Ordinary Council Meeting

Under Separate Cover Annexures

Tuesday, 13 August 2024

Table of Contents

14.1 Endorsement of 2023/24 Operational Plan Progress Report (1 January to 30 June 2024)

Annexure 1 Operational Plan Progress Report January to June 2024 4

14.2 Parkes Shire Destination Management Plan

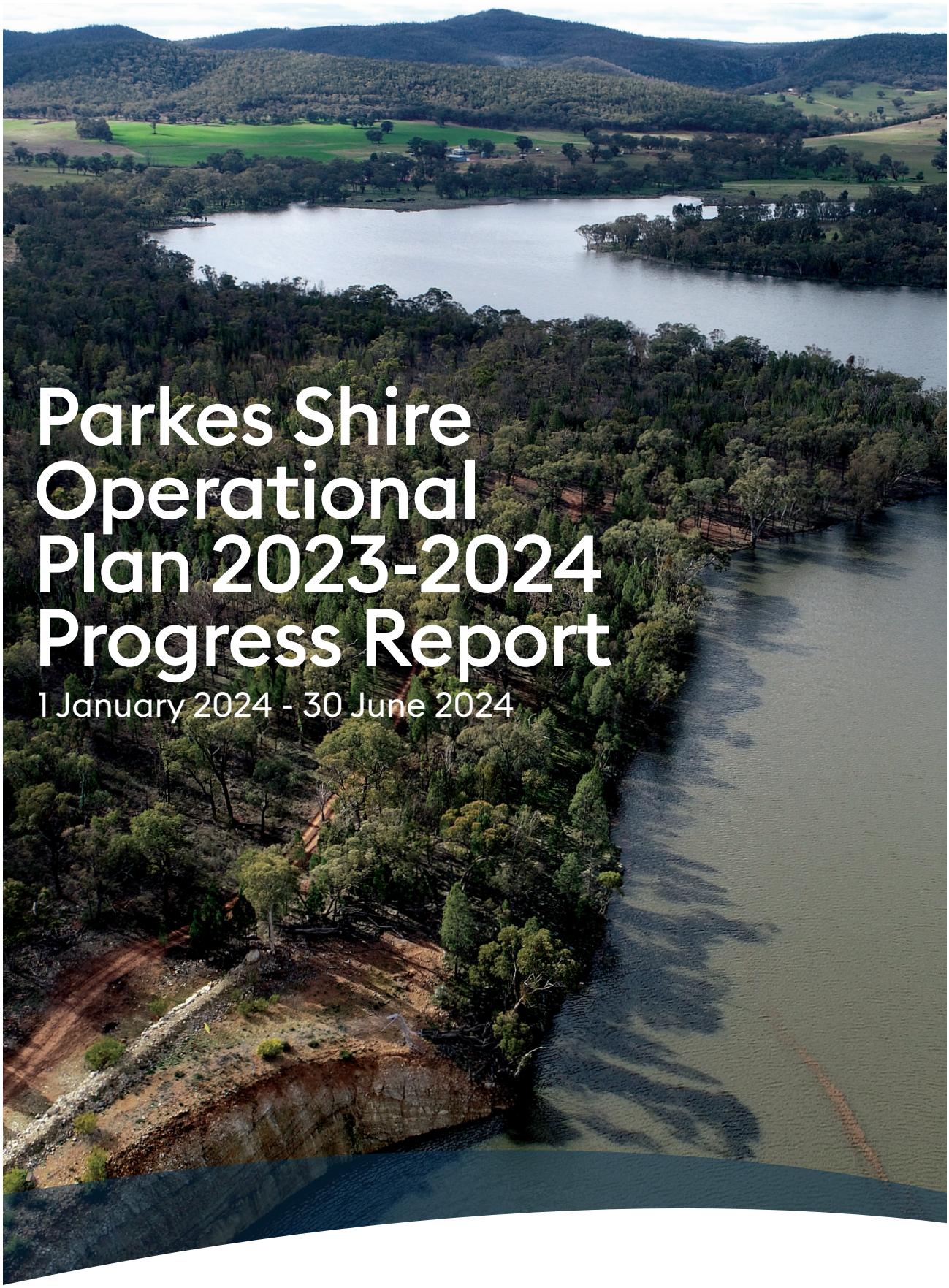
Annexure 1 Parkes Shire Destination Management Plan - Final 255

14.3 Parkes Shire Signage and Wayfinding Strategy and Styleguide

Annexure 1 Parkes Shire Signage Manual 301

17.3 PLANNING PROPOSAL: AMENDMENT TO PARKES LOCAL ENVIRONMENTAL PLAN 2012 - LOT 2 DP1064474 (3577 HENRY PARKES WAY, BOGAN GATE) PRE-EXHIBITION

Annexure 1 Planning Proposal: Amendment to Parkes LEP 2012 Schedule 1 - Additional Permitted Uses 415



Parkes Shire Operational Plan 2023-2024 Progress Report

1 January 2024 - 30 June 2024

parkes.nsw.gov.au

Parkes Shire Council

Operational Plan and Budget

2023–24



Acknowledgement of Country

Parkes Shire is the land of the Bogan River people, part of the Wiradjuri nation – the largest Aboriginal territory at the time of European settlement, encompassing the Central West slopes and plains.

Wiradjuri Country extends from Coonabarabran in the north, straddling the Great Dividing Range down to the Murray River and out to western NSW, encompassing around one fifth of NSW. The people of Wiradjuri Country are known as 'people of three rivers', due to the three rivers that border their lands: the Wambool (Macquarie River), Kalari (Lachlan River) and Murrumbidjeri (Murrumbidgee River).

In the spirit of reconciliation, Parkes Shire Council acknowledges the Wiradjuri people as the traditional custodians of the land and pays respect to Elders past, present and future and we extend our respect to all Indigenous Australians in Parkes Shire.

We recognise and respect their cultural heritage, beliefs and continuing connection with the land and rivers. We also recognise the resilience, strength and pride of the Wiradjuri community.

Contents

01

Introduction **2**

Our integrated planning and reporting framework 3

How we plan and report on our progress 4

Guiding principles 5

Quadruple Bottom Line 5

02

2023–24 Operational Plan **6**

About this plan 7

2023-24 Financial Performance 8

2023-24 TYD Key Achivements 10

03

Commercial enterprise **14**

04

Council and corporate **27**

05

Economy and engagement **101**

06

Emergency services **132**

07

Library, culture and social justice **138**

08

Open space and recreation **158**

09

Planning, certification and compliance **178**

10

sewerage **192**

11

Transport and drainage **198**

12

Waste management **227**

13

Water supply **238**

01 Introduction



- Our integrated planning and reporting framework
- How we plan and report on our progress
- Guiding principles
- Quadruple bottom line

Our integrated planning and reporting framework

Integrated planning and reporting

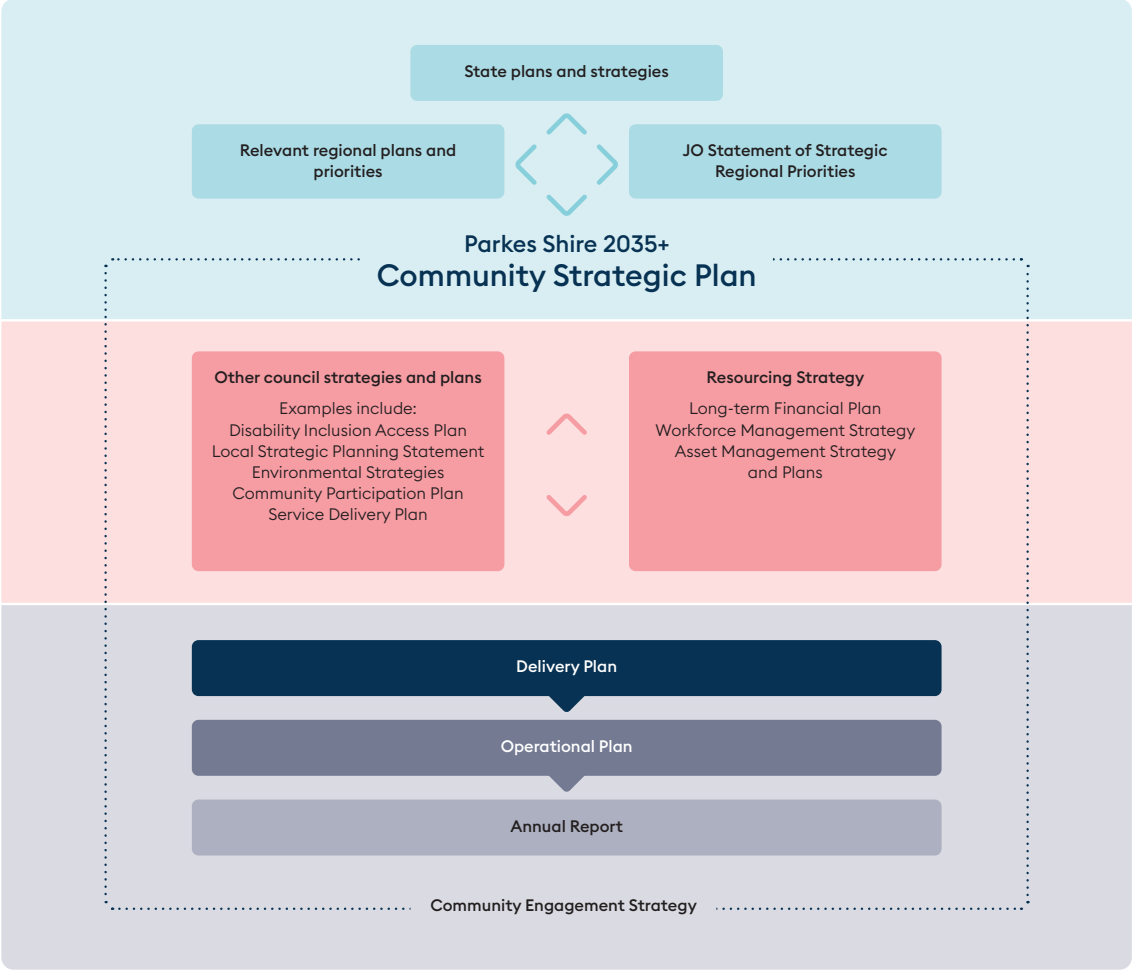
The 2023–24 Operational Plan and Budget forms part of the Integrated Planning and Reporting ("IP&R") framework.

In 2009, a new IP&R framework was introduced across Local Government in New South Wales ("NSW"). Parkes Shire Council was one of the first Council's to embrace this large and wide-ranging reform in becoming what was termed a "Group One" Council. Participation within this grouping saw Parkes Shire Council fully adopt its IP&R documentation in the 2009–10 Council year.

Parkes Shire has continued to develop its approach whilst regularly reporting on its progress, culminating in the latest End of Term Report being tabled at the final meeting of the previous Council in November 2021.

Council has now prepared its new suite of IP&R documents. These documents are structured to demonstrate what the newly elected Council (elected in December 2021) will deliver in order to assist the community to achieve the aspirations set out in the Parkes Shire 2035+ Community Strategic Plan ("CSP").

The following diagram illustrates how the IP&R framework ensures that local strategic planning and reporting is informed, relevant and responsive to community needs.



How we plan and report on our progress

Operational plan and budget

Supporting the delivery program are annual operational plans. These outline the details of the delivery program - the individual projects and actions that will be undertaken in that year to achieve the commitments made in the delivery program. The operational plan includes council's budget for that financial year.

Reporting our progress

Reporting is a key element of the ip&r framework. We use a variety of tools to report our progress in achieving this community strategic plan and implementing the delivery program, as well as our financial performance against the annual and long-term budgets.

Annual report:

Within five months of the end of each financial year, council prepares an annual report, which includes a copy of our audited financial reports. The annual report details our progress in implementing the delivery program and the activities we have undertaken to deliver on the objectives of the community strategic plan.

State of the shire report:

Tabled at the last meeting of the outgoing council, the end of term report provides an update on our progress in implementing the community strategic plan over the council term, as well as the results and outcomes the implementation of the community strategic plan has had for our community.

State of the environment report:

Included in the annual report in the year in which an ordinary election is held is a state of the environment report. This document reports on environmental issues relevant to the objectives for the environment established by the community strategic plan.

Delivery program progress reports:

Every six months, council prepares a report detailing our progress in achieving the principal activities detailed in the delivery program.

Budget review statement:

Council prepares a budget review statement three times each year which shows, by reference to the estimate of income and expenditure set out in the statement of council's revenue policy in the operational plan for the relevant year; a revised estimate of the income and expenditure for that year.

Guiding principles

Social justice

Preparation of Parkes Shire 2035+ Delivery Program has been guided by the following social justice principles:

- **Equity:** there should be fairness in decision making, prioritising and allocation of resources, particularly for those in need
- **Access:** all people should have fair access to service, resources and opportunities to improve their quality of life
- **Participation:** everyone should be given genuine opportunities to participate in decisions which affect their lives
- **Rights:** equal rights should be established and promoted, with opportunities provided for all people from all backgrounds

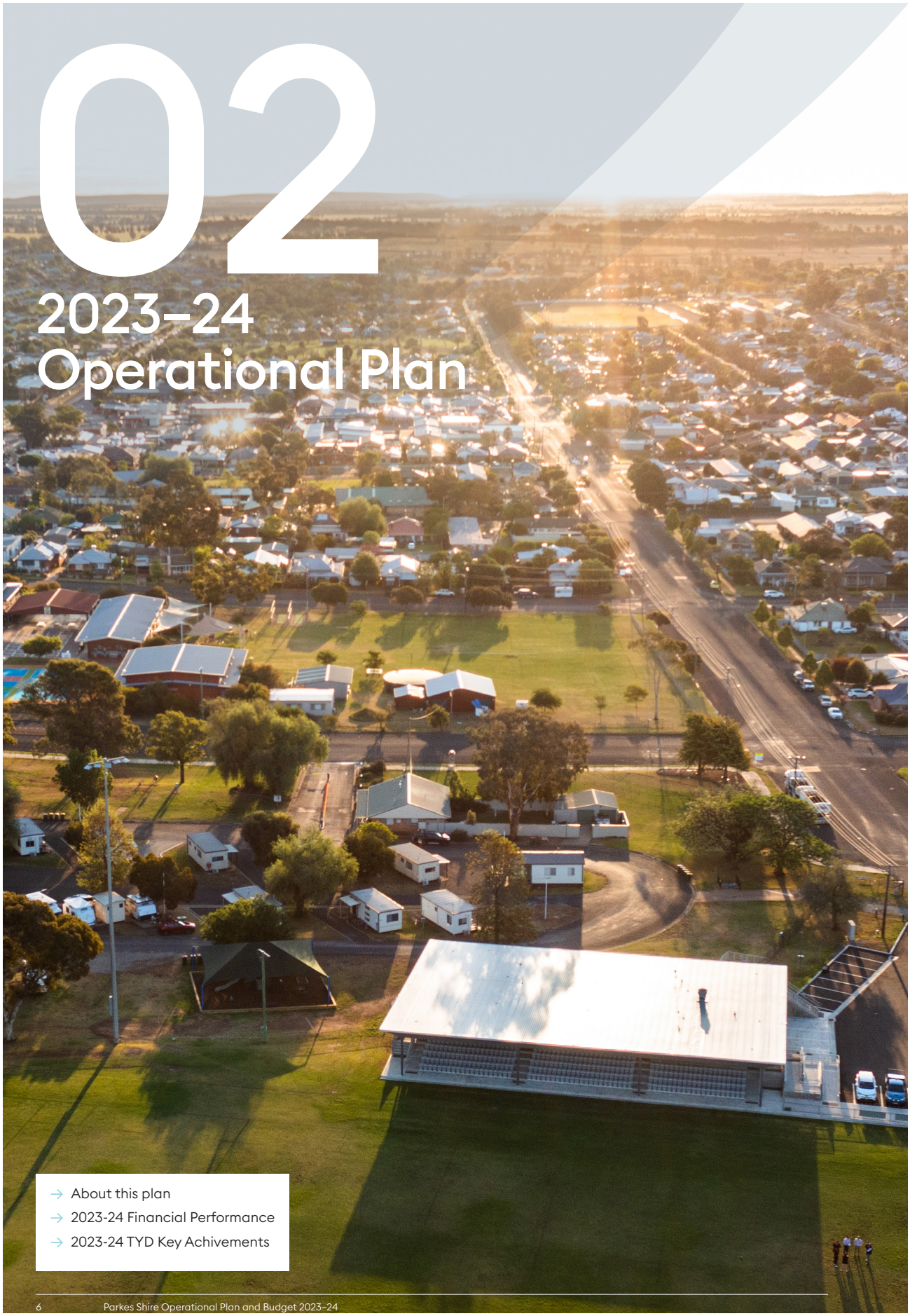
Quadruple Bottom Line

The Quadruple Bottom Line (QBL) addresses social, environmental, economic, and civic leadership (governance) considerations. The QBL ensues a holistic balanced approach is applied to all aspects of the 2023–24 Operational Plan and Budget.



02

2023–24 Operational Plan



- About this plan
- 2023-24 Financial Performance
- 2023-24 TYD Key Achivements

About this Plan

The 2023–24 Operational Plan and Budget forms part of the Parkes Shire 2035+ Delivery Program. These plans outline the details of the Delivery Program – specifically the individual projects, actions and budget that will be undertaken in this year to achieve the commitments made in the Parkes 2035+ Delivery Program. Council reports on these measures on a three-monthly basis.

The projects, actions, and budget of year one of the Parkes 2035+ Delivery Program are split into eleven core functions of Council, with Principal Activities grouped within each. These functions include:

The Budget details how Council intends to fund these activities and includes provisions relating to the content of Council's Annual Statement of Revenue Policy.

This includes details of:

- Estimated income and expenditure.
- Ordinary rates and special rates.
- Proposed fees and charges.
- Council's proposed pricing methodology.
- Proposed borrowings.

The Operational Budget is reviewed and reported to Council within two months, after the end of each quarter (excluding the June quarter).

Core functions of Council

Commercial enterprise	• Central West Childcare Services • Caravan Parks • Rental and Leasing • Land Development and Sales
Council and corporate	• Information Communication and Technology • Governance and Strategy • Civic • People, Safety and Culture • Finance • Fleet • Council Land and Buildings • Council Environmental Management • Customer Service • Community Services and Wellbeing • Communication and Engagement
Economy and activation	• Economic Development • Grants • Events and Festivals • Tourism and Destination Marketing
Emergency services	• Emergency Services Support
Library, arts and culture	• Library Services • Arts and Culture • Social Justice
Open space and recreation	• Parks and Gardens • Sports Fields • Open Space Facilities, Amenities and Public Toilets • Cemeteries • Swimming Pools • Wetlands Restoration
Planning, certification and compliance	• Local Strategic Land Use Planning • Development Assessment • Building Certification • Environmental Health and Ranger Services • Noxious Weed Management
Sewerage	• Sewerage System
Transport and drainage	• Sealed Roads • Unsealed Roads • Regional Roads • Other Transport and Overheads • Urban Stormwater • Regional Airport • Road Maintenance Council Contract • Road Safety
Water supply	• Water Supply • Water Security Project • Recycled Water Extension Project
Waste management	• Domestic Waste Management • Commercial Waste • Waste Education and Sustainability

2023-24 Financial Performance

		Operational Performance		Capital Performance	
Function	**Principal Activity**	**Income**	**Expenditure**	**Income**	**Expenditure**
Commerical Enterprise	Central West Childcare Services	1,304,559	1,065,975	-	3,627
	Caravan Park	298,415	165,786	-	-
	Rental and Leasing	-	-	-	-
	Land Development and Sales	-	-	-	81,003
Council	ICT	-	617,171	-	83,535
	Governance and Strategy	5,961	79,398	-	-
	Civic	150,000	830,023	-	-
	People, Safety and Culture	13,613	679,317	-	-
	Finance	5,604,436	1,657,932	-	-
	Fleet	2,167,784	1,396,331	-	1,218,499
	Council Land and Buildings	928,385	1,138,179	-	242,467
	Council Environment Management	-	-	-	-
	Customer Service	-	297,113	-	-
	Community Services and Wellbeing	-	-	-	-
Economy	Economic Development and Grants	-	93,719	-	121,654
	Communication and Engagement	-	284,426	-	-
	Elvis Festival, Special Events and Event Support	734,155	1,324,013	-	268,343
	Visitor Economy	72,887	120,647	-	-
Emergency Services	Emergency Services Support	77,387	401,977	1,251,208	16,249
Library	Library Services	14,758	364,446	-	18,402
	Arts and Culture	4,457	63,001	-	-
	Social Justice	40,000	45,000	-	-

		Operational Performance		Capital Performance	
Function	**Principal Activity**	**Income**	**Expenditure**	**Income**	**Expenditure**
Open Spaces	Parks and Gardens	-	1,200,563	-	-
	Sports Fields	9,672	228,133	-	59,244
	Open Space Facilities, Amenities, Cemetries and Public Toilets	141,840	383,991	231,345	1,457,857
	Swimming Pools	9,492	553,420	20,000	36,954
	Wetlands Restoration	-	-	100,000	-
Planning	Local Strategic Land Use Planning	-	-	-	-
	Development Assessment	107,497	140,581	-	-
	Building Certification	195,342	174,781	-	-
	Environmental Health and Ranger Services	64,089	556,479	-	-
	Noxious Weeds Management	100,500	196,789	-	-
Sewer	Sewerage System	2,653,281	1,711,024	97,209	734,597
Water	Water Supply	7,595,144	4,768,658	4,226,865	9,005,151
Waste	Waste Management	498,698	1,872,349	-	11,969
Transport	Sealed Roads	4,445,271	3,273,454	4,547,494	2,233,295
	Unsealed Roads	-	1,228,162	-	150,940
	Other Transport	25,490	1,429,779	147,190	1,145,962
	Urban Stormwater	18,237	152,348	-	685,928
	Regional Airport	122,117	144,668	29,144	84,220
	Road Maintenance and Council Contract / Regional Roads	10,954,678	5,184,316	3,571,075	5,449,582
	Road Safety	53,568	103,037	-	-
	Depreciation	-	9,119,768	-	-
		38,411,712	**43,046,757**	**14,221,530**	**23,109,477**

January to June 2024 Key Achievements

Actions completed
258

Actions progressing
74

Actions not progressing
31

Actions not due to start
5

No update provided
0

Commercial enterprise

- The occupancy rate at Spicer Caravan Park saw a 35% increase compared to 2022.
- Council 's commercial buildings and properties achieved a 100% occupancy rate.
- Central West Childcare maintained educator to student ratio numbers, 24 play groups, and 400 bus transport services.
- Preschool maintained 30 children per day.

Council and corporate

- Recruitment as part of the Cadet, Apprentice, and Trainee (CAT) Program in the reporting period including Biosecurity, Events Trainee and Finance Trainee advertised.
- Fifteen (15) staff commenced compliance and professional development training during the reporting period.
- Council's biennial employee surveys for workplace wellbeing assessment and people at work measuring psychosocial hazards and risks.
- All employees were provided with WHS, cyber security, and code of conduct compliance.
- Service review on Children's Services including the development of a framework and scope of works for the review was completed. Next steps analysing the results.
- Maintenance of International Standard 45001 OH&S Management System achieved.
- Internal attraction and retention audit completed.
- Delivered Audit, Risk and Improvement Committee meetings.
- A team of four representatives in the rural management challenge.
- Council exceeded the Office of Local Government's benchmark of an ≥1.5x unrestricted ratio, with a result of 2.01x.
- The Annual Financial Statements were delivered a month early.
- Delivered Councillor Professional Development Plan.
- Fleet maintenance 31.7%, number well with the IPWEAS benchmark of 30%
- Plant replacement program saw development to ensure accuracy improvements.
- Electric vehicle strategy preparations commenced. GPS system has gone from introduction to implementation phase.
- Rural Fire Service (red fleet) over a third of pink slips and services were completed, total of sixty-five.
- Delivered the Plans of Management for community land, developed and presented to the Minister for endorsement.
- Park bookings increased, especially Lions Park since its redevelopment was delivered.
- Spicer Caravan Park hosted 10,126 visitors throughout the year.
- The Cookamidgera RFS Shed project was delivered.
- Increase in usage for online customer portal request, 2,336 submissions, 2,191 closed.
- Development of the whole-of-council customer service charter.
- Customer service staff capacity increases and upskilling to manage planning enquiries.
- Implemented recommended actions from the 2023 customer service review.

Economy and engagement

- Council was successful in securing grant funds for 79 grants during the reporting period including Council and community grants. Grants submitted 213.
- Council secured $220,000 in sponsorship for the 2024 Parkes Elvis Festival.
- Parkes Elvis Festival highlighted total circulation of 1,873,655,869 an advertising equivalent of $16,700,00.
- Sponsorship Prospectus developed including sponsorship opportunities for Parkes Elvis Festival, Trundle ABBA Festival and Sounds at the Pavillion events.
- Tourism within the Shire saw a 1.11% increase.
- Three Summer Sounds events were delivered at Cooke Parke pavilion.
- Parkes visitor information centre- maintained level 2 accreditation status with visitor information available across each township/ village.
- Supported interested investors to the Parkes Special Activation precinct in partnerships.
- Hosted and supported the Environment and Allied Professionals conference held in Parkes with 120 people attending.

Emergency services

- Council continued to support the operations of the Rural Fire Service as per the Service Level Agreement
- Council continued to support the operations of the Rural Fire Service with fleet maintenance of plant and equipment with this area expanding on the quality and reliability of Council servicing services.
- Local Disaster Plan (DISPLAN) reviewed by Council and referred to Agencies for concurrence.
- Cookamidgera RFS Shed project was successfully delivered during the year.

Library, arts and culture

- Eighteen (18) arts and cultural programs/events with 2,605 attendees over the year across both the Marramarra Makerspace and the Coventry Room.
- Local exhibitions delivered ten (10) events/exhibitions which had 4,800 attendees during the year.
- Nineteen (19) cultural programs were delivered as part of the Arts and Cultural Program.
- 264 people attended over 34 open-maker days in the Marramarra Makerspace Studio, which also held 12 creative workshops.
- 168 sessions of storytime and ryhmetime held over the annual year, with average of 16 per session.
- Six Author Talks held over the year with 176 attendees. Four were during this reporting period.
- Across all four branches 58 reading and writing groups were held during the reporting period for writing groups, and author-rised..
- Five events for primary youth held with 121 children attending, this reporting period.
- 109 events for adults with 1,232 people attending. This reporting period 27 events with 263 attendees
- STEAM program delivered 16 programs with 193 attendees.
- Increase in loaned materials at the Parkes Shire Libraries with a total of 19,539 loans in the reporting period. Over the 12-month period 38,988 in loaned materials.
- 6% increase in membership of the Parkes Shire Libraries, with an increase of 140 members during the period.

Open space and recreation

- Delivery of the Kelly Reserve splash pad water play.
- Lions Park upgrade completed in October 2023.
- Upgrades to Berryman Park continued with shelters and furniture installed and a footpath extension to the Trundle Pool completed during the year.
- Cheeney Park rehabilitation major drainage works delivered.
- Play equipment inspected and maintained.
- Sporting fields maintained identified for field and turf improvements.
- Outdoor team full support for all major events across the Shire.
- Delivery of the Lawn Portion project works on both Section H and Section J at Parkes Cemetery.
- Learn to Swim Classes delivered during the swimming season.
- Upgrades to Parkes, Tullamore and Peak Hill were delivered during the year.
- Akuna Wetlands progress continued during the year.

Planning, certification and compliance

- $12,500 of funding secured via the Local Heritage Fund.
- Delivered the Alectown tip cell project
- Parkes cemetery Section H project and Section J project were delivered.
- 75 food shops were inspected and completed, with no serious breaches reported to the food authority.
- All Ranger customer requests commenced investigations within 10-days.
- Companion animals rehoming partnering with registered rehoming organisations. and 96 registrations during the year.
- Swimming pool inspection completed with 100% of inspections completed.
- Reviews of planning controls concerning development in flood prone land.
- Domestic waste collection service contractor performed compliant throughout the year.

Sewerage

- Zero EPA License breaches during the period.
- Zero water samples not complying with operational Recycled Water Management System.
- Zero CPP exceedances during the period.
- Preventative maintenance scheduled works were planned and delivered during the year.
- Lagoon 3 was dewatered this year and the stockpile tested. Discussions to divert the bio-solids from landfill.

Transport and drainage

- The Apron Lighting project was delivered at the Parkes regional airport.
- Parkes Regional Airport compliant with Civil Aviation Safety Authority.
- Currajong to Mitchell Street reconstruction works completed during the year.
- Cookamidgera Road project was completed.
- Bushman and Dalton roundabout project completed.
- Graddle Creek Bridge upgrade has progressed.
- East Street railway crossing, and drainage has been on-going progression.
- Upgrade to Cookamidgera Road project delivered during the period.
- 15km length of road resheeted.
- 20km length of table drains cleared.
- Gravel pit operations, zero breaches.
- Councils Roadside Vegetation Management consulted throughout the year.
- Regional roads maintained in line with Transport Asset Management Plan.
- Sealed roads maintained through the RERRF program/NSW Transport.
- Road Safety programs delivered throughout the year.
- Parkes CBD flood mitigation works project progressed.

Waste management

- Alectown Tip Cell project was completed during the year.
- Commercial properties provide access to appropriate waste and recycling services.
- External contracts were maintained for recycling and landfill diversions.
- Partnership with Community Recycling Centre (CRC).
- Actively involved in investigating new waste technologies.
- Auditing green bin and yellow recycle bin audits were conducted.
- Transfer station and waste management assisted the diversion from landfill.
- Parkes waste facility operated in accordance with EPA license.
- Partnership with NetWaste attending forums, continual education opportunities.

Water supply

- The Bore Refurbishment Project was completed during the reporting period.
- Zero CPP exceedances during the period.
- Detailed designs completed for the refurbishment of Bore 1, 2, 3, 4 and 5 during the reporting period, with construction of Bore 2 almost complete.
- Detailed design of the Safe and Secure Water Project (Eugowra Road Pump Station, Akuna Road Pump Station and Eugowra Road Pump Station Solar System) completed.
- Detailed design of the Building Better Regions Fund Project (Lachlan River Pump Station, Eugowra Road/Lachlan River Pre-treatment Plant and Solar, and Parkes Water Treatment Plant Raw Water Dam) ninety percent completed.
- Detailed design of the Resources for Regions (Flood Mitigation and construction of retention basin in Crocker Park) completed.
- The Integrated water Cycle Management study was completed.
- Auditing of critical infrastructure and routine inspections were conducted.
- Water was effectively sourced from bore, river, dam and supernatant supplies.
- Materials and sensors for the non-revenue water was procured.
- No critical control point exceedances.

03

Commercial enterprise



30 places per day through Central West Childcare Services



1 Council operated caravan park



72 commercial leases and licences in place



Facilitation of land development and sales

Overview

Council undertakes these activities as it recognises, they provide important outcomes for the community that may not occur if Council wasn't involved, and the community need was simply filled by private sector providers.

Council aims to undertake these activities on a commercial basis therefore, over-time these activities become self-funding and do not require general rates to subsidise the activities. As these activities become self-funding, enough revenue is generated for 'day-to-day' and long-term costs to be covered by the activities themselves

Central West Childcare Services

CE1: We will provide quality care for families within the Shire through the provision of varied early childhood settings

CE1.1: Council is committed to advocating, facilitating, and providing quality care for the community through provision of Family Day Care (in-home) services

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE1.1.1	Approved provider of Central West Family Day Care	Family Day Care Coordinator	100%	Completed	Under the Central West Childcare Services banner services continued to be provided by Council for Early Childhood Education and the Bangala-la Preschool, Central West Family Day Care and In-Home Care. Council is committed to the services we continue to advocate, facilitate and provide high quality care service	Approved provider of Central West Family Day Care	Maintained	Maintained
CE1.1.2	Actively maintain Educator to Student Ratio to manage Family Day Care waitlist	Family Day Care Coordinator	100%	Completed	Sourcing and retaining educators have been an ongoing challenge across the childcare industry nationally. Throughout the 2023/24-year we continued to source avenues for advertising to promote educator recruitments	Actively maintain Educator to Student Ratio to manage Family Day Care waitlist	40:160 ratio	Maintain

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE1.1.3	Number of play groups per year	Family Day Care Coordinator	100%	Completed	Playgroups have been continuing- with the playgroup facilitator linking with the Early Childhood Teacher/service to enable interactions and participation within the Preschool. Playgroups continue with "out of town" educators which supports the small group child interactions and enables educators to network with others and the community	Number of play groups per year	24 per year	24

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE1.1.4	Actively engage with the community and current educators to reduce the number of children on the Family Day Care waitlist	Family Day Care Coordinator	100%	Completed	Continuing to be actively involved in the community across the 2023/24-year. Participated in both the Parkes and Forbes school careers days as well as participation on Tafe information days. Our "In Home Care" service was reestablished with a family in Eugowra requiring an educator to provide care within their home. Central West Childcare Services will provide support and monitoring between both the family and the educator		Four engagement opportunities in 2023-24	Four

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE1.1.5	Increase the number of Family Day Care educators throughout the Villages and small towns within the Parkes Shire	Family Day Care Coordinator	100%	Completed	During 2023/24-year there has been a shift in the eligibility for families in the "In home care" provision of care. Where and educator provides care within the family homes rather than the family coming to an educator's home. This type of care supports those families which cannot access traditional types of care provision due to multiple birth, isolation, medical concerns or availability of childcare services. Due to current childcare services/demands this type of service is increasingly being sourced. The decrease in the number of educators across the Family Day Care service has been due to regulatory educational progression qualification requirements changing	Increase the number of Family Day Care educators throughout the Villages and small towns within the Parkes Shire	Two educators recruited for Villages and small towns	

CE1.2: Council is committed to advocating, facilitating, and providing quality care for the community through provision of Bangala-la Preschool services

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE1.2.1	Maintain a service that provides continuity of regulatory approval	Family Day Care Coordinator	100%	Completed	The services continued to maintain its regulatory compliance and standards. The family day care provides ongoing provisions of hours/days of care choice for families outside the standard early childhood settings. Babies especially are predominantly the age group on our waitlists	Maintain a service that provides continuity of regulatory approval	Maintained	Maintained
CE1.2.2	Number of pre-schoolers within the setting	Family Day Care Coordinator	100%	Completed	The Bangala-la Preschool continued to maintain the enrolments of 30 children per day. Nine children were supported under our Inclusion Support staff. The service continued to have a two-year waitlist for placement, allocations continuing under the "Priority of Access" guidelines of the NSW Department of Education	Number of pre-schoolers within the setting	30 per day	30

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE1.2.3	Number of transport services facilitated through Central West Childcare Services	Family Day Care Coordinator	100%	Completed	During the 2023/24-year the number of bus transport services facilitated through Central West Childcare Services continued. The bus service supported families/children to attend the Bangala-la Pre-school with both morning and afternoon services. Over the past six months there has been an increase in numbers using the service. Council also continued to use the bus transport services to provide induction tours across all of Council owned buildings.	Number of transport services facilitated through Central West Childcare Services	400 transport services facilitated per term	400

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE1.2.4	Actively maintain Educator to Student Ratio to manage Bangala-la Preschool waitlist	Family Day Care Coordinator	100%	Completed	Actively maintained Educator to Student Ratio to manage Bangala-la Preschool waitlist during the 2023/24-year. Staff levels/ratios were maintained with new staff recruited to fill the inclusion support roles for 2024 calendar year. Central West family day care provided support when staff were unwell or on leave. To maintain the educator to student level full remained on-going with additional staff, alongside Early childhood trainees, Cert 3 supporting the service	Actively maintain Educator to Student Ratio to manage Bangala-la Preschool	Maintain 2:30 ratio	

Caravan Parks

CE2: We will implement appropriate processes to ensure the caravan park is maintained and developed in accordance with the growing needs of tourists entering the Shire

CE2.1: Encourage the Shire's visitor economy through the continued provision of Park operations

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE2.1.1	Number of visitors per annum	Manager Facilities	100%	Completed	The Shire's visitor economy achieved positive results during the 2023/24-year. The caravan park saw visitor numbers increase, with total visitor numbers 10,126. The visitor numbers were identified as follows: July 1,126 August 1,229 September 1,341 October 1,139 November 606 December 665 January 783 February 533 March 824 April 935 May 945 and June 1002 = 11,128 guests (2023/24) vs 6,579 guests (2022/23)	Number of visitors per annum	Maintain	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE2.1.2	Average weekly occupancy rates	Manager Facilities	100%	Completed	The Shire's visitor economy achieved positive results the 2023/24-year. The caravan park had average monthly occupancy rates identified as follows: July 33.19% August 38.38% September 48.43% October 42.62% November 26.44% December 25.13%, January 35.67% February 27.12% March 37.65% April 44.38% May 31.11% and June 2024 37.22%	Average weekly occupancy rates	Maintain	
CE2.1.3	Monitor feedback received by Spicer Caravan Park Management	Manager Facilities	100%	Completed	The Spice Caravan Park management team throughout the 2023/24-year continued to receive positive feedback from visitors into the area. Identifying the team efforts, site facilities, and overall area as welcoming and meeting their needs and expectations	Monitor feedback received by Spicer Caravan Park Management	Monthly report provided	12

CE2.2: Continue encouraging the utilization of Spicer Caravan Park through regular maintenance activities

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE2.2.1	Action a response to customer requests within 10-days	Manager Facilities	100%	Completed	During 2023/2024, requests from Caravan Park operators and tenants have been responded to within 10 working days	Action a response to customer requests within 10-days	100% of requests responded to within 10-days	

Land Development and Sales

CE4: We will zone, develop, and promote suitable land to ensure the community has access to appropriate spaces

CE4.1: Development and sale of land to provide opportunities for local business to generate income and revenue and increase economic prosperity

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE4.1.1	Blocks developed conceptually to encourage industry and economic growth	Director Operations	50%	Progressing	Industrial land identified with Development Application (DA) approval for the construction of 15 lots. The subdivision Works Certificate (WC) has also been approved which allows construction to commence. These lots range from approximately 2,300m2 to 8,000m2 to cater for industry development. During both quarter three and four Council went to market with an Expression of Interest (EOI) to inform the need to progress with the next stages of the industrial subdivision	Blocks developed conceptually to encourage industry and economic growth	Blocks meet community demand	

Rental and Leasing

CE3: We will develop and utilize suitable frameworks to ensure Council operated rentals are aligned with market expectations

CE3.1: Operations

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CE3.1.1	Occupancy rates of commercial buildings/properties provided rental at market rates with subsidies supported	Manager Facilities	100%	Completed	The 2023/24-year ended with all commercial properties occupied	Occupancy rates of commercial buildings/properties provided rental at market rates with subsidies supported	90% or increasing	100%
CE3.1.2	Issue formal lease or license agreements for community groups without a formal agreement in place	Manager Facilities	100%	Completed	All organisations occupying commercial facilities have leases and licence arrangements in place. Sporting Groups will also be included for the 2024/25-year	Issue formal lease or license agreements for community groups without a formal agreement in place	Formal agreements in place	

04 Council and Corporate



206 Council buildings



257 full-time equivalent ("FTE") staff



1,290 devices managed



$57.3M turnover



368 customer requests received monthly



164 fleet and depot assets managed



9 internal audits conducted in five years

Overview

The corporate function supports Council's delivery of efficient and effective services to the community. Regular monitoring and adjustments must be made to ensure Council can adapt to the changing needs of the organisation and community.

The council function covers the operation of Council itself as an organisation. The governing body of elected Councillors utilise community engagement and staff advice to set the strategic direction. Resources are then allocated to achieve objectives and Councillors are ultimately accountable to the community for the outcomes Council's organisation delivers.

CC: Council and Corporate

Information Communication and Technology

CC1: We will utilize appropriate ICT systems to support efficient and effective operations in accord with the ICT Strategic Plan

CC1.1: Implement and optimize ICT processes

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC1.1.1	Review the ICT Strategic Plan	Business Support Analyst	50%	Progressing	Cyber Security Framework is in the progress of being reviewed to support a new strategic plan	Review the ICT Strategic Plan	Plan reviewed by 30 June 2024	Reviewed
CC1.1.2	Review the Geographic Information Systems ("GIS") Strategic Plan	Business Support Analyst	0%	Not Progressing	The review of the GIS strategic plan, did not see progression during the 2023/24-year	Review the Geographic Information Systems ("GIS") Strategic Plan	Plan reviewed by 30 June 2024	Zero

CC1.2: Maximise mobility of access to corporate systems

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC1.2.1	Provide staff and contractors with access to the resources they need to work from anywhere through the mobile devices and laptop replacement program	Business Support Analyst	100%	Completed	The second half of the 2023/24-year saw this project come off hold and was completed with additional budget input.	Provide staff and contractors with access to the resources they need to work from anywhere through the mobile devices and laptop replacement program	Program delivered	Delivered
CC1.2.2	Migrate Financials and Supply Chain Management products from Ci to CiAnywhere	Business Support Analyst	50%	Progressing	Non-production environment provisioned. Testing to be completed in October 2024 and migration to production environment to be completed in November 2024	Migrate Financials and Supply Chain Management products from Ci to CiAnywhere	Migration of products	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC1.2.3	Commence migration of Property and Rating and Regulatory products from Ci to CiAnywhere	Business Support Analyst	0%	Not due to start	This project is dependent on the completion of migration of financials and supply chain manager products from Ci to Ci Anywhere. Therefore, this project has not started yet	Commence migration of Property and Rating and Regulatory products from Ci to CiAnywhere	Migration commenced	

CC1.3: Ensure an effective cyber security framework with robust risk controls is in place

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC1.3.1	Undertake a desktop review of Council's current cyber security processes and strategies	Business Support Analyst	100%	Completed	The audit was completed during the second half of the 2023/24-year. Actions scheduled for delivery during the 2024/25 operational year	Undertake a desktop review of Council's current cyber security processes and strategies	Desktop review completed	Completed

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC1.3.2	Achieve Maturity Level One in line with the Australian Cyber Security Centre's Essential Eight Maturity Model	Business Support Analyst	50%	Progressing	Three from eight strategies are in progress, four strategies are in the planning phase to be completed by a third party. The remaining two are scheduled to be completed in-house	Achieve Maturity Level One in line with the Australian Cyber Security Centre's Essential Eight Maturity Model	Achieve Maturity Level One	

Governance and Strategy

CC2: We will use appropriate governance and strategic frameworks to manage risk, provide assurance that legislative and other requirements can be met and to provide clear strategic direction for Council's activities

CC2.1: Continually develop and implement Council's Governance Framework

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.1.1	Facilitate the effective operation of Council's Audit, Risk and Improvement Committee	Procurement, Contracts and Insurance Coordinator	100%	Completed	Facilitated the effective operation of Council's Audit Risk and Improvement Committee (ARIC) throughout the second half of the 2023/24-year with meetings held during February and April 2024	Facilitate the effective operation of Council's Audit, Risk and Improvement Committee	Four meetings held by 30 June 2024	Six
CC2.1.2	Develop and implement an effective Internal Audit Program to provide assurance on critical systems, controls and processes	Procurement, Contracts and Insurance Coordinator	100%	Completed	The internal audit program was developed by Lambourne Partners. Both the contractors, volunteers and working with children and the staff attraction and retention commenced during the third quarter and both in its final stages. The cyber security audit was completed, with final report to the Audit Risk and Improvement Committee (ARIC) during quarter four	Develop and implement an effective Internal Audit Program to provide assurance on critical systems, controls and processes	One completed by 31 March 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.1.3	Develop and implement an Enterprise Risk Management Framework to mitigate risks and maximize opportunities	Procurement, Contracts and Insurance Coordinator	75%	Progressing	Council engaged Paladin Risk Management Services to conduct a review of policies and plans. There was the development of new policies and subsequent plans, currently in draft form, for enterprise and strategic risks. Works will continue to identify and complete the risk register	Develop and implement an Enterprise Risk Management Framework to mitigate risks and maximize opportunities	Reviewed by 31 March 2024	
CC2.1.4	Maintain and review Council's Delegations Register	Procurement, Contracts and Insurance Coordinator	0%	Not Progressing	During the 2023/24-year there was no progression with the maintaining and review of the delegation register	Maintain and review Council's Delegations Register	Reviewed by 31 December 2023	Zero
CC2.1.5	Maintain and review Council's Policy Register	Procurement, Contracts and Insurance Coordinator	50%	Progressing	Review of the policy register commenced, with attention to the specific policies identified from the external audit recommendations. The review process will continue across all of the policies and will include an update to the new brandings and styles	Maintain and review Council's Policy Register	Reviewed by 31 March 2024	
CC2.1.6	Develop a Graffiti Removal Works Register	Procurement, Contracts and Insurance Coordinator	10%	Not-Progressing	During the 2023/24-year there was no progression with the development of the graffiti removal works register	Develop a Graffiti Removal Works Register	Developed by 30 June 2024	

CC2.2: Continually develop, implement and improve Council's Business Excellence Program

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.2.1	Undertake service review of Council's library services	Procurement, Contracts and Insurance Coordinator	80%	Progressing	The service review during the 2023/24-year was on the Childcare Service, both the family day care and the pre-school. A change of decision within the business. The service review framework was built during the year and has been trialled with this review. Council engaged and supported a consultant from Families at Work an expert in the childcare industry nationally. All high-key tasks have been completed, with the review in final stages. Review will be presented in the next quarter	Undertake service review of Council's library services	Deliver by 31 March 2024	One

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.2.2	Deliver LEAN training to Council's workforce to improve efficiency across Council's organization and operations	Development/Certificates Coordinator	0%	Not Progressing	LEAN training did not see progression throughout the 2023/24-year with the focus on additional training priorities and operational demands	Deliver LEAN training to Council's workforce to improve efficiency across Council's organization and operations	Deliver by 30 June 2024	
CC2.2.3	Support Council staff with project management responsibilities to undertake Diploma in Project Management	Development/Certificates Coordinator	100%	Completed	During the 2023/24-year two employees were supported with their project management responsibilities. The Diploma Project Management course was completed with the Project Management Cert IV underway	Support Council staff with project management responsibilities to undertake Diploma in Project Management	Complete by 30 June 2024	

CC2.3: Continually develop Council's Work Health and Safety Management System (WHSMS)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.3.1	Maintain International Standard 45001 OH&S Management System accreditation	Work Health and Safety Coordinator	100%	Completed	During quarter four, an internal maintenance audit was undertaken as required by the ISO 45001 accreditation. Several minor-non-conformances were identified, which will be rectified with our ongoing audit action processes. The external ISO 45001 maintenance audit is being scheduled for October/November 2024	Maintain International Standard 45001 OH&S Management System accreditation	Maintained	Maintained
CC2.3.2	Review of WHSMS manual	Work Health and Safety Coordinator	100%	Completed	During quarter two of 2023/24 first six months, the review of WHSMS manual was completed and signed off by the Executive Leadership Team	Review of WHSMS manual	Reviewed by 31 December 2023	Reviewed

CC2.4: Coordinate and manage Council's IP&R Framework

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.4.1	Undertake community consultation with Parkes Shire to inform development and review of IP&R Framework	Corporate Planning and Performance Coordinator	100%	Completed	Community Consultation with the community of the Parkes Shire commenced during the March to June months with the engagement of Micromex to engage by way of phone survey asking collective questions and provided data results (statistics). Micromex comparable data was received to compare on the last three end of term reports. Placescore was engaged to assist with the livability strategy (personable) and this has now been elevated into the CSP building for the live data and adaptability to understand the communities ideas, priorities and concerns	Undertake community consultation with Parkes Shire to inform development and review of IP&R Framework	Completed by 30 June 2024	Consultation commenced

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.4.2	Develop and adopt all IP&R documents within legislated timeframes	Corporate Planning and Performance Coordinator	100%	Completed	The development and adoption of IP&R document requirements during the second half of the 2023/24-year were completed within the legislated timeframes. The Operational Plan 2024-25, The Operational Plan 2023-24 progress reports	Develop and adopt all IP&R documents within legislated timeframes	100% compliance	Compliant
CC2.4.3	Report on our progress in achieving our Delivery Program and Operational Plan	Corporate Planning and Performance Coordinator	100%	Completed	Operational Plan 2023/24 progress reporting for the first two quarters was reported on time within the legislated timeframes	Report on our progress in achieving our Delivery Program and Operational Plan	Quarterly reports to Council	Compliant

CC2.5: Continually develop, implement and improve Council's Procurement Framework

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.5.1	Develop Contract Management Framework	Procurement, Contracts and Insurance Coordinator	25%	Progressing	During the second half of the 2023/24-year there was no progression with the development of the contract management framework	Develop Contract Management Framework	by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.5.2	Investigate options for a centralized Contract Management system	Procurement, Contracts and Insurance Coordinator	50%	Progressing	During the second half of the 2023/24-year there was no progression for the contract management system	Investigate options for a centralized Contract Management system	Investigate by 31 December 2023	
CC2.5.3	Incorporate sub-delegations pertaining to contract management into broader review of Delegations Register	Procurement, Contracts and Insurance Coordinator	0%	Not Progressing	During the second half of the 2023/24-year there was no progression for the contract management system	Incorporate sub-delegations pertaining to contract management into broader review of Delegations Register	Incorporated by 31 October 2023	Zero
CC2.5.4	Develop procedures for the review and approval of contract variations as part of the Contract Management Framework	Procurement, Contracts and Insurance Coordinator	0%	Not Progressing	During the second half of the 2023/24-year there was no progression for the contract management framework	Develop procedures for the review and approval of contract variations as part of the Contract Management Framework	Procedures developed by 30 June 2024	Zero

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.5.5	Develop a Contractor Insurances Register	Procurement, Contracts and Insurance Coordinator	10%	Progressing	During the second half of the 2023/24-year there was no progression on the contractor insurance register	Develop a Contractor Insurances Register	Register developed by 31 December 2023	
CC2.5.6	Develop templates to document key performance criteria and compliance obligations based on the conditions of each contract	Procurement, Contracts and Insurance Coordinator	0%	Not Progressing	During the 2023/24-year there was no progression on the development of templates	Develop templates to document key performance criteria and compliance obligations based on the conditions of each contract	Developed by 30 June 2024	Zero
CC2.5.7	Incorporate key performance criteria and compliance obligations of contracts into Council's Project Management Framework	Procurement, Contracts and Insurance Coordinator	0%	Not Progressing	During the 2023/24-year there was no progression on the development of contracts	Incorporate key performance criteria and compliance obligations of contracts into Council's Project Management Framework	Incorporated by 30 June 2024	Zero

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.5.8	Review currently held Bank Guarantees to determine currency	Procurement, Contracts and Insurance Coordinator	0%	Not Progressing	During the 2023/24-year there was no progression on the bank guarantees	Review currently held Bank Guarantees to determine currency	Reviewed by 30 September 2023	Zero
CC2.5.9	Develop a centralized Bank Guarantee Register	Procurement, Contracts and Insurance Coordinator	10%	Progressing	During the 2023/24-year there was no progression on the bank guarantee register	Develop a centralized Bank Guarantee Register	Developed by 30 September 2023	Zero
CC2.5.10	Implement procedures to ensure project works do not commence until all documents, including Bank Guarantees or other securities as required under the contract, are provided	Procurement, Contracts and Insurance Coordinator	0%	Not Progressing	During the 2023/24-year there was no progression on the bank guarantees	Implement procedures to ensure project works do not commence until all documents, including Bank Guarantees or other securities as required under the contract, are provided	Implemented 30 June 2024	Zero

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC2.5.11	Maintain and review Council's Government Information (Public Access) ("GIPA") Register	Records and Information Management Coordinator	100%	Completed	During the second half of the 2023/24-year period the register was up to date. There were no access applications received and deemed to be of interest to other members of the public	Maintain and review Council's Government Information (Public Access) ("GIPA") Register	GIPA Register updated by 31 December 2024	Updated
CC2.5.12	Maintain and review Council's Contracts Register	Procurement, Contracts and Insurance Coordinator	50%	Progressing	During the 2023/24-year there was no progression on the maintenance/review of the contracts register	Maintain and review Council's Contracts Register	Published to Council's website within 20-days of awarding	
CC2.5.13	Facilitate increased utilization of VendorPanel to create efficiencies and improve transparency in our procurement processes	Procurement, Contracts and Insurance Coordinator	100%	Completed	Additional teams have been added to the Vendorpanel platform allowing for the increase of usage. There were eleven requests for quotes throughout the 2023/24-year. Further training will be planned into the next financial year	Facilitate increased utilization of VendorPanel to create efficiencies and improve transparency in our procurement processes	60% procurements completed via VendorPanel	

Civic

CC3: We will manage civic operations in line with regulations to support decision-making and drive positive outcomes for the community

CC3.1: Manage Council's civic operations in line with regulations

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC3.1.1	Hold elections as required by regulatory standards	Director Customer, Corporate Services and Economy	100%	Completed	Mayoral and Deputy Mayoral election held at the Council meeting on 19 September 2023	Hold elections as required by regulatory standards	100% compliance	100%
CC3.1.2	Provide training and support to elected officials in line with the Councillor Induction and Professional Development Program	Procurement, Contracts and Insurance Coordinator	100%	Completed	The second half of the 2023/24-year had Councillors attending various training sessions within workshop environments and had opportunities to attend external events including Environmental Development and Allied Professionals (EDAP) conference, Agri Tourism Accelerator Program Youth Workshop, Reconstruct NSW - Community Leaders Forum #2 and #3, and Governance and Risk Management	Provide training and support to elected officials in line with the Councillor Induction and Professional Development Program	Four professional development activities held	Four

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC3.1.3	Ordinary Council Meetings are held in line with Council's Code of Meeting Practice	Procurement, Contracts and Insurance Coordinator	100%	Completed	Ordinary Council meetings were held in line with Council's code of meeting practice, with meetings held on 23rd January, 20th February, 19th March, 23rd April, 21st May and 18th June 2024. An Extraordinary meeting was held 7th May 2024	Ordinary Council Meetings are held in line with Council's Code of Meeting Practice	10 meetings held per year	12 meetings

CC3.2: Provide guidance and planning support for civic events

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC3.2.1	Hold 2024 Australia Day celebrations throughout the Parkes Shire	Executive Manager Economy and Engagement	100%	Completed	Australia Day celebrations were successfully supported and executed by Council officers in January 2024. This encompassed work by events staff on the activities of the day, as well as support from the governance and civic teams for the awards program. A range of events were held across the shire in Parkes, Bogan Gate, Peak Hill, Tullamore and Trundle	Hold 2024 Australia Day celebrations throughout the Parkes Shire	Celebrations held	One
CC3.2.2	Recognize community heroes through the Australia Day Awards Scheme 2024	Procurement, Contracts and Insurance Coordinator	100%	Completed	The Australia Day Awards Scheme 2024 was successfully delivered with community hero's recognised, and the event was held in Cooke Park in Parkes.	Recognize community heroes through the Australia Day Awards Scheme 2024	Awards Scheme administered	One

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC3.2.3	Partner with RSL Sub-branches to hold 2024 ANZAC Day Commemoration Services throughout the Parkes Shire	Capability Support Officer	100%	Completed	2024 ANZAC Day Commemoration Services held on 25 April 2024	Partner with RSL Sub-branches to hold 2024 ANZAC Day Commemoration Services throughout the Parkes Shire	Commemoration Services held	One

People, Safety and Culture

CC4: We will implement appropriate strategies as detailed in Council's Workforce Management Plan ("WMP") to develop a vibrant workforce equipped to deliver progress and value to our community. Undertake sustainable workforce planning and adapt to change through an innovative, smart, safe, and compliant workplace culture.

CC4.1: Enhance workforce planning procedures and tools to guide decision-making (WMP1.1)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
C4.1.1	Workforce data provided to Executive Leadership Team ("ELT")	Human Resources Advisor	100%	Completed	During the 2023/24-year safety and recruitment metrics were provided to the ELT. Improvements have been made to report on safety reporting and reporting on corporate goals focusing on clear metrics	Workforce data provided to ELT	Monthly report to ELT	12

CC4.2: Promote the benefits of working at Parkes Shire Council (WMP1.2)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
C4.2.1	Employee Value Proposition ("EVP") documented and promoted on Council's website and across our recruitment marketing collateral	Human Resources Advisor	1000%	Completed	The Employee Value Proposition (EVP) was promoted on Council's website throughout the first half of the year 2023/24-year. Including the recruitment marketing collateral. An internal audit was completed in June 2024 to ensure our EVP is current and engaging	EVP documented and promoted on Council's website and across our recruitment marketing collateral	EVP documented and promoted	Documented and promoted

CC4.3: Improve recruitment marketing and promotion (WMP 1.3)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
C4.3.1	Recruitment Marketing Strategy and Guidelines	Corporate Communications and Media Specialist	10%	Progressing	During the 2023/24-year there was zero progression on this action	Recruitment Marketing Strategy and Guidelines	Strategy and Guidelines developed	Zero

CC4.4: Ensure a merit-based approach to recruitment across the organisation (WMP 1.4)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.4.1	Provide biennial merit-based recruitment training to all recruiting managers	Human Resources Advisor	70%	Progressing	Council's recruitment guidelines, processes and procedures have been finalised. On completion all supervisors, managers and the HR Team will be provided with training	Provide biennial merit-based recruitment training to all recruiting managers	Training delivered to all recruiting managers	Delivered

CC4.5: Review and improve recruitment actions to ensure values – and behaviour-based recruitment (WMP 1.5)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.5.1	LGNSW Capability Framework implemented across position descriptions	Human Resources Advisor	75%	Progressing	The LGNSW capability framework was implemented across the updating of position descriptions and continued to be progressed through the organisation structure, which included the update of vacant and redesigned roles	LGNSW Capability Framework implemented across position descriptions	100% of all position descriptions reviewed and updated	

CC4.6: Review and improve the Exit Interview process to maximise feedback to improve systems and reduce turnover (WMP 1.6)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.6.1	Employees invited to participate in Exit Interviews	Human Resources Advisor	100%	Completed	The 2023/24-year continued with all employees invited to participate in exit interviews. During quarter one due to technical issues with survey monkey, the was a need to review and implement the digital exit questionnaire	Employees invited to participate in Exit Interviews	100%	100%

CC4.7: Develop and implement a "Grow Our Own" Cadetship, Apprenticeship and Traineeship ("CAT") Program (WMP 2.1)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual

CC4.7.1	CAT Program developed and implemented	Human Resources Advisor	100%	Completed	The Cadet, Apprentice and Trainee (CAT) program is developed and implemented across the organisation. The first half of the 2023/24-year had regular reviews scheduled in as on-going with the current CAT employees with the Education, Capability and Wellbeing Coordinator. During quarter one additional positions were identified for biosecurity, finance, and events, with positions advertised, supporting the target of 10% workforce in 'grow our own' program. During the last parts of quarter two of the roles were recruited, with enrolments with the apprenticeship networks and relevant registered training. Recruitments occurred for a cadet engineer, an environmental trainee, an events trainee, a finance trainee, and a mechanic apprenticeship. During quarter three and four, roles were reviewed by the HR Team and management. These roles will be	CAT Program developed and implemented	Program implementation commenced

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
					incorporated into the 2024/25-year CAT program			

CC4.8: Ensure employees have the capabilities required to perform their roles (WMP 2.3)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.8.1	Deliver the annual Corporate Training Plan	Human Resources Advisor	100%	Completed	Completed during the first half of the 2023/24-year	Deliver the annual Corporate Training Plan	June each year	Delivered

CC4.9: Potential successors are identified, confirmed and provided with tailored development opportunities (WMP 2.4)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.9.1	Talent Management Framework developed and implemented	Human Resources Advisor	25%	Completed	Internal Attraction and Retention Audit completed in June 2024. Outcomes will assist with the development of the talent management framework. This has been incorporated into the 2024/25 Operational Plan	Talent Management Framework developed and implemented	Framework implemented for potential successors and high potential employees	

CC4.10: Undertake regular reviews to recognise employees' capabilities and performance (WMP 3.1)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.10.1	Employee reviews completed	Human Resources Advisor	50%	Progressing	Employee reviews have commenced. Reviews for 2023/24 are expected to be completed by August 2024	Employee reviews completed	100% of employee reviews are completed	

CC4.11: Adopt a contemporary approach to evaluating positions' salaries (WMP 3.2)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.11.1	Implement new job evaluation system	Human Resources Advisor	100%	Completed	The employment new job evaluation system (Oo-Soft) was implemented. All Council position were being evaluated through the new job evaluation system. This is an on-going process	Implement new job evaluation system	Oo-soft system implemented	Implemented

CC4.12: Apply Attraction and Retention incentives (WMP 3.3)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.12.1	Develop Attraction and Retention Policy	Human Resources Advisor	75%	Progressing	An internal attraction and retention audit was completed in June 2024. This audit will form part of an attraction and retention policy and/or framework. During 2022/23 OO-Soft software system was implemented with Council position descriptions being evaluated within the new system	Develop Attraction and Retention Policy	Policy developed and adopted	
CC4.12.2	Salary packaging opportunities provided	Human Resources Advisor	100%	Completed	Throughout the 2023/24-year the opportunities continued to be provided	Salary packaging opportunities provided	Provided to all employees	

CC4.13: Recognize employees' sustained engagement and service through service milestones (WMP 3.4)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.13.1	Service Awards provided	Payroll Officer	1000%	Completed	Service Awards were updated in the second half of 2023/24 to provide a more meaningful recognition of service for employees. Employees will now receive their award upon their anniversary of service by their supervisor/manager and the HR Team. Employees are recognised during ACE meetings during the respective quarter and at the end-of-year ACE Meeting, employees will also receive a plaque acknowledging their service in front of their peers	Service Awards provided	100% of employees reaching milestones are awarded	100%

CC4.14: Conduct biennial employee engagement surveys (WMP 4.1)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.14.1	Conduct biennial employee surveys	Human Resources Advisor	100%	Completed	During quarter three of the 2023/24-year a workplace wellbeing assessment was completed in February 2024 and a People at Work Survey measuring psychosocial hazards and risks was completed in March 2024	Conduct biennial employee surveys	Survey delivered	

CC4.15: Ensure our organisation and operations are resilient and able to deal effectively with disruption (WMP 4.2)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.15.1	Review, monitor and refine Council's Business Continuity Plan ("BCP")	Procurement, Contracts and Insurance Coordinator	50%	Progressing	During the second half of the 2023/24-year the plan was under review	Review, monitor and refine Council's Business Continuity Plan ("BCP")	BCP sub-plans reviewed	Reviewed
CC4.15.2	Conduct BCP exercises	Procurement, Contracts and Insurance Coordinator	0%	Not Progressing	During the second half of the 2023/24-year the plan was currently under review	Conduct BCP exercises	One exercise conducted each year	

CC4.16: Facilitate a culture of continuous improvement in service delivery across our organisation (WMP 4.5)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.16.1	Deliver biennial LEAN training	Human Resources Advisor	0%	Not due to start	Employee training was the focus on compliance training, leadership development and management of psychosocial hazards/risks. LEAN Training was not delivered in 2023/24	Deliver biennial LEAN training	LEAN training delivered	Zero

CC4.17: Injured employees are effectively returned to the workplace (WMP 5.2)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.17.1	Train and skill people leaders on injury management role and process	Work Health and Safety Lead	100%	Completed	Training completed	Train and skill people leaders on injury management role and process	Training delivered to all people leaders	

CC4.18: Provide independent support to employees via an Employee Assistance Program (EAP) (WMP 5.3)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.18.1	EAP service available to all employees	Work Health and Safety Lead	100%	Completed	EAP service was available to all employees	EAP service available to all employees	EAP service provided	Provided

CC4.19: Review and implement Council's Equal Employment Opportunity Program (WMP 1.7)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.19.1	Review and promote Council's Equal Employment Opportunity Management Plan	Work Health and Safety Lead	0%	Not due to start	The review of Council's Equal Employment Opportunity Management Plan has been incorporated into the 2024/25 Operational Plan	Review and promote Council's Equal Employment Opportunity Management Plan	Equal Employment Opportunity Management Plan reviewed and promoted	Zero

CC4.20: Provide a strong first impression of Parkes Shire Council for new employees (WMP 1.9)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.20.1	Review and improve Council's online orientation system	Human Resources Advisor	100%	Completed	Council's online orientation system has been reviewed. Council engaged multiple providers to provide content and branding for our online orientation system. The training providers will ensure consistency in message and compliance regarding legislation and best practice. All employees have been provided with WHS, Cyber Security and Code of Conduct compliance modules. All employees will be provided refresher training in the remaining compliance modules over the next twelve months	Review and improve Council's online orientation system	System reviewed	Reviewed

CC4.21: Conduct biennial employee engagement surveys (WMP 4.1)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.21.1	Conduct biennial employee surveys	Human Resources Advisor	100%	Completed	Biennial employee surveys were conducted during the second half of 2023/24. A workplace wellbeing assessment was completed in February 2024. A People at Work Survey measuring psychosocial hazards and risks was completed in March 2024. The workplace wellbeing assessment assist with the development of Council's Health, Safety and Wellbeing Calendar and identifies key areas that employees would like to focus on. The People at Work Survey gives employees the opportunity to identify psychosocial hazards and risks in the workplace. This assists Council in measuring and analysing these risks and to apply appropriate control measures	Conduct biennial employee surveys	Survey delivered	

CC4.22: Facilitate organizational success by creating accountability and responsibility among the members of our organization by providing clear values to meet our corporate and community vision (WMP 6.1)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC4.22.1	Implement Corporate Values into recruitment processes	Human Resources Advisor	100%	Completed	During the selection and advertising process all roles for recruitment, have the corporate values, both outlined and implemented	Implement Corporate Values into recruitment processes	Values incorporated into recruitment advertising and selection criteria	
CC4.22.2	Implement Corporate Values across position descriptions	Human Resources Advisor	75%	Progressing	The implementation of corporate values across the position descriptions (PD) is reviewed as PD are reviewed. PD's is currently under review with the new branded template which includes the corporate values of 'respect, integrity, safety, community, innovation, and teamwork'. This practice is an on-going process with PD'			

Finance

CC5: We will comply with financial policies and accounting standards, enabling us to operate as a financially sustainable organisation. We will continue to focus on cost containment to improve performance and to deliver enhanced cash reserves for the organisation

CC5.1: Financial Reporting

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC5.1.1	Annual financial statements submitted in line with statutory deadlines	Chief Financial Officer	100%	Completed	The Annual Financial Statements were submitted on the 29 of September 2023, a month before the due date. PSC was the third council in NSW to submit their Annual Financial Statements	Annual financial statements submitted in line with statutory deadlines	31 October 2024	29 September 2023
CC5.1.2	Achieve a positive Operating performance ratio	Chief Financial Officer	100%	Completed	Council exceeded the benchmark. The operating performance ratio measures are how well the council contained expenditure within the operating period	Achieve a positive Operating performance ratio	≥0%	1.63
CC5.1.3	Achieve an unrestricted ratio greater than the Office of Local Government (“OLG”) benchmark	Chief Financial Officer	100%	Completed	The Unrestricted current ratio is 2.01 times	Achieve an unrestricted ratio greater than OLG benchmark	≥1.5x	2.01X

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC5.1.4	Debt service cover ratio	Chief Financial Officer	100%	Completed	The Debt Service Ratio is 11.28 times against a benchmark of 2 times	Debt service cover ratio	≥2x	11.28X
CC5.1.5	Cash expense cover ratio	Chief Financial Officer	100%	Completed	The cash expenses cover ratio was 7.38 months. This ratio indicates the number of months the council can continue to pay for its expenses without additional cash inflow	Cash expense cover ratio	≥ 3 months	7.38 months

CC5.2: Management Accounting

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC5.2.1	Monthly management reports are submitted to the Senior Leadership Team on time	Chief Financial Officer	100%	Completed	Monthly management reports were submitted to the directors and discussed with the cost centre owners during monthly meeting discussing their variance against budget	Monthly management reports are submitted to the Senior Leadership Team on time	By 14th of each month	14
CC5.2.2	Quarterly Budget Review Statements are submitted on time	Chief Financial Officer	100%	Completed	All the Quarterly Budget Review Statements were submitted on time and presented at Council meetings	Quarterly Budget Review Statements are submitted on time	Within 2 months of End of Quarter	<2

CC5.3: Creditors and Purchasing

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC5.3.1	% of purchase orders raised before invoice date	Procurement, Contracts and Insurance Coordinator	100%	Completed	Throughout the 2023/24-year regular reviews were completed with an overall compliance score of 88% slightly below the benchmark - equal to last-years	% of purchase orders raised before invoice date	90%	88%

CC5.4: Debtors

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC5.4.1	% of rates and annual charges outstanding	Chief Financial Officer	100%	Completed	The sale of land which is scheduled for August 2024 will resolve the issue	% of rates and annual charges outstanding	Less than 10%	11.43
CC5.4.2	Own source operating revenue ratio	Chief Financial Officer	100%	Completed	The council did not meet the benchmark due to the high level of grants and contributions received	Own source operating revenue ratio	≥60%	46.36%

CC5.5: Fixed Asset Accounting

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC5.5.1	Monthly CAPEX reports are submitted to the Senior Leadership Team on time	Chief Financial Officer	100%	Completed	Monthly capex reports were submitted to the Senior Leadership Team by the fifth working day	Monthly CAPEX reports are submitted to the Senior Leadership Team on time	By the 14th of each month	Five
CC5.5.2	Monitor current progress to prevent budget overruns by distributing and discussing reports monthly	Chief Financial Officer	100%	Completed	Monthly capital reports were distributed by workday five	Monitor current progress to prevent budget overruns by distributing and discussing reports monthly	Provide document by the 14th of each month	Five
CC5.5.3	Total Value / projects of work in progress account for council's general fund activities	Chief Financial Officer	100%	Completed	The work in progress account increased due to the number of large-scale projects the council has embarked on	Total Value / projects of work in progress account for council's general fund activities	Declining	Increasing

Fleet

CC6: We will maintain Council's heavy plant and equipment, plan and procure new assets and monitor regular plant safety inspections

CC6.1: Support Council operations with effective fleet procurement

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC6.1.1	Plant uptime across fleets meets operational need within budgetary constraints	Fleet and Depot Coordinator	100%	Completed	During the second half of the 2023/24-year there were two notable plant issues resulting in downtime. The new store forklift experience failure with the reverse gear not working. The street sweeper experienced a transmission issue, both issues were resolved with the repairs falling under warranty	Plant uptime across fleets meets operational need within budgetary constraints	95%	

CC6.2: Support Council operations with effective fleet management and maintenance

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC6.2.1	Maintenance of heavy plant, light vehicles and small plant and equipment to support Council services and programs	Fleet and Depot Coordinator	100%	Completed	During the 2023/24-year the maintenance scheduled servicing program was on-going, with new scheduled service work orders generated weekly and booked. Continual data from plant pre-starts provided data identifying any issues reducing downtime. The second half of the year saw reactionary work orders reduction equating to 31.7% of all work done. This number sits well under the IPWEAS benchmark of 30%	Maintenance of heavy plant, light vehicles and small plant and equipment to support Council services and programs	Maintenance Achieved	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC6.2.2	Implement the 2023-24 Plant Replacement Program that aligns with service needs	Fleet and Depot Coordinator	100%	Completed	The Plant replacement program saw 30 assets arrive and have been commissioned, with 8 still on route. All plant due for replacement have had capital committed. Additional ad-hoc purchases were made, for the electrician and drainage camera maintenance team with a Toyota Hiace vehicle. Throughout the second half of the year development and improvements have been made to the fleet dashboard to ensure 10-year planning accuracy improvements	Implement the 2023-24 Plant Replacement Program that aligns with service needs	36 items of plant and equipment replaced Annual Plant Disposal report provided to the Plant Procurement Committee	
CC6.2.3	Prepare and adopt an Electric Vehicle Strategy	Fleet and Depot Coordinator	50%	Progressing	Preparation for an electric vehicle strategy was underway, during the first six months of the 2023/24-year. Which saw all the fleet data supplied to CNSWJO. The EV Strategy has yet to be finalised	Prepare and adopt an Electric Vehicle Strategy	Policy adopted by 30 June 2024	

CC6.3: Monitor efficiencies of Council's fleet to ensure a safe working environment that aligns with organisational needs

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual

CC6.3.1	Introduction of the new GPS system	Fleet and Depot Coordinator	80%	Progressing	The introduction of the GPS system has gone from the introduction phase during the first half of the year, to implementation phase during the second half of the 2023/24-year. The driver fobs have been distributed across the organization with draft procedures being reviewed for delivery prior to the official commencement date expected in the first quarter next year. Geofenced town limits and council facilities has been implemented, providing alerts to any vehicle outside these boundaries after 6pm work hours. Hydraulic monitoring has been on-going for each plant, to ensure fit for purpose sensors are on each plant item., this will occur as part of the schedule maintenance program. Once the GPS system commences its full capacity, this will allow, drivers to use their fob within the plant to identify the person in charge, the unit will beep until the in charge driver actions the fob. The GPS system has the capacity to provide SMS alerts in cases of collision events or duress alarms	Introduction of the new GPS system	Installed in relevant Council-owned vehicles by 30 June 2024

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC6.3.2	Utilization of plant and equipment in accordance with Institute of Public Works Engineering Australasia Limited (“IPWEA”) plant and equipment benchmarks	Fleet and Depot Coordinator	90%	Progressing	During the second half of the 2023/24-year development of specific monthly reporting to reflect the utilisation of fleet vehicles, in accordance with IPWEA benchmarks. TechOne and GeoTab provide the technology to support the implementation of the data. The implementation of the GPS system across the organisation (driver fobs) will capture data to utilise for reporting systems and distribute across the organisation. The reporting will provide data on engine hours and idling time of each plant. 91% of vehicles including trucks are driving over 500km per month.	Utilization of plant and equipment in accordance with Institute of Public Works Engineering Australasia Limited (“IPWEA”) plant and equipment benchmarks	Attend workshop one per year	One

Council Land and Buildings

CC7: We will comply with the statutory requirements of public land and buildings including planning for renewals and/or upgrades and environmental management of Council land

CC7.1: Ensure effective management of all Council-owned and Crown land parcels

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC7.1.1	Develop Plans of Management for Community Land	Manager Facilities	100%	Completed	The Plan of Management Community Land was developed and presented to the Minister for approval, the plan is currently on 28-day public exhibition before being returned to the Minister for endorsement	Develop Plans of Management for Community Land	Developed by 30 June 2024	Developed
CC7.1.2	Development of business model for Carrington Hotel	Manager Facilities	100%	Completed	During the first half of the 2023/24-year consultants were engaged, and stakeholder meetings were held. The consultants provided a Business Model which was reported to Council and currently placed on public exhibition	Development of business model for Carrington Hotel	Delivered by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC7.1.3	Development of business model for Spicer Caravan Park	Manager Facilities	100%	Completed	During the first half of the 2023/24-year consultants were engaged, and stakeholder meetings were held. The consultants provided a Business Model which was reported to Council during May 2024	Development of business model for Spicer Caravan Park	Delivered by 30 June 2024	

CC7.2: Foster relationships between Council and user groups in a bid to provide opportunities for the community to be involved in a wide range of activities and recreational programs

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC7.2.1	Number of Park Bookings received	Manager Facilities	100%	Completed	The second half of the 2023/24-year had 24 park bookings during the January to June 2024 season	Number of Park Bookings received	Average five per month	24

Council Environmental Management

CC8: We will implement appropriate measures to ensure all environmental management activities progress. The potential impacts, environmental legislation and biosecurity will have been considered.

CC8.1: Sustainable environmental management of Council owned and managed land

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC8.1.1	Utilize Council's Crown Land Environmental Masterplan, to ensure biodiversity is considered, when undertaking activities at all Crown Land owned, Parkes Shire Council managed reserves	Water Quality and Sustainability Specialist	100%	Completed	Completed during the first six months of the 23/34-year with the continual use of Council's Crown Land Environmental Masterplan	Utilize Council's Crown Land Environmental Masterplan, to ensure biodiversity is considered, when undertaking activities at all Crown Land owned, Parkes Shire Council managed reserves	Achieve	

CC8.2: Sustainable environmental management system for Council operations

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC8.2.1	Operational activities are completed with environmental impacts taken into consideration in line with Council's Environment Management Plan and regulations	Water Quality and Sustainability Specialist	100%	Completed	100% compliant to date with this action	Operational activities are completed with environmental impacts taken into consideration in line with Council's Environment Management Plan and regulations	Achieve	100%

CC8.3: Develop, facilitate, and deliver environmental, sustainability and energy efficiency initiatives

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC8.3.1	Support and partner with Central West Lachlan Landcare to deliver environmental initiatives within the Parkes Shire	Environmental and Sustainability Co-Ordinator	100%	Completed	Within the reporting period Council partnered with Central West Lachlan Landcare to run Parkes' third Homegrown Parkes event in March 2024, focusing on local produce and sustainability. This event saw over 2000 community members in attendance	Support and partner with Central West Lachlan Landcare to deliver environmental initiatives within the Parkes Shire	Three initiatives conducted	Three
CC8.3.2	Support local schools to undertake environmental, sustainability and energy efficiency initiatives	Environmental and Sustainability Co-Ordinator	75%	Progressing	Schools Eco Day, planned for March 2024, was postponed to October 2024. Significant planning and preparation were undertaken in partnership with Central West Lachlan Landcare	Operational activities are completed with environmental impacts taken into consideration in line with Council's Environment Management Plan and regulations	Three activities supported	

Customer Service

CC9: We will implement appropriate systems, processes, and technology to deliver high-quality, informative and responsive customer service

CC9.1: Provide customers with prompt responses to customer requests

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC9.1.1	Increase usage of customer requests received and processed via online Customer Request Management (CRM) portal	Customer Experience Coordinator	100%	Completed	Council's CRM portal received at total of 2,336 requests across the organisation during the first half of the 2023/24-year. 287 requests were submitted online. This is a significant increase, especially during the months May and June 2024	Increase usage of customer requests received and processed via online Customer Request Management (CRM) portal	5% Increase	
CC9.1.2	Promptly and efficiently respond to customer requests	Customer Experience Coordinator	100%	Completed	Customer requests were responded to within 13 days (average number of days) and closed off on average within 16 days. The 2,336 requests received, there was 2,191 requests closed off during this period. 60.2% a total of 131 CRM's was closed off before deadline	Promptly and efficiently respond to customer requests	Customer requests are responded to within 10-days	60.2%

CC9.2: Monitor and improve customer service across Council's organisation and operations

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC9.2.1	Develop a whole-of-Council Customer Service Charter	Customer Experience Coordinator	100%	Completed	The development of a whole-of-council Customer Service Charter was completed. Displayed in customer service areas, and attached to the customer service policy	Develop a whole-of-Council Customer Service Charter	Customer Service Charter developed by 30 June 2024	Zero
CC9.2.2	Complete the Customer Service Centre foyer refurbishment	Director Customer, Corporate Services and Economy	50%	Progressing	The plans for the refurbishment have been completed and an estimate for the costs delivered by the Architect. There are plans to replace the carpet in the Council Chambers and Committee Room and to refurbish the public toilets, however no funding has been identified for the Foyer refurbishments	Complete the Customer Service Centre foyer refurbishment	Completed by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC9.2.3	Initiate professional Customer Service training for all customer service staff	Human Resources Advisor	100%	Completed	Professional Customer Service training was delivered in the second half of 2023/24. In December 2023, customer service staff undertook training in Dealing with Difficult Ratepayers and Community Behaviour. In March 2023, customer service staff undertook Customer Service Excellence Training	Initiate professional Customer Service training for all customer service staff	Training initiated by 30 June 2024	
CC9.2.4	Develop a new, consolidated Customer Service Team structure and position descriptions	Human Resources Advisor	100%	Completed	Development of a new consolidated customer service team structure and position descriptions were completed throughout the first half of the 2023/24-year	Develop a new, consolidated Customer Service Team structure and position descriptions	Developed by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC9.2.5	Convene regular Customer Experience Coordinator meetings with all Directors and key personnel	Customer Experience Coordinator	100%	Completed	Regular meetings were convened throughout the second half of the 2023/24-year with all relevant directors. Meetings focused on the improvements we can deliver across customer service and identify and implement the improvements. The customer service review, which was completed during 2023, all the implemented actions were being monitoring and extracting of data	Convene regular Customer Experience Coordinator meetings with all Directors and key personnel	Meetings held every two months	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC9.2.6	Increase capacity of Customer Service staff to manage routine planning inquiries and move to either an appointment model for complex planning matters or limited hours access to duty planners	Customer Experience Coordinator	100%	Completed	Customer service staff capacity levels were increased to manage the planning enquiries within the corporate queue. Meetings were held for information and up skilling began, ensuring the team will be enabled to answer planning questions and redirecting	Monitor and improve customer service across Council's organisation and operations		
CC9.2.7	Consolidate and promote single access points for all external telephone and email enquiries	Customer Experience Coordinator	50%	Progressing	Consolidation and promotion of the single access customer service point has been on-going with upskilling, negotiations and meetings between stakeholders in preparation for the 2024/25-year	Consolidate and promote single access points for all external telephone and email enquiries	Single access points implemented by 31 December 2023	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC9.2.8	Implement improved workflows and internal protocols for the management of common customer inquiries involving one or more department	Executive Manager Customer, Communication and Information	100%	Completed	During the second half of the 2023/24-year business processes were identified for improvements. There was the introduction of tracking customer complaint, promotion and review of existing CRMs and processes. New CRMs have been identified and created	CC9.2.8 Implement improved workflows and internal protocols for the management of common customer inquiries involving one or more department	Improved workflows and internal protocols implemented by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC9.2.9	Update and promote Council's website as the first port-of-call for up-to-date Council information	Corporate Communications and Media Specialist	100%	Completed	The Council's website was updated and promoted throughout the 2023/24-year. The teams made improvements across many of the owned websites including the corporate website as a single central point, Parkes Elvis Festival, invest in Parkes, visit Parkes and Trundle ABBA Festival. Improvements were also made in our "Your Say" section collating community engagement initiatives to sure easy use	Update and promote Council's website as the first port-of-call for up-to-date Council information	Website updated and promoted	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC9.2.10	Develop a plain English Frequently Asked Questions (FAQ) document that is accessible for all staff on the most common customer service enquiries	Customer Experience Coordinator	50%	Progressing	The development of a plain English FAQ commenced, with all the team contributing their stories of experience. A centralised location is collating the data for analysing	Develop a plain English Frequently Asked Questions (FAQ) document that is accessible for all staff on the most common customer service enquiries	FAQ document developed 31 December 2023	
CC9.2.11	Establish processes to prepare customer service performance reports with agreed outcomes and measures for review by the Executive and Council	Customer Experience Coordinator	100%	Completed	During the second half of the year, implementation of the actions from the customer service review completed during 2023. Statistics and reporting monthly for Management team and Council access	Establish processes to prepare customer service performance reports with agreed outcomes and measures for review by the Executive and Council	Monthly reports prepared	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC9.2.12	Provide updates on Customer Service Reform to Executive Leadership Team, Connected Management Team and Council	Customer Experience Coordinator	100%	Completed	Monthly statistics and reporting on customer service reform was provided to both the Executive Leadership Team and Council. Quarterly reporting was provided to the Connected Management Team	Provide updates on Customer Service Reform to Executive Leadership Team, Connected Management Team and Council	Monthly updates provided	Four

Community Services and Wellbeing

CC10: We will implement appropriate frameworks and strategies, as outlined in Council's Disability Inclusion Action Plan ("DIAP"), to ensure residents of the Shire have access to services, groups and activities that have a positive impact on community wellbeing.

CC10.1: Review Council induction materials, to incorporate the topic of disability inclusion, to ensure staff have the knowledge to communicate with people respectfully, confidentiality and effectively with a disability (DIAP 1.1.3)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC10.1.1	Customer service training held with the inclusion of disability awareness and person-centered communication	Human Resources Advisor	10%	Progressing	The Customer Service Charter is to be developed prior to training being commenced for customer service training. Training will then be sourced and delivered to the customer service team. Dealing with Difficult Ratepayer and Community Behaviour was delivered in December 2023. This training had a limited exposure to the topic of disability inclusion. This has been incorporated into the 2024/25 Operational Plan	Customer service training held with the inclusion of disability awareness and person-centered communication	Training completed by 30 June 2024	

CC10.2: Ensure that all relevant staff have knowledge of accessibility features of venues and buildings (DIAP 1.3.3)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC10.2.1	Resources developed highlighting accessibility features of Council venues and buildings	Manager Facilities	100%	Completed	Council venues, buildings and new facilities include accessibility features	Resources developed highlighting accessibility features of Council venues and buildings	Developed by 30 June 2024	

CC10.3: Prepare a self-assessment checklist for local businesses and tourist attractions to encourage them to meet accessibility needs (DIAP 2.1.2)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC10.3.1	Self-assessment prepared and distributed via Council's public communication channels and industry groups	Economic Development Specialist	60%	Progressing	Council has progressed with contracting a third-party operator to provide a checklist for businesses. Checklist to be implemented in the 24/25 financial year	Self-assessment prepared and distributed via Council's public communication channels and industry groups	Prepared and distributed by 30 June 2024	

CC10.4 and inclusion of Council operated public recreation, learning and leisure facilities (DIAP 2.2.2): Improve accessibility

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC10.4.1	Review Parkes Shire Visitor Guide to ensure the details of access features of places and interest in the Parkes Shire are included	Tourism Team Leader	100%	Completed	The visitparkes.com site is currently being maintained and provides the latest source of visitor information. The visitor guide is currently out of print pending a refresh of the visit Parkes branding. The Destination Management Plan identified the branding refresh as a priority task. This will also include a new look website	Review Parkes Shire Visitor Guide to ensure the details of access features of places and interest in the Parkes Shire are included	Review by 30 June 2024	

CC10.5: Improve access to Council Administration Centre and Visitor Information Centre (VIC), including way finding (DIAP 2.3.1)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC10.5.1	Review undertaken on Council's Administration Centre to determine if VIC buildings are accessible and fitted with advanced technologies to meet the varied needs of users	Director Planning and Environment	100%	Completed	The review was undertaken on Council's Administration Centre during 2023/24-year as part of the customer service location upgrades	Review undertaken on Council's Administration Centre to determine if VIC buildings are accessible and fitted with advanced technologies to meet the varied needs of users	Review by 30 June 2024	One

CC10.6: Promote representation of people with disability in Council's workforce to the public (DIAP 3.1.2)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC10.6.1	Council website updated to promote representation of employees with disability	Corporate Communications and Media Specialist	0%	Not Progressing	During the 2023/24-year there was zero progression on this action	Council website updated to promote representation of employees with disability	Updated by 30 June 2024	Zero

CC10.7: Identify and implement services and systems that support people with disability being retrained within the workforce (DIAP 3.1.3)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC10.7.1	Services and systems identified and improved/implemented	Human Resources Advisor	0%	Not due to start	During the 2023/24-year there was zero commencement will be incorporated into the 2024/25 Operational Plan	Services and systems identified and improved/implemented	Manager People, Safety and Culture	Zero

CC10.8: Develop and promote flexible working arrangements and in-house support to recruit and retain people with disability in Council's workforce (DIAP 3.1.4)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC10.8.1	Flexible working arrangements policy reviewed	Human Resources Advisor	100%	Completed	Flexible working policy has been developed and endorsed by the Connected Management Team and the Executive Leadership Team	Flexible working arrangements policy reviewed	Policy reviewed by 30 September 2023	

CC10.9: Promote information for people with disability on how to volunteer and access work experience (DIAP 3.2.1)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC10.9.1	Council website updated to include information for people with disability on how to volunteer and access work experience	Corporate Communications and Media Specialist	0%	Not Progressing	During the 2023/24-year there was zero progression on this action	Council website updated to include information for people with disability on how to volunteer and access work experience	Website update by 30 June 2024	Zero

CC10.10: Facilitate programs to assist to address the gap in servicing the early education needs for children with disability in the Parkes Shire (DIAP 3.3.1)

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual

CC10.10.1	Programs delivered to early childhood children with disability	Family Day Care Coordinator	100%	Completed	Early Interventions programs have continued to be delivered at the Preschool over the previous six months, including the "Aruma" Early Intervention program early in the year, which assessed all children going to school in 2025- along with any children deemed needing support. The "Happee Ears" program from Hearing Australia - first round was completed in second term- with the follow-up round occurring early in term three- this assesses all children within the service. NSW government program "StEPS"- assesses children's eyesight in preparation for school 2025. Supported activities continue with all Allied Health services and support teams linked with individual children under NDS plans and evidence and documentation stored for NSW Inclusion Support Staff funding. Resources and support equipment- such as high seated disability chair and toilet support have been purchased for ongoing support of children of the service. In term four- the "Sprouts" early Intervention program will	Programs delivered to early childhood children with disability	Number of programs delivered

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
					assess children heading off to school in 2025.			

CC10.11: Advocate for improved health services within the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC10.11.1	Participation in regular meetings with the Local Health District	Director Planning and Environment	100%	Completed	Participated in regular meetings which were incorporated and aligned with the liveability committee meetings, held throughout the second half of the 2023/24-year	Participation in regular meetings with the Local Health District	Four meetings attended per year	Two
CC10.11.2	Percentage of Incentive applications processed for medical services within the Parkes Shire	Director Planning and Environment	55%	Progressing	Actions were identified during and actions to be allocated in 2024/25 Operational Plan	Percentage of Incentive applications processed for medical services within the Parkes Shire	Increasing	One

Communication and Engagement

CC11: We will promote the Parkes Shire as a place to live, work, invest and visit, and ensure our brand and our communication is inclusive and assists in connecting Council with our vibrant community.

CC11.1: Development of a multi-faceted Communications Strategy to improve communications with our community

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC11.1.1	Develop a Communications Strategy	Corporate Communications and Media Specialist	50%	Not-Progressing	Some development of the communication strategy occurred during the first half of the 2023/24-year, before the recruitment process at the end of quarter one. This development will be put forward for the 2024/25-year for progress	Develop a Communications Strategy	Strategy adopted by 30 June 2024	Zero

CC11.2.1: Increase the profile of Parkes Shire through effective brand management and public relations activities

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC11.2.1	Complete the implementation of the new corporate brand across Council's digital and physical assets	Corporate Communications and Media Specialist	100%	Completed	The implementation of the new corporate brand was completed throughout the 2023/24-year. Identified physical assets and digital assets currently with the old branding will gradually proceed to the new branding as on-going business as part of the policy review process	Complete the implementation of the new corporate brand across Council's digital and physical assets	Implemented by 30 June 2024	Complete

CC11.3: Manage and grow Council's online presence to ensure effective communication and dissemination of information

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC11.3.1	Increase in Google Analytics statistics	Corporate Communications and Media Specialist	30%	Not-Progressing	Due to changes with software and account management practices data analytics were not able to be captured during the year, therefore this action has been pushed forward into the 2024/25-year	Increase in Google Analytics statistics	Increase by 2%	Zero

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
CC11.3.2	Increase engagement measured through social media insights	Corporate Communications and Media Specialist	10%	Not-Progressing	Due to changes with software and account management practices data analytics were not able to be captured during the year, therefore this action has been pushed forward into the 2024/25-year	Increase engagement measured through social media insights	Increase by 2%	Zero

05 Economy and activation



$68.4M Grant funding secured since 2016



$13M generated per annum from Parkes Elvis Festival



$66M visitor economy

Overview

Council performs activities to ensure the Parkes Shire is home to a diverse, thriving economy which supports traditional and new industries, accommodates continued population growth, and provides quality employment, education and training opportunities. Council performs four principal activities to ensure the Shire's economy can continue to grow, these being Economic Development, Grants, Events and Festivals and Tourism and Destination Marketing.

Council recognises the potential commercial benefit that activities within this function can deliver to the community and the inability for private sector providers to lead these services and opportunities. As a result, Council fulfils the responsibility of these activities for the Shire when possible. There is also potential for these activities to provide a commercial benefit to the Council through continued investment within the local economy. Council aims for these functions to be as self-sufficient as possible over time, enabling both operational and long-term costs to be largely generated by the activities themselves.

EE: Economy and activation

Economic Development

EE1: We will provide support to businesses through the facilitation of various business support, growth and investment opportunities

EE1.1: Deliver the Economic Development Strategy to plan for future jobs and growth

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE1.1.1	Review the Economic Development Strategy	Executive Manager Economy and Engagement	0%	Not Progressing	The review of the Economic Development Strategy did not progress during the year and has been pushed forward into the 2024/25-year	Review the Economic Development Strategy	Strategy adopted by 30 June 2024	Zero

EE1.2: Advocate for increased Government funding and support for economic development within the Parkes Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE1.2.1	Complete the Parkes Regional Entertainment Centre Feasibility Study	Executive Manager Economy and Engagement	100%	Completed	During the 2023/24-year the Parkes Regional Entertainment Centre Feasibility Study was completed	Complete the Parkes Regional Entertainment Centre Feasibility Study	Study completed by 30 June 2024	Completed

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE1.2.2	Develop a Parkes Shire Liveability Strategy	Director Planning and Environment	100%	Completed	The development of the Parkes Shire Liveability Strategy was successfully completed and adopted during the second quarter of the 2023/24-year	Develop a Parkes Shire Liveability Strategy	Strategy adopted by 30 June 2024	Adopted

EE1.3: Support businesses and industry groups within the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE1.3.1	Number of business and industry group meetings attended	Economic Development Specialist	100%	Completed	Council attended regular meetings with RGDC, NSW Government, and the Central West Joint Organisation and Regional Development Association	Number of business and industry group meetings attended	One per quarter	Two

EE1.4: Promote growth in smart and sustainable businesses and industries

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE1.4.1	Develop a Multicultural Strategy for the Parkes region, including welcome and settlement initiatives	Executive Manager Economy and Engagement	0%	Not Progressing	The review of the Multicultural Strategy did not progress and has been pushed forward into the 2024/25-year	Develop a Multicultural Strategy for the Parkes region, including welcome and settlement initiatives	Strategy adopted by 30 June 2024	

EE1.5: Facilitate investment projects that match our economic development priorities

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE1.5.1	Collaborate with Regional Growth NSW Development Corporation (RDGC) to support interested investors through investor enquiry process	Executive Manager Economy and Engagement	100%	Completed	Council continued to work in partnership with Regional Growth NSW Development Corporation (RGDC) supporting interested investors to the Parkes Special Activation Precinct (SAP). Council coordinated and engaged in all inter-agency meetings	Collaborate with Regional Growth NSW Development Corporation (RDGC) to support interested investors through investor enquiry process	100% of meetings attended	100%

Communication and Engagement

EE2: We will promote the Parkes Shire as a place to live, work, invest and visit, and ensure our brand and our communication is inclusive and assists in connecting Council with our vibrant community

EE2.1: Development of a multifaceted Communications Strategy to improve communications with our community

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE2.1.1	Develop a Communications Strategy	Brand and Corporate Communications Specialist	0%	Not Progressing	Some development of the communication strategy occurred during the first half of the 2023/24-year, before the recruitment process at the end of quarter one. This development will be put forward for the 2024/25-year for progress	Develop a Communications Strategy	Complete	
EE2.1.2	Develop an Engagement Strategy	Brand and Corporate Communications Specialist	10%	Progressing	The engagement strategy will be first half of the 2024/25-year, between the governance team, and the communications and media teams in readiness of the new IP&R program	Develop an Engagement Strategy	Complete	

EE2.2: Increase the profile of Parkes Shire through effective brand management and public relations activities

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE2.2.1	Increase in media value measured	Corporate Communications and Media Specialist	100%	Completed	During the year Council engaged Original Spin to support media exposure and measurement throughout the 2024 Parkes Elvis Festival. These highlights identified total circulation of 1,873,655,869 and an advertising value equivalency approximately of $16,700,00. The 2024 festival was in its 30th year, and the results highlighted the appeal and legacy of the festival. This occasion heightened interest to an extensive radio distribution and increased online syndication of articles, contributing to the significant difference in radio and online coverage	Increase in media value measured	Increase	Increased
EE2.2.2	Number of media releases distributed by Council	Brand and Corporate Communications Specialist	50%	Progressing	There were 14 media releases during the first half of the year. No updated for the second half	Number of media releases distributed by Council	26	

EE2.3: Manage and grow Council's online presence to ensure effective communication and dissemination of information

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE2.3.1	Increase in Google Analytics statistics	Brand and Corporate Communications Specialist	0%	Not Progressing	No update provided	Increase in Google Analytics statistics	2% increase	
EE2.3.2	Increase engagement measured through social media insights	Brand and Corporate Communications Specialist	50%	Progressing	No update provided	Increase engagement measured through social media insights	2% increase	
EE2.3.3	Investigate new ways of connecting with our community	Brand and Corporate Communications Specialist	20%	Progressing	Plans underway for connecting with the community at the Annual Shire shows, one of the core focuses of engagement will be the IP&R engagement process planning (Parkes Shire 2040) as part of the Community Strategic Plan building	Investigate new ways of connecting with our community	Achieved	

EE2.4: Deliver strategic marketing plans to promote Parkes as a place to visit, live, work and invest

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE2.4.1	Number of marketing campaigns developed	Executive Manager Economy and Engagement	100%	Completed	During the 2023/24-year marketing campaigns included the Trundle ABBA Festival 2024, Parkes Elvis Festival 2025. The Parkes region gained some national exposure with the Sydney Morning Herald 'Traveller' NSW and 'Power Trip' a Central NSW touring trip by Rob MacFarland. The Bicycling Australia's July/August issue and website with a multi-page editorial story by Nat Bromhead. Paul Murray Live "Our Town" show, in Parkes 26 May 2024	Number of marketing campaigns developed	Ten	Ten

Events and Festivals

EE3: We will work with our community to deliver a financially sustainable Events and Festivals program including the annual Elvis Festival and Trundle ABBA Festival.

EE3.1: Develop funding, corporate partnerships and sponsorships to ensure the Parkes Elvis Festival is financially sustainable

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.1.1	Attract and retain sponsors to deliver the 2024 Parkes Elvis Festival	Capability Support Officer	100%	Completed	Sponsorship to the value of $220,000 was achieved for the 2024 Parkes Elvis Festival	Attract and retain sponsors to deliver the 2024 Parkes Elvis Festival	$180,000	$220,000
EE3.1.2	Attract and retain sponsors to deliver the 2023 Trundle ABBA Festival	Executive Manager Economy and Engagement	100%	Completed	Sponsorship income for the 2023 Trundle Abba Festival was ten thousand dollars, there was no prior sponsorship income derived from the festival by Council	Attract and retain sponsors to deliver the 2023 Trundle ABBA Festival	$15,000	10,000
EE3.1.3	Develop Sponsorship Prospectus for Council's Events and Festivals program	Event Attraction and Sponsorship Coordinator	100%	Completed	Sponsorship Prospectus developed by Council's Event Attraction and Sponsorship Coordinator and includes sponsorship opportunities for Parkes Elvis Festival, Trundle ABBA Festival and Sounds at the Pavilion events	Develop Sponsorship Prospectus for Council's Events and Festivals program	Developed by 31 March 2024	In progress

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.1.4	Maintain funding from Destination NSW to deliver Parkes Elvis Festival	Event Attraction and Sponsorship Coordinator	100%	Completed	Council maintained the 2022-2025 Funding Agreement with Destination NSW throughout the reporting period. Council will enter into negotiations with Destination NSW to continue this funding for the 2026 Parkes Elvis Festival and beyond	Maintain funding from Destination NSW to deliver Parkes Elvis Festival	Funding maintained	Funding maintained

EE3.2: Deliver the Parkes Elvis Festival and Trundle ABBA Festival

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.2.1	Deliver the 2023 Trundle ABBA Festival in accordance with endorsed Event Management Plan	Executive Manager Economy and Engagement	100%	Completed	The 2023 Trundle ABBA festival was delivered successfully during quarter two during the first six months of the 2023/24-year. There were no major operational, safety of medical incidents during the event. The overall survey indicated a positive experience and impression amongst attendees. The financial targets were achieved, with overall expenditure and investment coming in at less than projected. The data provide, draft insights, indicate a local economic benefit of $97,000. Over 2,200 tickets were sold, with 12% visiting from interstate	Deliver the 2023 Trundle ABBA Festival in accordance with endorsed Event Management Plan	Festival delivered October 2023	Festival delivered

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.2.2	Deliver the 2024 Parkes Elvis Festival in accordance with endorsed Event Management Plan	Events and Festivals Specialist	100%	Completed	The 2024 Parkes Elvis Festival was successfully delivered in January 2024	Deliver the 2024 Parkes Elvis Festival in accordance with endorsed Event Management Plan	Festival delivered January 2024	Delivered
EE3.2.3	Develop a detailed Event Management Plan for the 2024 Trundle ABBA Festival	Events and Festivals Specialist	100%	Completed	2024 Parkes Elvis Festival delivered between 10-14 January 2024	Develop a detailed Event Management Plan for the 2024 Trundle ABBA Festival	Developed by 31 March 2024	In progress
EE3.2.4	Develop a detailed Event Management Plan for the 2025 Parkes Elvis Festival	Events and Festivals Specialist	75%	Progressing	Council's Events and Festivals team has continued to develop and implement the Event Management Plan for the 2025 Parkes Elvis Festival, including a structured approach to procurement of services to reduce budget overruns and addition of new Festival attractions	Develop a detailed Event Management Plan for the 2025 Parkes Elvis Festival	Developed by 31 March 2024	In progress

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.2.5	Maintain the Parkes Elvis Festival Net Promoter Score	Executive Manager Economy and Engagement	100%	Completed	The net promoter score in the 2024 Parkes Elvis Festival survey received a score 65% from (470) responses. Eighty percent of respondents stated they are likely to and would attend the 2025 festival. These responses also rated the event 9/10 or 73% (334). Whilst 18% (84) gave a rating of 7/8 and 8% (38) gave a rating of 1/6	Maintain the Parkes Elvis Festival Net Promoter Score	Net Promoter Score greater than >80%	

EE3.3: Improve the planning, delivery and evaluation of Council's Events and Festivals program

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.3.1	Implement improvement opportunities identified via Event Management Service Review	Events and Festivals Specialist	90%	Progressing	A number of improvement opportunities identified in the Event Management Service Review were implemented including the implementation of an Events Financial Assistance Program, relocation of the Events and Festivals team to the main Administration Office precinct, commencement of the delivery of a Major Events and Festivals Strategy, and review of internal event management processes	Implement improvement opportunities identified via Event Management Service Review	All High-Priority actions implemented by 30 June 2024	In progress

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.3.2	Develop and adopt an Events and Festivals Strategy	Executive Manager Economy and Engagement	5%	Progressing	The development and adoption of the Events and Festival strategy will be pushed over to the 2024/25-year. Silver Living Strategy was engaged as the contractor during the third quarter with meetings held. Project briefings submitted to the Major Events Advisory Committee during quarters three and four. Next financial year will commence with the stakeholder engagement sessions already planned	Develop and adopt an Events and Festivals Strategy	Strategy adopted by 30 November 2023	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.3.3	Review Parkes Elvis Festival annual operational plans	Executive Manager Economy and Engagement	50%	Progressing	The development and adoption of the Events and Festival strategy will be pushed over to the 2024/25-year. Silver Living Strategy was engaged as the contractor during the third quarter with meetings held. Project briefings submitted to the Major Events Advisory Committee during quarters three and four. Next financial year will commence with the stakeholder engagement sessions already planned	Review Parkes Elvis Festival annual operational plans	Plans reviewed by 30 June 2024	
EE3.3.4	Maintain team of Parkes Elvis Festival volunteer portfolio holders	Parkes Elvis Festival Producer	100%	Completed	Portfolio Holders maintained for the delivery of the 2024 Parkes Elvis Festival	Maintain team of Parkes Elvis Festival volunteer portfolio holders	Eight portfolio holders	Maintained

EE3.4: Promote Parkes Shire as a preferred location for targeted tourism and business events

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.4.1	Develop marketing collateral to promote Parkes as a preferred location for events	Executive Manager Economy and Engagement	50%	Progressing	The development of marketing collateral did not progress and has been pushed forward into the 2024/25-year	Develop marketing collateral to promote Parkes as a preferred location for events	Developed by 31 December 2023	Zero

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.4.2	Attract new business events to the Shire	Executive Manager Economy and Engagement	100%	Completed	During the 2023/24-year Council secured and supported the hosting of the Environment and Allied Professionals (EDAP) conference held in Parkes during quarter four which attracted over 120 professionals to the area. Quarter four also saw partnership with Destination Network Central West utilizing their business connections to alert relevant local businesses of the opportunity to be involved in the Destination Business Events showcase held during quarter four. Development of the Events financial assistance program which includes a "Destination Events" fund which provides an available budget for attracting business events to the region. The framework and the program had been endorsed and implemented from 1st July 2024. Further development will be needed to provide facilities like suitable conference venues, accommodation and dining options	Attract new business events to the Shire	One new event per year	One

EE3.5: Develop and implement a balanced program to support business and tourism events throughout the year

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.5.1	Develop 2024-25 Events Calendar containing an event every month	Events and Festivals Specialist	100%	Completed	2024/25 Events Calendar has been developed and includes Council-run and community events. Support will be provided by the Events and Festivals team to deliver events throughout the 2024/25 FY	Develop 2024-25 Events Calendar containing an event every month	Developed by 30 June 2024	In progress
EE3.5.2	Provide planning support to new and existing event operators	Events and Festivals Specialist	100%	Completed	Council's Events and Festivals team continued to provide support to event operators through the delivery of the Community Events Program. In addition, Council implemented an Events Financial Assistance Program in June 2024 which included the distribution of financial assistance to community and destination events through funding rounds with a structured application process	Provide planning support to new and existing event operators	Ten per year	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE3.5.3	Deliver three Summer Sounds at Cooke Park Pavilion events	Events and Festivals Specialist	90%	Progressing	Two events delivered (November 2023 and February 2024). The third event was not held due to budget constraints	Deliver three Summer Sounds at Cooke Park Pavilion events	Three events delivered	Two events delivered to date

Grants

EE2: We will provide support to businesses and individuals, meet the community's needs, build skills and resilience, and develop and maintain community infrastructure and services through the facilitation of Council's Grants Program.

EE2.1: Promote and support grant opportunities within the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE2.1.1	Number of Council grant applications submitted	Corporate Grants Specialist	100%	Completed	During the second half of the 2023/24-year there were 14 Council grant applications submitted. 9 during quarter three and 5 during quarter four	Number of Council grant applications submitted	20 per year	46
EE2.1.2	Number of Community grant applications submitted	Corporate Grants Specialist	100%	Completed	During the second half of the 2023/24-year, 134 Community grants submitted, in total, exceeding the targets for the year. Parkes 78; Peak Hill and Alectown 11; Tullamore 4; Trundle 13; Bogan Gate 4 and Shire wide 24	Number of Community grant applications submitted	20 per year	134

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE2.1.3	Success rate of Community grants applied for	Corporate Grants Specialist	100%	Completed	The second half of the 2023/24-year continued with promotion and support of grant opportunities within the Shire. Whilst there have been successful, unsuccessful and pending tallies, these included grants lodged during previous quarters. This is due to assessment periods for some grants that can take more than 3 months. Quarter 3 - 16 applications lodged (16 pending; 1 successful; 0 unsuccessful) Quarter 4 - 26 Grants submitted (0 pending, 37 successful, 15 unsuccessful)	Success rate of Community grants applied for	50%	71%

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE2.1.4	Success rate of Council grants applied for	Corporate Grants Specialist	100%	Completed	The second half of the 2023/24-year continued with promotion and support of grant opportunities within the Shire. Quarter three 5 Grants submitted (5 pending, 1 successful, 0 pending) Quarter four 20 Grants submitted (11 pending, 3 successful), 13 unsuccessful)	Success rate of Council grants applied for	50%	45%
EE2.1.5	Number of successful grant application in each township	Corporate Grants Specialist	100%	Completed	The second half of the 2023/24-year continued with promotion and support of grant opportunities within the Shire. 37 successful Grants (Parkes 26, Peak Hill and Alectown 2, Tullamore 2, Trundle 6, Bogan Gate 1 and Shire wide 1)	Number of successful grant application in each township	Two per year per township	Parkes: 51; Peak Hill and Alectown: 5; Tullamore: 4; Trundle: 8; Bogan Gate: 3; Shire wide: 8
EE2.1.6	Number of community grant newsletters published	Corporate Grants Specialist	100%	Completed	The Community grant newsletters were published throughout the 2023/24-year with an actual number of 10	Number of community grant newsletters published	Six newsletters published	Ten

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE2.1.7	Number of community groups and businesses that accessed Council's grant preparation activities	Corporate Grants Specialist	100%	Completed	The first half of the 2023/24-year exceeded the target number, during the second half of the year there were zero sessions held	Number of community groups and businesses that accessed Council's grant preparation activities	30 per year	41
EE2.1.8	Presentation of Grants Update tabled at the Councillors Workshop	Corporate Grants Specialist	100%	Completed	The annual 2023/24-year summary of grants was tabled at the July Council workshop	Presentation of Grants Update tabled at the Councillors Workshop	One per quarter	

Tourism and Destination Marketing

EE4: We will grow our vibrant visitor economy through the support of new tourism product development, delivery of quality visitor information services, and the implementation of a renewed Destination Management Plan

EE4.1: Promote and engage Parkes Shire tourism opportunities with targeted visitor market segments

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE4.1.1	Number of promotions and engagements with tourism sector	Executive Manager Economy and Engagement	100%	Completed	Throughout the 2023/24-year a range of industry engagements and promotions were supported and attended. Including the networking events and the fourth quarter board meeting for the Destination Network Central West (DNCW). Attending the meeting with the Central NSW Joint Organisation Tourism managers meeting held in quarter four. Planning and executing the showcase of the region's assets and opportunities with the DNCW	Number of promotions and engagements with tourism sector	Six per year	

EE4.2: Develop and grow regional tourism partnerships to support increased visitation

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE4.2.1	Regular liaison with tourism bodies including Central NSW Joint Organisation, Destination NSW and Department of Regional NSW	Executive Manager Economy and Engagement	100%	Completed	Throughout the 2023/24-year a range of industry engagements and promotions were supported and attended. Including the networking events and the fourth quarter board meeting for the Destination Network Central West (DNCW). Attending the meeting with the Central NSW Joint Organisation Tourism managers meeting held in quarter four. Planning and executing the showcase of the region's assets and opportunities with the DNCW	Regular liaison with tourism bodies including Central NSW Joint Organisation, Destination NSW and Department of Regional NSW	Six joint promotions per year	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE4.2.2	Foster development of new tourism products	Executive Manager Economy and Engagement	100%	Completed	Development of the Parkes Shire Destination Management Plan continued during the second half of the 2023/24-year. There was a strong focus on tourism development during through the Gates of Graceland project. The tourism, events and marketing teams actively participated within this project. During this period the final site layout, and project design was completed. Including signage, artwork design, audio production and materials selection. This new accessible tourism experience is expected to officially open during quarter one in 2024/25	Foster development of new tourism products	One new experience developed	

EE4.3: Manage the delivery of high-quality visitor information services at the Henry Parkes Centre

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE4.3.1	Maintain Level two Visitor Information Centre Accreditation	Tourism and Visitor Services Coordinator	100%	Completed	The Parkes Visitor Information Centre was successful in maintaining the Level 2 Accreditation status valid to June 2025. The annual AVIC accreditation was conducted by Tourism Group during quarter four	Maintain Level two Visitor Information Centre Accreditation	Maintain accreditation	Maintained
EE4.3.2	Number of visitors to the Visitor Information Centre	Tourism and Visitor Services Coordinator	100%	Completed	The annual 2023/24-year total to report is still showing a slight increase of 1.11% overall, with visitor numbers maintained over the last two years. Downturn in numbers has been highlighted across Australia with research data showing the current cost of living and regain of overseas travel being two factors for consideration	Number of visitors to the Visitor Information Centre	5% increase annually	1.11%

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE4.3.3	Deliver the Gracelands Gates project at the Henry Parkes Centre	Director Operations	90%	Progressing	During the final six months of this reporting period, works commenced and nearing completion with the walls installed, mural painted and gates installed. The final stages of landscaping and irrigation outstanding were held up due to inclement weather therefore forecasted to be completed by August 2024	Deliver the Gracelands Gates project at the Henry Parkes Centre	Delivered by 31 March 2024	

EE4.4: Ensure that visitor information is accessibly available across the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EE4.4.1	Visitor Information available in each township	Tourism and Visitor Services Coordinator	100%	Completed	Visitor Information is available within key locations across the shire including accommodation providers, hospitality and at the Visitor Information Outlet at Peak Hill. The weekly Gig Guide is updated for the whole of shire providing information for residents and visitors. ATDW listings are updated and maintained for all attractions across the shire. The Visitparkes website is continually monitored and updated as required. A comprehensive accommodation listing is maintained for all towns and villages across the shire	Visitor Information available in each township	Five townships	Five townships
EE4.4.2	Develop a Parkes Shire Signage and Wayfinding Strategy	Economic Development Specialist	70%	Progressing	Progression has been achieved during the second half with the strategy. The draft document was presented to the Business and Investment Advisory Committee with the final version expected in quarter one of the 2024/25-year	Develop a Parkes Shire Signage and Wayfinding Strategy	Adopted 31 December 2023	

06 Emergency services



Management of 30 emergency services buildings



Provision of $125k to fund Rural Fire Service facilities



Payment of $644k for Emergency Services Levy



Provision or facilities for State Emergency Services

Overview

To ensure urgent action can be taken when required, Council provides continued support for emergency services within the Shire. Council provides various forms of support to the Rural Fire Service, NSW Fire Brigades, State Emergency Services, and the Local Emergency Management Committee. Through the provision of funding, compensation, facilities and support in other capacities, these organisations continue to provide emergency responses to members of the community when needed.

EM: Emergency Services

Emergency Services Support

EM1: We will provide appropriate support for emergency service providers, ensuring their ongoing involvement within the community remains, to ensure urgent action can be taken when required.

EM1.1: Local Emergency Management Committee

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EM1.1.1	Number of Local Emergency Management Committee meetings attended	Director Infrastructure	100%	Completed	Council provided ongoing administrative and executive support the operation of the Local Emergency Management Committee through the hosting of four meetings for the year, one each quarter and the on-going development and review of key emergency management plans	Number of Local Emergency Management Committee meetings attended	Four per year	Four
EM1.1.2	Local Emergency Operations Centre maintained in a state of readiness	Director Infrastructure	100%	Completed	The Emergency Operations Centre identified as the Community Centre at Rose Street was available for use for the full year. Regular assessments were undertaken through the year to ensure readiness with a full audit undertaken in Q4	Local Emergency Operations Centre maintained in a state of readiness	Maintained	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EM1.1.3	DISPLAN (Local Disaster Plan) reviewed	Director Infrastructure	100%	Completed	Council officers have reviewed and updated each of the key regulatory emergency plans for adoption by the Local Emergency Management Committee including the EMPlan, Consequence Management Guides and the Pre-event Recovery Plan developed by Reconstruction NSW	DISPLAN (Local Disaster Plan) reviewed	Reviewed by 30 June 2024	Reviewed and adopted

EM1.2: Provision of facilities for State Emergency Services

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EM1.2.1	Facilities maintained as per agreement with State Emergency Services	Director Operations	100%	Completed	Council continued its support to the SES with facilities and property management including building maintenance, as required, Either Council staff or sub-contractors completed the works. A project manager has been appointed, conceptual designs for the building approved and engagement of preliminary services including surveying and geotechnical investigations	Facilities maintained as per agreement with State Emergency Services	Maintained	
EM1.2.2	Investigate suitable locations for proposed new State Emergency Services facility	Director Operations	50%	Progressing	No update provided	Investigate suitable locations for proposed new State Emergency Services facility	Facility identified	

EM1.3: Provision of support for Rural Fire Service

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EM1.3.1	Councillor representation at Rural Fire Service Committee Meetings	Director Operations	50%	Progressing	No update provided	Councillor representation at Rural Fire Service Committee Meetings	Twelve per year	
EM1.3.2	Service Level Agreement maintained with Rural Fire Service	Director Operations	100%	Completed	During both quarter three and four Council continued to maintain the Service Level Agreement, supporting the operations of the Rural Fire Service	Service Level Agreement maintained with Rural Fire Service	Maintained	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EM1.3.3	Maintenance of Rural Fire Service “Red Fleet”	Fleet and Depot Coordinator	100%	Completed	The second half of the 2023/24-year saw the annual servicing of the red fleet, with pink slips commencing in the fourth quarter. Over a third of the pink slips and services were completed out of the total of sixty-five. Pink slips commence from the month of May, with reactive maintenance continuing throughout the year for issues like battery and tyre replacements. The goal is to have all red fleet vehicles prepared by the end of the next quarter in preparation for the fire season	Maintenance of Rural Fire Service “Red Fleet”	80 items maintained per year	
EM1.3.4	Deliver the Coobang RFS Shed project	Manager Facilities	0%	Not Progressing	The Coobang RFS Shed project was not delivered this year as funding was not provided by the Rural Fire Service	Deliver the Coobang RFS Shed project	Delivered by 30 June 2024	Zero

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EM1.3.5	Deliver the Cookamidgera RFS Shed project	Manager Facilities	100%	Completed	The Cookamidgera RFS Shed project was completed during the first six months of the 2023/-24-year, with the building now in use for the 2023/24 bushfire season	Deliver the Cookamidgera RFS Shed project	Delivered by 30 June 2024	

EM1.4: Provision of financial support for Emergency Services

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
EM1.4.1	Financial support provided as per regulatory obligations	Director Operations	50%	Progressing	No update provided	Financial support provided as per regulatory obligations	Maintained	

07
Library, culture and social justice



4 library services



Arts and cultural programs and activities



Community wellbeing and social justice program and activities

Overview

The council provides services, activities and facilities that provide outlets for the creation and appreciation of art, culture, and social justice within the community. The Council continues to support and facilitate these activities as it recognises their positive impact on the community.

L: Library, Culture and Social Justice

Library Services

L1: We will ensure the community has access to services, facilities and resources that are inclusive, high quality and contemporary in nature. Support social interaction and encourage lifelong learning. Facilitate and support engaging programs at Shire libraries.

L1.1: Enable the continued provision of library services to residents of the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L1.1.1	Increase in the number of in-person visits	Manager Cultural, Education and Library Services	50%	Progressing	Across the year the number of in-person visits to the Parkes Shire Library increased by 5% with an increase of 486 visits from the first to final quarters. During the second half of the year the library visitor numbers recorded 21,802 across all four libraries branches Parkes, Peak Hill, Trundle and Tullamore. Visitors during quarter 3 was 10,746 and during quarter 4 visitor numbers increased to 11,056. Across the year the Parkes Shire Library experienced a 5% increase of 486 visits	Increase in the number of in-person visits	Increase 1%	5%

L1.1.2	Number of all loaned materials	Manager Cultural, Education and Library Services	50%	Progressing	Over the year a total of 38,988 materials were loaned to members across the Parkes Shire. Whilst there was a drop in loaned materials in the second and third quarters loans in the first and fourth quarters remained stable. Whist the overall number of loaned materials have not increased, each of the eCollections have increased across the past 12 months with an overall 15% increase in eCollection loans. During the second half of the 2023/24-year the Parkes Shire Library branches collectively loaned, to the residents of the Parkes Shire, a total of 19,539 materials. Over the 12 month period a total of 38,988 materials were loaned out, including a 15% increase in eCollection loans. These included physical, eBook, Audiobook, and ePress loans and film viewing. Quarter three - 8,243 physical, 459 eBook, 566 Audiobook, 151 ePress loans and 55 film viewings Quarter four - 8,729 physical, 635 eBook, 635 Audiobook, 166 ePress loans and 69 film viewings	Number of all loaned materials	Increase 1%

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L1.1.3	Increase in Library members	Manager Cultural, Education and Library Services	100%	Completed	During the annual year 2023/24 Parkes Shire library memberships increased by 378, including both new members and expired memberships. During the second half of the year quarter three had 140 and quarter four had 140 new members	Increase in Library members	Increase 1%	6%
L1.1.4	Number of Meeting Room bookings	Manager Cultural, Education and Library Services	100%	Completed	During the year 542 room bookings were made at the Parkes Library and Cultural Centre.	Number of Meeting Room bookings	52 bookings per year	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L1.1.5	Number of people accessing Marramarra Makerspace Studio	Manager Cultural, Education and Library Services	50%	Progressing	During the 2023/24 the Parkes Library and Cultural Centre held 542 bookings across the location. The second half of the year had a total number of 253 bookings. The Coventry Room included two exhibitions during quarter four and during quarter three held the Elvis Festival Photography, the Council Collection exhibitions and included a private booking for the Elsie Mahon's retrospective exhibition and birthday party. During quarter three the library meeting rooms had 99 bookings/171.5 hours. The Coventry Room held three exhibitions and one private function. The Marramarra Makerspace held 14 bookings/ 26.5 hours. During quarter four the library meeting rooms held 109 bookings. The Coventry Room held two exhibitions. The Marramarra Makerspace held 29 bookings	Number of people accessing Marramarra Makerspace Studio	250 per year	542

L1.2: Facilitate and support engaging Programs at Shire Libraries

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual

L1.2.1	Attendees at Story Time and Rhyme Time	Manager Cultural, Education and Library Services	100%	Completed	Throughout the 2023-2024 period the Parkes Shire Library conducted 168 sessions of Rhyme time and Storytime with 2702 attendees representing an average attendance of 16 per session. As well as regular Storytime and Rhyme time sessions, library staff performed the National Simultaneous Storytime and performed storytime as part of the Paint the Town READ reading day. The Storytime and Rhymetime sessions were held across the Shire, throughout the second half of the 2023/24-year, adding to a total of 168 sessions for the annual year. The Parkes Shire Library team participated in the annual reading day and the Paint the town REaD day encouraging people to read with children. Amazing community. The Storytime and Rhymetime activities were powerful and embraced by those who enjoyed the experience, with a lot of smiles with an average of 16 per session. Quarter three held 30 sessions (Storytime 16 and Rymetime 14) this included 209 attendees of Storytime plus 189 attendees to Rhymetime. Totalling 398 attendees in this	Attendees at Story Time and Rhyme Time	15 per session	14

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
					quarter. Quarter four held 53 sessions (Storytime 27 and Rymetime 26) this included 357 attendees of Storytime plus 379 attendees to Rhymetime. Totalling 736 attendees in this quarter			
L1.2.2	Number of Author visits	Manager Cultural, Education and Library Services	100%	Completed	During the 2023/24 year the Parkes Shire Library facilitated six author talks with 176 attendees. Both Karen Viggers and Andrew Sketch presented during quarter four with a total number of 27 attendees. Andrew also presented at the Trundle library	Number of Author visits	Two visits per year	Two
L1.2.3	Number of reading and writing activities held	Manager Cultural, Education and Library Services	100%	Completed	During the 2023/24-year we saw Book Clubs held at all four branches, including both Writing Groups, Author-Rised and Peak Hill totalling 58 reading and writing groups across the year. Quarter three over its 15 reading and writing groups had 128 attendees.	Number of reading and writing activities held	12 per year	15

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L1.2.4	Number of activities targeting primary, and youth held	Manager Cultural, Education and Library Services	100%	Completed	Across the year the Parkes Shire Library held 53 events and activities specifically targeting primary aged children and young people. In total 854 children and young people attended giving an average attendance of 16 for each activity/event. During quarter four 16 events were held 259 children and young people attending. These included: School Visits, Library Ambassador events, author and illustration workshops, Little Bang Discovery Club at Bogan Gate School and Library Lock-Ins	Number of activities targeting primary, and youth held	15 per year	49

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L1.2.5	Number of activities targeting adults held	Manager Cultural, Education and Library Services	100%	Completed	The Parkes Shire Library throughout the 2023/24-year facilitated and supported 109 events and activities targeting adults seeing 1,232 people overall attending. Quarter three facilitated and supported 27 programs across the Shire with 263 attendees. These included social AUSLAN sessions, Crop Swap, Nerd Night, Seniors Festival, Waste 2 Art launch, Book Clubs, Writing Groups, Movie Nights and the Parkes Multicultural Art Group. Th fourth quarter facilitated and supported 29 events with 288 attendees. The programs and activities included movie nights, book clubs, writing groups, author talks, AUSLAN social group, and information sessions during Law Week	Number of activities targeting adults held	24 per year	29

Arts and Culture

L2: We will enable all members of the community to participate, including to provide accessible facilities, resources and services, enhancing the opportunities for creative arts and cultural activities within the community.

L2.1: Support the continued operations of cultural spaces

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L2.1.1	Develop a Cultural Spaces Activation Plan	Manager Cultural, Education and Library Services	100%	Completed	During 2023/2024 a business case was developed and approved to activate and maximise the use of the Coventry Room for exhibitions and events. A new tiered system for booking and charging of events and exhibitions has been developed for full implementation in 2025. Artists and community groups will now complete an Expression of Interest form for exhibitions and events in the Coventry Room. An assessment panel will meet quarterly to review all requests and make recommendations for future budgeting and planning	Develop a Cultural Spaces Activation Plan	Endorsed by Council by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L2.1.2	Deliver Science, Technology, Engineering, Arts and Math (“STEAM”) programs in Marramarra Makerspace	Manager Cultural, Education and Library Services	100%	Completed	STEAM support-based learning in the Marramarra Makerspace was delivered during the third quarter with 16 programs with 193 total attendees. During this quarter the were an additional 34 open-maker days with 264 attendees	Deliver Science, Technology, Engineering, Arts and Math (“STEAM”) programs in Marramarra Makerspace	12 programs delivered	

L2.2: Enable all members of the community to participate in Council led and supported cultural programs

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L2.2.1	Implementation of annual Arts Advisory Plan	Manager Cultural, Education and Library Services	100%	Completed	During quarter three the Council Art Collection Policy was adopted at the March Council meeting. ArtsOutWest presented at the same meeting, outlining their activities and support for Parkes. The art collection was showcased on exhibition in the Coventry Room during the months of February and March 2024. The promotion of arts and cultural events to be held in both the Marramarra Makerspace and the Coventry Room continued in the monthly "What's-on guide" flyer, promoting the retrospective exhibition of the work from the local artist Elsie Mahon. Quarter three held 12 creative workshops in in the Marramarra Makerspace and three exhibitions in the Coventry Room	Implementation of annual Arts Advisory Plan	Five initiatives implement	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L2.2.2	Provide support for community arts and cultural groups	Manager Cultural, Education and Library Services	100%	Completed	Throughout the year ten community arts and cultural groups were supported either through the provision of free access to meeting spaces or Council representation on planning committees. Additionally, PSC Cultural Grants were awarded to Parkes Community Arts Inc, Parkes Christian School, Parkes School of Dance and Trundle Bush Tucker Day to support arts and cultural events across the shire.	Provide support for community arts and cultural groups	Five meetings supported	Ten
L2.2.3	Events held for community and cultural groups	Manager Cultural, Education and Library Services	100%	Completed	Across the year Parkes Shire Council has supported and delivered a range of events for community and cultural groups. Events have included Crop Swap, Social AUSLAN, Multicultural Art Group workshops, Arts OutWEst workshops, Parkes Community Arts workshops as well as Council funded & supported creative workshops provided in the Marramarra Makerspace.	Events held for community and cultural groups	Three events held	

L2.3: Support and facilitate arts and cultural programs for community engagement

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L2.3.1	Host local exhibitions	Manager Cultural, Education and Library Services	100%	Completed	Across the year the Coventry Room hosted 8 local exhibitions. 3 exhibitions showcased the work of local artists including the Parkes Painting Group, Karen Ritchie and Elsie Mahon. 3 exhibitions were open to all residents to submit work including the Everchanging and Expanding Cardboard Show, Who Is Parkes? photography exhibition and the Waste 2 Art exhibition. The annual Elvis Photography Exhibition had entries from local residents and nation-wide entries. The Council Collection exhibited the artworks collected by Parkes Shire Council over the past 40+ years. All exhibitions were free of charge for entry to residents and visitors.	Host local exhibitions	Three exhibitions hosted	Eight

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L2.3.2	Host travelling and non-local exhibitions	Manager Cultural, Education and Library Services	100%	Completed	Due to the number of local exhibitions no travelling exhibitions were hosted in the Coventry Room. The Who Is Parkes photography exhibition, coordinated by Parkes Community Arts, was extended from the Coventry Room out across the Parkes Shire with 11 photographs from the exhibition enlarged onto large-scale banners in Parkes, Bogan Gate, Peak Hill, Trundle and Tullamore. This outdoor exhibition was partly sponsored by a PSC Cultural Grant and included a photography trail brochure encouraging residents and visitors to travel around the shire to view each of the banners. PSC also selected several of the photographs from the exhibition for smaller banners on display along Clarinda and Welcome Streets.	Host travelling and non-local exhibitions	One exhibition hosted	One Who Is Parkes? Outdoor Photography Project

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L2.3.3	Attendees at arts and cultural events	Manager Cultural, Education and Library Services	100%	Completed	The second half of the 2023/24-year saw a range of arts and cultural activities and events/exhibitions. Quarter three held 18 with 2,605 attendees over both spaces. These included art and creative workshops in the Marramarra Makerspace, Waste 2 Art launch, Arts OutWest 20/50 vision workshop and three art exhibitions. Quarter four held 23 with 2,448 attendees. Marramarra Makerspace held creative workshops	Attendees at arts and cultural events	30 attendees per event	

Social Justice

L3: We will advocate for, and facilitate, services and activities that have the capacity to enhance Community Wellbeing and Social Justice.

L3.1: Promote Social Justice principals of equity, access, participate and rights within our community

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L3.1.1	Initiatives Council supported to promote social justice within the community (women, youth, Indigenous, seniors, people with disabilities)	Director Planning and Environment	100%	Completed	During 2023/24-year the library services provided activities for both youth week, School Services, Waste to Art workshops, Maker Space Workshops and NAIDOC week	Initiatives Council supported to promote social justice within the community (women, youth, Indigenous, seniors, people with disabilities)	Five events supported	Two
L3.1.2	Provide a report to the Councillors Workshop on attendance for the five targeted events	Director Planning and Environment	100%	Completed	During the second half of the 2023/24-year a report was provided to the Councillors workshop, confirming events. There were two art exhibitions, the collection of Council owned artworks, and participation in poetry/photography for Elvis celebrations	Provide a report to the Councillors Workshop on attendance for the five targeted events	Report provided by 30 June 2024	Five

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
L3.1.3	Develop a Youth Strategy	Director Planning and Environment	0%	Not Progressing	There was no development towards the Youth Strategy during the 2023/24-year	Develop a Youth Strategy	Strategy adopted by 30 June 2024	Zero

08 Open space and recreation



30 parks and gardens



15 Sportsgrounds



77 Open space facilities



6 cemeteries



4 swimming pools



Wetland restoration activities

Overview

The Council values the Shire's natural and built environments and effectively plans for a growing community. Council performs the planning, maintenance and development of open spaces and recreation areas across the Shire. By completing these activities, the natural environments within the Shire remain protected and preserved whilst also benefiting the community through the opportunity to utilise and enjoy public spaces.

To ensure the Shire's natural environment is effectively managed, open space and recreation is separated into 6 principal activities. The division of activities ensures, parks and gardens, sport fields, open space facilities, amenities and public toilets, cemeteries, swimming pools and wetlands are managed in accordance with regulatory standards and independent Council requirements.

O: Open Space and Recreation

Parks and Gardens

OS1: To ensure the Shire's natural environment remains protected and preserved the council will continue implementing appropriate planning and maintenance strategies. The Shire is maintained and upgraded to meet community needs.

OS1.1: Maintain play spaces to meet the communities needs

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS1.1.1	Engage with the community regarding current and upcoming play space developments via various communication channels	Shire Presentation Coordinator	100%	Completed	The second half of the 2023/24 year saw the continuation of strong communication and engaging with the community, community committees, sporting groups, and school groups. Social media posts, Council website progress reports providing updates, newspapers. We provided support and assistance to the sporting groups with their weekly events. Clear communications with social media posts. Parks in general and the new Lions Park bookings were strong, booked electronically, allowing the outdoors team to support the community. Facilities hygiene maintained with additional schedules during the peak	Engage with the community regarding current and upcoming play space developments via various communication channels	Four engagements per year	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS1.1.2	Play equipment is inspected in accordance with regulatory standard and guidelines	Shire Presentation Coordinator	100%	Completed	Play equipment during the second half of the 2023/24-year continued with visual and operational checks maintained ensuring regulatory standards and guidelines were adhered to. These inspection schedules ranged from weekly, monthly, and quarterly checks. These scheduled inspections allowed identifications of play equipment works requiring any service and/or repairs. These inspections also included the grounds for overall maintenance requirements like mulch and wear and tear of the grounds. Additional resources have been obtained to assist with Lions Park and Kelly Reserve maintenance inspection schedule	Play equipment is inspected in accordance with regulatory standard and guidelines	Six inspections per year	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS1.1.3	Action a response to customer requests within 10-days	Shire Presentation Coordinator	100%	Completed	During the 2023/24-year the weekly supervisor meetings provided a clear platform for reviewing and identifying the customer requests. The supervisors were able to actions the works with planning, timing and priorities levels	Action a response to customer requests within 10-days	100% of requests are actioned within 10-days	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS1.1.4	Provide support to Council's Major Events and Visitor Economy team through the provision of pre-event and post-event logistical assistance through the management of Council assets	Shire Presentation Coordinator	100%	Completed	The second half of the year 2023/24-year kept the outdoor spaces teams busy, with the Councils major events for both the community, visitors, and sporting groups. The Cooke Park saw the shade sails going up and down, stalls and markets being bumped in and bumped out. Grass areas seeing extra fertilising to balance the additional traffic enjoying the free events like Sounds events and open spaces. The support continued with Anzac Day, Australia Day and home-grown markets. The Elvis festival campers needed some plan B actions due to wet weather across all sport fields always ensuring full preparations and delivery support ensuring success with outdoor spaces and facilities were at their best	Provide support to Council's Major Events and Visitor Economy team through the provision of pre-event and post-event logistical assistance through the management of Council assets	Support provided as needed	

Sports Fields

OS2: We will ensure sporting fields continue to be utilized across the Shire through suitable upgrading, maintenance and development of facilities.

OS2.1: Develop sporting facilities to meet community needs

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS2.1.1	Deliver the final stage of rehabilitation works at Cheney Park	Shire Presentation Coordinator	100%	Completed	Cheney Park rehabilitation works has been on-going throughout the second half of the 2023/24-year. New irrigation designs progressed for major drainage works, scheduled for last quarter commencement. Conclusion of the rehabilitation works is expected to be completed during the next quarter	Deliver the final stage of rehabilitation works at Cheney Park	Delivered by 30 June 2024	

OS2.2: Maintain sporting fields to ensure they continue meeting community needs, regulatory standards and align

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS2.2.1	Sporting fields are inspected in accordance with the Inspection Schedule and meet regulatory Australian Sporting Codes	Shire Presentation Coordinator	100%	Completed	The second half of the 2023/24-year did see the continuation of the scheduled weekly inspections and maintenance programs. The sporting fields were maintained and marked out within the Australian sporting codes/standards. A consultant engaged during the first half of the year identified testing for Pioneer oval, and testing for Northparkes over where the soil is out of balance as part of recommendations towards the fields and turf improvements	Sporting fields are inspected in accordance with the Inspection Schedule and meet regulatory Australian Sporting Codes	100% compliance	
OS2.2.2	Action a response to customer requests within 10-days	Shire Presentation Coordinator	100%	Completed	During the first half of the year 2023/24 the weekly supervisor meetings provided a clear platform for reviewing and identifying the sporting fields customer requests. The supervisors were able to actions the works with planning, timing and priorities levels	Action a response to customer requests within 10-days	100% of requests are actioned within 10-days	

Open Space Facilities, Amenities and Public Toilets

OS3: We will implement appropriate strategies and plans to ensure open space facilities and amenities are maintained and developed, enabling the community, to better utilise the Shire's open spaces.

OS3.1: Enhance open spaces through the expansion and upgrading of facilities, amenities and public toilets

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS3.1.1	Facilities, amenities and public toilets are inspected in accordance with Inspection Schedule and meet standards	Shire Presentation Coordinator	100%	Completed	The building services and outdoor spaces team continued working alongside ensuring the high standards of hygiene, maintenance and repairs were completed. The facilities, amenities and public toilets not only had an early morning inspection schedule, but random routine inspections occur completed to work closely with the sporting events, and outdoor events, ensuring on-site, in advance had facilities ready. Schedules and standards were met with strong communication between teams. Social media provides up to date access for sporting routine/events to ensure Council schedules in line with the expected uses	Facilities, amenities and public toilets are inspected in accordance with Inspection Schedule and meet standards	100% compliance	100%

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS3.1.2	Action a response to customer requests within 10-days	Shire Presentation Coordinator	100%	Completed	The building services and outdoor spaces team continued working alongside ensuring the high standards of hygiene, maintenance and repairs were completed. The facilities, amenities and public toilets had early morning inspection schedules with random routine inspections completed throughout the community outdoor spaces	Action a response to customer requests within 10-days	100% of requests are actioned within 10-days	
OS3.1.3	Deliver upgrades of infrastructure at Memorial Park, Tullamore	Shire Presentation Coordinator	100%	Completed	The second half of the 2023/24-year plannings and on-going works continued with this project. The outdoor spaces teams commenced removal of trees; modified irrigation works. Upgrades will continue into the next quarter. After meeting with the CCC additional small works completed near Anzac Memorial, concreting works as a joint project	Deliver upgrades of infrastructure at Memorial Park, Tullamore	Delivered by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS3.1.4	Deliver upgrades of infrastructure at Berryman Park, Trundle	Shire Presentation Coordinator	80%	Progressing	The upgrades of infrastructure at Berryman Park continued throughout the second half of the 2023/24-year. Commencement on the perimeter fencing with solar lighting, works will continue into the next quarter, works will also include access pathways	Deliver upgrades of infrastructure at Berryman Park, Trundle	Delivered by 30 June 2024	
OS3.1.5	Deliver upgrades of infrastructure at Burrawang Park, Bogan Gate	Shire Presentation Coordinator	100%	Completed	The second half of the 2023/24-year continued with on-going works on this project. Completed works included new facilities like concrete furniture and electric barbeque. The access pathway was also completed. Council planned for the repurpose of play-equipment from Kelly Park to Bogan Gate. The CCC meeting/advised	Deliver upgrades of infrastructure at Burrawang Park, Bogan Gate	Delivered by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS3.1.6	Deliver upgrades of infrastructure at Kelly Reserve, Parkes	Shire Presentation Coordinator	100%	Completed	The second half of the 2023/24-year saw the completion of the water play space which included three phase power connected, Splash Pad, Interactive water play equipment, Sand play, Risky Paly/Balance paly, Interpretive signage, Shelter including new BBQ x3, Fencing and paths. The next stage of the Ninja Park was started with site construction fencing and removal of existing play equipment. Contractor to establish the site in the next quarter	Deliver upgrades of infrastructure at Kelly Reserve, Parkes	Delivered by 30 June 2024	

OS3.2: Support the use of open spaces through the maintenance of facilities, amenities, and public toilets

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS3.2.1	Audits carried out on facilities, amenities and public toilets	Manager Facilities	100%	Completed	Inspections scheduled by the Property Team to support of open spaces. The 2023/24-year saw on-going inspections of facilities, amenities, and public toilets. Strong communication between the community, the building support team and the outdoor spaces team ensuring user satisfaction	Audits carried out on facilities, amenities and public toilets	Three audits per quarter	
OS3.2.2	Action a response to customer requests within 10-days	Manager Facilities	100%	Completed	Customer requests were responded to within 10-days or less as continuation of support of open spaces. The 2023/24-year saw on-going inspections of facilities, amenities, and public toilets. Strong communication between the community, the building support team and the outdoor spaces team ensuring user satisfaction	Action a response to customer requests within 10-days	100% of requests are actioned within 10-days	

Cemeteries

OS4: We will utilise appropriate management practices for all cemeteries across the Shire, ensuring ongoing maintenance and planning for future development.

OS4.1: Administration of Shire Cemeteries is aligned with regulatory guidelines

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS4.1.1	Number of Burials in Shire Cemeteries	Manager Regulation and Compliance	100%	Completed	Throughout the 2023/24-year there were 65 burials which included 37 during the first six months and 28 in the second half of the year	Number of Burials in Shire Cemeteries	Ongoing	65
OS4.1.2	Develop plan for future development of Council owned cemeteries	Manager Regulation and Compliance	100%	Completed	The Parkes cemetery, in the new financial year will see a new road built, under the $100,000 capital works program	Develop plan for future development of Council owned cemeteries	Developed by 30 June 2024	
OS4.1.3	Action a response to customer requests within 10-days	Manager Regulation and Compliance	100%	Completed	During the last six months of the 2023/24-year customer requests were reviewed and actioned within 10-days	Action a response to customer requests within 10-days	100% of requests actioned within 10-days	
OS4.1.4	Deliver Lawn Portion - Section H project at Parkes Cemetery	Manager Regulation and Compliance	100%	Completed	The lawn portion, section H project had all works completed during the first six months of the 2023/24-year	Deliver Lawn Portion - Section H project at Parkes Cemetery	Delivered by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS4.1.5	Deliver Lawn Portion - Section J project at Parkes Cemetery	Manager Regulation and Compliance	100%	Completed	The Section J project was completed, during the second half of the 2023/24-year with the numbering as the next step, which will be completed by the maintenance officer	Deliver Lawn Portion - Section J project at Parkes Cemetery	Delivered by 30 June 2024	

Swimming Pools

OS5: We will continue implementing suitable frameworks for swimming pools across the Shire. Ensuring the standards of regulatory bodies and the needs of the community through ongoing upkeep and developments. Operate sustainably and safely, implementing suitable frameworks.

OS5.1: Operate Shire swimming pools sustainably and safely

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS5.1.1	Swimming Pool Contractor undertake daily water tests, ensuring results are compliant with the Department of Health Pool Operations standards	Executive Manager Operations	100%	Completed	Belgravia have undertaken water testing as required under the Contract. There have been two instances at the Village Pools where a lower water quality has resulted in a pool closure to promptly address the situation	Swimming Pool Contractor undertake daily water tests, ensuring results are compliant with the Department of Health Pool Operations standards	100% compliance	100%

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS5.1.2	Swimming Pool Contractor to undertake monthly water samples to ensure results are compliant with Department of Health Pool Operations standards	Executive Manager Operations	50%	Progressing	During both quarters three and four there were no further updates as the pool was closed during this reporting period	Swimming Pool Contractor to undertake monthly water samples to ensure results are compliant with Department of Health Pool Operations standards	100% compliance	100%

OS5.2: Continued provision of high quality Learn to Swim Programs

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS5.2.1	Advocate the community to participate in learn to swim classes	Executive Manager Operations	100%	Completed	During quarter three participation in classes continued to be successful and rates were driven by availability of the Learn to Swim teachers within the region. Quarter four there are no further updates as the pool was closed	Advocate the community to participate in learn to swim classes	Increase in participation	100

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS5.2.2	All Instructors hold a current AUSTSWIM accreditation	Executive Manager Operations	100%	Completed	All instructors held accreditation during the 2023/24-year	All Instructors hold a current AUSTSWIM accreditation	100% of instructors hold accreditation	100%
OS5.2.3	Report provided by Swimming Pool Contractor detailing the number of instructors holding AUSTSWIM accreditation	Executive Manager Operations	50%	Progressing	The pool season was not operational during both quarters three and four	Report provided by Swimming Pool Contractor detailing the number of instructors holding AUSTSWIM accreditation	Monthly report received	100%
OS5.2.4	Swimming Pool Contractor to provide feedback and action a response to customer requests within 10-days	Executive Manager Operations	100%	Completed	Throughout the third quarter of the 2023/24-year the swimming pool contractor, Belgravia and Council engaged in open communications regarding feedback and customers. The swimming pool was closed during four	Swimming Pool Contractor to provide feedback and action a response to customer requests within 10-days	10-days	10

OS5.3: Capital works projects are efficiently carried out in line with the Delivery Program

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS5.3.1	Deliver upgrades to the Tullamore Pool	Executive Manager Operations	100%	Completed	The Tullamore pool project was successfully completed to budget and to time restraints, with the facility opening on time	Deliver upgrades to the Tullamore Pool	Delivered by 30 June 2024	100%
OS5.3.2	Deliver upgrades to the female amenities at Parkes Aquatic Centre	Executive Manager Operations	100%	Completed	During the first half of the 2023/24-year the upgrades to the female amenities were completed in time for the week of the opening during quarter two	Deliver upgrades to the female amenities at Parkes Aquatic Centre	Delivered by 30 June 2024	100%
OS5.3.3	Deliver rejuvenation works and upgrades to Peak Hill Pool	Executive Manager Operations	100%	Completed	During the first half of the 2023/24-year the upgrades to the female amenities were completed in time for the week of the opening during quarter two	Deliver rejuvenation works and upgrades to Peak Hill Pool	Delivered by 30 June 2024	100%
OS5.3.4	Deliver upgrades to the pool heater at Parkes Aquatic Centre	Executive Manager Operations	100%	Completed	During the first half of the 2023/24-year Parkes aquatic centre had the pool heater upgraded successfully on budget and to the schedule	Deliver upgrades to the pool heater at Parkes Aquatic Centre	Delivered by 30 June 2024	100%

Wetlands Restoration

OS6: We will conduct appropriate established preservation activities, to ensure the ongoing protection and development of natural reserves, to preserve and maintain.

OS6.1: Facilitate the restoration of Akuna Wetlands project

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS6.1.1	Provision of progress updates on the Akuna Wetlands Restoration project	Environmental and Sustainability Coordinator	50%	Progressing	Presentation to Councillors at a Parkes Plus Workshop during quarter three, and on-site announcement of grant funding for quarter four. Provided updates to senior staff and Councillors on the project	Provision of progress updates on the Akuna Wetlands Restoration project	Update provided	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
OS6.1.2	Provide community updates of project through various communication channels	Environmental and Sustainability Coordinator	100%	Completed	After heavy promotion and community involvement during both quarters one and two in the first half of the 2023/24-year we saw significant activity with this project during both quarters three and four. Work on the 2.5km gravel walking track around the wetlands commenced, and additional funding was received through the Federal Government to further activate the wetlands, which was announced by our Federal Member on site with key staff and Councillors. This was accompanied by a media release and social post, and the Parkes Wetlands project page on our website has been updated to reflect these recent developments	Provide community updates of project through various communication channels	Two communication channels used to provide community updates	Three Website, socials, media releases

09

Planning, certification and compliance



Development assessments



Local strategic land use planning



Ranger services and companion animals



Environmental health and food safety compliance



Facilitation of planning for affordable housing within the Shire

Overview

Parkes Shire Council values the natural and built environments and effectively plans for a growing community. The council performs activities regarding local strategic land use planning, development assessment, building certification, environmental health and ranger services and noxious weed management. By performing these activities, the Council best ensures the built and physical environment of the Shire correlates with the changing needs of the community. Council is responsible for monitoring and enforcing statutory requirements, to ensure the built environment continues to safely accommodate residents and visitors of the Shire.

P: Planning, Certification and Compliance

Local Strategic Land Use Planning

P1: We will develop Strategic land use plans, enabling the Parkes Shire to meet growth and demand for housing, jobs, and services

P1.1: Continue implementing land use projects in accordance with the LSPS

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P1.1.1	Planning decisions and preparation of development controls continue to align with the Local Strategic Planning Statement (LSPS) 2020	Land Use Planning Specialist	95%	Progressing	The second half of the 2023/24-year saw the commencement of the review of planning controls, concerning development in flood prone land. Completion is expected during 2024/25 pending the findings of the Regional Flood Study, currently in progress. Review is on-going for the Parkes Local Environmental Plan 2012 and Parkes Shire Development Control Plan	Planning decisions and preparation of development controls continue to align with the Local Strategic Planning Statement (LSPS) 2020	Ongoing	Ongoing

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P1.1.2	Review existing strategic land use plans and polices in line with Council standards and statutory regulation	Land Use Planning Specialist	100%	Completed	The second half of the 2023/24-year saw the continuation of monitoring of the Parkes Shire Local Environmental Plan (LEP) 2012 and Parkes Shire Development Control Plan (DCP) 2021. The DCP will be revised at some stage when development in flood prone land is available. There is on-going reviews of the Parkes Shire Development Control Plan 2021 and general planning controls, for corrections/anomalies	Review existing strategic land use plans and polices in line with Council standards and statutory regulation	Conduct one review	ongoing

Development Assessment

P2: We will achieve quality land use outcomes and assist people to understand the development process

P2.1: Provide timely, accurate and professional advice and development assessment in line with Local Environment Plan (LEP) and relevant legislation

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P2.1.1	Development Applications (DA) are determined in a timely manner whilst maintaining quality land use outcomes		100%	Completed	Consistent with required timeframes, the second half of the 2023/24-year received a total of 43 applications determined. Ranging from Development Applications, Modifications to Development Applications and Subdivision Certificates	Development Applications (DA) are determined in a timely manner whilst maintaining quality land use outcomes	90% of DA determined within a 40-day processing time	On-going

P2.2: Promote and support heritage values within the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P2.2.1	Work with the Grants Team to source funding through the NSW Heritage Office and Local Heritage Assistance Funding Program	Land Use Planning Specialist	95%	Progressing	Advertisement for the 2023-2024 Local Heritage Grant allocation has taken place, Council has received one response to the advertisement. Council is in ongoing communication with the NSW Heritage Office to ensure the appropriate and effective allocation of the Local Heritage Fund	Work with the Grants Team to source funding through the NSW Heritage Office and Local Heritage Assistance Funding Program	Ongoing	

Building Certification

P3: We will control and regulate the built environment to achieve compliant buildings

P3.1: Provide timely and accurate building certification

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P3.1.1	Number of Complying Development Certificates approved within regulatory timeframe	Manager Building Certification	100%	Completed	Four Complying Development Certificate (CDC) applications were received from Private Certifiers. Council received two CDC applications with one approved within 14 days, whilst the second one saw the time extended, pending additional information, rather than refusal for insufficient information	Number of Complying Development Certificates approved within regulatory timeframe	Approved within 10-days or another timeframe as agreed with applicant	Two

P3.2: Support council's role and obligations under the Swimming Pools Act 1992

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P3.2.1	Investigate complaints and enforcement of Swimming Pools Act within regulatory timeframe	Manager Building Certification	1000%	Completed	The second half of the 2023/24-year there were zero complaints received. Complaints received during the first half were investigated within three days of receipt of the complaint	Investigate complaints and enforcement of Swimming Pools Act within regulatory timeframe	100% of complaints are investigated within three days	100%

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P3.2.2	Number of residential swimming pool barrier requests actioned within 10-days	Manager Building Certification	100%	Completed	The second half of the 2023/24-year saw a delay between the payment on portal and the scheduling of inspections in calendars. 31% were inspected within 10-days and 65% within 25-days. During the first half of the year 62% of residential properties were actioned within 10-days	Number of residential swimming pool barrier requests actioned within 10-days	100% actioned within 10-days	Actual 31% 63% within 25 days 6% over 25 days
P3.2.3	Number of compliant swimming pool barrier inspection certificates issued	Manager Building Certification	100%	Completed	During the second half of the 2023/24-year all Compliance Certificates were issued with three days following inspection	Number of compliant swimming pool barrier inspection certificates issued	Issued within three days	Seven
P3.2.4	Number of non-compliant Swimming Pool Barrier Inspection certificates issued	Manager Building Certification	100%	Completed	During the first half of the 2023/24-year there were two compliant swimming pool barriers inspection certificates issued and four non-compliance inspections	Number of non-compliant Swimming Pool Barrier Inspection certificates issued	Issued within seven days	Six

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P3.2.5	Number of compulsory inspections carried out as per Council's Swimming Pool Inspection Program	Manager Building Certification	100%	Completed	During the first half of the 2023/24-year the Council's swimming pool inspection program continued which had 16 inspections completed. 100% of inspections completed	Number of compulsory inspections carried out as per Council's Swimming Pool Inspection Program	100% of inspections carried out	100%

Environmental Health and Ranger Services

P4: We will support public health and environmental safety through education, inspection and enforcement of government rules and regulation

P4.1: Provide Food Safety and Public Health monitoring to the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P4.1.1	Undertake annual inspections of registered businesses and report to the Food Authority	Manager Regulation and Compliance	100%	Completed	The annual inspections for the 2023/24-year were scheduled and carried out during quarter four. A total of 75 food shops were inspected and completed, with no serious breaches identified. Food Authority reporting requirements were underway with expected completion by the due date in the next quarter	Undertake annual inspections of registered businesses and report to the food authority	100% of registered premises inspected	

P4.2: Provide ranger services to the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P4.2.1	Action a response to customer requests within 10-days	Manager Regulation and Compliance	100%	Completed	All Ranger customer requests commenced investigations with 10-days. Legislative requirements at times will not allow for the matters to be completed within 10-days or closed	Action a response to customer requests within 10-days	100% of requests actioned within 10-days	
P4.2.2	Number of notices and orders issued	Manager Regulation and Compliance	100%	Completed	The second half of the 2023/24-year saw one order for a dangerous dog declaration issued, and six notices of intention to serve an order	Number of notices and orders issued	Declining	
P4.2.3	Number of Companion Animal registrations	Manager Regulation and Compliance	100%	Completed	During the 2023/24-year a total of 96 animal registrations were completed. This included 31 during the first half of the year, and 65 in the second half of the year	Number of Companion Animal registrations	Ongoing	
P4.2.4	Develop a Rehoming Companion Animals Plan	Manager Regulation and Compliance	100%	Completed	Council has partnerships with registered rehoming organisations, which adopt companion animals. Council advertises on social media/Council website to promote awareness within the community	Develop a Rehoming Companion Animals Plan	Plan developed by 30 June 2024	

Noxious Weed Management

P5: We will utilise appropriate biosecurity controls within the Parkes Shire in accordance with regulatory obligations

P5.1: Monitor the control of priority weeds on public and private land under the Biosecurity Act

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P5.1.1	Private property inspections per month	Environmental and Sustainability Co-Ordinator	100%	Completed	During the second half of the 2023/24-year 120 property inspections were conducted, which exceeded the target of 100 for the year. Quarter three had 27 inspections whilst quarter four had 35	Private property inspections per month	12 inspections per month	120
P5.1.2	Monitor and inspect Council owned and managed public land	Environmental and Sustainability Co-Ordinator	100%	Completed	During the second half of the 2023/24-year a total of 24 inspections were conducted. Quarter three had 7 inspections, whilst quarter four had 4 inspections	Monitor and inspect Council owned and managed public land	30 land parcels inspected per year	
P5.1.3	Monitor and inspect Council owned and managed roadsides	Environmental and Sustainability Co-Ordinator	100%	Completed	Council owned and managed roadsides were inspected and monitored throughout the second half of the 2023/24-year with a total of 100% of roadside inspections completed by the end of quarter four	Monitor and inspect Council owned and managed roadsides	100% of roadsides inspected	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P5.1.4	Percentage of known infestations inspected and actioned and/or controlled	Environmental and Sustainability Co-Ordinator	100%	Completed	Council's Biosecurity Team have a register of priority infestations which are monitored regularly and controlled as necessary. Approximately 75% of known infestations were inspected during the reporting period, and control work was undertaken at approximately 60% of these infestations	Percentage of known infestations inspected and actioned and/or controlled	100% inspected and actioned	
P5.1.5	Action a response to customer requests within 10-days	Environmental and Sustainability Co-Ordinator	100%	Completed	All customer requests related to biosecurity acknowledged within 10 days, and responded to in a timely manner based on the nature of the request	Action a response to customer requests within 10-days	100% of requests actioned within 10-days	

P5.2: Provide the Shire with educational opportunities and resources on Noxious weed management

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P5.2.1	Provide educational material and engagement opportunities during private property inspections	Environmental and Sustainability Co-Ordinator	100%	Completed	During the second half of the 2023/24-year Council engaged with private landholders and the community on both environment and biosecurity issues, including formal and informal conversations at private property inspections (supplying brochures, handouts and information packs etc.). The Biosecurity Team, when additional education is required and/or requested, use postage or hand delivery of information to the community and provide information by emails	Provide educational material and engagement opportunities during private property inspections	90% of property owners provided with education	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
P5.2.2	Number of Shire shows, and local/regional field days attended	Environmental and Sustainability Co-Ordinator	100%	Completed	Council attended all four Shire Shows throughout the first quarter, which facilitated direct interface with the community. The Biosecurity Team were on-site with an informational weeds trailer, a resource provided by the Macquarie and Lachlan Valley Weeds Association. Educational material was available including pamphlets, brochures, and biosecurity information packs. Having the knowledge of the Biosecurity Team on-site enabled direct engagement with the community and positive communication and education outcomes	Number of Shire shows, and local/regional field days attended	Four Shire shows and local/regional field days attended	Four
P5.2.3	Engagement with the community through social and traditional media	Environmental and Sustainability Co-Ordinator	100%	Completed	Engagement with the community continued during the second half of the year, with one media release and two biosecurity social media posts shared during this reporting period	Engagement with the community through social and traditional media	Three media releases Three social media posts per year	Three and three

10 Sewerage



4 sewerage systems in Parkes, Peak Hill, Trundle and Tullamore

Overview

Parkes is serviced by a network of gravity pipelines. A new Sewage Treatment Plant was built in 2017 at a cost of $28M. The Plant is highly automated and energy efficient (energy consumption is further reduced by a 107kW solar array). It produces a high standard of effluent used for the Recycled Water Supply Scheme (discussed under the Water Supply function). It has a capacity of 15,000 equivalent persons (EP) and can be upgraded to 20,000 EP to accommodate population growth.

Peak Hill is also serviced by gravity pipelines. The Sewage Treatment Plant, built in the 1960s, was upgraded to address safety issues in 2000. Effluent from the plant is evaporated (not released from the site).

Trundle and Tullamore are serviced by a network of low pressure sewers constructed in 2010 and 2008 respectively. Both have simple Treatment Plants with no discharge to the environment.

S: Sewerage

Sewerage System

S1: We will utilize effective systems and frameworks to ensure our safe and sustainable sewerage systems are maintained

S1.1: Safely collect wastewater from the community

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
S1.1.1	Percentage of trade waste agreement coverage	Water Quality and Sustainability Specialist	100%	Completed	Completed	Percentage of trade waste agreement coverage	50%	50%
S1.1.2	Number of sewers chokes per 100km	Executive Manager Water Engineering	100%	Completed	Council responded to 28 customer requests regarding blockages in the main this reporting period. This has resulted in council clearing 41.3 chokes/100km of main the last 12 month	Number of sewers chokes per 100km	20	41
S1.1.3	Action a response to customer requests within 10-days	Executive Manager Water Engineering	100%	Completed	Council received 75 customer requests relating to sewer blockages in the reporting period. 78% of these requests were actioned within the 10 days	Action a response to customer requests within 10-days	100% of requests actioned within 10-days	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
S1.1.4	Percentage of customer complaints responded to in accordance with standards	Executive Manager Water Engineering	100%	Completed	During the second half of the 2023/24-year Council received 154 sewer related requests. This included 75 which were sewer blockages and 74 were in the low-pressure systems in both Trundle and Tullamore	Percentage of customer complaints responded to in accordance with standards	100%	100%

S1.2: Sustainably treat wastewater

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
S1.2.1	Number of EPA License breaches	Executive Manager Water Engineering	100%	Completed	There were zero license breaches during the last six months of the 2023/24-year	Number of EPA License breaches	Zero	0
S1.2.2	Cost of treatment per Kl inflow	Executive Manager Water Engineering	100%	Completed	Power Costs at the STP have risen 20% in the last twelve months. Despite this, the cost of power per kL has fallen slightly due to increased flows in the six months of this year. Chemical costs per kL have also fallen slightly due to the higher flows	Cost of treatment per Kl inflow	Maintained	$0.55

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
S1.2.3	To reduce breakdown maintenance work, scheduled planned preventative maintenance work	Executive Manager Water Engineering	100%	Completed	Throughout the 2023/24-year the project continued, with planning already in process of implementation through the relining and replacement program	To reduce breakdown maintenance work, scheduled planned preventative maintenance work	Zero	

S1.3: Responsibly manage waste by-products of treatment

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
S1.3.1	Percentage of effluent reused	Manager Infrastructure Operations	100%	Completed	Due to shortages in supply of UV parts, Council were unable to reuse any effluent this reporting period. The parts have now arrived, waiting on the supplier for installation	Percentage of effluent reused	100%	19%
S1.3.2	Percentage of bio-solids diverted from landfill	Manager Infrastructure Operations	50%	Progressing	Lagoon 3 was dewatered this year and the stockpile tested for grading. Discussions are continuing with Evolution Mining to use the bio solids as capping material	Percentage of bio-solids diverted from landfill	100%	0% bio solids not removed from site

S1.4: Safely and sustainably treat and distribute recycled water

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
S1.4.1	Number of samples not complying with operational Recycled Water Management System	Water Quality and Sustainability Specialist	100%	Completed	Completed	Number of samples not complying with operational Recycled Water Management System	Zero	Zero
S1.4.2	Number of Critical Control Point exceedances	Water Quality and Sustainability Specialist	100%	Completed	Completed	Number of Critical Control Point exceedances	One	Zero
S1.4.3	Recycled water supplied as a percentage of total demand	Water Quality and Sustainability Specialist	0%	Not Progressing	During the 2023/24-year there was no progression against this action	Recycled water supplied as a percentage of total demand	90%	Zero
S1.4.4	Provide up to date stakeholder reporting	Water Quality and Sustainability Specialist	100%	Completed	Completed	Provide up to date stakeholder reporting	Achieve	Achieved
S1.4.5	Number of end user complaints	Water Quality and Sustainability Specialist	100%	Completed	Completed	Number of end user complaints	Zero	Zero

S1.5: Effectively capture and contain wastewater, whilst managing improvements in the system relating to wet weather and critical events

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
S1.5.1	Number of sewer system wet weather overflow events	Manager Infrastructure Operations	100%	Completed	Council cleared two chokes in wet weather in the last six months. A relining program was undertaken this year aimed at reducing inflow into the sewerage system	Number of sewer system wet weather overflow events	Zero overflow for 20% annual exceedance probability events and smaller	Zero
S1.5.2	Increasing containment of sewer system wet weather overflow events	Executive Manager Water Engineering	100%	Completed	Council's working model of sewer network is used to identify current and future augmentation programs to contain overflow events. This model also integrates SAP flows	Increasing containment of sewer system wet weather overflow events	10% containment	8%

11 Transport and drainage



800km of sealed and 1300km of unsealed roads



215 bridges



47km of footpaths and cycleways



65km of kerb and gutter



45km of urban stormwater drainage pipes



1 airport
3 landing strips



315 rural drainage culverts

Overview

Council is a key facilitator in projects and programs that ensure the transport and drainage of the Shire is appropriate for residents and visitors.

Grants or Council finances provide funding for roads within the Shire. Council receives several ongoing grants to help fund the Shire's road network generally and for specific regional roads. Beyond its road network, Council completes work under the Road Maintenance Council Contract on national and state highways with Transport for NSW. Parkes, Forbes and Lachlan Shire have shared resources to develop and implement suitable Road Safety Campaigns to maximise road safety. Council also manages alternative transport, continually expanding and maintaining transport options such as footpaths and cycleways.

Continued collaboration with Regional Express enables the Parkes Regional Airport to continue as a gateway to the region.

Council conducts numerous activities to ensure the infrastructure and management for Urban stormwater is sufficient during times of unexpected and high rainfall.

T: Transport and Drainage

Sealed Roads

T1: We will maintain and expand the Shire's sealed road network with safety and efficiency in mind through the planning and construction of the roads

T1.1: Ensure effective maintenance of Council's sealed Road Network through the Roads and Maintenance Program

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T1.1.1	Maintain compliance of sealed roads in line with Council's Condition Assessment Inspection Schedule and Strategic Asset Management Plan	Executive Manager Operations	50%	Progressing	During both quarters three and four Council Technical Officers undertook network assessments in accordance with the respective asset management plans	Maintain compliance of sealed roads in line with Council's Condition Assessment Inspection Schedule and Strategic Asset Management Plan	100% compliance	100%
T1.1.2	Length of table drains to be cleared per kilometre, per annum	Executive Manager Operations	30%	Progressing	No update provided	Length of table drains to be cleared per kilometre, per annum	20km per annum	5km

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T1.1.3	Action a response to Customer Requests within 10-days regarding sealed roads	Executive Manager Operations	100%	Completed	During both quarter three and four all customer requests were acknowledged within the 10-day target. Those requests that require design and further investigation can span months and the lower severity level of the request gets prioritised accordingly, if the request does not require immediate intervention and can be left open until scheduled works are undertaken in this area	Action a response to Customer Requests within 10-days regarding sealed roads	100% of requests actioned within 10-days	100%

T1.2: Ensure effective upgrade and renewals of Council's sealed Road Network through the Capital Works Program

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T1.2.1	Length of sealed road reseals per kilometre, per annum	Executive Manager Operations	100%	Completed	Council delivered 21km of road resealing across Local and Regional Roads within the Local Government Area (LGA). Some portions of works were incomplete, and have been rescheduled during the warmer period in 24/25 Financial Year	Length of sealed road reseals per kilometre, per annum	20km per annum	21

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T1.2.2	Length of pavement rehabilitation per kilometre per annum	Executive Manager Operations	100%	Completed	Council had undertaken numerous roads rehabilitations across the shire through the delivery of RLRRP and AGRN storm damage restorative works, expending $7.5M of the $9.7M available. Undertaking rehabilitations across the Local Government Area	Length of pavement rehabilitation per kilometre per annum	3.5 km per annum	2km
T1.2.3	Deliver Currajong to Mitchell Streets reconstruction works including asphalt, reshaping, line marking, signage, and footpaths	Executive Manager Operations	100%	Completed	Council successfully delivered the Parkes, Currajong to Mitchell Streets reconstruction works project during the first half of the 2023/24-year	Deliver Currajong to Mitchell Streets reconstruction works including asphalt, reshaping, line marking, signage, and footpaths	Delivered by 30 June 2024	100%
T1.2.4	Deliver upgrades to Cookamidgera Road	Executive Manager Operations	100%	Completed	The Cookamidgera Road upgrade project was successfully completed by Council during the first half of the 2023/24-year	Deliver upgrades to Cookamidgera Road	Delivered by 30 June 2024	100%

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T1.2.5	Deliver upgrades to the Bushman and Dalton Streets roundabout	Executive Manager Operations	100%	Completed	The Bushman and Dalton Roundabout re-works have been completed on February 2024. The roundabout has been re-opened, and is operating successfully without further complaints	Deliver upgrades to the Bushman and Dalton Streets roundabout	Delivered by 30 June 2024	70%
T1.2.6	Deliver access upgrades to Mugincoble Silos Parkes	Executive Manager Operations	10%	Progressing	Council has recently received approval from the Federal Government to proceed with the conception design under the ROSI funding, a scoping project proposal (PPR) has been submitted awaiting approval and release of funds to support the conceptual designs and land acquisition negotiations	Deliver access upgrades to Mugincoble Silos Parkes	Delivered by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T1.2.7	Deliver Remote Roads Pilot Program for the Bogan Road Upgrade	Executive Manager Operations	30%	Progressing	During quarters three and four progression within the pre-construction activity space has been made with the project including fisheries permits, review of environmental factors and tendering of the culvert and causeway portion of the project enabling it to be shovel ready for commencement in September 2024	Deliver Remote Roads Pilot Program for the Bogan Road Upgrade	Delivered by 30 June 2024	30%
T1.2.8	Deliver upgrades to Graddle Creek Bridge	Executive Manager Operations	20%	Progressing	Land acquisitions have progressed, and access obtained into the land to progress survey and design. Parkes Council has also engaged consultants to undertake a Review of Environmental Factors (REF) and a hydrology study to inform the conceptual design and associated bridge deck height. Majority of project moved into the next Financial Year	Deliver upgrades to Graddle Creek Bridge	Delivered by 30 June 2024	20%

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T1.2.9	Deliver upgrades to Peak Hill-Tullamore Road	Executive Manager Operations	100%	Completed	Council has been maintaining the sealed road network through delivery of the RERRF program in accordance with Transport for NSW guidelines and road hierarchy. Councils long term strategic plan has a focus on maintaining and resealing not road widening and capital works upgrade and currently have expended $7.0 / $9.5M available	Deliver upgrades to Peak Hill-Tullamore Road	Delivered by 30 June 2024	
T1.2.10	Deliver upgrades to East Street railway crossing and drainage	Executive Manager Operations	90%	Progressing	During quarter three and four the East Street project continued to be delayed through access into the Rail corridor. However, approval has been received as of 30th July and works are scheduled to be completed by early September 2024	Deliver upgrades to East Street railway crossing and drainage	Delivered by 30 June 2024	90%

T1.3: Develop a Transport Asset Prioritisation Framework

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T1.3.1	Conduct a review of Council's sealed and unsealed road hierarchy	Executive Manager Operations	0%	Progressing	Due to changes across projects during the 2023/24-year there was zero progression	Conduct a review of Council's sealed and unsealed road hierarchy	Achieve	Zero
T1.3.2	Develop an updated list of priority projects to inform grant applications	Executive Manager Technical Services	20%	Progressing	Due to changes across projects during the 2023/24-year there was zero progression	Develop an updated list of priority projects to inform grant applications	Achieve	

Unsealed Roads

T2: We will provide the community with access to safe and effective roads through the appropriate planning, construction, and maintenance of the unsealed road network.

T2.1: Ensure effective maintenance of Council's unsealed Road Network through the Roads and Maintenance Program

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T2.1.1	Maintain compliance of unsealed roads in line with Council's Condition Assessment Inspection Schedule and Strategic Asset Management Plan	Executive Manager Operations	100%	Completed	During quarters three and four Council Technical Officers undertook network assessments in accordance with the respective asset management plans	Maintain compliance of unsealed roads in line with Council's Condition Assessment Inspection Schedule and Strategic Asset Management Plan	100% compliance	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T2.1.2	Action a response to Customer Requests within 10-days regarding unsealed roads	Executive Manager Operations	100%	Completed	During both quarter three and four all customer requests were acknowledged within the 10-day target. Those requests that require design and further investigation can span months and the lower severity level of the request gets prioritized accordingly, if the request does not require immediate intervention and can be left open until scheduled works are undertaken in this area	Action a response to Customer Requests within 10-days regarding unsealed roads	100% of requests actioned within 10-days	100%

T2.2: Ensure effective upgrade and renewals of Council's unsealed Road Network through the Capital Works Program

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T2.2.1	Length of road resheeted	Executive Manager Operations	100%	Progressing	Council has not undertaken and resheeting under the Federal Assistance Grants but has delivered Capital works improvements under the Regional Emergency Road Repair Fund and the AGRN1034 Restorative Works Claim. We have completed approximately 15km of resheeting during the final 6 months of the reporting year	Length of road resheeted	20 km per annum	15
T2.2.2	Length of table drains to be cleared per kilometre per annum	Executive Manager Operations	100%	Completed	During the remaining six months of 2023/24-year Council continued its regular undertakings of table drain maintenance when commencing projects within the capital works program, funded by the RERRF and AGRN1034 funds	Length of table drains to be cleared per kilometre per annum	20 km per annum	20km

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T2.2.3	Grant funded upgrade and renewal projects are completed before funding deadlines	Executive Manager Operations	80%	Progressing	During both quarter three and four Council have successfully delivered the Bushman and Dalton roundabout and completed the rural causeway programs funded under the Office of Local Government (OLG). Remaining Grant funded capital works are ongoing and have been rolled into the next Financial Year	Grant funded upgrade and renewal projects are completed before funding deadlines	100%	80% Majority of projects have been completed in this financial year

Regional Roads

T3: We will ensure our regional roads are well maintained and developed through the utilisation of appropriate construction, maintenance, and planning processes.

T3.1: Ensure effective maintenance of regional roads through the Roads Maintenance Program

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T3.1.1	Action a response to customer requests within 10-days regarding regional roads	Executive Manager Operations	100%	Completed	Regional Roads are maintained within the agreed levels of service within the Transport Asset Management Plan. Customer requests are acknowledged within the 10-day target, but works are scheduled alongside other works to ensure productivity and efficiency	Action a response to customer requests within 10-days regarding regional roads	100% of requests actioned within 10-days	

T3.2: Ensure effective upgrade and renewals of regional roads through the Capital Works Program

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T3.2.1	Length of sealed road reseals per kilometre, per annum	Executive Manager Operations	100%	Completed	Council completed a significant resealing program during quarters three and four spending approximately $2.3M. Works not completed have been re-scheduled to the warmer period in the 24/25 reseal season	Length of sealed road reseals per kilometre, per annum	7.5 km	32km

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T3.2.2	Length of pavement rehabilitation per kilometre, per annum	Executive Manager Operations	80%	Progressing	Council has been maintaining the sealed road network through delivery of the Regional Emergency Road Repair Fund (RERRF) program in accordance with Transport for NSW guidelines and road hierarchy. These works are being coupled with the AGRN1034 claim to extend the value, and efficiency of works	Length of pavement rehabilitation per kilometre, per annum	1.5 km per annum	8km
T3.2.3	Length of unsealed roads re-sheeted per kilometre per annum	Executive Manager Operations	40%	Progressing	During both quarters three and four there was no resheeting activities undertaken on Regional Road MR348 (only Regional Road remaining unsealed). The funds were utilized into maintenance of the existing sealed Regional Roads with higher traffic volumes	Length of unsealed roads re-sheeted per kilometre per annum	2km per annum	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T3.2.4	Deliver upgrades to the Bogan Way (North and South)	Executive Manager Operations	80%	Progressing	During quarters three and four significant progression occurred on the MR350 project which is largely completed with five out of the seven projects completed. The two remaining outstanding include the Bogan Gate upgrade and the Southern approach to Trundle which is reliant on flood assessment information currently being modelled	Deliver upgrades to the Bogan Way (North and South)	Delivered by 30 May 2025	45%
T3.2.5	Deliver upgrades to Regional Roads in line with Block Grant funding	Executive Manager Operations	10%	Progressing	No update provided	Deliver upgrades to Regional Roads in line with Block Grant funding	Delivered by 30 June 2024	10%

Other Transport and Overheads

T4: We will develop and maintain alternative transport options to suit the needs of the Shire

T4.1: Other Transport Maintenance Program

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T4.1.1	Action a response to customer requests within 10-days	Executive Manager Operations	95%	Progressing	Customer requests are acknowledged within the 10-day target but are programmed alongside maintenance activities in areas to achieve higher productivity. All high-risk defects are assessed and triaged according to risk profile; some include installation of signage until works can be completed	Action a response to customer requests within 10-days	100% of requests actioned within 10-days	

T4.2: Ensure Gravel Pits are responsibly managed and utilised

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T4.2.1	Ensure compliance with relevant legislation relating to the operations of gravel and pits with no breaches recorded	Executive Manager Operations	100%	Completed	Parkes Shire Council was compliant during the final six months of the 2023/24-year with the gravel pit operations having zero recorded breaches. The mine safety management plans require review, and a request for quotation is currently being prepared to engage specialists within this area to update in line with industry standard	Ensure compliance with relevant legislation relating to the operations of gravel and pits with no breaches recorded	Zero breaches	Zero
T4.2.2	Responsibly manage contractors to ensure legislative compliance is utilized to ensure no breaches are recorded	Executive Manager Operations	100%	Completed	During quarter three and four Council responsibly managed contractors to ensure legislative compliance was utilised in our gravel pits. Zero breaches have been recorded. Council has recently renewed it's gravel crushing tender and have awarded a new contractor with ISO accreditation across WH&S, Environmental and Quality	Responsibly manage contractors to ensure legislative compliance is utilized to ensure no breaches are recorded	Zero breaches	Zero

T4.3: Ensure all Council roadsides are managed in accordance with Council's Roadside Vegetation Management Plan

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T4.3.1	Council's Roadside Vegetation Management Plan is consulted for all roadworks and is kept up-to-date and accessible	Environmental and Sustainability Co-Ordinator	100%	Completed	Council's Roadside Vegetation Management Plan (RVMP) continued to be consulted throughout the last six months of the 2023/24-year. There were no significant changes to the conservation area ratings since the report was updated in 2019. The existing mapping available in IntraMaps remained current throughout this period. All roadwork projects included an environmental assessment, which considers the impact of the proposed works on native vegetation within the project footprint. Through thoughtful planning, significant impacts are often avoided	Council's Roadside Vegetation Management Plan is consulted for all roadworks and is kept up-to-date and accessible	Achieved	Achieved

Urban Stormwater

T5: We will effectively manage stormwater across the Shire through effective planning and development strategies

T5.1: Conduct maintenance activities to ensure stormwater is effectively managed within the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T5.1.1	Action a response to customer requests within 10-days	Executive Manager Operations	100%	Completed	During both quarter three and four all customer requests were acknowledged within the 10-day target. Those requests that require design and further investigation can span months and the lower severity level of the request gets prioritised accordingly, if the request does not require immediate intervention and can be left open until scheduled works are undertaken in this area	Action a response to customer requests within 10-days	100% of requests actioned within 10-days	

T5.2: Undertake capital works to ensure the stormwater management system continued to meet the needs of the community

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T5.2.1	Deliver Parkes CBD Flood Mitigation Works project	Manager Infrastructure Operations	50%	Progressing	Throughout the 2023/24-year the flood study continued including recommendations to utilize	Deliver Parkes CBD Flood Mitigation Works project	Delivered by 30 June 2024	

Regional Airport

T6: We will ensure the Parkes Regional Airport can continue serving as a gateway to the Shire by aligning development and maintenance strategies with regulatory guidelines and community needs.

T6.1: Ensure effective maintenance and operation of the Parkes Regional Airport

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T6.1.1	Compliance with Civil Aviation Safety Authority surveillance activities	Manager Facilities	100%	Completed	Parkes Regional Airport continued ongoing compliance with the Civil Aviation Safety Authority regulations and requirements throughout the 2023/24-year	Compliance with Civil Aviation Safety Authority surveillance activities	100% compliance	100%
T6.1.2	Maintain Parkes Regional Airport Certification	Manager Facilities	100%	Completed	Civil Aviation Safety Authority (CASA) certification was provided and continued to be on-going in throughout the 2023/24-year	Maintain Parkes Regional Airport Certification	100% compliance	100%
T6.1.3	Deliver the Parkes Airport Apron Lighting project to improve the facilities and ensure compliance with standards	Manager Facilities	100%	Completed	The Parkes Airport Apron lighting project was completed during quarter three, following on from the contractor engaged and installation commenced during the first half of the 2023/24-year	Deliver the Parkes Airport Apron Lighting project to improve the facilities and ensure compliance with standards	Delivered by 30 June 2024	Delivered

Road Council Contract

T7: We will maintain our partnership with Transport NSW, enabling the ongoing development and maintenance of state and national highways within the Shire

T7.1: Ensure development and maintenance of State and National Highways within the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T7.1.1	Compliance with the Road Maintenance Council Contract	Executive Manager Operations	100%	Completed	During quarters three and four Council worked collaboratively with TfNSW in the delivery of all services under the RMCC contract without incident	Compliance with the Road Maintenance Council Contract	100% compliance	100%
T7.1.2	Obtain a Contractor Performance Report (CPR)	Executive Manager Operations	100%	Completed	Council worked collaboratively with TfNSW in the delivery of all services under the RMCC and during quarters three and four received 64 and 68% respectively	Obtain a Contractor Performance Report (CPR)	Achieve 80% with CPR	68%

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T7.1.3	Develop a program for Kerb and Guttering to maintain, manage and develop improvements	Executive Manager Operations	0%	Not Progressing	Parkes Council has been successfully managing the State Network within the Shire through the Road Maintenance Council Contract. All maintenance budgets have been expended and ordered works have been completed on time. Council is currently undergoing renewal of the R2 pre-qualification to continue delivering these services	Develop a program for Kerb and Guttering to maintain, manage and develop improvements	Program developed	

Road Safety

T8: We will continue developing appropriate road safety programs in partnership with Transport for NSW to align with the road safety plan

T8.1: Road Safety Plan

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T8.1.1	Deliver the 'NOT A STATISTIC! Youth Driver Education Program' as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Road Safety and Injury Prevention Officer	100%	Completed	The NOT A STATISTIC! Program commenced workings with stakeholders and with the videographer. The Mock Crash 2024 has had successful auditions during quarter four, with eight local youth actors. The cast has been established, with the video and impact statements recorded. The Road Safety and Injury Prevention Officer (RSIPO) confirmed the live demonstrations to be held 12 August 2024. The pre and post lessons have been scheduled for the local high schools	Deliver the 'NOT A STATISTIC! Youth Driver Education Program' as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Delivered in August 2023	Delivered

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T8.1.2	Deliver the 'Free Cuppa for the Driver Scheme' project as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Road Safety and Injury Prevention Officer	0%	Not Progressing	During the first half of the 2023/24-year the grants team applied for a federal road safety grant, to undertake a strategic review, without success. The Free Cuppa driver scheme was paused, with the discussions to continue into the next financial year	Deliver the 'Free Cuppa for the Driver Scheme' project as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Delivered between March and May 2024	Zero

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T8.1.3	Deliver 'Helping Learner Drivers Become Safer Drivers' workshops as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Road Safety and Injury Prevention Officer	100%	Completed	During the fourth quarter of the 2023/24-year scheduled workshops were delivered, with Parkes workshop seeing four in attendance, primary role for each were supervising drivers, with learner drivers. Discussion topics on current licensing systems, driver logbooks and tips for effective on-road driving experiences. The feedback was positive, praised for being helpful and appreciative for the knowledge sharing, rating 5/5 and a net promoter score of 100. Social media was the most common way people heard about the workshops	Deliver 'Helping Learner Drivers Become Safer Drivers' workshops as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Two rounds delivered	Delivered

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T8.1.4	Deliver the 'I'm Counting on You' project as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Road Safety and Injury Prevention Officer	100%	Completed	The 'I'm counting on you' project aims to bring awareness on car seats, the awareness projects were conducted throughout the 2023/24-year. During the fourth quarter the Road Safety and Injury Prevention Officer (RSIPO) held two on-line workshops, followed by child restraint checking days across Parkes, Forbes and Condobolin which had 29 child restraints checked, with 52% incorrectly fitted. For people unable to attend the checking days, we completed three installations and four follow-up checks. The RSIPO attended playgroups in both Parkes and Tullamore, checking ten child restraints and providing knowledge and information for local families	Deliver the 'I'm Counting on You' project as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Delivered during 2023-24	Delivered

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
T8.1.5	Deliver the 'Plan B' project as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Road Safety and Injury Prevention Officer	100%	Completed	During the 2023/24-year 56 licensed venues across the Parkes, Forbes and Lachlan Shire Council areas registered and participated in the "Plan B" project which commenced during the months of December and January. This project encourages the conversation about planning safe ways to get home. The Road Safety and Injury Prevention Officer (RSIPO) processed the feedback form results from the venues which formed part of the region-wide debrief. Certificates of appreciation provided to all participating venues	Deliver the 'Plan B' project as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Delivered in December 2023	Delivered

T8.1.6	Deliver the 'Heavy Vehicle Safety' project as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Road Safety and Injury Prevention Officer	100%	Completed	The 'Heavy Vehicle Safety' project continued throughout the 2023/24-year with many activities and events. During quarter four the 13th Annual Central West Heavy Vehicle Breakfast forum was held in Forbes at the Forbes Inn. Over 80 attendees joined the breakfast, a mixture of truck drivers, transport company representatives, relevant associations, farmers, customer harvesters, government agencies and Council representatives. On the agenda was access, an industry case study from Divall's Earthworks & Bulk Haulage. All on the agenda was SafeWork NSW with their update, Police enforcement including a FAQ session on mobile phone rules, NHVR compliance approach and an industry collaboration case study between NHVR and Westlime about axle weights. The feedback form from the breakfast provided positive and agreement that the forum meet their needs, and would attend the next event	Deliver the 'Heavy Vehicle Safety' project as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Delivered during 2023-24	Delivered
T8.1.7	Deliver the 'Observation	Road Safety and Injury	100%	Completed	The 'Observations surveys' project was conducted	Deliver the 'Observation	Delivered before	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
	Surveys' project as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	Prevention Officer			throughout the 2023/24-year during both quarter two and quarter four. The objective of the survey is to allow the exploration of the current road safety data, the vehicle information, driver and passenger characteristics, bull-bards, use of mobile phones, motor cars, motor bikes and child restraints wearing. The Road Safety and Injury Prevention Officer (RSIPO) collates and analyses the data	Surveys' project as part of the Parkes, Forbes and Lachlan Shire Councils' Road Safety Action Plan 2023-2024	October 2023 and April 2024	

12 Water supply



3 Water supply schemes

Overview

The Parkes-Peak Hill scheme draws from a combination of surface water from the Lachlan River, 15km east of Forbes and the Lake Endeavour and Beargamil dams as well as groundwater from bores located on the Escort Way associated with the Lachlan River through to the Parkes Water Treatment Plant. It is then treated at the Parkes Water Treatment Plant before being supplied to consumers at Parkes, Peak Hill, Alectown, Cookamidgera and Trewilga. The scheme also supplies raw water to Northparkes Mine. A major project for the next Delivery Program involves increasing the security of supply – largely to cater for increased demand associated with the Special Activation Precinct – by constructing additional bores and a new pipeline from the river and bore supplies at the Lachlan River through to the Parkes Water Treatment Plant.

The Forbes Tottenham scheme supplies towns on the western side of the Shire. This is also known as the B section of pipeline. Water is purchased from Forbes Shire Council, who draws it from the Lachlan River and treats it (for its own supply as well) before it is piped to the towns of Bogan Gate, Gunningbland, Trundle, and Tullamore. Parkes Shire Council then sells it to Lachlan Shire Council to supply Tottenham.

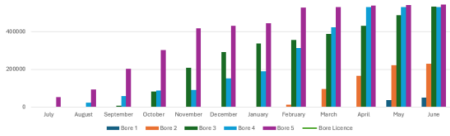
The Recycled Water Scheme draws treated effluent from the Parkes Recycled Water Plant and supplies it to a number of parks and sportsgrounds around Parkes, as well as commercial users. It is an important means of reducing the demand on potable water resources. A major project for the next Delivery Program involves connecting a number of third-party users to the scheme. This could include a number of low risk, high water use business and not-for-profit organisations to provide a lower cost non-potable water option.

WS: Water Supply

Water Supply

WS1: We will provide appropriate maintenance, development, infrastructure and ongoing operational activities that align with community needs, regulatory guidelines and long-term sustainability concerns

WS1.1: Water sources effectively are managed to meet the Shire's needs

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS1.1.1	Audits of critical infrastructure	Executive Manager Water Engineering	100%	Completed	During the first six months of the 2023/24-year on-going routine inspections and preventative maintenance of treatment plants continued. Regular on-going audits continued critical infrastructure, with the Asset team involved in completing inspections of the sources and other network assets	Audits of critical infrastructure	Ten	Ten
WS1.1.2	Water is effectively sourced from bore, river, dam and supernatant supplies	Executive Manager Water Engineering	100%	Completed	The bore refurbishment project was completed in this reporting period with all Council and NPM bores available for the first time in a number of years. Bores 1,2&3 were predominately used to even the annual extraction between the bores. Extraction from the river was down this year due to high turbidities. Extractions were; 	Water is effectively sourced from bore, river, dam and supernatant supplies	Achieved	Achieved Extraction shared as per attached graph

WS1.2: Ensure the integrity and performance of our water supply network

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS1.2.1	Maintain Council's Water Conservation and Drought Management Program	Executive Manager Water Engineering	100%	Completed	Throughout the 2023/24-year worked through projects identified within Integrated Water Cycle Management (IWCM) various forms of study and water resilience projects	Maintain Council's Water Conservation and Drought Management Program	Maintained	
WS1.2.2	Volume of non-revenue water	Executive Manager Water Engineering	50%	Progressing	All material and sensors for the non-revenue water was procured. Currently in the process of being installed	Volume of non-revenue water	Declining	50%

WS1.3: Ensure the Drinking Water Quality Management System is effectively utilized

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS1.3.1	Number of Critical Control Point exceedances	Manager Infrastructure Operations	100%	Completed	There were no Critical Control Point exceedances in the last six months	Number of Critical Control Point exceedances	Zero	Zero

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS1.3.2	Number of non-compliant samples	Infrastructure Operations Manager	100%	Completed	During the second half of the 2023/24-year Council had fourteen samples exceeding the Australian Drinking Water Guidelines (ADWG). This included ten with low fluoride levels, three for low chlorine levels and one was for a high pH reading	Number of non-compliant samples	Declining	14

WS1.4: Efficiently operate the water supply system

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS1.4.1	Cost of production per KL	Manager Infrastructure Operations	100%	Completed	The cost to pump water rose by 26% from last year. The cost to treat water rose slightly from $0.56/kL to $0.69/kL. Chemical costs are down from last year due to a change in supplier	Cost of production per kL	Maintain	$0.69 / kL

WS1.5: Provide the Shire with sufficient water supplies through effective water distribution

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS1.5.1	Number of water quality complaints	Manager Infrastructure Operations	100%	Completed	During the second half of the 2023/24-year there were five water quality complaints, of which three were regarding dirty water	Number of water quality complaints	Declining	Five
WS1.5.2	Number of unplanned supply interruptions	Manager Infrastructure Operations	100%	Completed	Councils water teams responded to ten water main bursts during the second half of the 2023/24-year. This resulted in an unplanned shutdown of water	Number of unplanned supply interruptions	Maintain	Ten

WS1.6: Recycled Water is safe for municipal irrigation

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS1.6.1	Number of samples not complying with Australian Drinking Water Guide (“ADWG”)	Manager Infrastructure Operations	100%	Completed	The Advanced Water Recycling Facility was offline the last six months due to a shortage of parts for the UV dosing equipment	Number of samples not complying with Australian Drinking Water Guide (“ADWG”)	Zero	Zero

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS1.6.2	Action a response to customer requests within 10-days	Manager Infrastructure Operations	100%	Completed	Council responded to all customer requests in the 10-day period	Action a response to customer requests within 10-days	100% of customer requests actioned within 10-days	Zero

Water Security Project

WS2: We will ensure the Water Security Project has been appropriately designed, constructed, and commissioned for the needs of the community

WS2.1: Design the water security project to meet the changing needs of the community

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS2.1.1	Complete detailed design of the Drought Relief Program Project (refurbishment of Bore 1, 3, 4 and 5 and replacement of Bore 2)	Executive Manager Water Engineering	100%	Completed	The detailed designs were completed for the refurbishment of Bore 1, 3, 4, 2 and 5 during the 2023/24-year	Complete detailed design of the Drought Relief Program Project (refurbishment of Bore 1, 3, 4 and 5 and replacement of Bore 2)	Complete detailed design by 30 June 2024	
WS2.1.2	Complete detailed design of the Safe and Secure Water Project (Eugowra Road Pump Station, Akuna Road Pump Station and Eugowra Road Pump Station Solar System)	Executive Manager Water Engineering	90%	Progressing	The detailed design of the safe and secure water project was completed with tenders sent out. Reporting will be provided in the next quarter	Complete detailed design of the Safe and Secure Water Project (Eugowra Road Pump Station, Akuna Road Pump Station and Eugowra Road Pump Station Solar System)	Complete detailed design by 30 June 2024	Complete

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS2.1.3	Complete detailed design of the Building Better Regions Fund Project (Lachlan River Pump Station, Eugowra Road/Lachlan River Pre-treatment Plant and Solar, Lachlan River Additional Bore and Parkes Water Treatment Plant Raw Water Dam)	Executive Manager Water Engineering	90%	Progressing	The detailed designs of the building better regions fund project were 90% completed, with either in construction or procurement phase or awaiting State approval	Complete detailed design of the Building Better Regions Fund Project (Lachlan River Pump Station, Eugowra Road/Lachlan River Pre-treatment Plant and Solar, Lachlan River Additional Bore and Parkes Water Treatment Plant Raw Water Dam)	Complete detailed design by 30 June 2024	90
WS2.1.4	Complete detailed design of the Resources for Regions Project (Flood Mitigation and construction of retention basin in Crocker Park)	Executive Manager Water Engineering	50%	Progressing	The second half of the 2023/24-year saw the flood study progressing, the Croker Park project is currently on hold, with Transport NSW managing the project	Complete detailed design of the Resources for Regions Project (Flood Mitigation and construction of retention basin in Crocker Park)	Complete detailed design by 30 June 2024	

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS2.1.5	Finalize the Integrated Water Cycle Management study	Executive Manager Water Engineering	100%	Completed	The finalisation of the study was completed throughout the 2023/24-year	Finalize the Integrated Water Cycle Management study	Study finalized by 30 June 2024	100

WS2.2: Ensure the Water Security Project can meet community needs through effective construction

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS2.2.1	Construction of the Drought Relief Program project (refurbishment of Bore 1, 3, 4 and 5 and replacement of Bore 2) commenced	Executive Manager Water Engineering	100%	Completed	The construction of the project was completed during the 2023/24-year	Construction of the Drought Relief Program project (refurbishment of Bore 1, 3, 4 and 5 and replacement of Bore 2) commenced	Construction commenced by 30 June 2024	100

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS2.2.2	Construction of the Building Better Regions Fund Project (Lachlan River Pump Station, Eugowra Road/Lachlan River Pre-treatment Plant and Solar, Lachlan River Additional Bore and Parkes Water Treatment Plant Raw Water Dam) commenced	Executive Manager Water Engineering	70%	Progressing	The construction of the Parkes water treatment plant raw water dam is ongoing, with pipe work to start at the end of the next quarter and completed by the next second quarter, October/November 2024. Lachlan River Pre-treatment Plant (LRPS) is very close to completion. The Solar tender is out and in progress with construction completion expected at the end of the second quarter. Waiting for approval from the state body for the Lachlan River Pre-treatment Plant design which will be made shovel ready. Waiting for approval for Bore 9 and we have the design works all in completion	Construction of the Building Better Regions Fund Project (Lachlan River Pump Station, Eugowra Road/Lachlan River Pre-treatment Plant and Solar, Lachlan River Additional Bore and Parkes Water Treatment Plant Raw Water Dam) commenced	Construction commenced by 30 June 2024	80

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
WS2.2.3	Construction of the Resources for Regions Project (Flood Mitigation and construction of retention basin in Crocker Park) commenced	Executive Manager Water Engineering	0%	Not Progressing	The progression of this project is on hold, awaiting the outcomes of the evaluations impacts and/or outcomes of constructing pipe work prior to completion of the retention basin as per actions WS2.1.4	Construction of the Resources for Regions Project (Flood Mitigation and construction of retention basin in Crocker Park) commenced	Construction commenced by 30 June 2024	

13 Waste management



Domestic waste management



Commercial waste and recycling facilities



Waste education and sustainability

Overview

As the traditional means of landfilling increases in cost, Parkes Shire Council has adapted to prioritise recycling and resource recovery. Council complies with all regulatory requirements, when transitioning to newer methods of waste management. An example of this compliance is ensuring domestic waste management activities are 'self-funded', complying with the NSW Local Government Act (section 504).

To ensure Council activities are efficiently run, Council maintains a contract with JR Richards to service the collection of residential and commercial waste at eligible properties across the Shire, operating a three-bin collection service. For additional waste that cannot be collected with JR Richards, Council operates 8 waste depots within the Shire.

Council collaborates with various organisations to enhance waste outcomes within the Shire. Collaboration continues with NetWaste, enabling cooperative projects to improve planning and delivery of waste management services across the region. While Visy Australia processes recyclable materials collected within the shire, ensuring items are correctly categorised and sold to reprocessing companies.

W: Waste Management

Domestic Waste Management

W1: We will provide effective domestic waste collection, minimize waste to landfill and promote widespread adoption of recycling and waste reduction.

W1.1: Provide effective domestic waste collection services to deliver positive public health, environmental and economic outcomes for the community

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
W1.1.1	Action a response to customer requests within 10-days	Director Planning and Environment	100%	Completed	Throughout the 2023/24-year Council representatives participated with Parkes Community Recycling Cnetre (CRC) and accepted advice. The annual kerb recycling was carried out and operational of Councils CRC with EPA compliance	Action a response to customer requests within 10-days	100% of customer requests actioned within 10-days	100
W1.1.2	Review the Parkes Waste Strategy, including the effective management of the 3-bin service contract	Director Planning and Environment	0%	Not Progressing	The review of the Parkes waste strategy has been rescheduled to commence throughout the 2024/25-year, as there was no progression during this financial year	Review the Parkes Waste Strategy, including the effective management of the 3-bin service contract	Reviewed completed	Zero

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
W1.1.3	Liaise with the NSW Environment Protection Authority (“NSW EPA”) and Regional Growth Development Corporation (“RGDC”) to investigate new technologies waste management	Director Planning and Environment	100%	Completed	During the 2023/24-year saw the continuation of communications with the NSW Environmental Protection Agency and Regional Growth Development Corporation	Liaise with the NSW Environment Protection Authority (“NSW EPA”) and Regional Growth Development Corporation (“RGDC”) to investigate new technologies waste management	Active involvement in investigation of new technologies	One
W1.1.4	Conduct annual audits on general recycling and green bins	Director Planning and Environment	100%	Completed	The annual audits on general recycling and green bins continued during the 2023/24-year	Conduct annual audits on general recycling and green bins	Minimum of one audit per year	One

W1.2: Council provides facilities for residents to dispose of waste were public health, environmental and economic outcomes are considered

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
W1.2.1	Percentage of waste diverted from landfill utilising resource recovery at transfer station and waste management facilities	Director Planning and Environment	100%	Completed	Waste diverted from landfill continued successfully throughout the 2023/24-year	Percentage of waste diverted from landfill utilising resource recovery at transfer station and waste management facilities	3% increase	2%
W1.2.2	Continued operation and maintenance of waste facilities across the Parkes Shire	Director Planning and Environment	100%	Completed	Parkes Waste facility operating in accordance with EPA license	Continued operation and maintenance of waste facilities across the Parkes Shire	Maintain and review rural tip operations	
W1.2.3	Deliver the Alectown Tip Cell project	Director Planning and Environment	100%	Completed	The Alectown Tip Cell project was completed during the 2023/24-year	Deliver the Alectown Tip Cell project	Delivered by 30 June 2024	

Commercial Waste

W2: We will develop processes to ensure commercial properties have the access to a disposal service and the opportunity to participate with waste diversion strategies

W2.1: Provide effective landfill management to deliver positive public health, environmental and economic outcomes for the community

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
W2.1.1	Increase the percentage of commercial waste diverted from landfill	Director Planning and Environment	100%	Completed	Waste services were made available to the Commercial sector throughout the 2023/24-year for both general waste and recycling waste	Increase the percentage of commercial waste diverted from landfill	2% increase	1%
W2.1.2	Continued provision of a commercial waste collection service in Parkes	Director Planning and Environment	100%	Completed	Waste services were made available to the Commercial sector throughout the 2023/24-year for both general waste and recycling waste	Continued provision of a commercial waste collection service in Parkes	Service maintained	100
W2.1.3	Action a response to customer requests within 10-days	Director Planning and Environment	100%	Completed	Customer requests were actioned and responded to with 10-days, during the last six months of the 2023/24-year	Action a response to customer requests within 10-days	100% of customer requests actioned within 10-days	100

W2.2: Ensure commercial waste collection services are maintained and manage the current and emerging impacts of external change

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
W2.2.1	Maintain contracts for external services for the recycling and diversion from landfill	Director Planning and Environment	100%	Completed	External contracts were maintained for the recycling and diversion from landfill throughout the 2023/24-year	Maintain contracts for external services for the recycling and diversion from landfill	5 to 8, external services contracts per annum	Six
W2.2.2	Maintain the number of educational opportunities provided to both residential and business customers	Director Planning and Environment	100%	Completed	Educational opportunities for both residential and commercial customers were considered with promotion of CRC and bulk goods collections services	Maintain the number of educational opportunities provided to both residential and business customers	Two educational opportunities per annum	Two

W2.3: Ensure recycling services are maintained and manage the current and emerging impacts of external change

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
W2.3.1	Council representatives participate in educational programs	Director Planning and Environment	100%	Completed	Throughout the 2023/24-year Council representatives participated with Parkes Community Recycling Centre (CRC) and accepted advice. The annual kerb recycling was carried out and operational of Councils CRC with EPA compliance	Council representatives participate in educational programs	Participation in one program	One

Waste Education

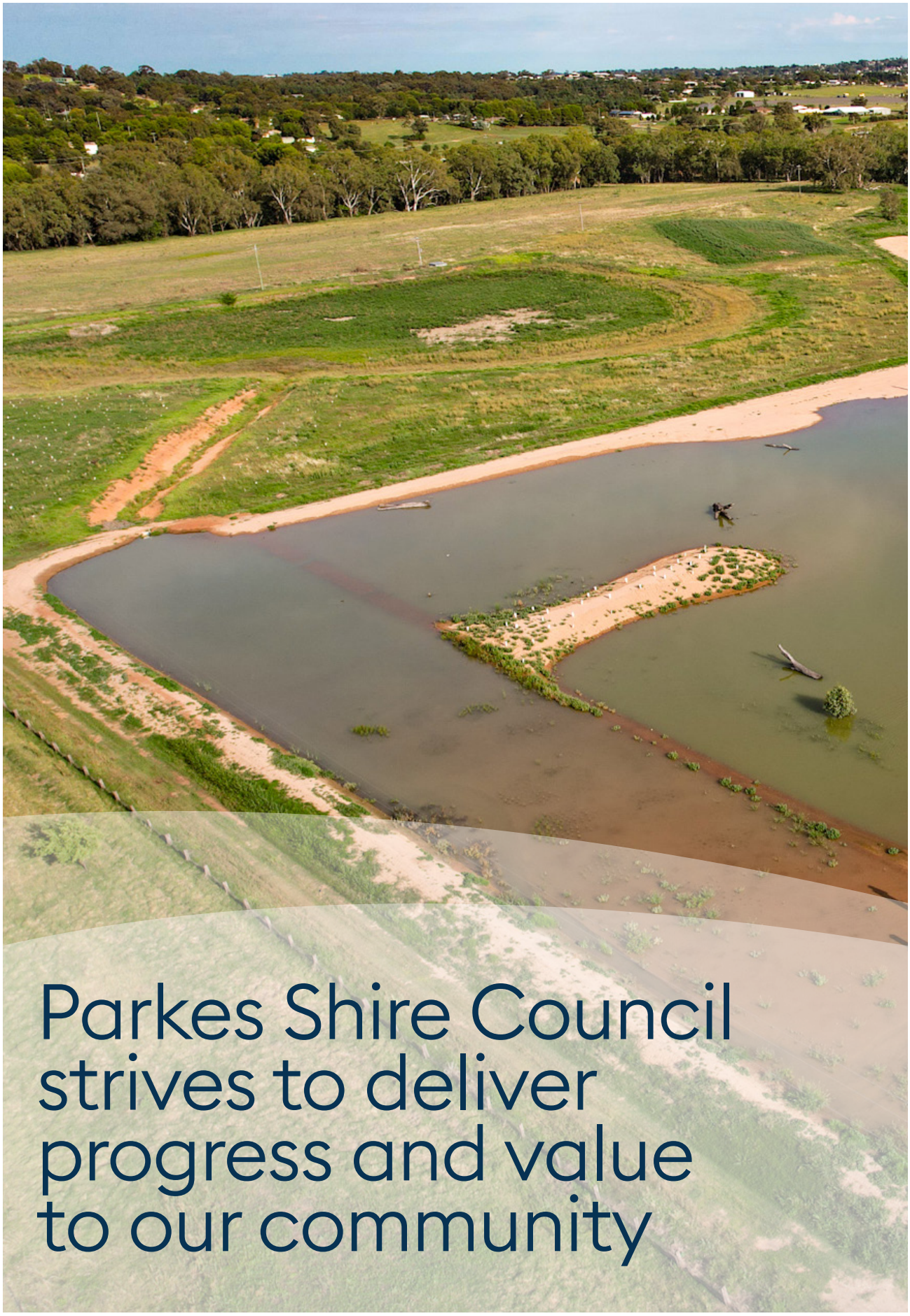
W3: We will provide appropriate educational opportunities to the community, aiding residents to improve their knowledge of waste management

W3.1: Provide educational opportunities for residents and businesses across the Shire to aid their understanding of waste management practices within the Shire

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
W3.1.1	Attend NetWaste Forums to promote waste education	Director Planning and Environment	100%	Completed	Netwaste forums provide continual advice on Regional Waste Strategy developments, were attended to during the 2023/24-year with the expectations of on-going attendance into the following year	Attend NetWaste Forums to promote waste education	Four NetWaste forums attended per annum	Two

W3.2: Strengthen waste management practices through Council's engagement with external education opportunities

Action Code	Action Name	Responsible Officer Position	Progress	Status	Comments	Performance Measure	Target	Actual
W3.2.1	Implement a suggested strategy, program, process, or activity from a NetWaste forum	Director Planning and Environment	100%	Completed	Educational programs from Netwaste for the Community Recycling (CRC)	Implement a suggested strategy, program, process, or activity from a NetWaste forum	One education program implemented	One


Parkes Shire Council
strives to deliver
progress and value
to our community


Parkes Shire Operational Plan and Budget Progress Report 2023-24

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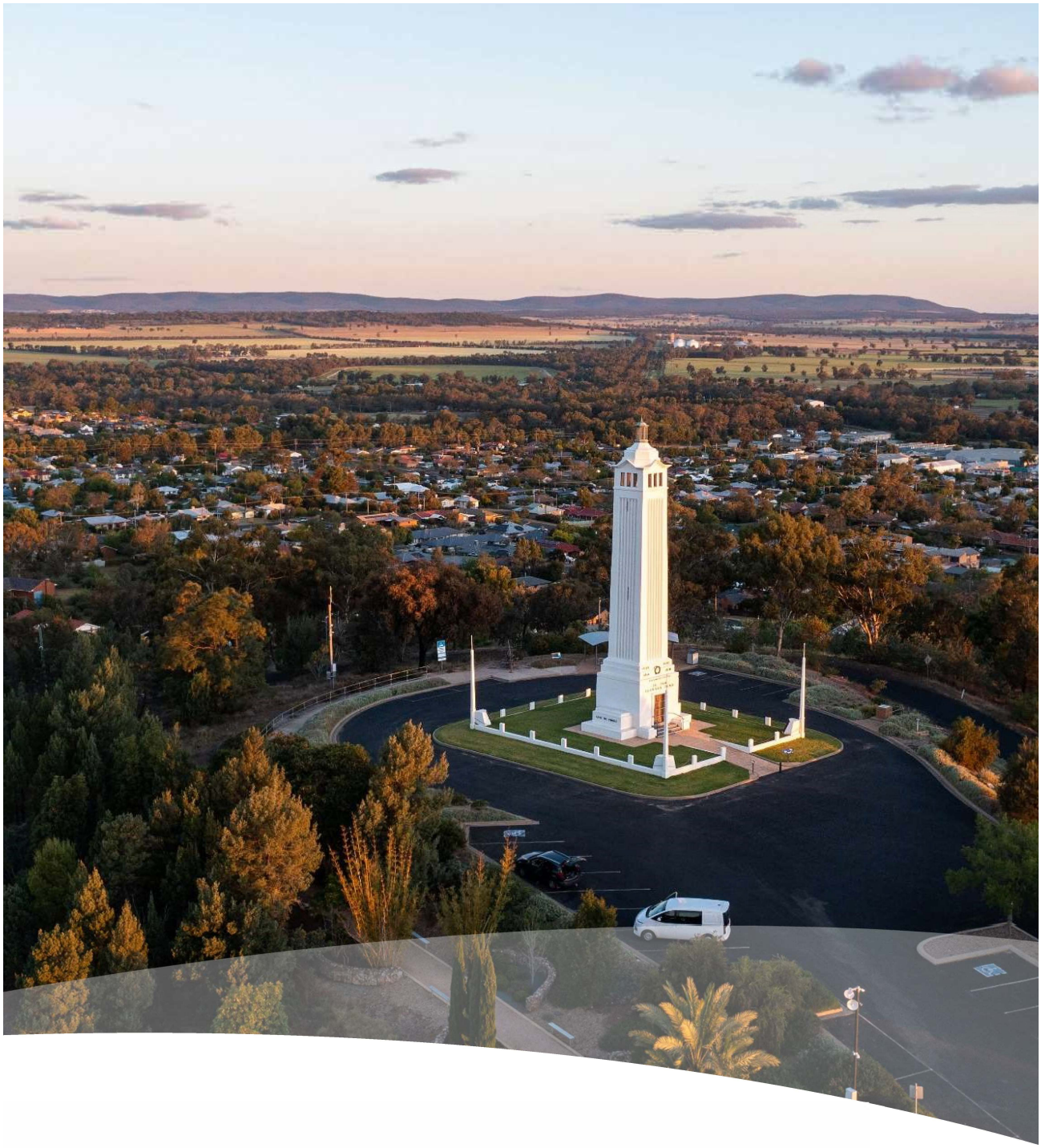

Parkes Shire Destination Management Plan

2024 - 2030

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Disclaimer

The information contained in this plan is intended only to inform and should not be relied upon for future business investment or other decisions. It is expected any specific recommended actions should be analysed and appropriate due diligence undertaken prior to making any investment decisions.

Recommended actions contained in the Parkes Shire Destination Management Plan 2024 to 2030 have been made based on assumptions, methodology and information provided from many sources. The authors, and Parkes Shire Council, accept no responsibility or liability for any errors, omissions or resultant consequences including any loss or damage arising from reliance on the information contained in this plan.

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Date	Details / Comments
27/05/2024	Draft Parkes Shire Destination Management Plan
13/08/2024	Final Parkes Shire Destination Management Plan

Parkes Shire Destination Management Plan

Contents

List of Tables **3**

1. Introduction **5**

2. About the Parkes Shire **7**

3. Strategic Context **9**

4. About the Parkes Shire Visitor Economy **10**

5. Growing the Parkes Shire Visitor Economy **12**

6. Vision and Visitor Markets **15**

Vision *15*

Main Visitor Markets *15*

7. Infrastructure Development Considerations **16**

7.1. Newell Highway Bypass 16

7.2. Parkes Special Activation Precinct 18

7.3. Inland Rail Project 21

8. Visitor Experience Development **22**

8.1. Foundational Visitor Experiences 23

Celebrity Events and Aligned Experiences *23*

The Dish and Astro-Tourism Experiences *25*

8.2. Growth Visitor Experiences 26

Heritage and Cultural Experiences *26*

Parkes Aviation Museum *27*

Nature-Based Tourism Experiences *28*

9. Destination Marketing **33**

10. Destination Management **34**

11. Strategic Priorities **35**

12. Destination Action Plan **36**

12.1. Priority One: Destination Management 36

12.2. Priority Two: Destination Development 37

12.3. Priority Three: Event Development 38

12.4. Priority Four: Destination Experience Development 39

12.5. Priority Five: Destination Marketing 41

13. Appendices **42**

List of Figures

Figure 1: Parkes Shire Destination Management Planning Process....5
Figure 2: Parkes Shire Map....8
Figure 3: Visitor Economy Strategic Context....9
Figure 4: Map of the Parkes Township....20
Figure 5: Map of Australia's existing freight lines, Darwin to Adelaide Railway, Sydney to Perth Trans-Australian Railway and the upcoming Melbourne to Brisbane Inland Rail....21
Figure 6: Foundational and Growth Visitor Experience Themes....22

List of Tables

Table 1: Parkes Shire Domestic Visitation 2019 and 2022 (YE Dec)....10
Table 2: Central West Domestic Visitation by LGA....10
Table 3: Main Reasons for Travel to Central NSW Destinations....11
Table 4: Main Industries of Employment - Parkes Shire Residents....11
Table 5: Parkes Shire Visitor Economy SWOT Analysis....13
Table 6: Parkes Shires Primary, Secondary and Emerging Visitor Markets....15
Table 7: Experience Development Framework - 2030 Objectives....32
Table 8: Strategic Priorities....35

List of Acronyms

CSIRO	Commonwealth Scientific and Industrial Research Organisation
DMP	Destination Management Plan
DNSW	Destination New South Wales
DNCW	Destination Network Central West
HARS	Historical Aircraft Restoration Society Inc.
LGA	Local Government Area
NPWS	National Parks & Wildlife Service
LTO	Local Tourism Operator
NSW	New South Wales
PSC	Parkes Shire Council
PSDMP	Parkes Shire Destination Management Plan
SAP	Special Activation Precinct
VIC	Visitor Information Centre
YE	Year End

Acknowledgement of Country

Parkes Shire is in the land of the Wiradjuri nation – the largest Aboriginal territory at the time of European settlement, encompassing the Central West slopes and plains.

Wiradjuri Country extends from Coonabarabran in the north, straddling the Great Dividing Range down to the Murray River and out to western NSW, encompassing around one fifth of NSW. The people of Wiradjuri Country are known as 'people of three rivers', due to the three rivers that border their lands: the Wambool (Macquarie River), Galari (Lachlan River) and Marrambidya (Murrumbidgee River).

In the spirit of reconciliation, Parkes Shire Council acknowledges and the Wiradjuri people as the traditional custodians of the land and pays respect to Elders past, present and future and we extend our respect to all Indigenous Australians in Parkes Shire.

We recognise and respect their cultural heritage, beliefs and continuing connection with the land and rivers. We also recognise the resilience, strength, and pride of the Wiradjuri community.

1. Introduction

The Parkes Shire Destination Management Plan (PSDMP) has been developed as a roadmap to guide the collaborative work of Parkes Shire Council (PSC) and local stakeholders to grow and develop the Parkes Shire visitor economy to 2030.

The PSDMP aims to recognise the opportunities and challenges associated with the Parkes Newell Highway Bypass, providing a strategic and unified direction for the development of the visitor economy as we steer towards a prosperous future.

Importantly, the Parkes Shire Destination Management Plan has been informed by research and engagement with representatives of industry, community and government and considers the:

- **Influence of major infrastructure projects** that are being developed within the Parkes Shire and their influence on the visitor economy - the Parkes Special Activation Precinct, Newell Highway Bypass and Inland Rail.

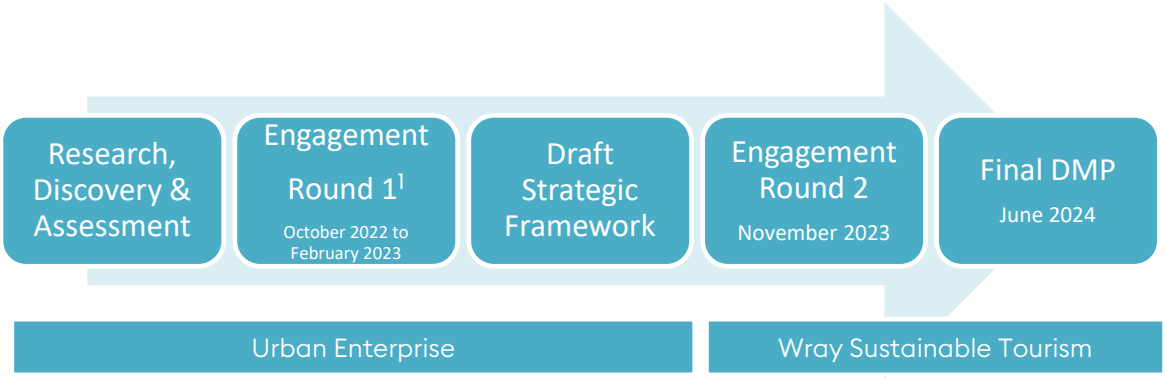
- **Significance of important attractions and events** that have helped to position Parkes Shire as a distinct inland regional destination in NSW - The Dish, the Parkes Elvis Festival, and the potential of the Trundle ABBA Festival.

- **Ongoing work of Council to plan and create new recreation and place-based projects** that will further establish the Parkes Shire as a great place to live and visit.

The destination management planning process was initially undertaken by Urban Enterprise. Dr Meredith Wray (Wray Sustainable Tourism Research & Planning) was engaged to finalise the plan during October to December 2023.

The DMP process is outlined in Figure 1 below.

Figure 1: Parkes Shire Destination Management Planning Process



[1] See Appendix 1 for DMP engagement activities (Rounds 1 and 2)

The Parkes Shire Destination Management Plan has been designed as a living document to:

- Sustainably grow and further develop the Parkes Shire visitor economy.
- Best position the Parkes Shire within the Central West region.
- Establish a shared vision for the future of the visitor economy across the Parkes Shire.
- Identify realistic and catalyst opportunities to develop, grow and promote the range and quality of tourism product and visitor experiences across the region that appeal to key visitor markets.
- Encourage a productive, and integrated working relationship between Council and industry stakeholders.
- Further activate local businesses and support them to flourish.
- Adapt to changes in visitor travel patterns and behaviours arising from the Newell Highway Bypass.
- Adapt to changing conditions, issues and opportunities as they arise.
- Recognise the role of Parkes Shire Council as leading the sustainable tourism growth and development of the local visitor economy through the provision of financial and human resources, and as the custodian and manager of key assets, developing infrastructure and facilities.

2. About the Parkes Shire

Parkes Shire is in the Central West region of New South Wales. It is intersected by the Newell Highway which services road travellers from Melbourne to Brisbane and is a 3.5-hour drive from Canberra and a 5-hour drive from Sydney (see Figure 2).

The Shire encompasses an area of approximately 6,000 square kilometres of land and is home to approximately 14,300 people. Over 70 percent of the population live within Parkes, the primary servicing town for the region[2]. Parkes has a population profile that is 'book-ended' by a large number of young people under 20 and people over 60 years of age. The towns of Bogan Gate, Trundle and Tullamore have higher proportions of older residents. Peak Hill has a significantly high percentage of First Nations people.[3]

Parkes Shire neighbours the Cabonne, Forbes, Lachlan and Narromine Local Government Areas and benefits from its connections to other regional centres such as Bathurst, Condobolin, Cowra, Dubbo, Forbes, and Orange. Parkes and Forbes are located less than 30 kilometres apart via the Newell Highway and are known as twin towns. The Parkes Regional Airport provides daily passenger flights to Sydney and services the communities of Parkes, Forbes, and Lachlan Shires.

The location of Parkes is unique in that it is at the crossroads of the national rail network, which links to all capital cities in Australia. Nowhere else in Australia do so many national railways converge and redistribute to the farthest reaches of our continent.

Parkes Shire is currently at a transformational point in its development [4]with the construction of national scale infrastructure and development projects including the $9.4 billion Inland Rail Project, $168 million Newell Highway Upgrade, $260 million Parkes Special Activation Precinct project, $270 million Northparkes Mines Expansion, and NSW government approval of a new nickel and cobalt mine west of Parkes[5]. These projects will establish Parkes as a major centre for national transport logistics, including rail, road and airfreight, as well as a world leader in circular economy and sustainability-based industry. As this new economic activity begins to emerge, Parkes will further develop its role as an important regional centre with its population predicted to grow by up to 19 percent over the next two decades[6]. The town's growth will be further fuelled by the labour force needed to build a hub for these projects and the need for affordable housing. For example, the Inland Rail Project is expected to create more than 3,000 jobs in Parkes[7].

[2] https://profile.id.com.au/parkes
[3] Parkes Shire Liveability Strategy
[4] Parkes Shire Local Strategic Planning Statement 2020
[5] Parkes Shire Council 2021 Regional Telecommunications Review Submission
[6] https://www.abc.net.au/news/2021-06-24/nsw-towns-housing-crisis-cowra-parkes-government-infrastructure/100201526
[7] https://www.nsw.gov.au/regional-nsw/regional-business-and-economy-nsw/special-activation-precincts/parkes-activation-precinct

Figure 2: Parkes Shire Map



3. Strategic Context

The Parkes Shire Destination Management Plan has been developed to align with the directions of the Central West NSW Destination Management Plan and NSW Visitor Economy Strategy 2030.

Figure 3: Visitor Economy Strategic Context



Parkes Shire is one of 12 local government areas that comprise the Central West NSW destination network region. The other LGAs within the region are Bathurst Regional, Blayney Shire, Cabonne, Cowra, Forbes Shire, Lachlan Shire, Lithgow City, Mid-Western Regional, Oberon, Orange City, and Weddin Shire Council. Its location within a one and a half hour radius of other Central West destinations, Orange, Dubbo, Forbes and Condobolin is important to consider as part of any future collaboration opportunities.

The Central West Destination Management Plan 2022 to 2030 identifies five strategic objectives that are designed to coordinate the region's tourism industry and grow the Central West NSW visitor economy to be fit for the future and align with the NSW Government's 2030 strategic pillars.

The NSW Government's Visitor Economy Strategy (VES) 2030 acknowledges regional NSW as key to the future of the NSW visitor economy. The NSW statewide target for 2030 is $65 billion in total visitor expenditure. Regional NSW will contribute $25 billion in overnight visitor expenditure to this target. Tourism is identified as one of seven 'engine industries' expected to drive regional NSW economies over the next 18 years and is identified as one of 50 new priorities to drive long-term stimulus impact[8].

The VES 2030 identifies five Strategic Pillars that have been established to guide visitor economy growth to 2030:

- Road to Recovery
- Build the Brand
- Showcase our Strengths
- Focus on World Class Events
- Facilitate Growth

The PSDMP also considers important Council strategies and plans that relate to the potential growth and development of the Parkes Shire visitor economy (see Appendix 2).

[8] NSW 2020 Economic Blueprint

4. About the Parkes Shire Visitor Economy

The following table highlights the 2019 (pre-COVID) visitor economy achievements versus the Year End (YE) 2022 results that shows a 30% increase in total domestic visitor expenditure and 27% increase in overnight domestic visitors.

Table 1: Parkes Shire Domestic Visitation 2019 and 2022 (YE Dec)

Table 1: Parkes Shire Domestic Visitation 2019 and 2022 (YE Dec)[9]		
	2019	2022
Total domestic visitors	383,000	356,000
Total visitor expenditure	$87m	$113m
Overnight domestic Visitors	173,000	219,000
Overnight domestic visitor expenditure	$55m	$95m
Daytrip visitors	N/A	137,000
Daytrip visitor expenditure	N/A	$18m

Parkes Shire accounts for 6% of all domestic visitors and 5% of domestic overnight visitors to the Central West NSW region as shown in Table 2.

Table 2: Central West Domestic Visitation by LGA

Table 2: Central West Domestic Visitation by LGA[10]			
Local Government Area	Total Domestic Share %	Domestic Overnight Share %	Domestic Daytrip Share %
Bathurst Regional (LGA)	22	13	9
Cowra (LGA)	4	3	N/A
Mid-Western (LGA)	19	17	N/A
Orange	33	22	11
Parkes	**6**	**5**	**2**
Blue Mountains	10	8	N/A
Lithgow (LGA)	7	6	N/A
Oberon (LGA)	3	N/A	N/A

[9] Note: International visitor data is not statistically reliable for Parkes SLA.
[10] The Value of Tourism to the Central West NSW 2022

The main reasons of travel to Central NSW destinations (Bathurst Regional, Cowra, Mid-Western, Orange and Parkes) are as follows:

Table 3: Main Reasons for Travel to Central NSW Destinations

Table 3: Main Reasons for Travel to Central NSW Destinations	
Main reason for travel	%
Holiday	43
Visiting Friends & Relatives	30
Business	22
Other	5

The visitor economy provides a source of employment for Parkes Shire residents. The table below highlights the percentage of Parkes Shire residents employed within tourism-related industries, including Accommodation and Food Services (6.9%) and Retail Trade (8.2%).

Table 4: Main Industries of Employment - Parkes Shire Residents

Table 4: Main Industries of Employment – Parkes Shire Residents[11]	
Industry	% 2021/22
Agriculture, Forestry and Fishing	13.6
Health Care and Social Assistance	11.9
Mining	11.0
Retail Trade	8.2
Public Administration and Safety	8.2
Education and Training	7.9
Transport, Postal and Warehouse	7.3
Construction	7.2
Accommodation and Food Services	6.9
Manufacturing	2.9

[11] https://economy.id.com.au/parkes/employment-by-industry

5. Growing the Parkes Shire Visitor Economy

Enhancing Parkes Shire and its towns and villages as must-stop destinations in the Central West and appealing year-round, is important to increasing domestic visitor expenditure, overnight stays and daytrips to the area.

There is an immediate need to consider opportunities and strategies to grow and develop tourism in a new way given the construction of the Newell Highway Bypass.

Parkes Shire Council has an important role in leading and working with local stakeholders to guide the development, management and marketing of tourism and events to create greater awareness of the area and to encourage visitation year-round to grow the local visitor economy.

Continued engagement between Council and industry stakeholders is also necessary to drive the Parkes Shire visitor economy forward. This includes consideration of how Council can engage with the Chamber of Commerce and other important local and regional stakeholders including Destination Central West, National Parks and Wildlife Service (NPWS) and CSIRO.

Visitation to the Parkes Shire has recovered well following the COVID- 19 health pandemic and currently contributes an estimated $113 million to the local economy. The Parkes Shire visitor economy can, however, be considered relatively small compared to other Central West destinations (Orange $578 million and Bathurst $383 million)[12]. The aim of this DMP is to further increase domestic visitor expenditure.

Research and engagement activities to inform this DMP identified the following main strengths, weaknesses, opportunities and challenges to the future growth and development of the Parkes Shire visitor economy.

[12] The Value of Tourism to the Central West NSW 2022a

Table 5: Parkes Shire Visitor Economy SWOT Analysis

Table 5: Parkes Shire Visitor Economy SWOT Analysis	
Strengths	Weaknesses
Accommodation occupancy currently experiencing growth due to major infrastructure development in the area	Current Destination brand doesn't effectively reflect the Parkes Shire destination story and identity
Central location in network of Central West regional towns and stop-over destination for visitors on the Melbourne and Brisbane touring route and from inland NSW	Need to consider accommodation occupancy levels post construction of major infrastructure projects to continue good occupancy rates
The national and international significance of the Parkes Observatory	National Park facilities at Goobang National Park need improvement
The enduring reputation and appeal of the Parkes Elvis Festival	Limited local business engagement in visitor economy initiatives
Capacity of the Council to successfully deliver major events	Workforce challenges post-COVID-19
Significant government investment in major infrastructure projects – Newell Highway Bypass, Parkes Special Activation Precinct and Inland Rail	Lack of astro-tourism product and experiences linked to the significance of The Dish and moon-landing
Council commitment to enhance the Shire as a great place to live through place-making strategies and new infrastructure development and projects	Immediate need for improved gateway and wayfinding signage given the development of the Newell Highway Bypass that is due for completion in 2024 and construction of the Parkes SAP
Quality accommodation across the Shire	

Table 5: Parkes Shire Visitor Economy SWOT Analysis (cont.)	
Opportunities	Threats
Create new visitor experiences aligned to destination strengths – astro-tourism, celebrity events, nature-based tourism, destination events	Changing economic conditions impacting event attendance, tourism visitation and business investment
Attract business travel and meetings linked to the Parkes Special Activation Precinct and Inland Rail projects	Ongoing threat from natural disasters - drought, floods and bushfires for residents and visitors
Further develop the Parkes Shire as an RV and EV friendly destination	Newell Highway Bypass may alter visitor flow
Collaborate with neighbouring LGAs and Central West region on destination marketing initiatives – e.g. cycle trails, public art trails	
Create new and vibrant public art installations across the Shire	
Attract new visitors to the Parkes Shire – e.g. younger generations, families, Generation X nomads	
Strengthen retail and entertainment in Parkes, like Dubbo and Orange	
Use shops for pop-ups and source grants to beautify empty shops	
Position Peak Hill as the gateway to nature-based tourism experiences	
Cultural experiences provided by the proposed development of the Parkes Regional Entertainment and Cultural Centre	
Village trail itineraries that connect villages and offer opportunities for product development	

6. Vision and Visitor Markets

Vision

The following vision was created from findings of the destination management planning process:

By 2030 the Parkes Shire will be a must-stop destination for visitors and business travellers to the Central West that is home to important astro-tourism experiences, major events and festivals, nature-based experiences and emerging contemporary visitor experiences.

Main Visitor Markets

Based on findings of the destination management planning process, the focus for Parkes Shire destination marketing initiatives should be on growing overnight visitation with the intention of attracting repeat and new visitors and encouraging them to stop, stay and explore the area.

Table 6: Parkes Shires Primary, Secondary and Emerging Visitor Markets

Table 6: Parkes Shires Primary, Secondary and Emerging Visitor Markets

Visitor	Profile
Primary Visitor Markets	Domestic overnight visitors travelling between Melbourne and Brisbane, within regional NSW and those visiting for festivals including: • Families • Grey Nomads • Other Aussie Road Trippers - Gen X Nomads, Millennials and Gen Zers
Secondary Visitor Markets	• Visiting friends and relatives of a growing and culturally diverse resident population • Domestic daytrip visitors from the Central West region targeting families and Australians 45+ years
Emerging Visitor Markets	• **Business travellers:** connected to the Parkes Special Activation Precinct and Inland Rail infrastructure development projects. • **Regional Sports:** participating and watching regionally significant sports events. • **Education:** in cooperation with agencies working to promote the Parkes Shire as an excellent place for educational experiences. • **Nature-based:** visitors interested in bird watching, cycling and walking.

Note: Consumer research undertaken by Amazon in 2002 found that millennials (born 1981 to 1996) are the most road-trip happy generation, with nine in ten (89%) saying they love going on road trips. This compared with gen Xers (Born 1965-1980) at 83%, baby boomers (Born 1955-1964) at 81% and gen Zers (Born 1997-2012) at 77%[13].

[13] https://www.capricorn.coop/caphub/industry/2022/amazons-aussie-road-trip-research

7. Infrastructure Development Considerations

Growing the Parkes Shire Visitor Economy will require strategies to leverage opportunities associated with national and state significant infrastructure development projects in the Shire – the Newell Highway Bypass, the Parkes Special Activation Precinct and Inland Rail.

From a visitor economy perspective, careful consideration needs to be given to the impact of these projects for visitors to the area including consideration of any changes associated with visitor access and travel patterns; a changed gateway entrance to Parkes; viability of the location of the Visitor Information Centre at the Henry Parkes Centre; potential opportunities for new product development; and potential for new visitor markets (e.g. business travellers, business events) that may emerge from these major projects.

It is also important that Parkes Shire Council continues to adopt a strategic and whole-of-destination approach to continue to plan for and develop the Parkes Shire as a great place to live, visit and do business.

The following sections provide an overview of these projects relevant to the growth and development of the Parkes Shire visitor economy.

7.1. Newell Highway Bypass

The Newell Highway Bypass is a critical infrastructure project that will change visitor access to Parkes. The bypass, which is expected to be completed in late 2024, will relocate the Newell Highway two kilometres west of its current position, which cuts through Parkes. The bypass will not directly impact other towns and villages along the highway, including Peak Hill, Alectown, and Tichborne; however, it has the potential to affect where travellers choose to stop and stay.

The Newell Highway currently runs through the town of Parkes via Bogan Street. The upgrade will involve relocating the highway about two kilometres west, between Maguire Road to the north and Barkers Road to the south - a total length of 10.5 kilometres. The bypass would remove up to 1200 trucks per day from local streets and improve safety for motorists[14]. As such, the bypass will relieve pressure on Parkes CBD, and, in combination with the Parkes Special Activation Precinct (SAP) and other attractions west of town, will also significantly alter the character and importance of the Western entry corridor into Parkes.

As part of the destination management planning process Urban Enterprise were engaged to prepare a Parkes Shire Bypass Strategy as a sub-report to the DMP. Based on their analysis of secondary and primary research conducted as part of this study, the following outlines potential impacts of the Bypass on the economy of Parkes:

[14] https://www.transport.nsw.gov.au/projects/current-projects/parkes-bypass

- Overall, case studies of similar towns bypassed show, the role of Parkes township as an overnight stopover destination and the many large scale construction projects underway may have short-term impacts on visitor expenditure within Parkes Shire.
- It is estimated that there may be a loss of 10% ($7.2 million expenditure) within Parkes Shire as a result of the Bypass construction.
- The bypass will result in reduced traffic to CBD businesses, as 753,000 vehicles will be redirected from the CBD per annum. Economic activity may therefore be redirected to near the bypass (e.g. service stations) which could result in a risk of increased CBD vacancies, which is already a serious issue within the Shire.
- 31% of visitor trade is identified as at risk based on the proportion of the market not pre planning to stop in Parkes.
- 81% of businesses who responded to the industry survey identified that they would receive some negative impacts from the Bypass.
- Accommodation businesses surveyed estimated a loss of 31% of revenue, whilst retail businesses estimated a loss of 16%.
- Development pressure may occur around the interchange which could alter the growth pattern of the Parkes township community[15].

Conversely, the Bypass Strategy identified a range of opportunities arising from the Bypass development that have implications for the town of Parkes as an appealing regional destination. The Bypass:

- Offers potential to build Parkes Shire and township as a visitor destination, rather than a just a stopover point as it currently is perceived to be.
- Provides easy access to the Parkes Special Activation Precinct, which will be a key driver of employment following its establishment.
- Removes heavy traffic from the Parkes town centre. Currently, 42% of traffic on the Newell highway is heavy vehicle traffic. This will provide opportunity to improve the Parkes town centre by making it a more pedestrian and cyclist friendly CBD.
- Encourages active transport improvements through the implementation of improved public amenities (i.e. street trees, street furniture, art and gathering places).

Proposed strategies identified in the Bypass Strategy to mitigate impacts and take advantage of opportunities include:

- Encouraging visitors to enter Parkes township from the gateway treatments, wayfinding, landscaping corridors and the establishment of a visitor stopover precinct.
- Enhancing and activating Clarinda Street to become a vibrant food, retail and entertainment precinct.
- Providing support to affected businesses to mitigate impacts of the Bypass.

To prepare for changes and ameliorate any negative consequences associated with the development of the Newell Highway Bypass and Parkes Special Activation Precinct, Parkes Shire Council engaged consultants, King and Campbell, to prepare a Parkes Western Entry

[15] Parkes Shire Bypass Strategy

Gateway Masterplan that was finalised in October 2023. The Plan explores the merits of land-use changes along the road corridor as well as opportunities for improvements to the entry experience, including land use change, road, active transport and landscape improvements, wayfinding signage and tourism infrastructure and drainage improvements.

The preparation of the Masterplan is important as it provides a well-considered strategic plan to guide the development of an appealing new Gateway to the town. The vision is:

> *To create an inviting, vibrant and memorable town entry from the proposed new Newell Highway Bypass, connecting the Parkes Special Activation Precinct and other major developments and centres further west of the Highway to the Parkes urban area in an enticing manner, that makes turning off the Highway worth it.*

It should also be recognised that Parkes Shire Council is currently exploring the future use of Spicer Caravan Park through a Redevelopment Business Case. This report will evaluate the future uses of the caravan park, ensuring Parkes has appropriate short and long-term accommodation options for visitors.

7.2. Parkes Special Activation Precinct

The Parkes Special Activation Precinct and Inland Rail are significant development projects for Parkes that will consolidate its status as a key freight and logistics hub for NSW and Australia.

Special Activation Precincts are dedicated areas within regional New South Wales which have been identified by the NSW Government to become thriving business hubs. They build on each region's competitive advantages to create jobs, drive investment and business opportunities and fuel regional economic development[16].

Located 3km west of the Parkes township, the Special Activation Precinct will be a new and thriving enterprise hub, that will take advantage of its location at the only junction of Australia's two rail spines, the new $10 billion Inland Rail connecting Brisbane to Melbourne that will intersect with the east–west rail line in Parkes and the Trans-Australian Railway[17]. Pacific National has committed $35 million to start developing the Parkes Logistics Terminal adjacent to the Inland Rail[18].

The 4,821ha Precinct builds on the previous work of Parkes Shire Council in developing the Parkes National Logistics Hub. From here, suppliers can access up to 80 per cent of Australia's population within 12 hours by road or rail. This allows the delivery of local products across

[16] Parkes Special Activation Precinct Delivery Plan September 2023
[17] Parkes Special Activation Masterplan June 2020
[18] https://www.nsw.gov.au/regional-nsw/regional-business-and-economy-nsw/special-activation-precincts/parkes-activation-precinct

Australia and around the world. The Parkes precinct will build on already-planned private and government investments, creating up to 3,000 jobs across a range of industries.

The vision for the precinct is:

The Parkes Special Activation Precinct will be a hub of sustainability and enterprise that will enhance the local and regional community. Located at the epicentre of transport and logistics, the precinct will be a thriving inland port to national and global markets.

The Precinct has been planned to:

- **Stimulate economic development and employment** and be a hub of sustainability and enterprise that will enhance the local and regional community.
- **Be Australia's first United Nations Industrial Development Organisation eco-industrial park,** and the nation's leading circular economy precinct.
- **Become an inland port,** transferring export ready goods to every major city and freight centre in Australia.
- **Provide opportunities for new industries** in agriculture, freight and logistics, manufacturing, energy and resource recovery and transport.
- **Be a true eco-industrial park**, setting new benchmarks for efficient management and environmental performance standards in energy, waste, water, climate resilience and emissions.
- **Incorporate Aboriginal planning and design principles** ensuring the Precinct has a 'sense of place', history and spirit when we pass it onto the next generation.
- **Provide a flexible land use zone** allowing a wide range of employment and industrial uses in the area around the inland rail port – making the most of this opportunity.

Of relevance to the Parkes visitor economy, the precinct has been planned to support the town centre and local business with the complementary land uses permitted in the Precinct that are intended to promote economic growth for the region whilst not competing with the Parkes town centre.

Opportunities associated with the Commercial Gateway Sub-precinct may provide product development opportunities that cater to the needs of visitors and travellers to the area. This precinct has been designed to provide a transition between the industry uses of the Special Activation Precinct and the township of Parkes. The sub-precinct is located prominently alongside the proposed Newell Highway bypass of Parkes, it also offers business opportunities to service local and travelling populations. Objectives of the sub-precinct are to:

- Provide a transition between the heavier industrial uses in other areas of the Precinct and the existing Parkes township.
- Create the appropriate environment for businesses with more of a public interface.
- Provide an attractive and welcoming entry to the Precinct.
- Identify a gateway area to the Precinct off the Newell Highway that allows businesses to be located prominently.

- Service local, Precinct and travelling populations with provision for a highway service centre, a truck depot and truck stop, and a motel or hotel.
- Provide an entrance for development that requires vehicle visibility and promotion, within a high amenity sub-precinct with good public realm connection, landscaping and cultural heritage features.

Figure 4 highlights the location of this sub-precinct which is adjacent to the Newell Highway Bypass.



Figure 4: Map of the Parkes Township

7.3. Inland Rail Project

The Inland Rail project will enhance the National Land Transport Network by creating a rail linkage between Melbourne and Brisbane, connecting Queensland and the southern and western States.[19]

Spanning more than 1,600km, Inland Rail is Australia's largest freight rail project and one of the world's most significant rail infrastructure projects. It will connect Melbourne and Brisbane via regional Victoria, New South Wales and Queensland, enhancing national freight and supply chain capabilities and connecting existing freight routes through rail, roads and ports. This project will deliver faster and more reliable freight across Australia and beyond to global markets. It will also mean safer, less congested roads and fewer carbon emissions. The project will also better connect businesses, manufacturers and producers to national and global markets and create new opportunities for Australian industries and regional communities during construction and beyond.[20]

Inland Rail is taking a staged approach to the project. The route comprises 12 sections, some already operational, some under construction, and others in the planning phase. The sections between Beveridge, Victoria and Parkes, NSW, are prioritised for completion by 2027.[21]

Figure 5: Map of Australia's existing freight lines, Darwin to Adelaide Railway, Sydney to Perth Trans-Australian Railway and the upcoming Melbourne to Brisbane Inland Rail.



[19] The Case for Inland Rail – Summary of the 2015 Business Case
[20] https://inlandrail.artc.com.au/what-is-inland-rail/
[21] https://inlandrail.com.au/what-is-inland-rail/

8. Visitor Experience Development

Given the development of the Newell Highway Bypass, it is important that that the Parkes Shire is positioned as an attractive stop-over destination and give new and enticing reasons and experiences for visitors to stop, stay and explore.

The DMP focus on visitor experience development and activation across Parkes Shire aligns with the NSW Visitor Economy Strategy Strategic Pillar - 'Showcase Our Strengths' through focusing on existing strengths and developing new opportunities to ensure place making, destination marketing, events and visitor experiences drive visitation.

The Community and Industry Survey undertaken as part of the DMP process, as outlined in Appendix 1, also identified support for the development of new attractions and experiences (76%), increasing annual visitation (76%) and development of more local events (67%).

Experiences in Parkes Shire can be considered foundational or growth experiences. Foundational experiences drive the most significant number of visitors to the Shire and have the greatest potential to drive future visitation. Growth experiences are categorised as delivering some visitation from outside the Shire with further visitation potential if they continue to be supported.

The Foundational and Growth visitor experience themes for Parkes Shire are presented in Figure 6.



Figure 6: Foundational and Growth Visitor Experience Themes

In addition to the above experience themes, destination events may generate visitation to Parkes Shire and can be considered an emerging theme. Destination events are defined as events that drive economic development through a significant leisure, sporting or business event attracting visitation from primarily out of the Shire.

The following sections further explain the significance of these events and experiences for the growth and development of the Parkes Shire visitor economy to 2030.

8.1. Foundational Visitor Experiences

The on-going recognition by Parkes Shire Council to coordinate the Parkes Elvis Festival and more recently the Trundle ABBA Festival as drivers for destination awareness and visitation to the Shire is significant. Parkes Shire is also home to the celebrated 'Dish' that is managed by the CSIRO.

The unique and 'celebrity' appeal of these events and attractions provides Parkes Shire with an important competitive advantage over other regional destinations.

There is, however, potential to further enhance existing and develop new aligned product and experiences and establish new destination marketing strategies to leverage the strengths of these assets to appeal to new and repeat visitors to further build destination appeal and awareness in the areas of Elvis, ABBA and astro-tourism experiences.

Celebrity Events and Aligned Experiences

Parkes Elvis Festival

There is no doubt that the Parkes Elvis Festival is a significant hallmark event that has greatly helped to position Parkes as a distinct destination in NSW and Australia. Held since 1994, the Festival is recognised as one of the top three Festivals and Events in Australia. It attracts approximately 25,000 visitors annually and is estimated to have a global reach of 599 million[22].

The NSW Visitor Economy Strategy 2030 identifies the Elvis Festival as one of Country NSW's hero events and is supported by Destination New South Wales through state significant event development funding to 2025.

Estimations from the 2023 event stipulate that the event attracted 24,000 visitors and contributed $15 million to Parkes Shire's local economy.

The 2024 Festival Visitor Post-Event Survey found:

- 43% of attendees were from Regional NSW, 19% were from Sydney, and 37% were from other states and territories.
- 92% of attendees were aged 45 years and over.
- 76% had been to the event before.

[22] https://www.parkeselvisfestival.com.au/about/festival-history/

- 87% travelled to Parkes in a private vehicle.
- 80% said they were likely to or definitely will attend the event in 2025.

There are further opportunities to leverage the popularity of the Elvis reputation in Parkes through the curation of year-round Elvis experiences in and around the Parkes CBD including activation of a Parkes Elvis Central VIC in the CBD, revisioning the King's Castle experience, and developing the Gates of Graceland precinct.

Trundle ABBA Festival

Building on the reputation of the Parkes Elvis Festival, the Trundle ABBA Festival was launched in 2012 by locals Ruth and Gary Crowley as a way of making Trundle a destination rather than a drive-through town. Trundle is located 65 kilometres from the Parkes township and is Australia's only and original ABBA Festival where all things ABBA are celebrated.

As well as providing economic benefits to the area, the Trundle ABBA Festival has been a morale boost and a source of nostalgic fun for the community of about 400 people. Importantly, the festival has grown from an attendance of 200 people in 2012 to a peak crowd of 4,000 in 2018 and leverages visitors who have also enjoyed the Parkes Elvis Festival.

The festival was, however, cancelled during 2020 and 2021 due to the COVID-19 pandemic and in 2022 due to floods. Recognising the significance of the Festival to the Shire, Parkes Shire Council took over the coordination of the event for its re-launch in October 2023 and will plan and deliver the 2024 event.

There is an opportunity to develop the Trundle ABBA Festival through synergies with the Parkes Elvis festival coordination in terms of event management expertise; shared resource opportunities and cooperative marketing strategies coordinated by Council.

King's Castle

The 'King's Castle' Elvis exhibit at the Henry Parkes Centre is also an attractor but requires some new thinking on how to present the memorabilia in a vibrant and appealing way.

Stakeholder engagement undertaken to inform the Henry Parkes Centre Masterplan (2016) identified that Greg Page, the owner of the Elvis exhibit, considered that the current exhibition space is limited and inhibits visitor flows. He would like to see the 'Elvis Experience' broadened and higher visitor numbers to reach 20,000 people.

Visitor Information Centre Relocation

During the Parkes Elvis Festival, a dedicated event information hub, Elvis Central, is located in the Parkes CBD. Elvis Central is the official festival merchandise and souvenir outlet at 203 Clarinda Street. During this time, the Parkes Information Centre remains open for visitors outside the CBD.

Given the construction of the Newell Highway Bypass, consideration could be given to relocating visitor information services to the Elvis Central building or an alternative CBD location and creating a year-round destination experience in town.

The Dish and Astro-Tourism Experiences

The concept of astro-tourism has expanded over the years, from dictionary definitions of 'activities by tourists paying to travel into space for recreation' to 'tourism using the natural resource of unpolluted night skies for astronomical, cultural, or environmental activities'. Dark skies are becoming a scarce resource as night lighting and atmospheric pollution increase. astro-tourism opens new opportunities of bridging science and tourism, motivating alliances for starry nights, science, culture, and nature[23].

The Dish

For Australians the story of 'The Dish' (as it's colloquially named) is cemented in the back of our minds through the celebrated film The Dish, released 21 years ago – telling the story (through a fictional narrative) of the important role played by the telescope during the historic Apollo 11 Moon landing in 1969[24].

For astronomers, the Parkes Telescope is the most successful scientific instrument ever built in Australia and is unsurpassed in terms of the number of astronomers, both national and international, who have used the instrument, the number of research papers that have flowed from their research, and the sheer longevity of its operation (now over sixty years) that launched Australia into the world of 'big science' from the 1950s[25].

For visitors, the giant dish is co-located with a café and the CSIRO Visitor Discovery Centre which features displays, hands on exhibits, a 3D theatre, retail store and children's space-themed playground. Visitation to The Dish has grown from 68,427 visitors in 2014 to a peak of 133,098 visitors in 2019 with the 50-year celebration of the 1969 moon landing. The Dish attracted approximately 100,000 visitors in 2023 with January, April and July the Dish's busiest months[26]. 60% of visitors come from QLD and 30% are from NSW. It is also the CSIROs largest visitor facing site in Australia with the aim of engaging people in regional areas with science.

Visitor research undertaken to inform this DMP indicated that 51% of visitors visited or planned to visit the Dish during their trip to Parkes. Specifically, those who were day tripping to Parkes wanted to visit the Dish the most. This highlights the significance of the Dish as a visitor

[23] Fayos-Solà, E., Marín, C., Rashidi, M.R. (2016). Astrotourism. In: Jafari, J., Xiao, H. (eds) Encyclopedia of Tourism. Springer, Cham
[24] https://spaceaustralia.com/feature/60-years-science-wonder-happy-birthday-dish
[25] Robertson, P. (2011). An Australian Icon – Planning and Construction of the Parkes Telescope, University of Melbourne
[26] Parkes Dish visitor statistics 2014 to 2022 (YE December)

attraction and the potential to leverage further astro-tourism experience development opportunities that are linked to Parkes[27].

To foster, encourage and promote astronomy in the region, the Central West Astronomical Society (CWAS) holds its annual festival of astronomy, or AstroFest, in July. The Festival brings world-renowned astronomers (professional and amateur) to the Central West so they may share their enthusiasm and love of astronomy. The two-day program comprises a one-day conference in Parkes and a daytime program of astronomy viewings and talks at the CSIRO Parkes Observatory Visitors Centre[28].

In 2023, CSIRO upgraded the playground area and installed accessible paths and amenities. Plans are also underway to create two new visitor walks around The Dish. The first is an indigenous walk that will share local indigenous stories of the skies and native foods of the indigenous forest. The second is a walk around the other side of the Telescope to show historical pieces of scientific and telescope equipment. The CSIRO are exploring opportunities to create a significant astro visitor experience (e.g. planetarium and exhibition space) at the site and are keen to work collaboratively with Council and Destination New South Wales on this project. It is also important to recognise that visitor access to The Dish will remain a five-kilometre detour off the Newell Highway with the Newell Highway Bypass taking traffic around Parkes two kilometres south from The Dish turnoff.

There are opportunities to better connect The Dish to Parkes through creation of an astro-tourism experience in Parkes that is developed in collaboration with the CSIRO.

8.2. Growth Visitor Experiences

Heritage and Cultural Experiences

Careful consideration is needed to present the heritage and cultural stories and artefacts of the Parkes Shire in a contemporary way including Bushman's Hill and Memorial Hill. This includes determining the best use of the Henry Parkes Visitor Centre including its attractions and visitor information centre given it will no longer be located on the Newell Highway thoroughfare.

The Henry Parkes Centre

The Henry Parkes Centre currently comprises the Parkes Visitor Information Centre and four heritage and cultural museums - The King's Castle Elvis Exhibit, Parkes Motor Museum, Moat Cottage Replica, Henry Parkes Museum and Antique Machinery Collection.

Visitor Information Centres provide reliable information on attractions, activities and events in the region. The Henry Parkes Centre is the only credited Visitor Information Centre within the Shire as is is an important tool in dissemination information to travellers.

[27] Parkes Shire Visitor Survey, Urban Enterprise, 2023
[28] https://www.cwas.org.au/astrofest/

The Visitor Information Centre (VIC) has attracted around 26,000 visitors per year over the five years 2015 to 2019. During the COVID-19 years (2020 and 2021) visitation declined by approximately 20% per year. The year ending 2022 has however reflected healthy growth to achieve 29,000 visitors. Visitors to the VIC are mainly from NSW (46%), Victoria (15%), local residents (15%), and Queensland (13%). Visitors are mainly families and those aged over 51 years[29]. Around 21% percent of visitors to the VIC pay to visit King's Castle and Vintage Car exhibits. It should be noted that the Parkes Historical Society manage ticket sales for access to the Henry Parkes Museum. This data was not available to inform this plan, but it can be assumed that visitor numbers are similar or less than those visiting the King's Castle and Vintage Car exhibits.

A Masterplan developed for the site in 2016 by Source Architects identified a number of proposals that outline a long term staged development of the Henry Parkes Centre including alterations to existing facilities, new landscape, wayfinding and signage works and potential new facilities to enhance the patron experience.

It should also be acknowledged that Council have recently engaged consultants to undertake a feasibility study for a proposed Parkes Regional Entertainment and Cultural Centre. If this Centre was approved consideration would also need to be given to the viability of the Centre for visitor information service delivery.

Given the construction of the Newell Highway Bypass, and concerns that incidental visitation to the Centre and its attractions may be impacted, it is recommended that a new Masterplan should be developed for the site that considers: if this site is the best option for a new King's Castle experience; location of the vintage car display so it is more visible**;** if there is a need for a dedicated visitor information centre in this location; the creation of an astro-tourism experience and the location and contemporary presentation of Henry Parkes Museum and its artefacts.

Parkes Aviation Museum

The Parkes Aviation Museum that is curated by Historical Aircraft Restoration Society Inc. The Museum is co-located with the Parkes Regional Airport, highlighting the history of aviation in both Parkes and Australia. (HARS) is also planning investment and expansion of its historical aviation museum at Parkes airport. HARS also host an Aviation Museum in Albion Park that is home to a former Qantas Boeing 747-438 aircraft.

Support for grant funding opportunities for the expansion of the Parkes Aviation Museum should be explored in cooperation with HARS Inc.

[29] Henry Parkes Centre, Visitors by State YE 2022

Silo Art Trail

Ever since the first silo art was created in 2015, more than fifty large-scale artworks have been installed to beautify silos across the country including Western Australia, South Australia, Victoria, New South Wales and Queensland. There are currently six silo art locations in New South Wales: Weethalle, Grenfell, Portland, Dunedoo, Barraba and Merriwa.

The Silo Art Movement is considered to be more than a visual spectacle; it is a dynamic force of transformation and rejuvenation. In its majestic strokes and grandeur lie the seeds of renewal for many towns and communities that once teetered on the brink of obscurity. It is not just art; it is a resurrection, a new dawn that ushers in hope, economic vitality, and social resurgence. Every mural, every painted silo is a testament to the unwavering spirit of Regional Australia. The movement transcends the boundaries of art, becoming a robust engine that drives tourism, invigorates local economies, and rekindles the social fabric of communities[30].

Silo art projects are a collaboration between the silo owner, regional communities, artists and local councils. At present, three silos within the Shire have been approved by their owner, GrainCorp for the installation of a permanent mural project. Bogan Gate and Tullamore are the two closest towns to silos with current owner approval, whilst, opportunities for temporary installations and further planning may be considered for other silos across the Shire.

There is an opportunity to create a significant silo art trail around the Parkes Shire given the strategic location of silos across the Shire.

Nature-Based Tourism Experiences

Nature-based tourism is defined as leisure travel undertaken largely or solely for the purpose of enjoying natural attractions and engaging in a variety of nature-based activities. It includes a range of visitor experiences also associated with adventure, ecotourism, recreational activities, visiting natural attractions, health and wellbeing[31]. There are opportunities to promote nature-based tourism experiences provided by Goobang National Park, cycling trails, Bumberry Dam, Bogan Weir, Peak Hill Nature Walk and Trundle Black Range and new recreation experiences being developed in Parkes – the Akuna Wetlands, Kelly Reserve Splash Park and Lake Endeavour.

The following identifies nature-based tourism projects recently developed or underway within Parkes Shire that will provide new and easily accessible nature-based cycle and recreation experience opportunities for residents and visitors.

[30] https://www.australiansiloarttrail.com/new-south-wales-silo-art-locations
[31] Ecotourism Australia Nature Based Tourism in Australia Manifesto

Peak Hill Gold Mine

The Peak Hill gold mine was re-developed in 2002 as a Tourist Mine attraction located 400 metres from the Peak Hill town centre near the Newell Highway. In September 2007, Parkes Shire Council signed an agreement with lease-holder Alkane Exploration committing to keep the project running, through Council operating the tourist arm of the mine.

The Mine site provides a walking experience requiring a low to moderate fitness level to complete most of the trails. Alternatively, for those only wishing to access the main viewing platform, visitors can take a short, flat return walk along the low wall of the main open cut to experience the spectacular views across to the high wall. The site attracted around 5,000 visitors for the year 2022/ 2023.

Cycle Trails

Parkes Shire has over 1000kms of gravel trails for visitors to explore, with pre-mapped day and multi-day cycle routes ranging from 20 to 120km. These day and multi-day routes included the 55km 'Dish Loop' to the famous CSIRO Parkes Observatory, the 68km Bogan loop, 60km Cookamidgera-Mandagery loop and the 200km 'Parkes to Trundle' section, which visits the historic villages of Peak Hill and Trundle.

Several new cycle trails, gravel routes and tours have also been launched within the broader Central West Region including the 345km ‘Lachlan Valley Cycle Trail’ which links the tourism of Forbes, Cowra, Eugowra, Gooloogong, Parkes and Canowindra and the 360km ‘Orange and Villages Bike Trail’ that is made up of a six-day cycling journey to wineries, cafes, farm-gates and restaurants across the Orange region[32].

The Parkes Wetlands

The Parkes Wetlands project will redevelop Parkes' former Sewage Treatment Plant maturation ponds into wetlands. The wetlands will create a crucial habitat for a range of native animals, affording birds, reptiles, mammals and invertebrates an important refuge, particularly during dry periods and prolonged drought. Planned future projects at the site include walking tracks, double-story bird hides, an amenities block, car parking, interpretive signage, cultural art and sculpture, over-water viewing platforms, and an outdoor learning space.

The transformation of this unused site into a fully integrated cultural, educational, recreational and eco-tourism space will, over time, create a high-impact birdwatching experience for locals and visitors, and provide a unique opportunity for travellers seeking ecotourism experiences. The project may also facilitate regional collaboration and investment in nature-based tourism across the Central West, such as the potential to develop a birdwatching trail linking the Parkes Wetlands to Gum Swamp in Forbes, Lake Cowal, and Lake Cargelligo.

[32] https://www.visitcentralnsw.com.au/pedal-power-take-a-cycling-holiday-in-central nsw

Kelly Reserve Splash Park

The Kelly Reserve Splash Park is a free water play space at Kelly Reserve in Parkes. Council was awarded $500,000 in funding from the NSW Government to create the Splash Park that will enhance the Kelly Reserve precinct as a social hub and gathering space, providing an entertaining and engaging space for the community and visitors to Parkes. The play space has been designed using the topography of the lachlan catchment, and the rivers, lakes, dams, weirs and bores as inspiration. Interpretive signage tells the story of water and explains the physics and engineering that surround natural and engineered water flow. The project was completed in mid 2024 and was co-funded by Northparkes Mines and the NSW government.

Lake Endeavour

Lake Endeavour will become the first developed natural water location for recreational use in the Parkes Shire, enabling locals and visitors to enjoy the natural beauty of the lake. The NSW Government's Places to Swim program will deliver safety upgrades as well as the installation of new recreational infrastructure to encourage people to get active in, on and around Lake Endeavour - from swimming, kayaking and paddle boarding, to fishing, walking and relaxing by the water. The recreational use of Lake Endeavour has been a long-held desire of the Parkes community and is expected to be completed in 2024.[33]

Cycle tourism opportunities and recreation experiences provided by the new developments at Akuna Wetlands, Kelly Reserve Splash Park and Lake Endeavour as well as potential developments highlighted in this Destination Management Plan need to be highlighted as part of the diversity of experiences spreading across the existing cycling networks through Parkes, Peak Hill, Trundle, Bogan Gate, Cookamidgera and Alectown.

The following outlines other important nature-based tourism experiences that provide opportunities for visitor experience development requiring collaboration with NPWS and other agencies.

Goobang National Park

The Goobang National Park has been the traditional nature-based tourism experience offering for the Parkes Shire. Situated near Parkes and Dubbo, and between Peak Hill, Parkes and Molong, the Park offers scenic views, bush walking, bush camping, picnic areas, mountain biking trails, and 4WD touring. The cultural heritage of Goobang National Park is also significant. Named a National Park in 1995, Goobang traditionally belonged to the Wiradjuri people, who preferred the flatlands of the Herveys and Curumbenya Ranges. Ancient campsites and relics can be found at the park today, and along with them survive mythologies about the significance of the region. The Wanda Wandong Woodland Trail and Burrabadine Peak Walking Track offer short and moderate hiking opportunities around the park.

[33] https://www.parkes.nsw.gov.au/Council/News-media-and-projects/Projects-and-works/Activation-of-Lake-Endeavour

It should be noted that Peak Hill boarders the base of Goobang National Park and has the potential to be positioned as the gateway to the Park and will remain a township on the Newell Highway. The town will, however, require entrepreneurial investment into product development such as food and beverage and accommodation to further activate it as an appealing place to stop.

Snake Rock Aboriginal Area

Snake Rock Aboriginal Area is a small park of 61 hectares that is located west of Peak Hill on the semi-arid plains of central west New South Wales in Wiradjuri Country. This park is significant to Wiradjuri People and managed jointly between the Peak Hill–Bogan River Aboriginal Advisory Committee and the National Parks and Wildlife Service under a memorandum of understanding. It derives its name from the Aboriginal artwork depicting a snake or river on the massive sandstone rock formation that dominates the park. The Park protects other Aboriginal heritage sites and regionally significant vegetation in what is otherwise a cleared agricultural landscape.

A Plan of Management was prepared and represents an important achievement in the ongoing relationship between NPWS and the local Aboriginal community. The plan contains a range of actions to protect the natural and cultural values of the park, including actions to support the local Aboriginal community in connecting to Country and actions to protect and improve the habitat of native plants and animals, including threatened species. The plan also allows for low key recreation but, in order to provide adequate protection for this Aboriginal area, the plan puts in place a management approach which only allows people to visit the park with permission from the Peak Hill–Bogan River Aboriginal Advisory Committee and NPWS[34].

Opportunities to showcase and enhance visitor experiences of Goobang National Park and Snake Rock Aboriginal Park should be explored through engagement with key stakeholders – Peak Hill-Bogan River Aboriginal Advisory Committee and the National Parks and Wildlife Service. Peak Hill could be developed as the gateway to nature-based experiences including Aboriginal cultural tourism experiences.

[34] https://www.environment.nsw.gov.au/research-and-publications/publications-search/snake-rock-aboriginal-area-plan-of-management

Based on the previous discussion, the following table outlines the main visitor experience development objectives to guide visitor experience development for the Parkes Shire to 2030.

Table 7: Experience Development Framework - 2030 Objectives

Table 7: Experience Development Framework - **2030 Objectives**		
	Celebrity Events and Aligned Experiences	
Primary Visitor Experiences	Parkes Elvis Festival	Continue to deliver a successful annual festival in alignment with the Parkes Shire Major Events and Festival Strategy
	ABBA Festival Trundle	Deliver the ABBA Festival in alignment with the Parkes Shire Major Events and Festival Strategy
	Parkes CBD	Cement the Parkes township as a must-stop destination in the Central West by creating year-round visitor experiences that leverage its celebrity status
	King's Castle Elvis Exhibit	Present a vibrant and enticing new visitor experience of the King's Castle collection to attract new and repeat visitors to Parkes
	Parkes Shire Silo Art Trail	Create a silo art loop experience within Parkes Shire to attract visitors to explore the Shire's towns and villages and connect to silo art trails across the Central West
	The Dish & Astro-Tourism Experiences	
	The Dish	Improve the connection of The Dish /CSIRO visitor experience to Parkes township
	Astro-Tourism experiences	Create new and vibrant astro-tourism experiences that better connect visitors to significance of The Parkes Observatory in the moon landing and The Dish movie
Secondary Visitor Experiences	Nature-Based Experiences	
	Cycling	Improve promotion of cycling tourism opportunities in Parkes Shire and its surrounds
	Recreation	Continue to develop recreation and eco experiences for use by residents and visitors
	Peak Hill	Work with stakeholders to establish Peak Hill as the gateway to Goobang National Park
	Heritage & Cultural Experiences	
	Henry Parkes Centre	Review the HPC Masterplan (2016) to present a new contemporary visitor precinct
	HARS Parkes Aviation Museum	Support HARS to apply for relevant grant funding opportunities to support its plans for expansion of the museum
Emerging Visitor Experiences	Destination Events	
	Events that attract visitors external to the Shire	Determine Council support for destination and business events that have the potential to attract considerable visitation from outside the Shire as part of the new Parkes Shire Event Strategy

It is also important that future visitor experience development adopts a whole of destination approach that considers visitor access, experience connectivity, visibility and appeal across the Parkes Shire. Consideration of attractions and experiences in neighbouring LGAs should also be recognised to identify visitor flows and cooperative marketing opportunities.

9. Destination Marketing

There is an immediate need for a review of the Parkes Shire destination brand and positioning story.

The current brand was developed in 2015 through the Parkes Brand Identity Guidelines.
Parkes Shire currently uses a unified 'PARKES It all Adds Up' brand which was formulated from discovery workshops that identified the shared qualities of the diverse nature of Parkes are 'all positive'.

This brand is quite dated and not particularly engaging or consumer focused. It also fails to make a connection to any of the Shire's iconic assets, such as The Dish, Elvis Festival or ABBA Festival. This is a missed opportunity for the brand, as an iconic asset or event on a logo could have driven awareness to Parkes Shire through its recognition.

Interestingly, the Parkes Shire Council corporate brand addresses the weaknesses of the Parkes Shire destination brand, as it makes a clear connection to the region's iconic asset, the Dish.
It is strongly recommended that a brand review process is undertaken in 2024 to create a new appealing consumer-facing brand.

10. Destination Management

To ensure the effective implementation of this plan, it is important the roles and responsibilities of Parkes Shire Council and other key visitor economy stakeholder organisations are clearly understood and communicated.

It is recommended that:

- Parkes Shire Council continues to be positioned as the umbrella authority to coordinate the implementation of this plan and provides support to implement the strategies and actions in the Parkes Shire Destination Management Plan to 2030.
- The terms of reference of Council's Destination and Major Events Advisory Committee is reviewed to ensure effective business engagement and to provide strategic advice to assist Council to implement the priorities and actions in this plan.
- Other key stakeholder organisations and agencies identified in this plan are encouraged to provide on-going support to assist with the implementation of this plan.

Monitoring of the implementation of this plan is also important to ensure its vision and priorities are achieved and to provide new information which can be used to inform planning and decision making for the Parkes Shire visitor economy to 2030.

11. Strategic Priorities

Five strategic priorities have been established to guide work of Council and industry stakeholders to grow the Parkes Shire visitor economy over the next five years.

Table 8: Strategic Priorities

Table 8: Strategic Priorities		
Priority 1	Destination Management	Strengthen Council destination management arrangements for tourism and events to foster collaboration with local and regional stakeholders to ensure a sustainable, capable, and resilient visitor economy.
Priority 2	Destination Development	Adopt a whole-of-destination approach to continue to plan and develop infrastructure and facilities to enhance the appeal and amenity of Parkes Shire as a must-stop destination for visitors and business travellers to the Central West.
Priority 3	Event Development	Continue to deliver and grow outstanding destination events to drive destination awareness and visitation to the Parkes Shire.
Priority 4	Destination Experience Development	Enhance existing visitor attractions and develop new 'bucket-list' visitor experiences aligned to the positioning strengths of Parkes Shire.
Priority 5	Destination Marketing	Create a new destination brand identity and positioning story for the Parkes Shire and review destination marketing and visitor information service strategies to ensure a coordinated approach to promote the Parkes Shire as a vibrant must-stop destination.

Appendix 3 shows alignment of these objectives to the Central West DMP and NSW Visitor Economy Strategy 2030.

12. Destination Action Plan

The following Destination Action Plan provides detail against each priority and associated actions for Council, industry and community stakeholders to implement cooperatively over the next six years to 2030.

The actions in this Plan have been assigned a priority time frame:

- HIGH = commencing Year One
- MEDIUM = commencing Years Two-Three
- LOW = commencing Years Four-Six

12.1. Priority One: Destination Management

Strengthen Council destination management arrangements for tourism and events to foster collaboration with local and regional stakeholders to ensure a sustainable, capable, and resilient visitor economy.

Actions		Priority
1.1	Integrate the PSDMP into Council delivery program and annual operational plan.	Short
1.2	Work cooperatively with relevant Council Departments and Committees to ensure the vision, priorities and actions of the PSDMP are communicated and the visitor economy is an important consideration of Council's strategies and plans.	Short
1.3	Engage with local businesses to present the PSDMP vision, priorities and encourage an open-for-business attitude in preparation for the completion of the Newell Highway Bypass.	Short
1.4	Review the Terms of Reference for Council's Destination and Major Events Advisory Committee to meet four times per year and advise on the implementation of the PSDMP. Representatives should be selected based on their knowledge and expertise in tourism. The Chair of the Committee should be from the business community. Councillors should be observers to Committee meetings.	Short
1.5	Present briefings on the implementation progress of the PSDMP to Council at least twice annually.	On-going
1.6	Encourage and support tourism operators to participate in industry development initiatives provided by Council and key tourism stakeholders e.g. destination marketing, sustainable business and event development.	On-going
1.7	Provide professional development opportunities for Council staff involved in destination and visitor economy to advance their strategic tourism knowledge and leadership capacity, i.e tourism and strategic land-use planning, destination research, event planning and evaluation, strategic marketing, digital marketing, crisis management planning and recovery.	On-going
1.8	Continue to work with key stakeholders to consider and plan for potential risks that may impact the local visitor including health pandemics, natural disasters, threats to natural and economic environments, and ensure visitor safety and security is assessed and integrated into current and future Council plans and policies.	On-going

12.2. Priority Two: Destination Development

Adopt a whole-of-destination approach to continue to plan and develop infrastructure and facilities to enhance the appeal and amenity of Parkes Shire as a must-stop destination for visitors and business travellers to the Central West.

Actions		Priority
2.1	Continue to plan and deliver placemaking initiatives to establish Parkes Shire as a great place to live, visit and do business.	On-going
2.2	Continue to advocate and support the enhancement and development of infrastructure projects which will help drive visitor economy growth to the area such as recreation spaces, playgrounds, walking and cycle tracks, campground amenities, and consideration of accessibility for visitors with support needs.	On-going
2.3	Continue to improve the visual appeal, character and amenity of Parkes Shire towns and villages through the implementation of the Council strategies and plans, beautification and streetscape works, creation of new and enhancement of existing gateway entrances.	On-going
2.4	Create new and innovative gateway, wayfinding and visitor information in key locations to welcome and encourage visitors to stop, stay and explore the Parkes Shire that are aligned to a new Parkes Shire brand (see Action 5.1).	Short
2.5	Create new wayfinding signage to better connect The Dish to Parkes CBD in response to the opening of the Newell Highway Bypass.	Medium
2.6	Continue to explore options for the redevelopment of the Spicer Caravan Park and a complementary caravan park to capture bypass traffic.	Medium
2.7	Consider the viability of relocating visitor information services into the Parkes CBD in response to the opening of the Newell Highway Bypass.	Medium
2.8	Identify suitable sites for free camping across the Shire, develop RV parking facilities near towns and villages, and continue to work with the Caravan and Motorhome Club of Australia to promote Parkes Shire as an RV friendlily destination.	Medium
2.9	Work with the NRMA and other stakeholders to establish fast EV charging stations in key locations across the shire that are easily accessible for residents and visitors.	Medium
2.10	Upgrade public amenities to include accessible toilets and baby change facilities.	On-going

12.3. Priority Three: Event Development

Continue to deliver and grow outstanding major and destination events to drive destination awareness and visitation to the Parkes Shire.

Actions		Priority
3.1	Finalise the Parkes Shire Major Events and Festivals Strategy to guide the role of Council in supporting major, destination, community, sporting and business events.	Short
3.2	Develop and deliver a robust Community Events Financial Assistance Program to guide Council's continued support of a strong community events calendar in the Parkes Shire.	Short

12.4. Priority Four: Destination Experience Development

Enhance existing visitor attractions and develop new 'bucket-list' visitor experiences aligned to the positioning strengths of Parkes Shire.

Actions		Priority
4.1	Explore opportunities to leverage the popularity of the Elvis reputation in Parkes through the curation of year-round Elvis experiences in and around the Parkes CBD.	Short
4.2	Review the Henry Parkes Centre Masterplan in collaboration with centre stakeholders to consider: • The re-location of visitor information services to the Parkes CBD (see also Action 2.6) • Moving the Parkes Motor Museum to a more visible and larger location • Opportunities to create a refreshed and contemporary visitor experience for the Henry Parkes Museum & Moat Cottage • If this site is the best option for a refreshed King's Castle experience and Gates of Graceland park • Creating a new astro-tourism experience in collaboration with the CSIRO • Re-brand the name of the Centre following decisions around exhibits and their locations.	Medium
4.3	Work with businesses to create a program of curated 'celebrity' memorabilia and displays (Elvis, ABBA, The Dish movie) to activate the 'celebrity' status of Parkes and Trundle townships year-round.	Medium
4.4	Create new and vibrant 'celebrity' public art installations in Parkes and Trundle townships (Elvis, ABBA, The Dish).	Medium
4.5	Work with GrainCorp and community groups to create a significant silo art loop around the Parkes Shire that highlights the unique character and charm of each town and village	Medium
4.6	Work with the CSIRO to explore opportunities to better connect The Dish to Parkes through new wayfinding signage and creation of new and contemporary astro-tourism experiences in Parkes that celebrate the important role of the Parkes Telescope in the 1969 Moon Landing and The Dish movie.	Medium
4.7	Work with the CSIRO and other stakeholders (DNSW, DNCW) to support significant visitor experience development opportunities.	Long
4.8	Work with HARS Inc. to identify grant opportunities for the expansion of the Parkes Aviation Museum.	Medium
4.9	Work with NPWS and the Peak Hill-Bogan River Aboriginal Advisory Committee to better promote and enhance visitor experiences for	Long

	Goobang National Park and Snake Rock Aboriginal Park and explore interest of establishing Peak Hill as the gateway to these Parks.	
4.10	Continue to engage with accommodation providers to encourage the refurbishment of their properties so Parkes Shire continues to have a reputation for quality accommodation options.	On-going
4.11	Continue to provide support to businesses and investors for the development of new products and experiences (e.g. food and drink, retail and tour) to appeal to visitors.	On-going
4.12	Identify government grant funding for infrastructure and tourism product, experience and event development for public and private sector projects across the Parkes Shire.	On-going

12.5. Priority Five: Destination Marketing

Create a new destination brand identity and review destination marketing and visitor information service collateral to ensure a coordinated approach to promote the Parkes Shire as a vibrant must-stop destination.

Actions		Priority
5.1	Review the destination brand to establish a new consumer-facing brand that articulates engaging brand identities and positioning stories for each town and village that aligns to the Shire's positioning strengths. (*note this should be a visitor-facing brand not a Council brand*).	Short
5.2	Engage with local business to communicate findings and encourage adoption of a new Parkes Shire brand.	Medium
5.3	Review and enhance destination marketing and visitor information collateral (print and digital) to ensure an engaging and consistent approach that is based on the findings of the brand review process and aligned to the positioning experience strengths (Action 5.1).	Medium
5.4	Prepare a 3-year Destination Marketing Plan that identifies actions to target primary, secondary and emerging visitor markets.	Medium
5.5	Collaborate with DNCW, neighbouring LGAs and Local Tourism Operators on regional destination marketing initiatives to drive visitation to Central West destinations (e.g. Newell Highway Promotions Committee, Central West cycle trails, Lachlan Valley Art trail, Silo Art Trail NSW).	On-going

13. Appendices

APPENDIX 1: – Stakeholder Engagement Activities

ROUND ONE – November/December 2022

Council Staff Workshop – with relevant Council units

Stakeholder Meetings
Central West Joint Organisation
Destination Central West NSW
Transport for NSW
NSW Forestry Corporation
Crownlands Orange
Central West Regional Development

Industry Workshops (3) – with key local operators
Community and Business Survey – 34 responses
Visitor Survey – 870 responses (140 in-region & 730 online)

ROUND TWO – November 2023

Council Committee Meetings (2)

APPENDIX 2: Council Strategies and Plans Relevant to the Growth and Development of the Visitor Economy

- Dalton Street Masterplan 2016/17
- Henry Parkes Centre Masterplan, April 2016
- Parkes CBD Vibrancy Strategy 2016
- Parkes Regional Entertainment Centre & Cultural Centre Feasibility Study, October 2023
- Parkes Shire Bypass Strategy
- Parkes Shire Community Strategic Plan 2035+
- Parkes Shire Delivery Program 2022/23 to 2024/25
- Parkes Shire Liveability Strategy, Draft October 2023
- Parkes Shire Local Strategic Planning Statement, 2020
- Parkes Western Entry Masterplan, March 2023

APPENDIX 3: Alignment Parkes Shire DMP to VES 2030 and Central West DMP

	VES 2030 Strategic Pillars	Central West DMP Strategic Objectives	Parkes Shire DMP Strategic Priorities
Road to Recovery	A comprehensive program of marketing and industry development will ensure NSW recovers quickly from the impacts of COVID-19, bushfires, drought and floods and elevates its status as the premier visitor economy in the Asia Pacific.	Support the Central West NSW visitor economy to recover and be sustainable, capable and resilient.	Strengthen Council destination management arrangements for tourism and events to foster collaboration with local and regional stakeholders to ensure a sustainable, capable, and resilient visitor economy.
Build the Brand	Compelling new brands will be developed for Sydney and NSW to provide a strong foundation for differentiation, consumer messaging, local pride and competitiveness to turbocharge recovery and accelerate future.	Position and promote Central West NSW and its destinations to align to the Feel NSW brand.	Create a new destination brand identity and positioning story for the Parkes Shire and review destination marketing and visitor information service strategies to ensure a coordinated approach to promote the Parkes Shire as a vibrant must-stop destination.
Showcase Our Strengths	NSW is a state of breathtaking diversity and bucket list visitor attractions and experiences. We will focus on existing strengths and develop new opportunities to ensure place making, destination marketing, events and visitor experiences drive visitation.	Facilitate and enable the development or enhancement of world-class visitor experiences and accommodation.	Enhance existing visitor attractions and develop new 'bucket-list' visitor experiences aligned to the positioning strengths of Parkes Shire.
Invest in World Class Events	An accelerated investment in signature sporting and cultural events as well as business events will help position Sydney and NSW as the events capital of the Asia Pacific, drive visitation and enhance the social wellbeing of NSW residents.	Facilitate and enable the development or enhancement of world-class events.	Continue to deliver and grow outstanding destination events to drive destination awareness and visitation to the Parkes Shire.
Facilitate Growth	Investing in infrastructure, job creation, industry resilience and sustainability, future planning, and better ways to do business will ensure the continued growth and future prosperity of the NSW visitor economy.	Provide an enabling environment to attract investment in the Central West NSW visitor economy.	Adopt a whole-of-destination approach to continue to plan and develop infrastructure and facilities to enhance the appeal and amenity of Parkes Shire as a must-stop destination for visitors and business travellers to the Central West.

Parkes Shire Council

SIGNAGE MANUAL

Parkes Shire Council

Signage Manual

Prepared for
Parkes Shire Council

Revision
B

Date
25.07.24

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Acknowledgement of Country

Moir Landscape Architecture would like to acknowledge the traditional custodians of the lands and waters of Australia, most notably the Wiradjuri Nation, the traditional owners of the lands on which this project resides. We acknowledge their contribution to our community and their deep connection to the land. We pay our respects to Elders, past and present.

Contents

// Part 1
Introduction
1.1 Overview
1.2 The Parkes Shire
1.3 Signage Principles
1.4 Design Guidelines
1.5 Signage Family

// Part 2
Graphic Elements
2.1 Material Palette
2.2 Colour Palette
2.3 Typography
2.4 Text Size
2.5 Pictograms & Arrows
2.6 Map
2.7 Townsymbols
2.8 Accessibility
2.9 Locations of Signs

// Part 3
Sign Types
3.1 Signage Family
3.2 LGA Gateway Entry Signage
3.3 Town & Village Entry Signage
3.4 Community Facilities Entry Signage
3.5 Community Facilities Information Signage
3.6 Town Centre & Visitor Information Signage
3.7 Street Signage
3.8 Walkway & Cycleway Signage

// Part 4
Construction Components
4.1 Material Selection
4.2 Text
4.3 Construction Details & General Notes

// Part 5
Construction Details
5.1 LGA Gateway Entry Signage
5.2 Town & Village Entry Signage
5.3 Community Facilities Entry Signage
5.4 Community Facilities Information Signage
5.5 Town Centre & Visitor Information Signage
5.6 Street Signage
5.7 Walkway & Cycleway Signage

// Part 1

Introduction

1.1

Overview

Signage is a powerful tool for communities to develop a strong brand for their region, create a positive first impression for visitors, provide important information and aid navigation and wayfinding throughout the region.

The Signage Manual has been prepared for the Parkes Shire as an instrument to guide staff in the design and placement of signage within the LGA. It presents an excellent opportunity to develop a signage family for the entire Local Government Area (LGA) and develop a suite of signs that communicate a strong identity for the Parkes Shire.

Consistent, legible, recognisable graphics and sign placement that deliver a cohesive message will not only benefit visitors to the region but also local businesses and residents who live, work and play in the area.

A hierarchy of sign types has been designed as a comprehensive system to identify, inform and direct motorists and pedestrians around the LGA. Consideration has been given to longevity, production economies, ease of installation and ongoing maintenance.

1.2

The Parkes Shire

Parkes Shire Council is an important regional centre in the Central West of NSW and is seeking to stand out from the nearby LGAs and become a destination on its own by highlighting Parkes Shires distinguishing attractions and experiences.

Tourism is becoming a growing market for the LGA with visitors attracted to town events such as the Elvis and ABBA Festival, The Dish, recreational activities and nearby National Parks. With the Parkes Bypass project underway, while improving connectivity, road transport efficiency and safety for the locals it is also expected to create a significant impact on local businesses with reduced traffic flow through the Shire.

Located at the only junction of Australia's two rail spines, Parkes is home to NSW's first Special Activation Precinct and is set to become the epicenter for major logistics, innovation, manufacturing, warehousing and distribution opportunities. The precinct offers investment and business development opportunities for new and existing industries offered by the east-west rail line and the inland rail project.

Innovative and unique signage will reinforce the vision of a **VIBRANT**, **CONNECTED** and **SUSTAINABLE** regional city and will help create a sense of place and identity that will encourage visitors to explore the LGA.

1.3

Signage Principles

High-quality signage plays an important role in the public domain, providing information about facilities and attractions and developing an identity for the community. A good signage system is built on clarity, legibility and consistency to help people orientate themselves in unfamiliar environments. The key principles underlying this Signage Manual are:

1. Consistency
Consistency across the family of signs to ensure they are recognisable as part of a logical system.

2. Modularity
Using a modular approach will be cost effective and ensure ease of maintenance.

3. Replaceable Panels
Using replaceable panels enables signs to be kept up to date and are easily replaceable if damaged.

4. Vandal Proof
Using high quality materials can be effective in resisting damage from vandalism.

5. Identity
The signage family communicates a sense of character for the Parkes Shire.

6. Legibility
Using appropriate modes of communication to ensure that the signage can be interpreted by as many users as possible.

7. Hierachy
Signage systems propose a clear hierarchy of signs for motorists and pedestrians.

8. Context
The signage family contributes to the visual character of the area.

9. Content
Information is presented with clarity and accuracy using a combination of graphics, text, braille and technology.

10. Buildability
Ensure the signage is designed so members of the local community can construct the signage elements.

1.4

Design Guidelines

The design guidelines provide recommendations to clearly define the construction and design of the signs.

1. Design Standards

This manual sets out graphic standards for signs for the Parkes Shire. To ensure a uniform appearance is maintained throughout the Local Government Area (LGA), these standards are to be strictly followed.

2. Sizes

The signs have been designed around using a modular system to maintain consistency in appearance and achieve economical material sizes. The size of signs shown are underpinned by standard materiality sizes. If sign requires a variation in size, this must be considered against available material sizes.

3. Materials And Construction

Signs are to be constructed from high-quality materials suitable for exposed public areas. Sign faces shall be flat and free of sharp edges. Construction should be of best quality consistent with good trade practice. Signs are to be properly squared off, posts vertical and sign panels horizontal.

4. Finishes

Surfaces to be cleaned and degreased according to good practice and industry standards. Spare sign panels should be held in stock to allow vandalised signs to be replaced quickly.

5. Engineering And Construction

Engineering details for footings and fixtures have not been presented for the signage package. Footings and fixtures are to be designed by a structural engineer to allow for specific environmental conditions.

6. Graphics

Graphic standards for signs are prescribed in each particular signage section as well as Chapter 4 of the signage manual. All graphics including type faces, the Shire/Town/Village names, symbols, phrases and colours must conform to these standards.

1.5

Signage Family

Signs will work in combination with standard Roads and Maritime Services (RMS) directional signs. The purpose is to provide a family of signs that share visual similarities, reflect the environment of the area and are cost effective.

The Parkes Shire LGA signage family has 8 sign types including:

1. LGA Gateway Entry Signage

To welcome motorists to the Parkes Shire LGA.

2. Town & Village Entry Signage

To identify entries to towns/villages within the Parkes Shire LGA.

3. Community Facilities Entry Signage

To identify entries to community facilities within the Parkes Shire LGA.

4. Community Facility Information Signage

To communicate information to the users of the community facility within the Parkes Shire LGA.

5. Town Centre & Visitor Information Signage

To inform and guide tourist and visitors to local attractions within the Parkes Shire LGA.

6. Street Signage

To identify Street locations within the Parkes Shire LGA.

7. Walkway & Cycleway Signage

To identify and inform users of the walkways & cycleways within the Parkes Shire LGA.

// Part 2

Graphic Elements & Guidelines

2.1

Material Palette

Signs are constructed from materials that are hard wearing, effective and aesthetically pleasing adding value to the surrounding environment. The material selection reflects the vibrant, innonative and sustainable vision of the Parkes LGA. Materials have also been considered through the lense of procurement, ease of construction and maintenance.

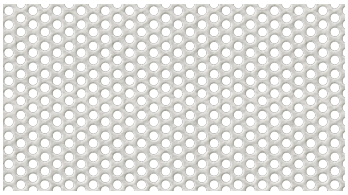
The signs are composed of:



1. Concrete

Colour: Natural

Finish: Off-form

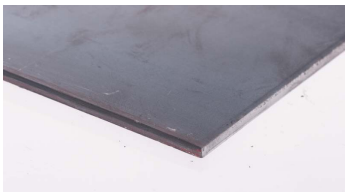


2. Perforated Steel Sheets

Colour: As specified in the drawings

Steel Grade: Mild Steel

Thickness: 3mm



3. Steel Sheets

Colour: As specified in the drawings

Steel Grade: Mild Steel

Thickness: 3-6mm



4. Angle Steel

Colour: As specified in the drawing

Steel Grade: Mild Steel

Thickness: 5mm



5. C Section Channel Steel

Colour: As specified in the drawing

Steel Grade: Mild Steel

Thickness: 5mm



6. Flat Bar

Colour: As specified in the drawing

Steel Grade: Mild Steel

Thickness: 5mm



7. Vinyl Wrap

Colour: As specified in the drawing

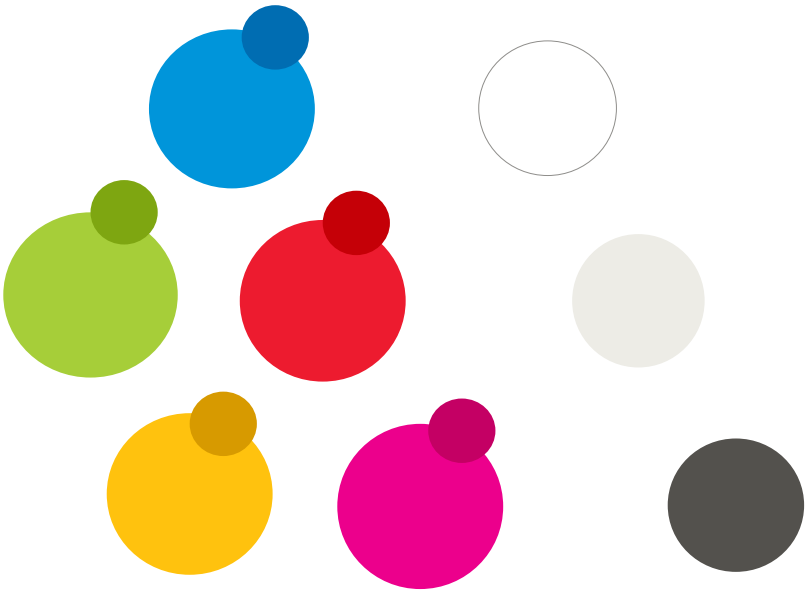
2.2

Colour Palette

The colours used within the Signage Family are consistent with the Parkes Plus Branding and strengthens the LGA's identity. To create visual cohesion throughout the Parkes Shire while still retaining individuality for the townships, each township is recognised by its designated colour. They should be read in conjunction with each signage type as detailed in Part 3.

1. Township Colours

2. Primary Colours



Bold

Parkes Red
RGB 237/27/47

Trundle Pink
RGB 236/0/140

Peak Hill Yellow
RGB 255/194/14

Tullamore Green
RGB 166/206/57

Bogan Gate Blue
RGB 0/149/218

Dark

Parkes Dark Red
RGB 197/0/7

Trundle Dark Pink
RGB 196/0/100

Peak Hill Dark Yellow
RGB 215/154/0

Tullamore Dark Green
RGB 126/166/17

Bogan Gate Dark Blue
RGB 0/109/178

White
RGB 255/255/255

Casper White Quarters
RGB 237/236/230

Woodland Grey
RGB 83/81/77

2.3

Typography

The primary font to be used is to be **Euclid Square**, as it is clear, informative and has a clean appearance. It is a sans serif font that is considered more modern and minimalist and is known to be highly legible. Euclid Square Bold for the main titles, Euclid Square Medium for subtibles and Euclid Square Light for the body text. This font is currently used as the primary font for all Parkes Shire Council professionally created communication and on the Parkes Shire Logo.

Euclid Square - Bold

ABCDEFGHIJKLMNOPQRSTUVWXYZ - Medium

abcdefghijklmnopqrstuvwxyz - Light

123456789

2.4

Text Size

Text size on all signs have been determined based on an ideal viewing distance and must be adhered to wherever possible. The height of letters in signs shall be not less than given int he following table. Guidelines for font and sizes for each particular signage item are to be found within Part 3 Sign Types - Graphic, Construction & Materials Guidelines.

Height of letters for varying viewing distances

Required viewing distance (m)	Minimum height of letters (mm)
2	6
4	12
6	20
8	25
12	40
15	50
25	80
35	100
40	130
50	150

** Source: Australian Standards AS 1428.2*

2.5

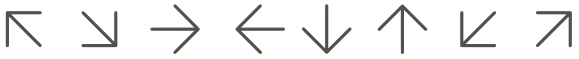
Pictograms & Arrows

Pictograms are symbols that define objects, activities and concepts in a visual form that is simple and informative (Calori, 2007). Pictograms and arrows are a powerful form of communication that aims to be easily and quickly interpreted and understood by all. They should be used with discretion as overuse may lead to confusion and visual clutter.

1. Operational & Attractions Icons



2. Directional Arrows



3. Regulatory Icons



2.6

Map

Map design varies regarding the level of detail required to be shown, map dimension and the pedestrian viewing distance. Map design principles should present spatial information in a simple and legible matter; it is important to minimise the information in order for it to be easily read at a distance. Maps are printed onto vinyl and designed to fit onto the size detailed in Part 3 of the manual. Alternate option is through the use of QR codes which can bu updated digitally.

1. General Guidelines

- Organise the environment into spaces either by abstraction or inclusion.
- Show organisational elements such as paths, landmarks and suburbs.
- Show the user's position.
- The upward direction on a map must always show what is in front of the viewer.
- Use a consistent form of communication.
- Show a hierarchy of labels.

2. Text & Symbols

- Symbol size should be between 6mm to 12mm.
- Text size should be between 8mm and 16mm.
- Ensure a high contrast between sign background and the information presented.

Note: Final graphic elements to be determined by graphic designers and samples provided to client for approval. Coherent graphic elements is encouraged throughout the map design process.Maps should be designed by a singular graphic designer to ensure consistency of style, symbols, text type, ect.

2.7
Town Symbols

It is the intention that on various signage elements totems or symbolic motifs be used to visually represent the culture of Parkes shire. To initiate such, the Parkes Shire Council has consulted with each respective communities seeking to gain an understanding of elements to be represented. Currently no conclusive decisions have been established however these elements can be retrofitted and adjusted later on due to the nature of construction.

2.8

Accessibility

Signs shall be easily and comprehended for people of all abilities and are to be installed as per AS 1428.1 & AS 1428.2 & AS 1428.4 Design for access and mobility, BCA Specification D3.6 as well as applicable local design standards.

1. Braille and Tactile Signage

It is recommended that braille & tactile signage be included at the following locations:

- Sanitary facilities
- Spaces with hearing augmentation
- Emergency exits
- Urban wayfinding signage from pedestrian entrances to nearby facilities.

Where required, braille and tactile to be installed between 1200mm and 1600mm above finished floor levels.

** Source: Australian Standards AS 1428.2*

2. Text & Symbols

- Large & contrasting print is recommended for those with low vision.
- Use dark-coloured text a against light-background where possible or light coloured text on a dark background.
- Letters should have a minimum height of 5-15mm.
- International symbol for access and deafness should have a minimum height of 60 x 60mm.
- Letters and symbols should be related to the distance at which the information is viewed.

** Source: Australian Standards AS 1428.4.2*

Size of international symbol for access and deafness for varying viewing distances

Required viewing distance (m)	Minimum size of symbol (mm)
<7	≥ (60 x 60)
>7 ≤ 18	≥ (110 x 110)
>18	≥ (200 x 200)
	≥ (450 x 450)

** Source: Australian Standards AS 1428.2*

2.9

Locations of Signs

Locations of signage varies between pedestrians and vehicular users. Accessible signage placed correctly can reduce the number of signs needed, improve the use of the facilities and increase safety and security within the Parkes Shires.

1. Pedestrian

Signs that the deliver information including symbols, numbering and lettering shall be located as follows:

- Where they are clearly visible to people in both seated and standing positions.
- At changes of direction.
- At sites where directional decisions are made, to enable the appropriate decisions to be made before a change of direction occurs.
- Where surfaces of the wall surrounding the sign provide sufficient contrast to the sign. If this surface provides insufficient contrast, the background to the sign shall be increased in size.

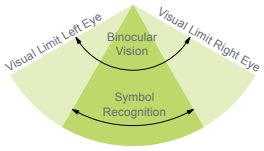
** Source: Australian Standards AS 1428.2*

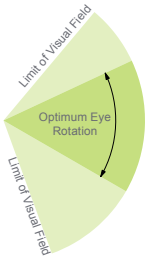
2. Vehicular

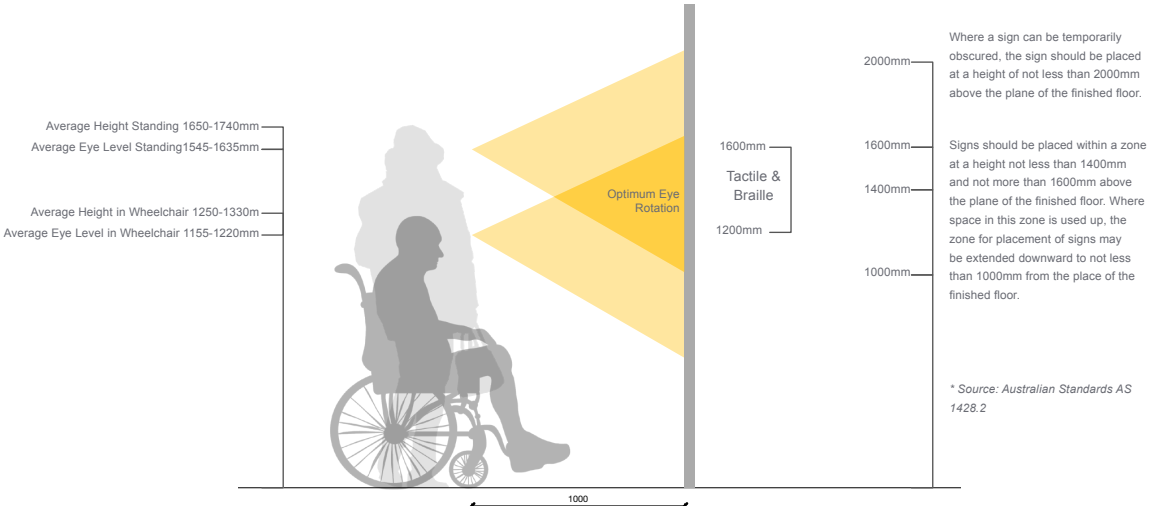
Gateway signs shall not be erected to face moving traffic at critical locations such as immediate approaches to intersections, merge points, sharp curves or crests where distracting a driver's attention may be a hazard.

** Source: Australian Standards AS 1742.2*

Wayfinding Visual Field of View







Where a sign can be temporarily obscured, the sign should be placed at a height of not less than 2000mm above the plane of the finished floor.

Signs should be placed within a zone at a height not less than 1400mm and not more than 1600mm above the plane of the finished floor. Where space in this zone is used up, the zone for placement of signs may be extended downward to not less than 1000mm from the place of the finished floor.

** Source: Australian Standards AS 1428.2*

// Part 3

Sign Types


Parkes

3.1

Signage Family



G

LGA Gateway Entry Signage

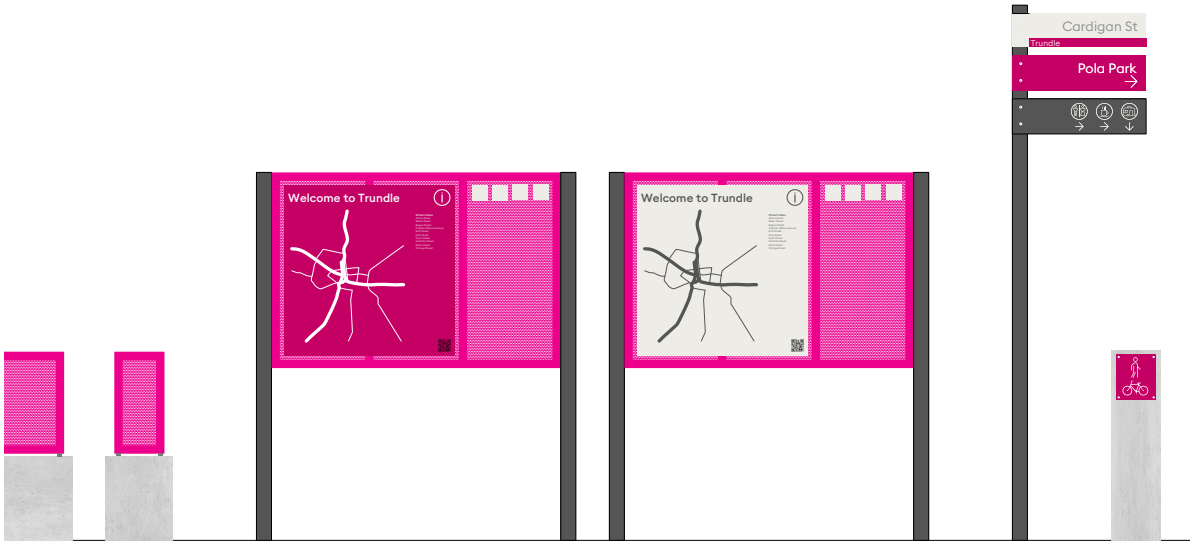
T

Town & Village Entry Signage

F

Community Facility Information Signage

Commu Entry S



ity

I

Town Centre & Visitor
Information Signage

S

Street Signage

W

Walkway and Cycleway
Signage

3.2

LGA Gateway Entry Signage

G

Purpose

To welcome motorists to the Parkes Shire LGA.



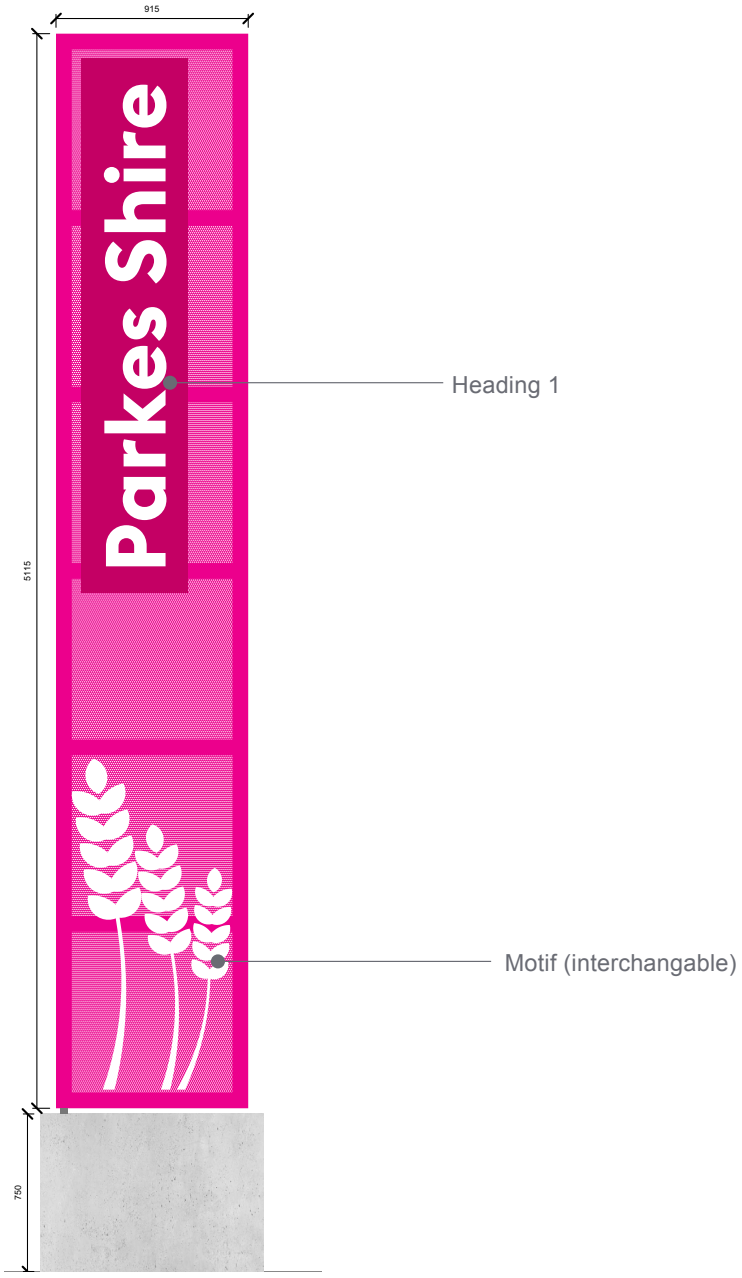
Front Elevation 1:20

3.2

LGA Gateway Entry Signage

G

Content



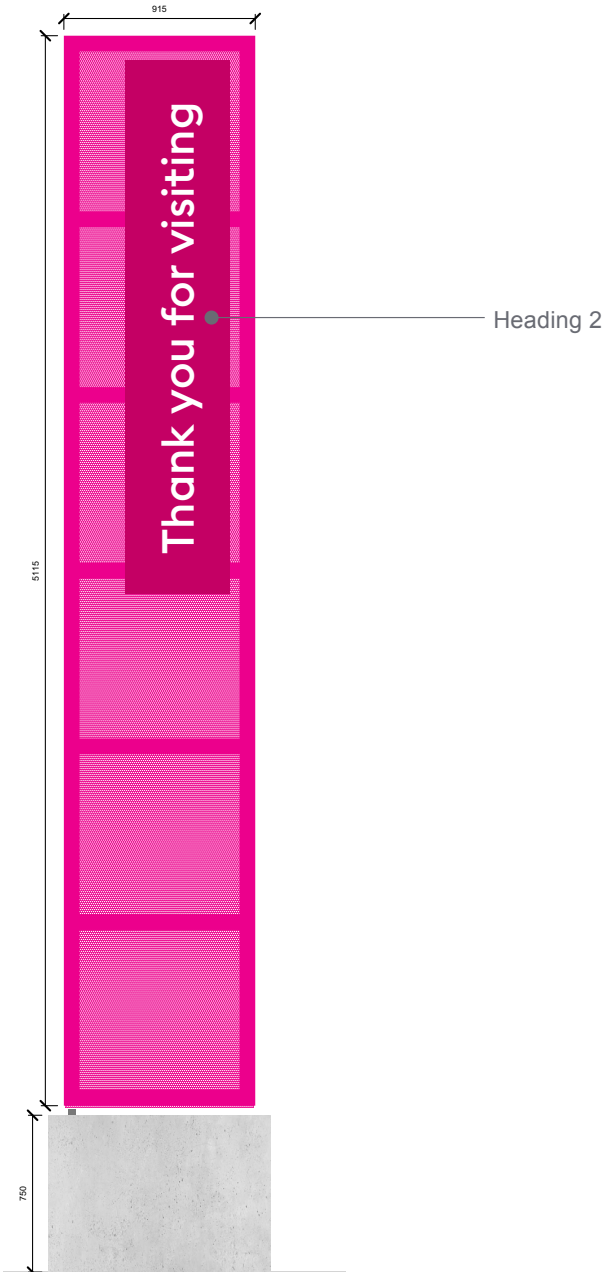
Plan 1:20

3.2

LGA Gateway Entry Signage

G

Graphic Detail



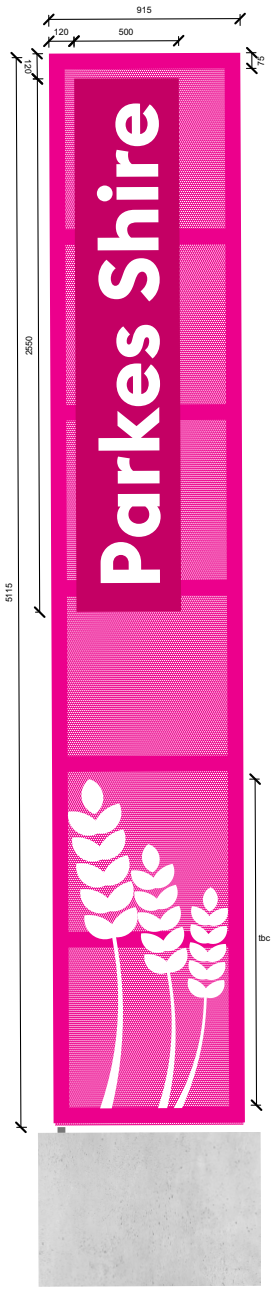
Plan 1:20

3.2

LGA Gateway Entry Signage

Graphic Detail

G



Plan 1:20

3.2

LGA Gateway Entry Signage

G

Location

Major external entry point to the Parkes Shire LGA. Parkes Shire Council should consider locations that have open view corridors, minimal surrounding signage or advertising and has a backdrop reflective of the Shire.

Colour

The colour of the LGA signage should be dictaed by the proximity to the closest town/village. For Example: Northern entry to the LGA along the McGrane Way - closest town: Tullamore. LGA signage in this location to be Green

3.2

LGA Gateway Entry Signage

Graphic Guidelines & Construction and Materials

T

1. Graphic Guidelines

Heading 1: Euclid Square Bold, 360mm, fixed height, centred alignement.

Heading 2: Euclid Square Bold, 240mm, fixed height, centred alignement.

Totem Element: Interchangable

2. Construction and Material

Concrete Base: To engineers specification.

Frame: 50 x 50 x 5mm steel angle & 50 x 5mm steel flat bar frame welded to 6mm steel base plate painted the Bold Township colours.

Perforated Steel: 3mm perforated steel welded or mechanically fixed to the steel frame painted the Bold Township colours.

Steel Panel: 3mm steel panel with laser cut lettering painted the Dark Township colours.

Opalescent Panel: 4mm white opalescent sheet under the laser cut steel panel for colour contrast and legibility.

Text: Laser cut lettering in 3mm steel panel.

Totem Element: Interchangable 3mm steel laser cut element painted White.

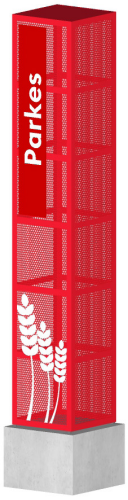
3.3

Town and Village Entry Signage

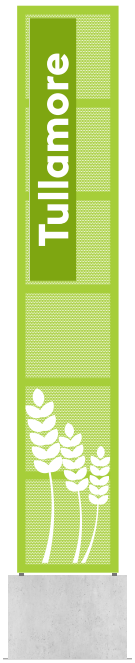
T

Purpose

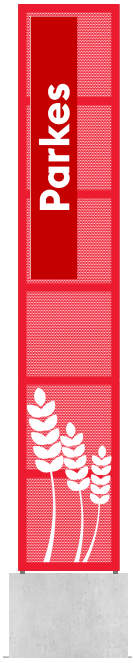
To identify entries to towns/villages within the Parkes Shire LGA.



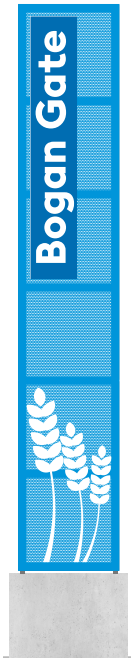
T1



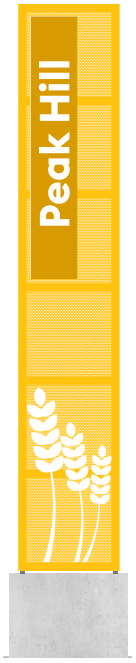
T2



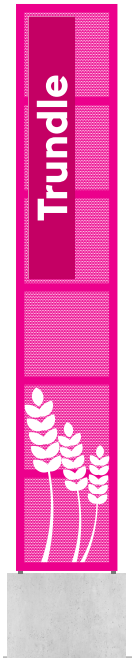
T3



T4



T5

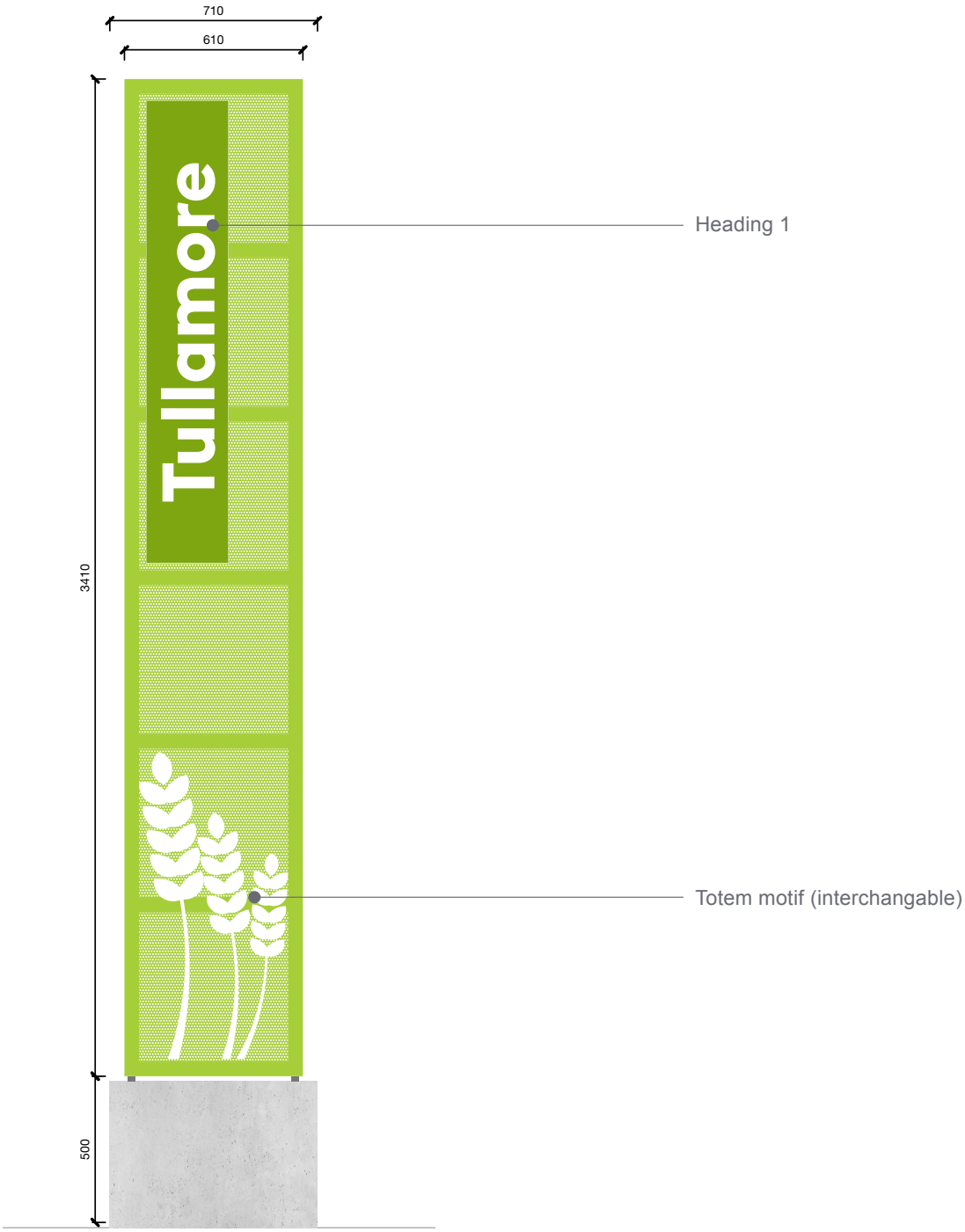


3.3

Town and Village Entry Signage

T

Content



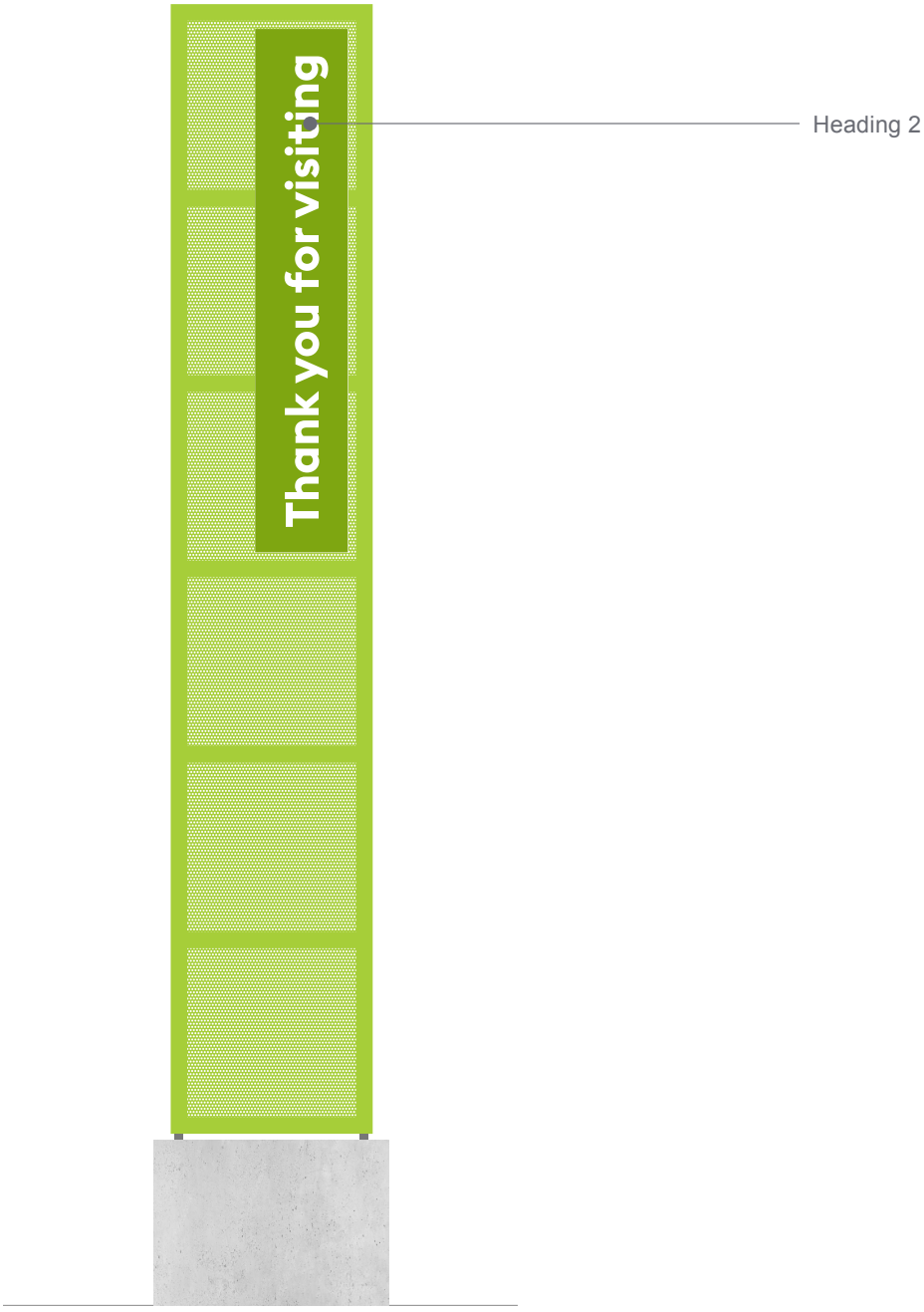
Front Elevation 1:20

3.3

Town and Village Entry Signage

T

Content



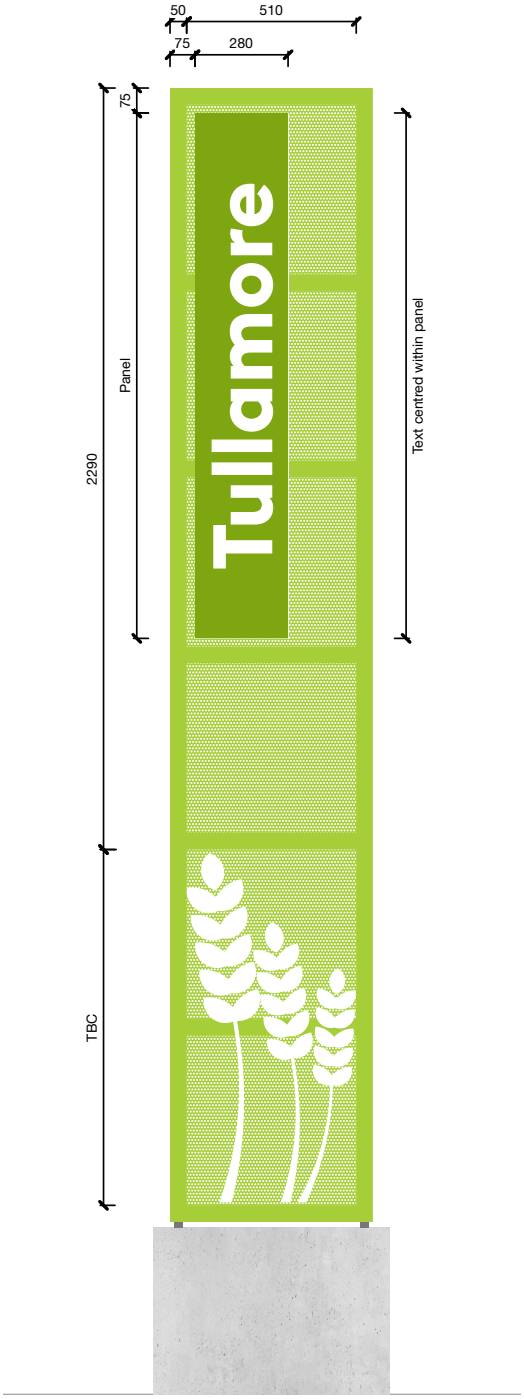
Back Elevation 1:20

3.3

Town and Village Entry Signage

T

Graphic Detail



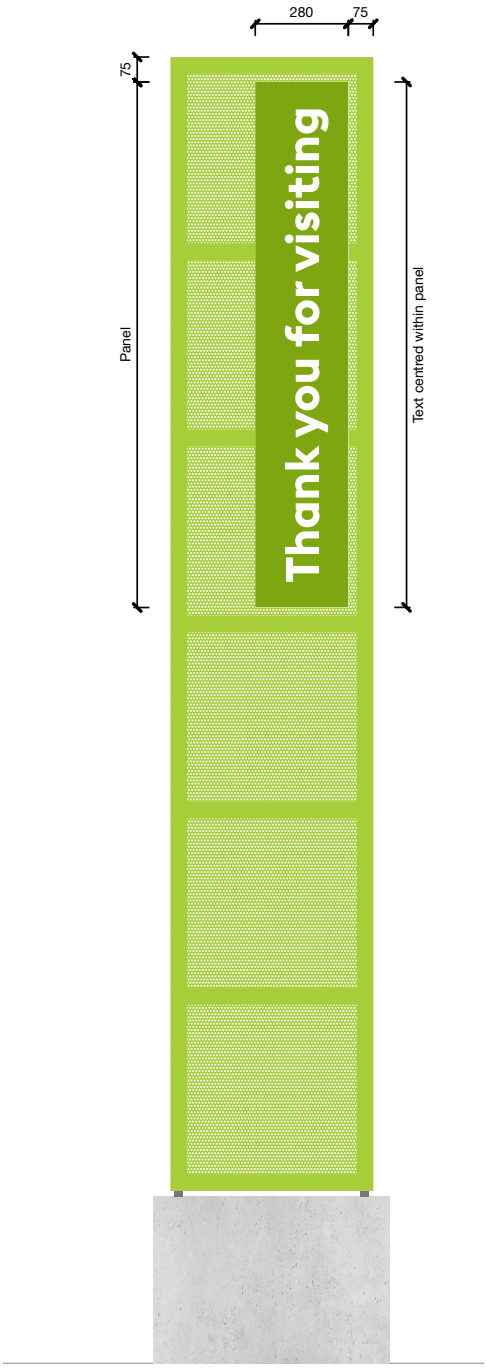
Front Elevation 1:20

3.3

Town and Village Entry Signage

T

Graphic Detail



Back Elevation 1:20

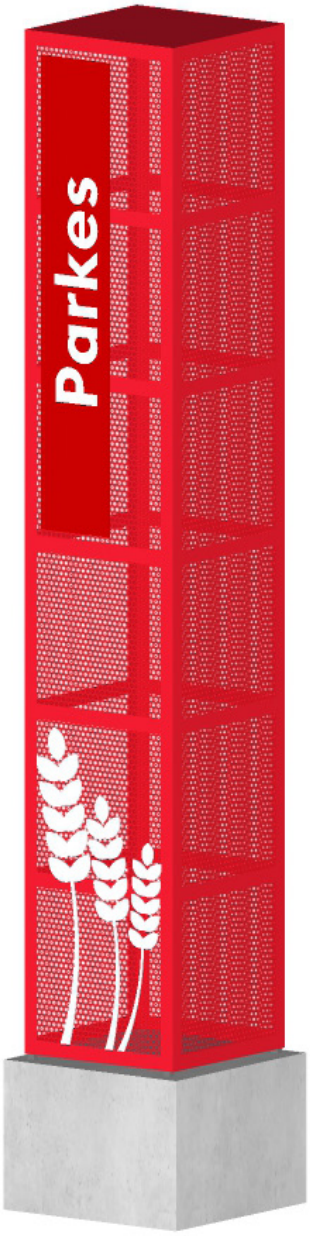
3.3

Town and Village Entry Signage

T

Location

Major entries of the Towns and Villages located within the Parkes Shire LGA.



Isometric View 1:20

3.3

Town and Village Entry Signage

T

Graphic Guidelines & Construction and Materials

1. Graphic Guidelines

Heading 1: Euclid Square Bold, 250mm, fixed height, centred alignement.

Heading 2: Euclid Square Bold, 140mm, fixed height, centred alignement.

Totem Element: Interchangable

2. Construction and Material

Concrete Base: To engineers specification.

Frame: 50 x 50 x 5mm steel angle & 50 x 5mm steel flat bar frame welded to 6mm steel base plate painted the Bold Township colours.

Perforated Steel: 3mm perforated steel welded or mechanically fixed to the steel frame painted the Bold Township colours.

Steel Panel: 3mm steel panel with laser cut lettering painted the Dark Township colours.

Opalescent Panel: 4mm white opalescent sheet under the laser cut steel panel for colour contrast and legibility.

Text: Laser cut lettering in 3mm steel panel.

Totem Element: Interchangable 6mm steel laser cut element painted White.


Parkes

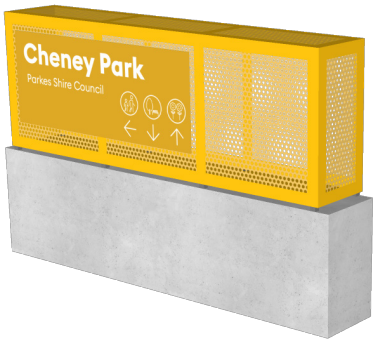
3.4

Community Facilities Entry Signage

C

Purpose

To identify entries to community facilities within the Parkes Shire LGA.



C1



C2



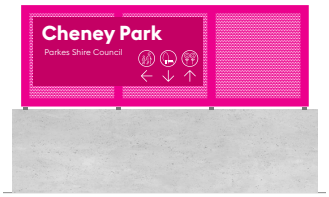
C3



C4



C5

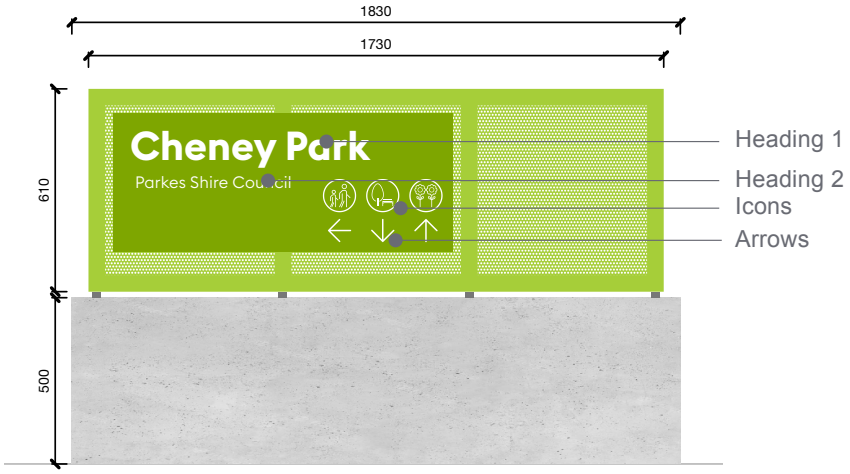


3.4

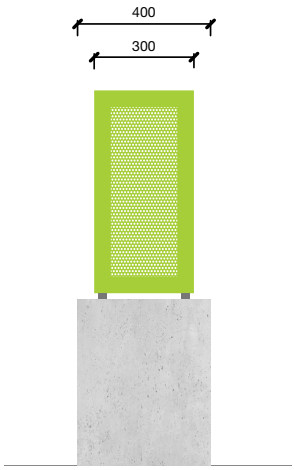
Community Facilities Entry Signage

C

Content



Front Elevation 1:20



Side Elevation 1:20

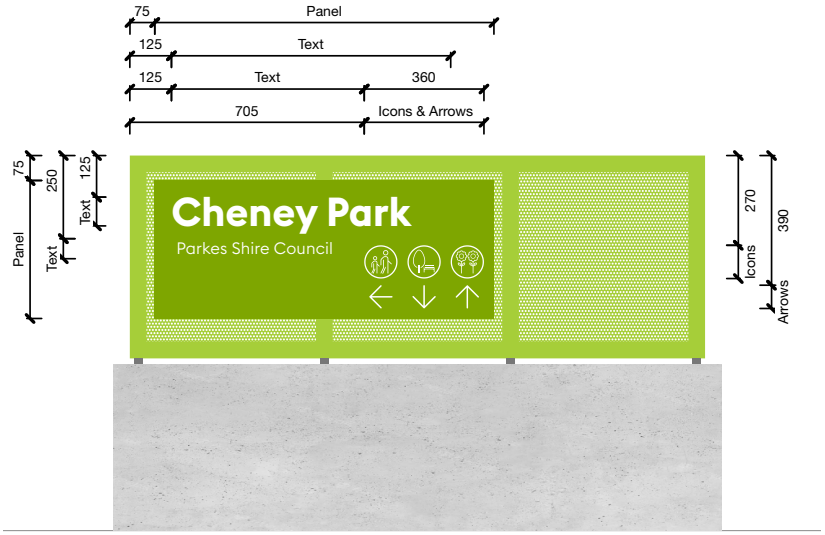
Please note: Concrete plinth shown is optional only. Sign can also be mounted on wall or supported by steel legs.

3.4

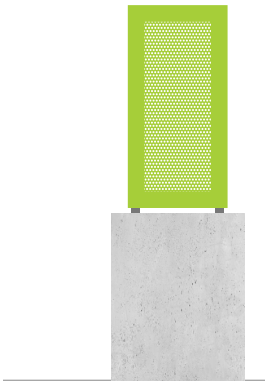
Community Facilities Entry Signage

C

Graphic Detail



Front Elevation 1:20



Side Elevation 1:20

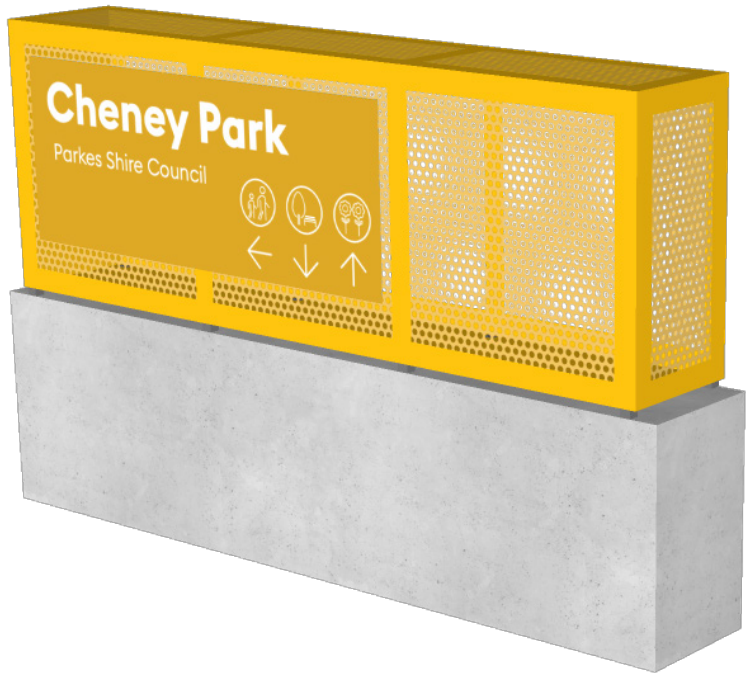
3.4

Community Facilities Entry Signage

C

Location

At the entrance of parks, reserves, sportsgrounds, cemeteries, libraries, pools, community centres and any other council facilites.



Isometric View

3.4

Community Facilities Entry Signage

C

Graphic Guidelines & Construction and Materials

1. Graphic Guidelines

Heading 1:Euclid Square Bold, 120mm, fixed height, left alignement.

Heading 2: Euclid Square Light, 50mm, fixed height, left alignement.

Icons: Operational & Attractions icons, 100mm, fixed height, right alignement, spaced evenly.

Arrows: Directional arrows, 70mm, fixed height, right alignement, spaced evenly.

2. Construction and Material

Concrete Base: To engineers specification.

Frame: 50 x 50 x 5mm steel angle & 50 x 5mm steel flat bar frame welded to 6mm steel base plate painted the Bold Township colours.

Perforated Steel: 3mm perforated steel welded or mechanically fixed to the steel frame painted the Bold Township colours.

Steel Panel: 3mm steel panel with vinyl wrap.

Vinyl Print: Base in the Dark Township colours with white graphics.

Text: Vinyl wrap on steel panel.


Cheney Park
Parkes Shire Council

3.5

Community Facilities Information Signage

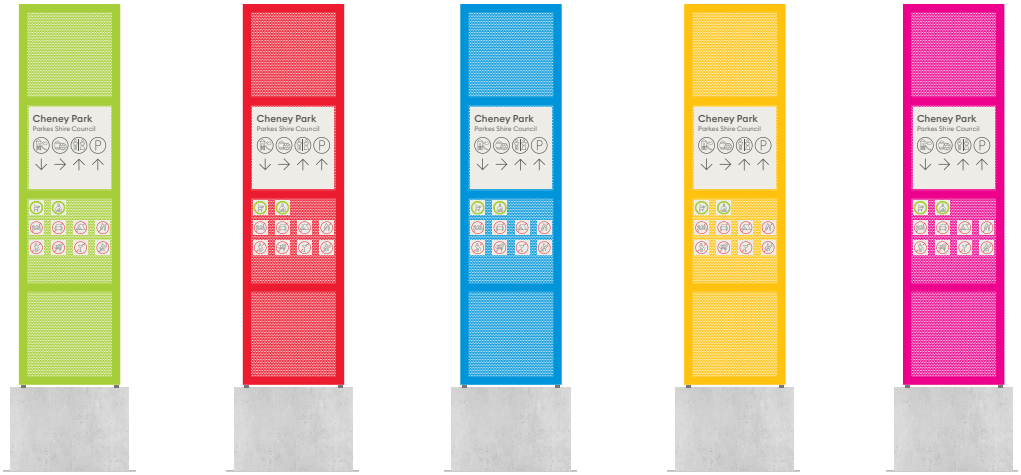
F

Purpose

To communicate information to the users of the community facility within the Parkes Shire LGA.



F1 F2 F3 F4 F5

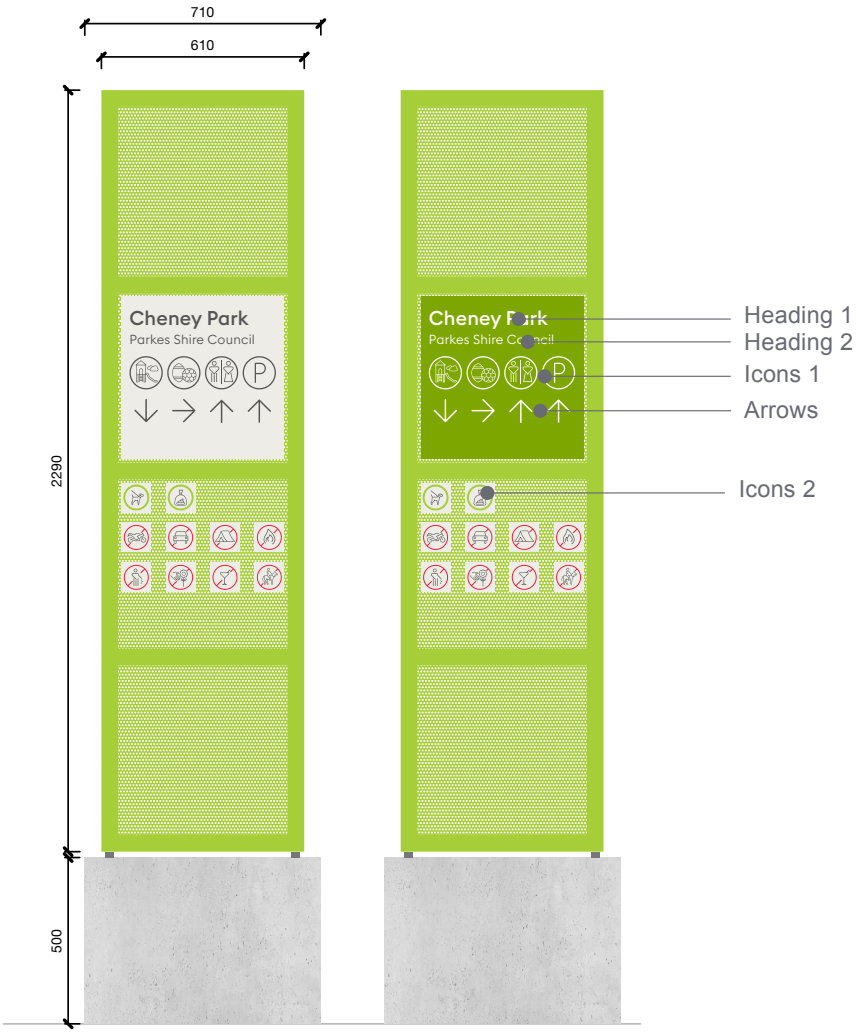


3.5

Community Facilities Information Signage

F

Content



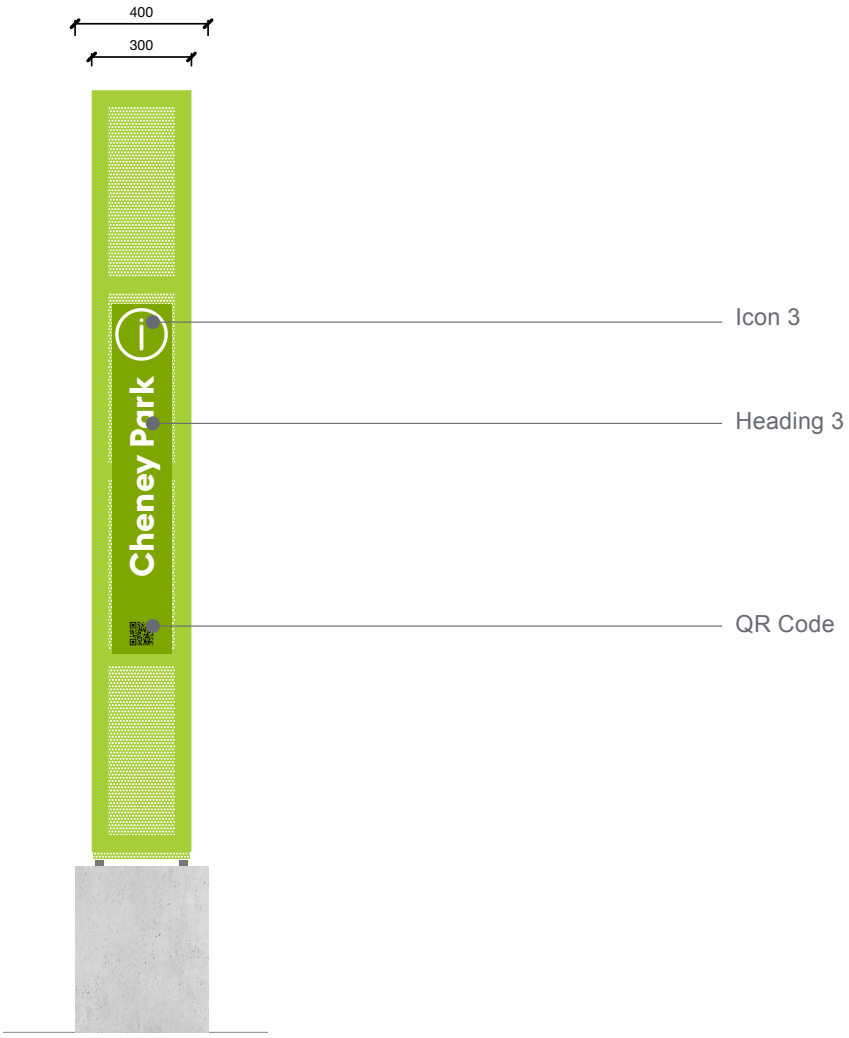
Front Elevation 1:20

3.5

Community Facilities Information Signage

F

Content



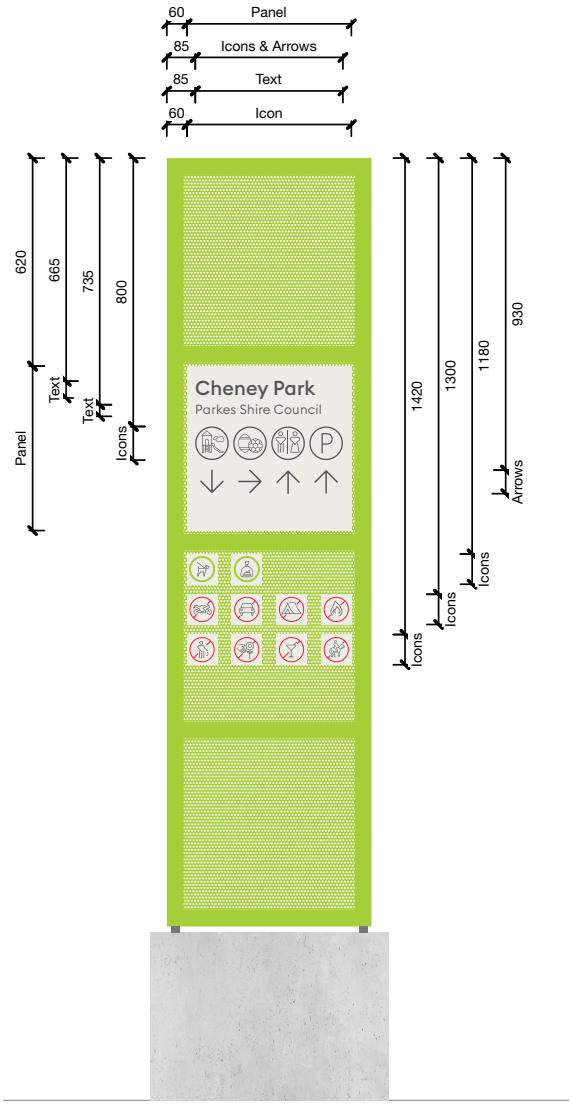
Side Elevation 1:20

3.5

Community Facilities Information Signage

F

Graphic Detail



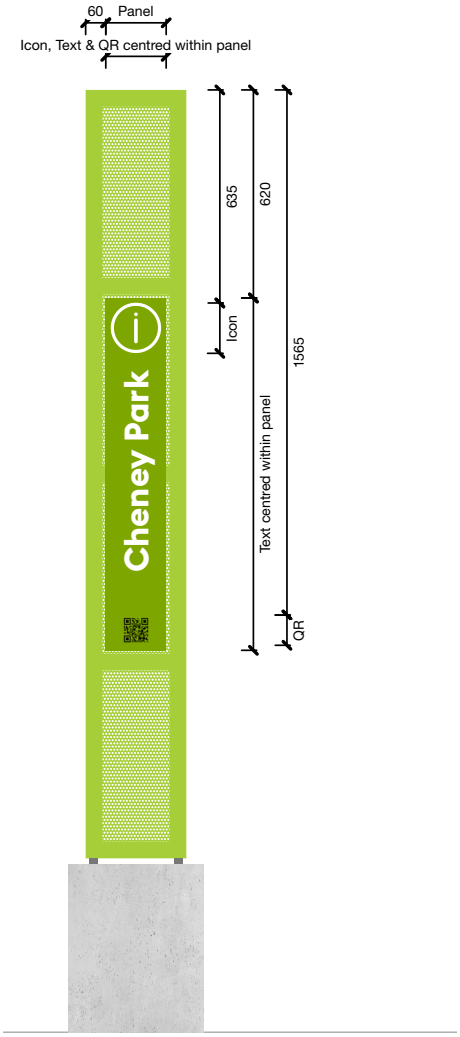
Front Elevation 1:20

3.5

Community Facilities Information Signage

F

Graphic Detail



Side Elevation 1:20

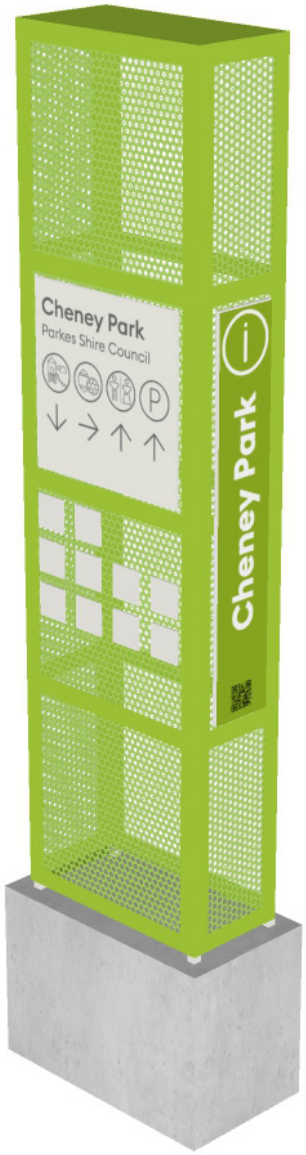
3.5

Community Facilities Information Signage

F

Location

In parks, reserves, sportsground, cenmetry, libraries, pools, community centre and any other council facilites.



Isometric View

3.5

Community Facilities Information Signage

F

Graphic Guidelines & Construction and Materials

1. Graphic Guidelines

Heading 1: Euclid Square Medium, 60mm, fixed height, left alignement.

Heading 2: Euclid Square Light, 40mm, fixed height, left alignement.

Heading 3: Euclid Square Bold, 100mm, fixed height, centred alignement.

Icons 1: Operational & Attractions icons, 100mm, fixed height, centred alignement, spaced evenly.

Icons 2: Regulatory icons, 75mm, fixed height, centred alignement, spaced evenly.

Icon 3: Operational & Attractions icon, 150mm, fixed height, centred alignement.

Arrows: Directional arrows, 70mm, fixed height, centred alignement, space evenly.

QR Code: 70mm, fixed height, centred alignement.

2. Construction and Material

Concrete Base: To engineers specification.

Frame: 50 x 50 x 5mm steel angle & 50 x 5mm steel flat bar frame welded to 6mm steel base plate painted the Bold Township colours.

Perforated Steel: 3mm perforated steel welded or mechanically fixed to the steel frame painted the Bold Township colours.

Steel Panel: 3mm steel panel with vinyl wrap.

Front Vinyl Print Option 1: Base in Casper White Quarters with Woodland Grey graphics.

Front Vinyl Print Option 2: Base in the Dark Township colours with white graphics.

Side Vinyl Print: Base in the Dark Township colours with white graphics & Woodland Grey QR Code.

Text: Vinyl wrap on steel panel.


Cheney Park
Cheney Park

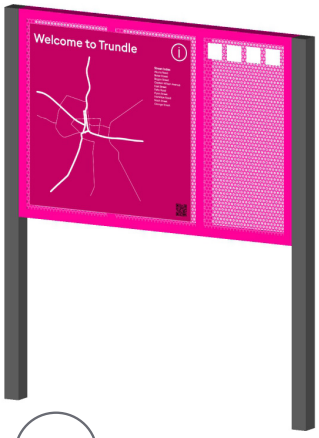
3.6

Town Centre & Visitor Information Signage

I

Purpose

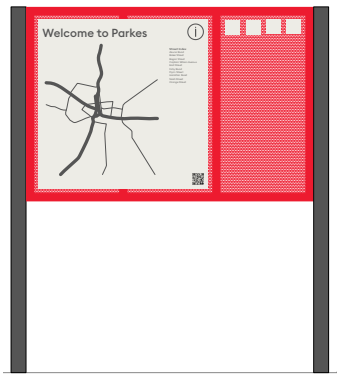
To inform and guide tourist and visitors to local attractions within the Parkes Shire LGA.



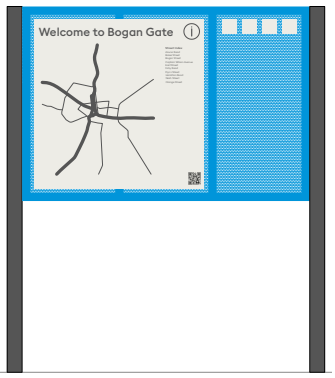
I1



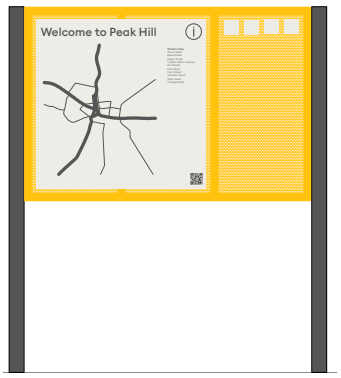
I2



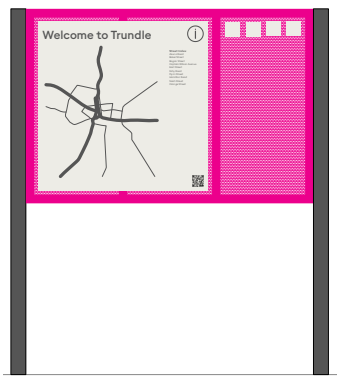
I3



I4



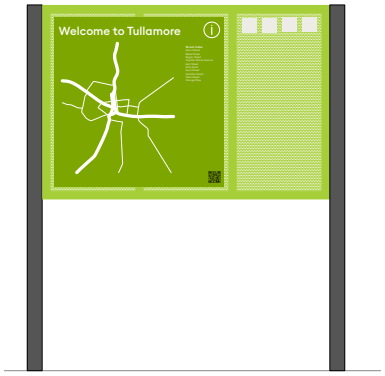
I5



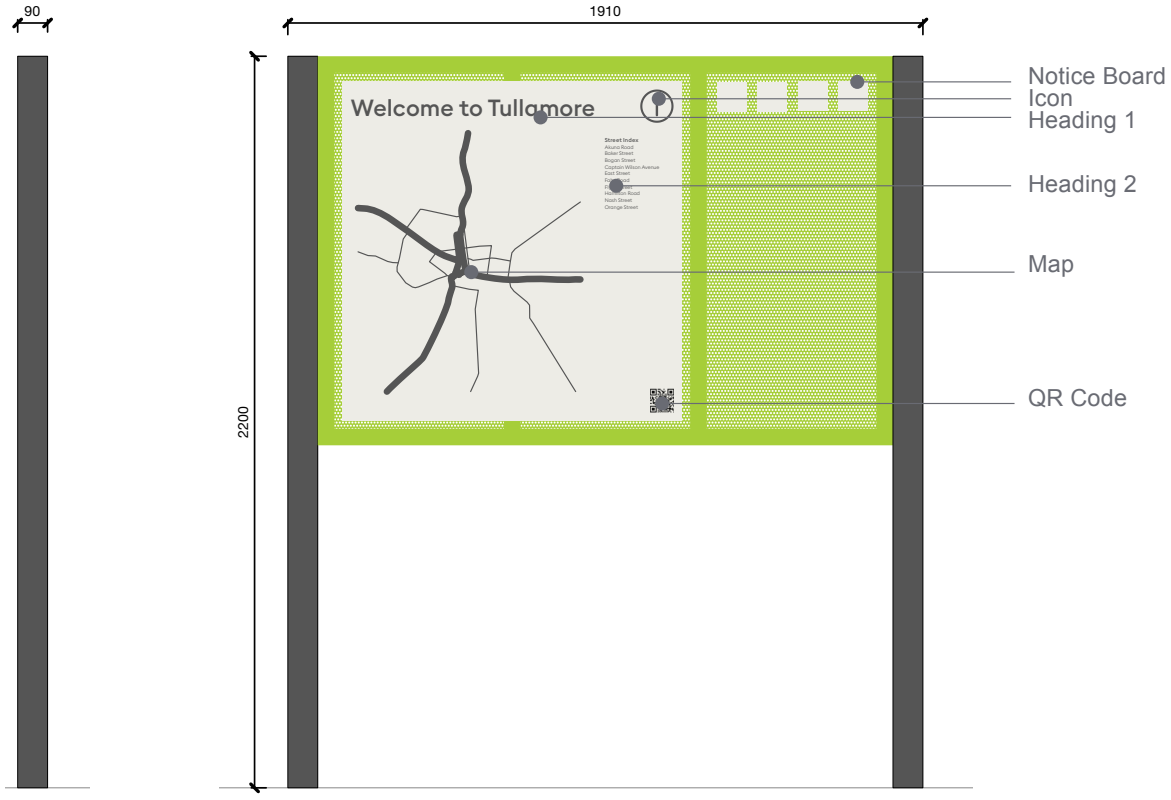
3.6

Town Centre & Visitor Information Signage

Content



Option 2



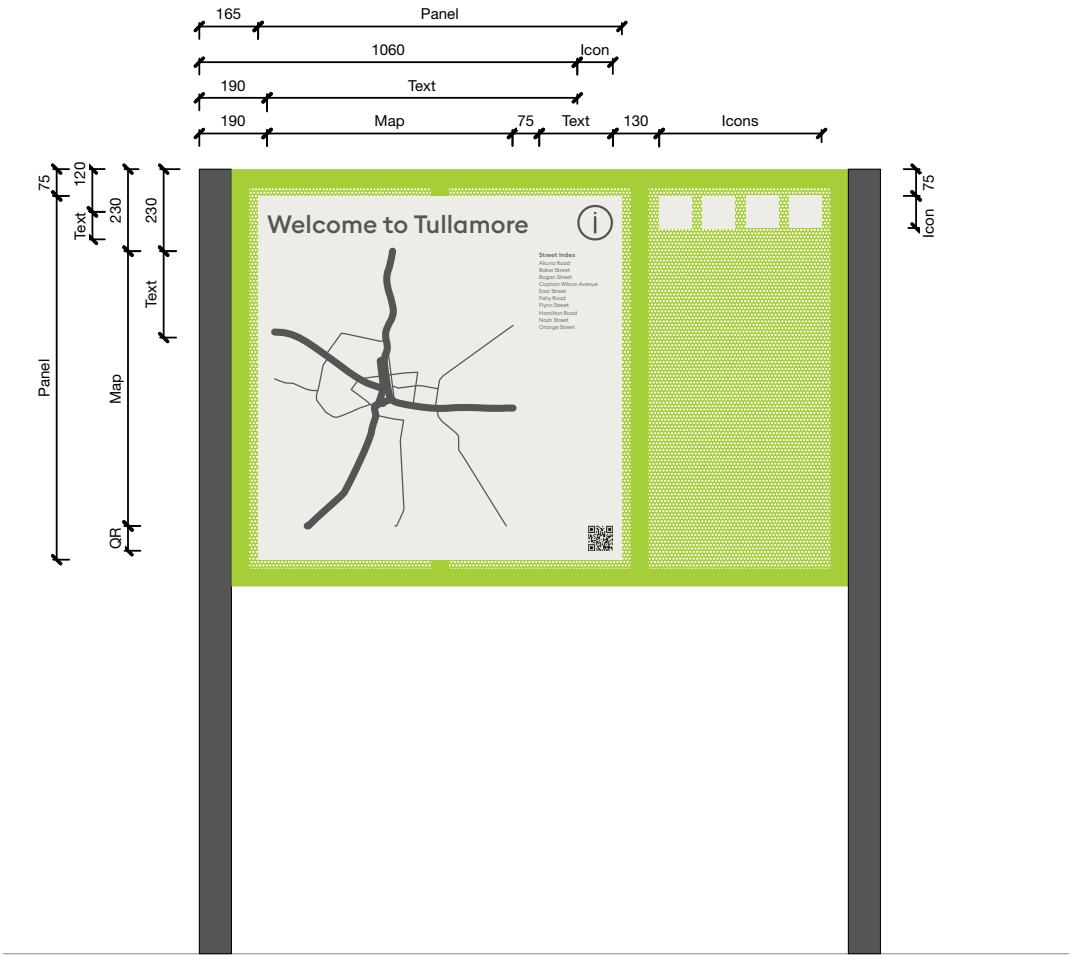
Option 1

Side Elevation 1:20 **Front Elevation 1:20**

3.6

Town Centre & Visitor Information Signage

Graphic Detail



Front Elevation 1:20

3.6

Town Centre & Visitor Information Signage

I

Location

At major Parkes Council Faclities, town centre & train station.



Isometric View

3.6

Town Centre & Visitor Information Signage

Graphic Guidelines & Construction and Materials

I

1. Graphic Guidelines

Heading 1: Euclid Square Medium, 70mm, fixed height, left alignement.

Heading 2: Euclid Square Light, 15mm, fixed height, right alignement.

Icon: Operational & Attractions icon, 100mm, fixed height, right alignement.

Notice Board/Information Board: TBC.

Map: TBC.

QR Code: 70mm, fixed height, right alignement.

2. Construction and Material

Concrete Footing: To engineers specification.

Frame: 100 x 50 x 5mm C section & 50 x 5mm steel flat bar frame welded to 6mm steel base plate painted the Bold Township colours.

Perforated Steel: 3mm perforated steel welded or mechanically fixed to the steel frame painted the Bold Township colours.

Steel Panel: 3mm steel panel with vinyl wrap.

Front Vinyl Print Option 1: Base in Casper White Quarters with Woodland Grey graphics.

Front Vinyl Print Option 2: Base in the Dark Township colours with white graphics.

Text: Vinyl wrap on steel panel.


Welcome to Trundle

3.7

Street Signage

S

Purpose

To identify Street locations within the Parkes Shire LGA.



S1 S2 S3 S4 S5



3.7

Street Signage

S

Content



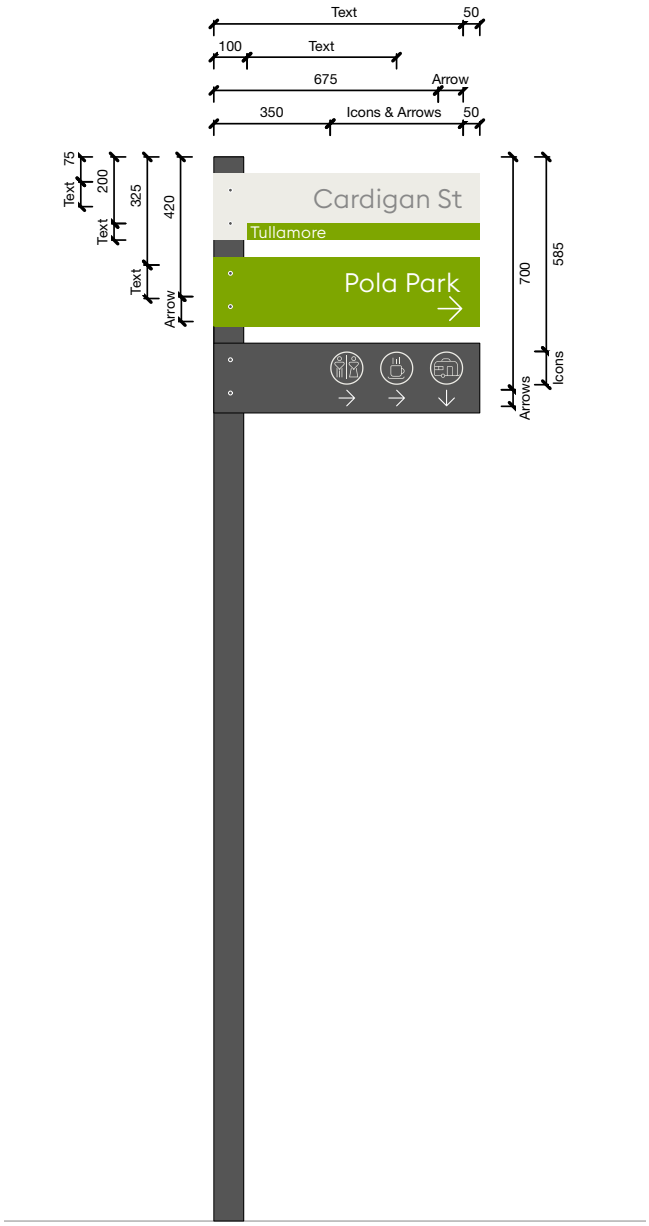
Side Elevation 1:20 Front Elevation 1:20

3.7

Street Signage

S

Graphic Detail



Front Elevation 1:20

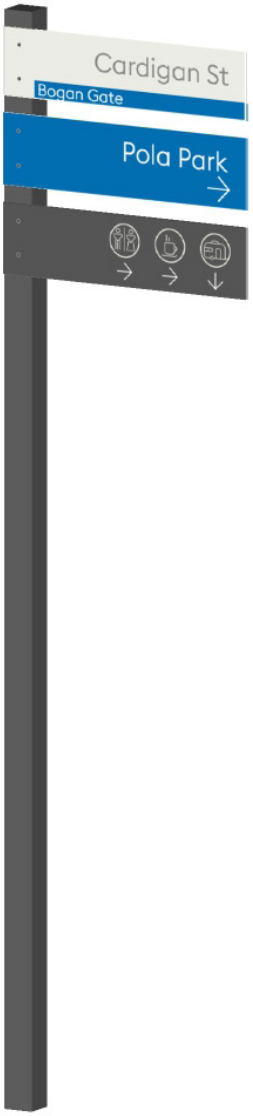
3.7

Street Signage

S

Location

Attached to existing directional and street signage and at street intersection and pedestrian/ cycleway pathways.



Isometric View

3.7

Street Signage

S

Graphic Guidelines & Construction and Materials

1. Graphic Guidelines

Heading 1: Euclid Square Light, 80mm, fixed height, right alignement.

Heading 2: Euclid Square Light, 50mm, fixed height, left alignement.

Heading 3: Euclid Square Light, 80mm, fixed height, right alignement.

Arrow 1: Directional arrows, 70mm, fixed height, right alignement, space evenly.

Icons: Operational & Attractions icons, 100mm, fixed height, right alignement, spaced evenly.

Arrow 2: Directional arrows, 50mm, fixed height, right alignement, space evenly.

2. Construction and Material

Concrete Footing: To engineers specification.

Post: 90x90 mm SHS steel post with steel square end cap painted Woodland Grey.

Steel Panel: 3mm steel panel with vinyl wrap.

Top Vinyl Print: Base in Casper White Quarters with Woodland Grey graphics.

Middle Vinyl Print: Base in the Dark Township colours with white graphics.

Middle Vinyl Print: Base in the Dark Township colours with white graphics.

Text: Vinyl wrap on steel panel.


Cardigan St
Bogan Gate
Pola Park

3.8

Walkway & Cycleway Signage

W

Purpose

To identify and inform users of the walkways & cycleways within the Parkes Shire LGA.



W1 W2 W3 W4 W5

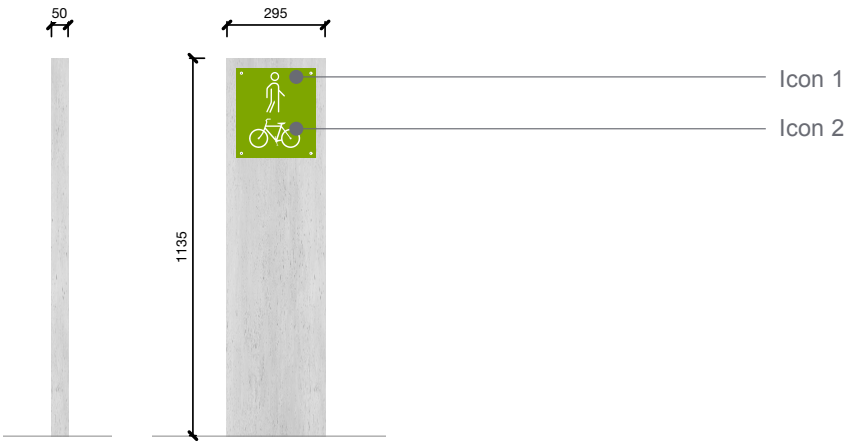


3.8

Walkway & Cycleway Signage

W

Content



Side Elevation 1:20 Front Elevation 1:20

3.8

Walkway & Cycleway Signage

W

Graphic Detail



Front Elevation 1:20

3.8

Walkway & Cycleway Signage

W

Location

At the entries and along pedestrian & cycleway pathways.



Isometric View

3.8

Walkway & Cycleway Signage

W

Graphic Guidelines & Construction and Materials

1. Graphic Guidelines

Icon 1: Operational & Attractions icons, ~100mm, fixed height, centred alignement.

Icon 2: Operational & Attractions icons, ~100mm, fixed height, centred alignement.

2. Construction and Material

Concrete Base: To engineers specification.

Steel Panel: 3mm steel panel with vinyl wrap.

Vinyl Print: Base in the Dark Township colours with white graphics.



// Part 4

Constuction Components

4.1

Material Selection

All materials to be installed to manufacturer's specification and recommendations.

1. Concrete Base

Benefit:

- Easily constucted
- Easily maintained around

Maintenance Requirements:

-

2. Steel Frame

Benefit:

- It is a strong material, readily available
- Lightweight, easy to transport and install
- Good corrosion resistance
- Can be fabricated locally
- Cost effective

Maintenance Requirements:

- Can be prone to rust if paint is damaged, requires some maintenance

3. Perforated Steel

Benefit:

- Sustainable, strong material that is easily and locally sourced
- Lightweight material with reduced windload that requires a reduced structural footing
- Cost effective and easily procured.

Maintenance Requirements: Can be prone to rust, requires some maintenance

4. Vinyl Wrapped Steel Panel

Benefit:

- Modular construction
- Easily manufactured
- Safeguards against vandalism
- Signage information can be updated and easily interchangeable & replaced

Maintenance Requirements:

- Fading in high UV explosure

4.2

Text

The following provides text guidelines for the design of the signage package.

1. Type

- All text is to be either Euclid Square Bold, Medium or Light. Refer to Part 3 Sign / Types for the font and locations.

2. Spacing

- Text should never be hyphenated
- All text is to be standard spacing

3. Size

- Text heights provided are from ascender to the descender as illustrated in the image below

4. Alignement

- Refer to Part 3 - Sign Types for each individual alignement

4. Colour

- Text is to be either White or Woodland Grey



4.3

Construction Details & General Notes

The construction drawings in the following Part 5.0 are suitable for information purpose only. Workshop drawings and Structural engineer detailing will need to be prepared and approved by Council prior to fabrication and installation.

1. Structure

- All structural steel members shown in the document are indicative only. ALI sign designs need sturctural workshop drawings certified by a qualified structural engineer.

2. Footing

- Footings are indicative, every sign manufactured for installation requires a structural footing detail once the location has been determined and soil conditions knows. The footings are to be designed by a certified engineer, for the specific conditions where the sign will be installed.

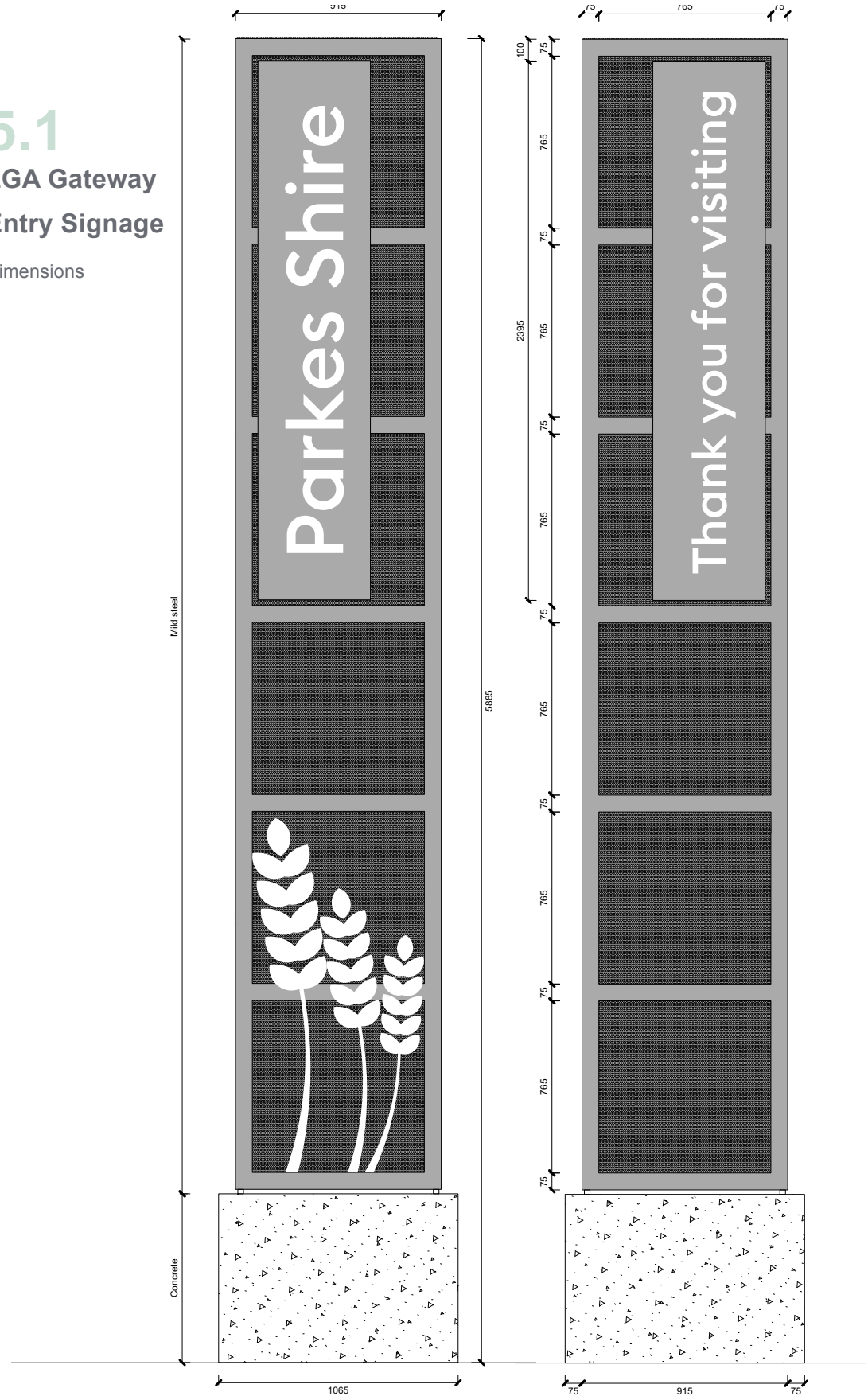
// Part 5

Constuction Details



5.1
LGA Gateway Entry Signage

Dimensions

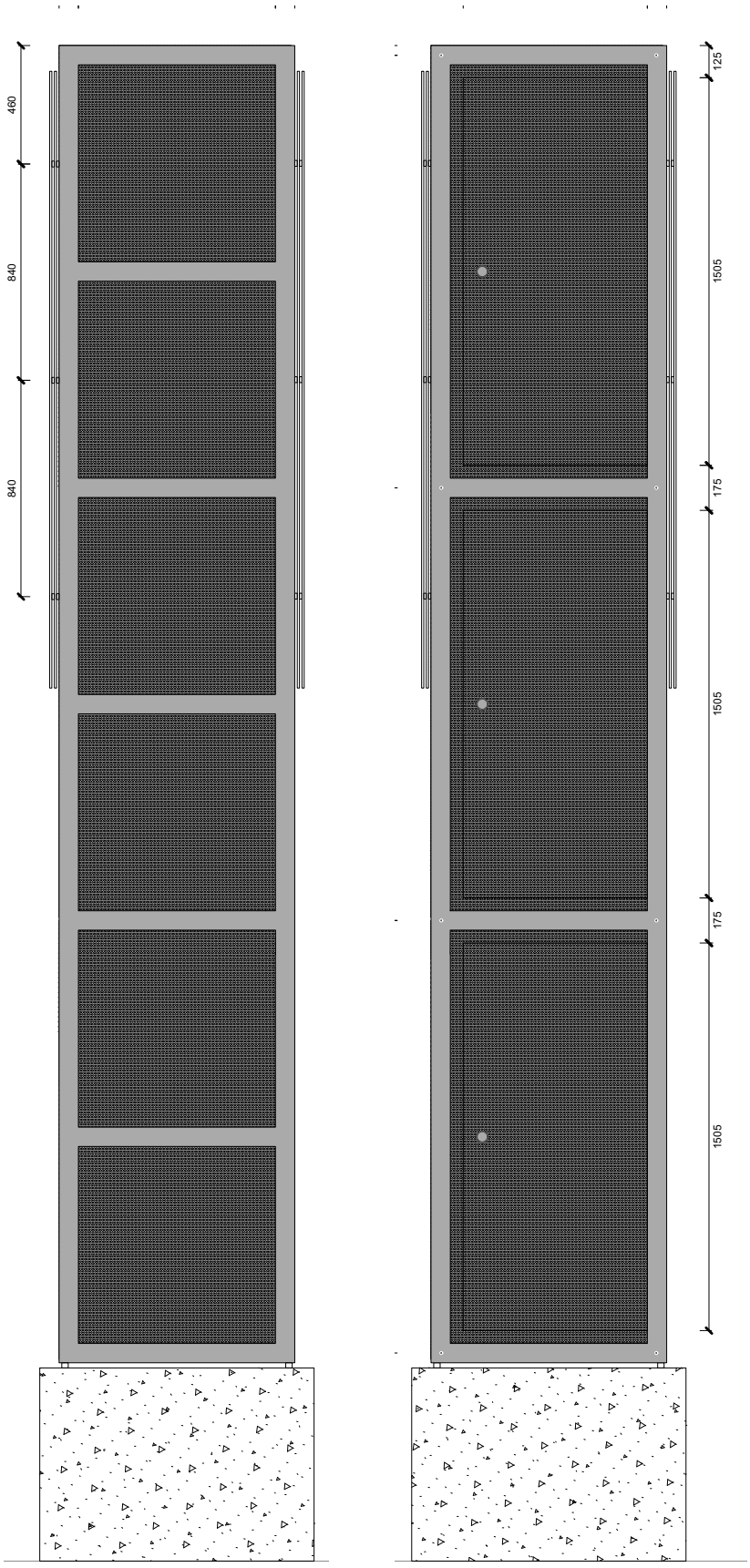


Front Elevation - Not to scale
Overall Dimensions

Back Elevation - Not to scale
Frame & Panel Dimensions

5.1
LGA Gateway Entry Signage

Dimensions

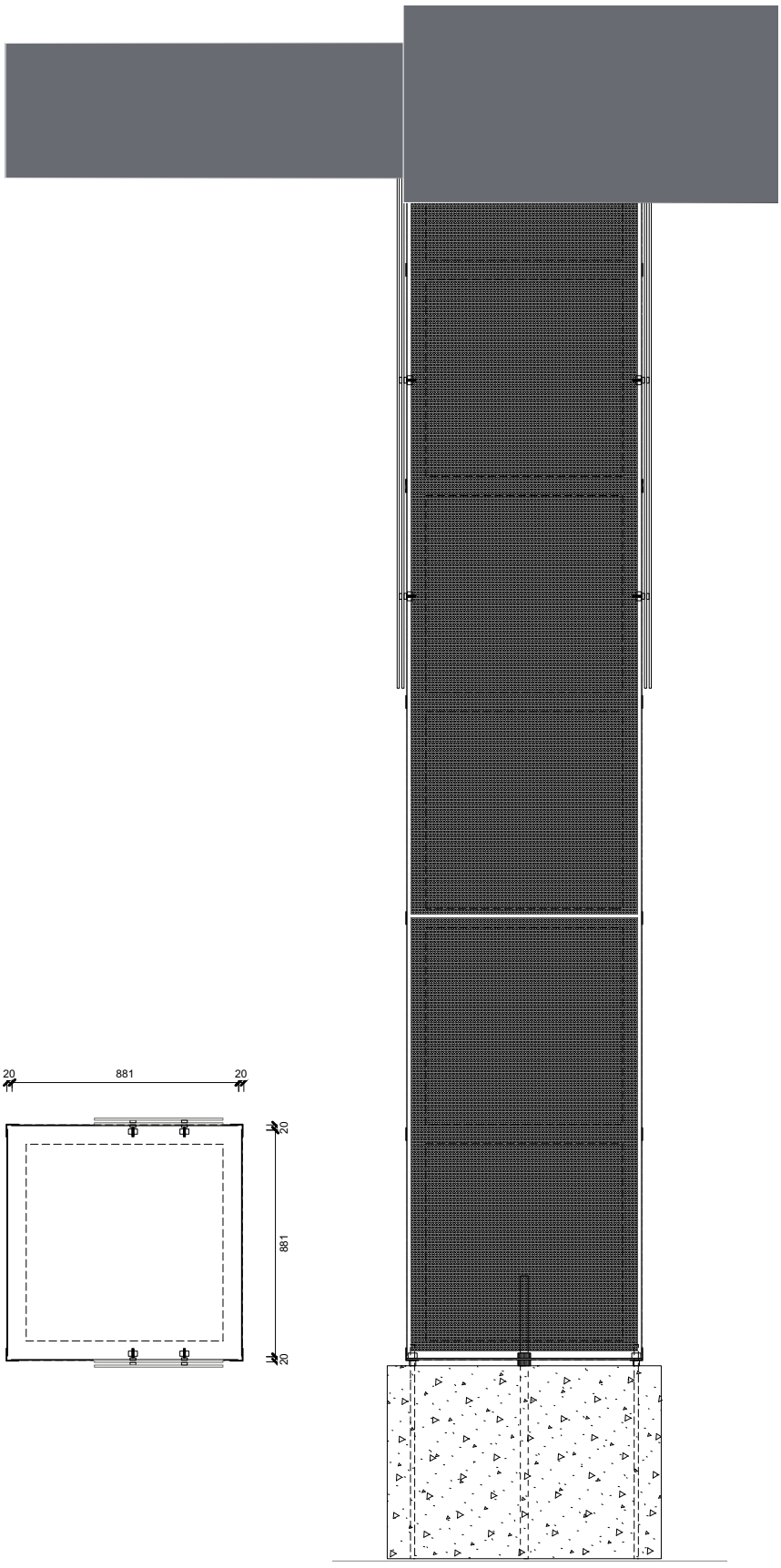


Road Side Elevation - Not to scale
Side Overall & Panel Fixing Dimensions

Non-Road Side Elevation - Not to scale
Access Dimensions

5.1
LGA Gateway Entry Signage

Dimensions

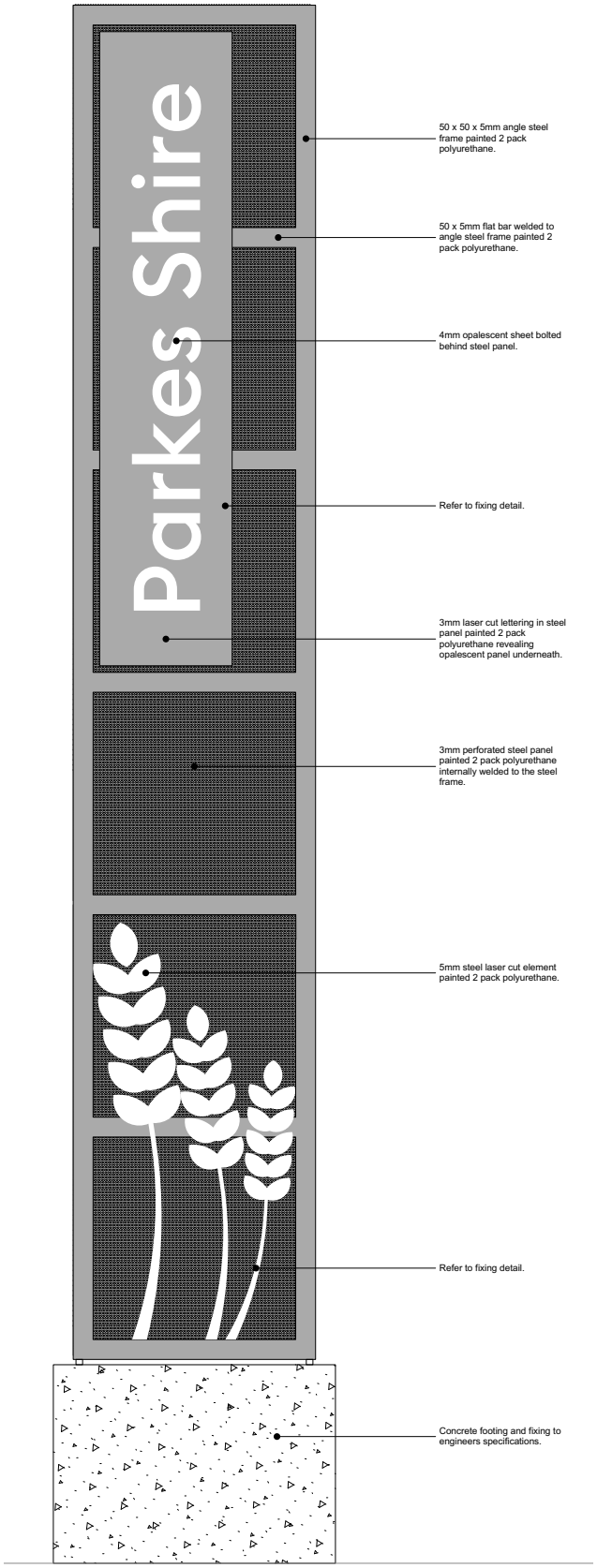


Section Plan - Not to scale
Perforated Steel Dimensions

Section - Not to scale
Perforated Steel & Internal Dimensions

5.1
LGA Gateway Entry Signage

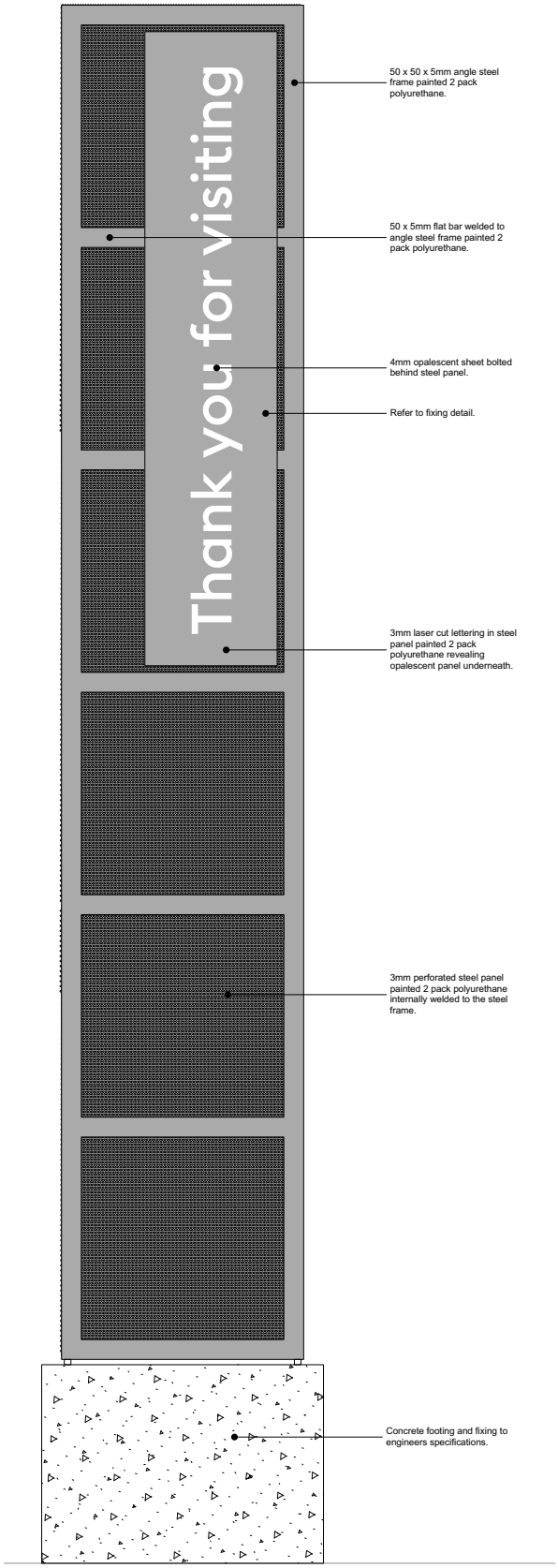
Annotations



Front Elevation - Not to scale

5.1
LGA Gateway Entry Signage

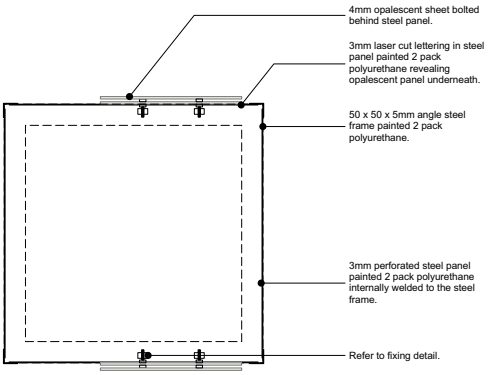
Annotations



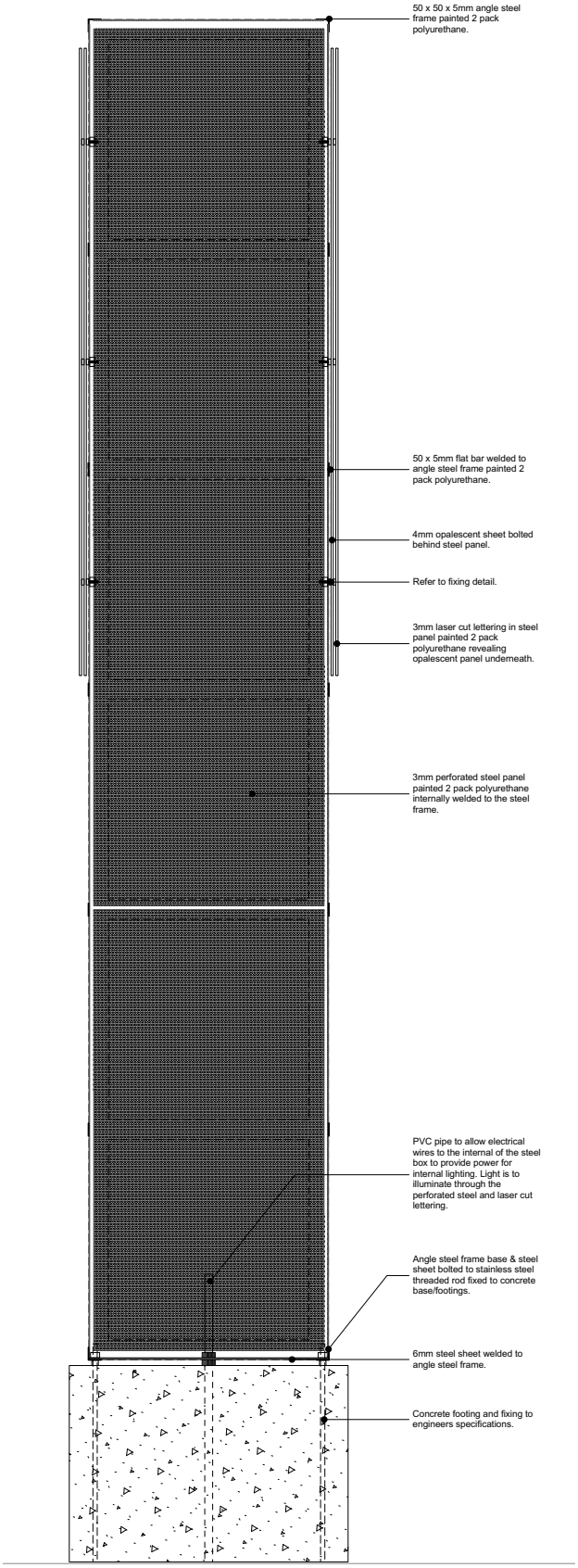
Back Elevation - Not to scale

5.1
LGA Gateway
Entry Signage

Annotations



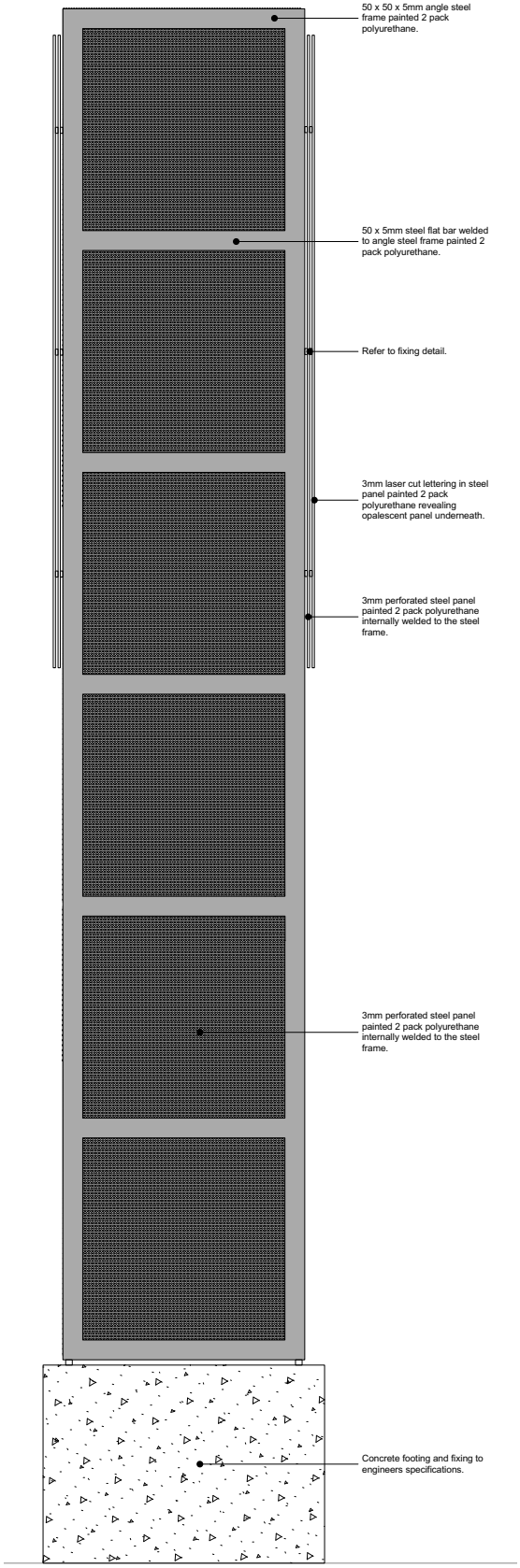
Section Plan - Not to scale



Section - Not to scale

5.1
LGA Gateway Entry Signage

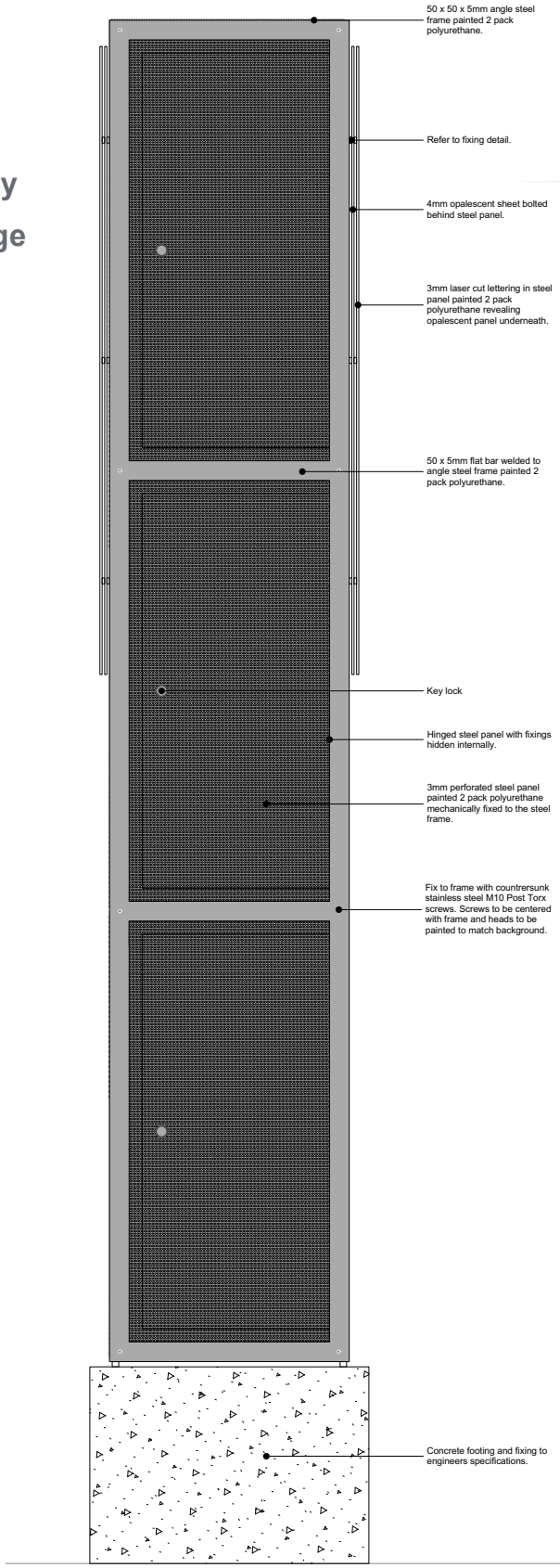
Dimensions



Roadside Elevation - Not to scale

5.1
LGA Gateway Entry Signage

Dimensions



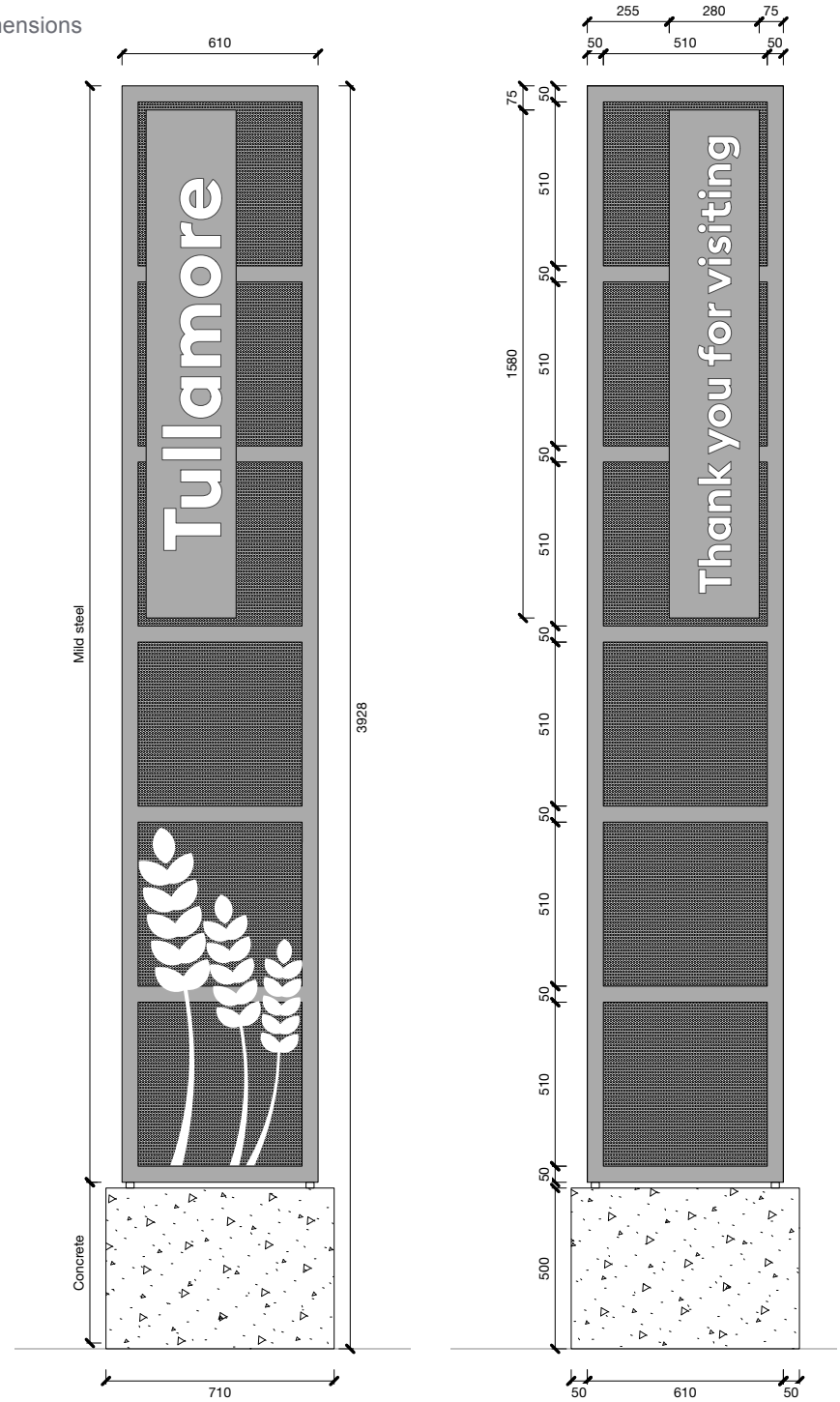
Non-roadside Elevation - Not to scale

5.2

Town and Village Entry Signage

T

Dimensions



Front Elevation 1:20
Overall Dimensions

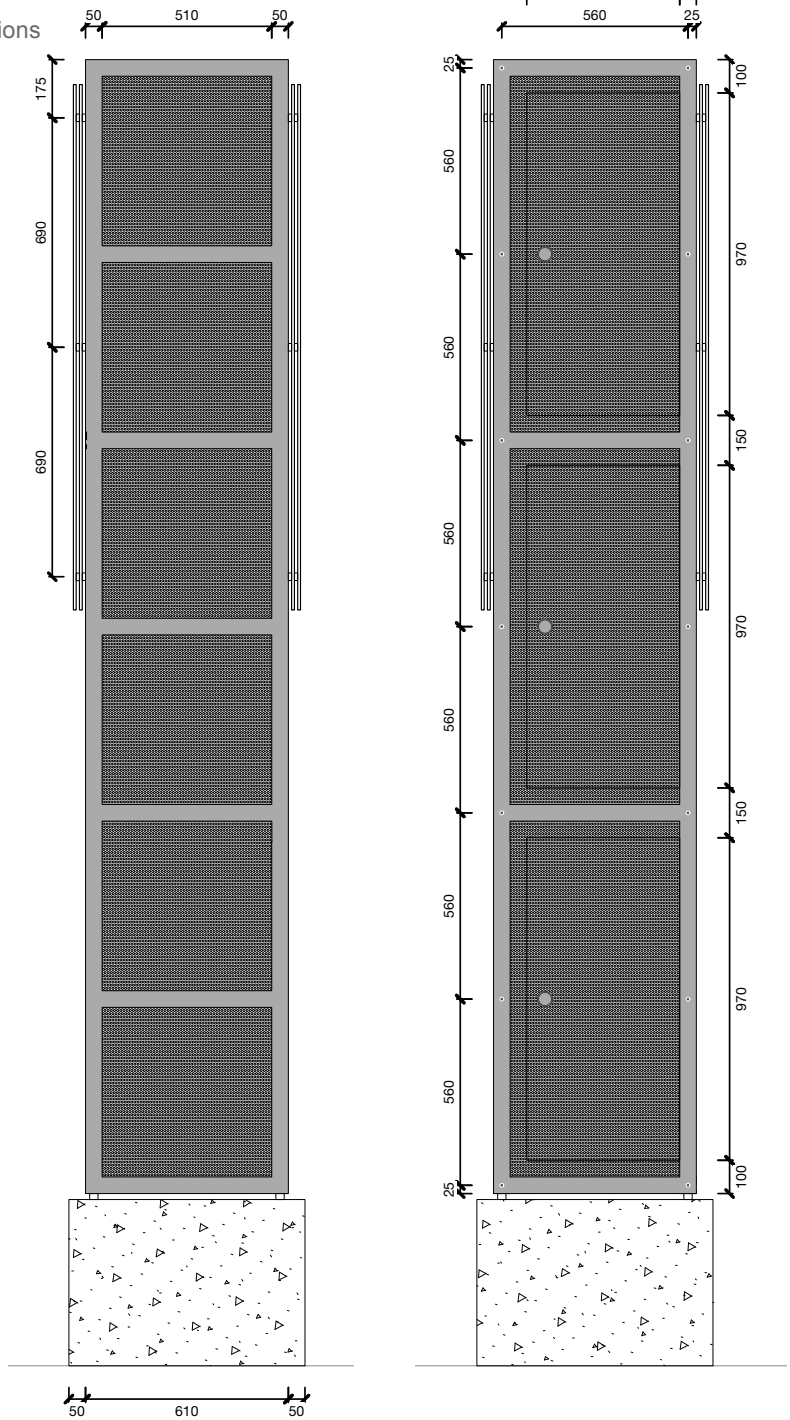
Back Elevation 1:20
Frame & Panel Dimensions

5.2

Town and Village Entry Signage

T

Dimensions



Road Side Elevation 1:20
Side Overall & Panel Fixing Dimensions

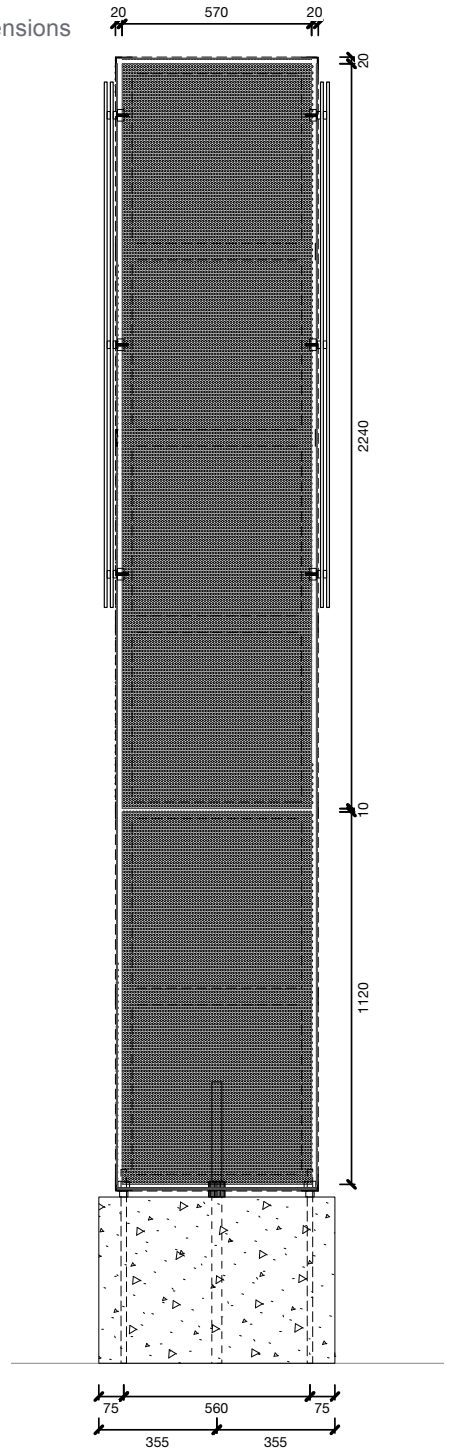
Non-Road Side Elevation 1:20
Access Dimensions

5.2

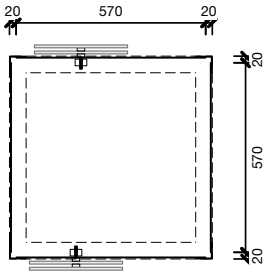
Town and Village Entry Signage

T

Dimensions



Section 1:20
Perforated Steel & Internal Dimensions



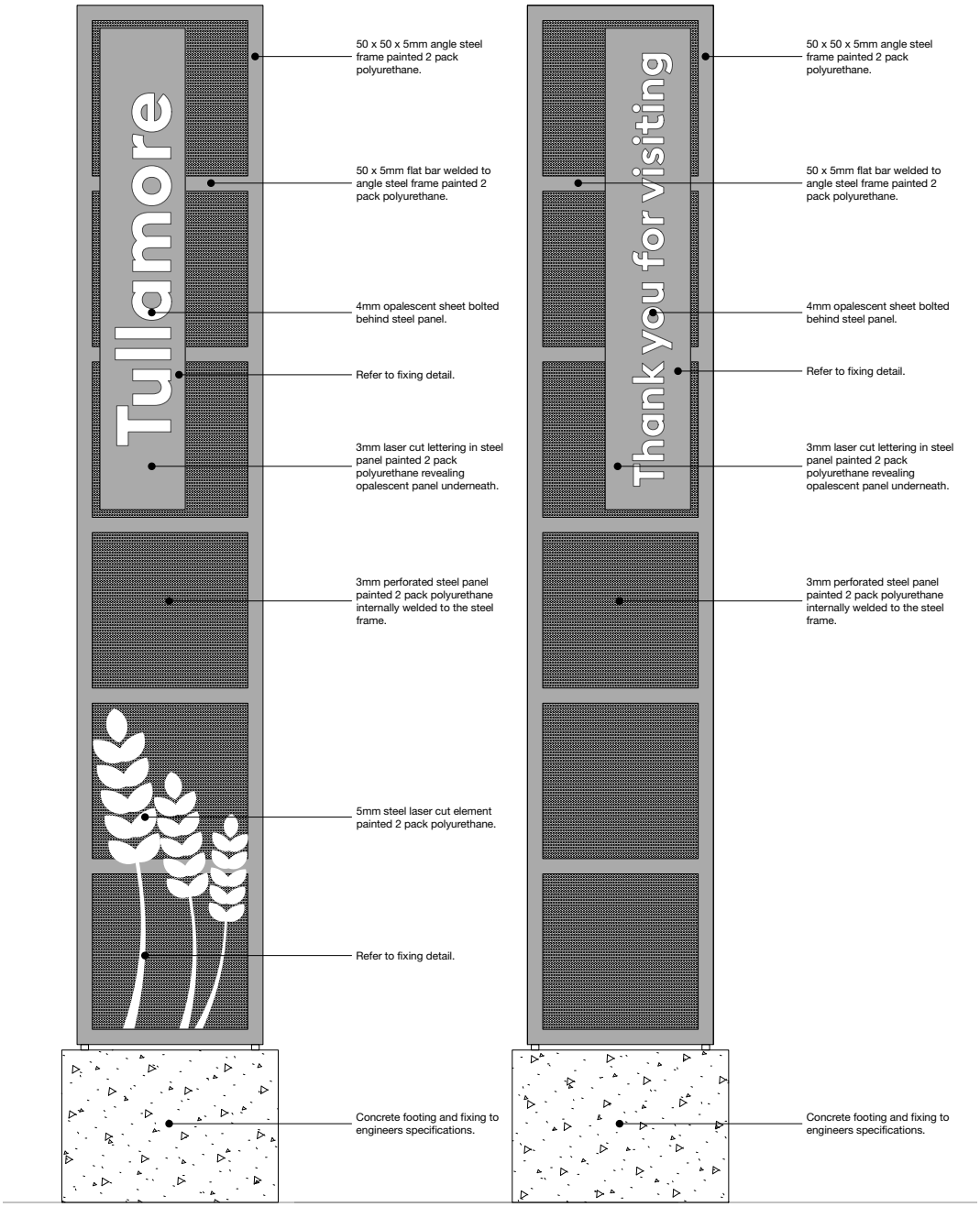
Section Plan 1:20
Perforated Steel Dimensions

5.2

Town and Village Entry Signage

T

Annotations



Front Elevation 1:20

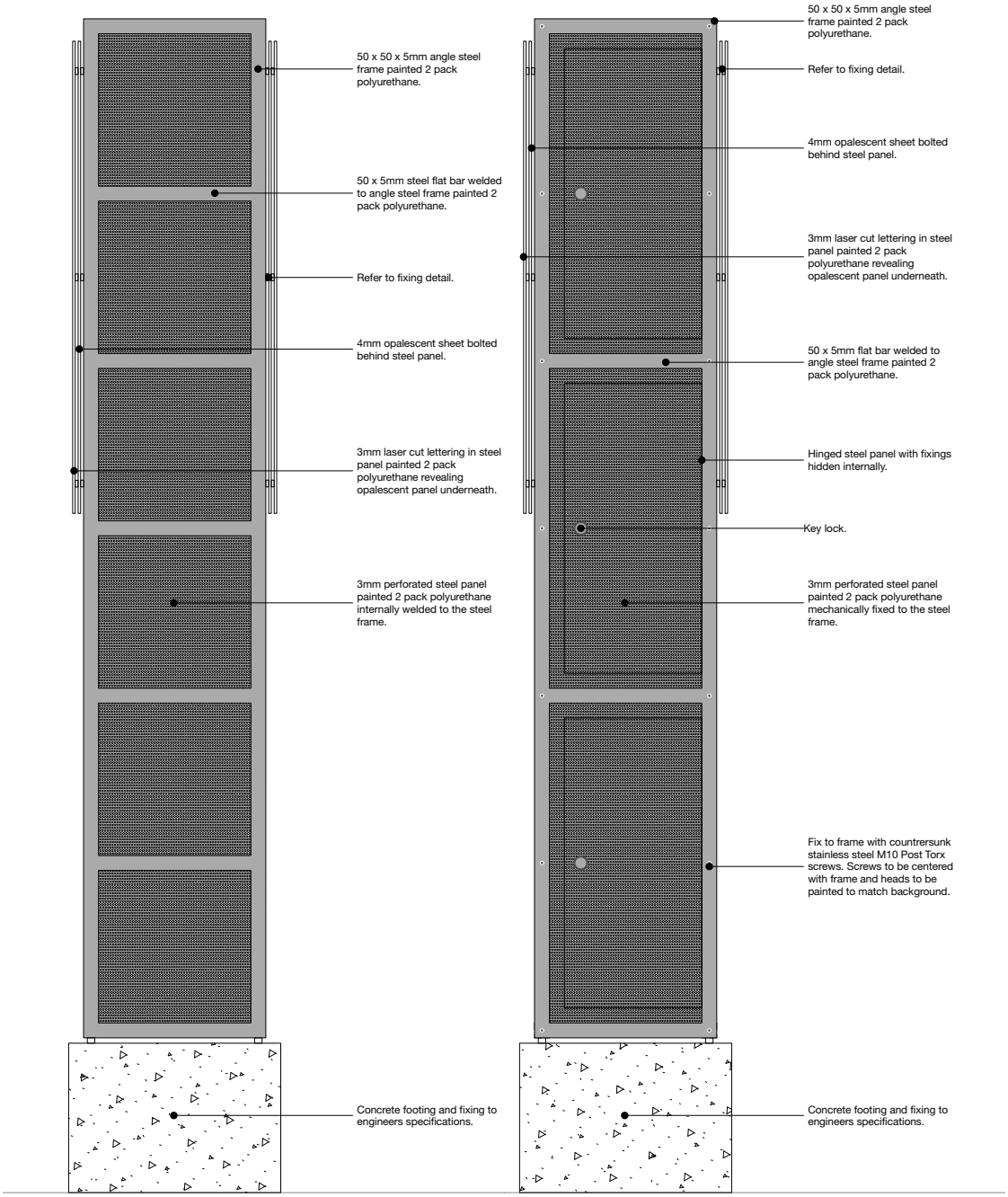
Back Elevation 1:20

5.2

Town and Village Entry Signage

T

Annotations



Road Side Elevation 1:20

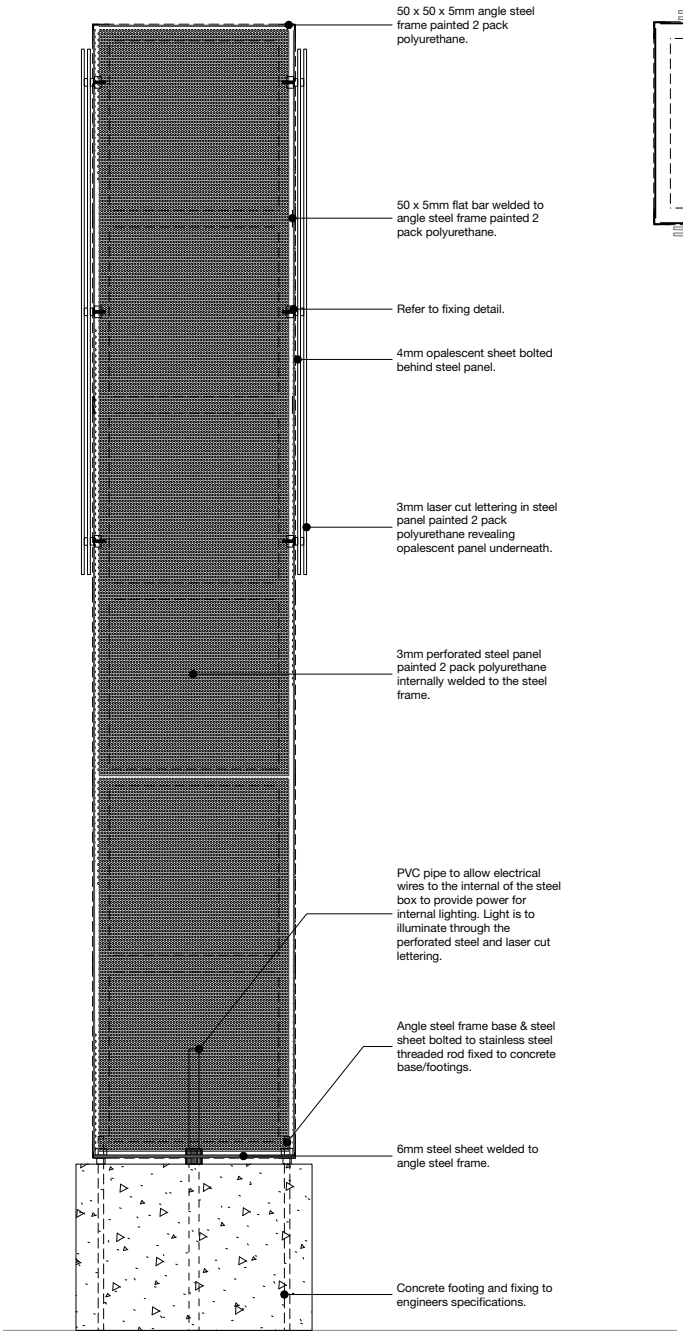
Non-Road Side Elevation 1:20

5.2

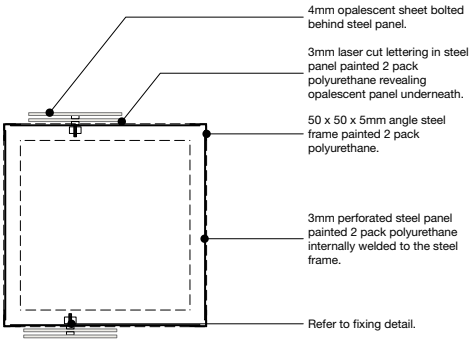
Town and Village Entry Signage

T

Annotations



Section 1:20



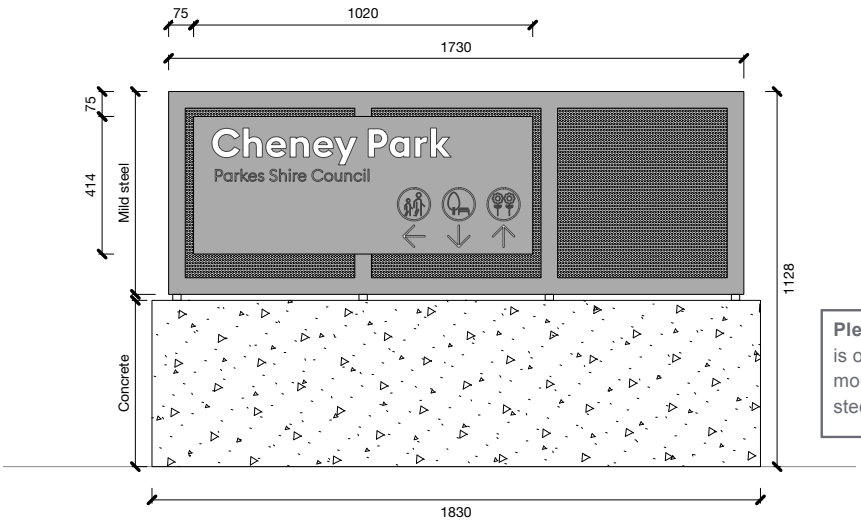
Section Plan 1:20

5.3

Community Facilities Entry Signage

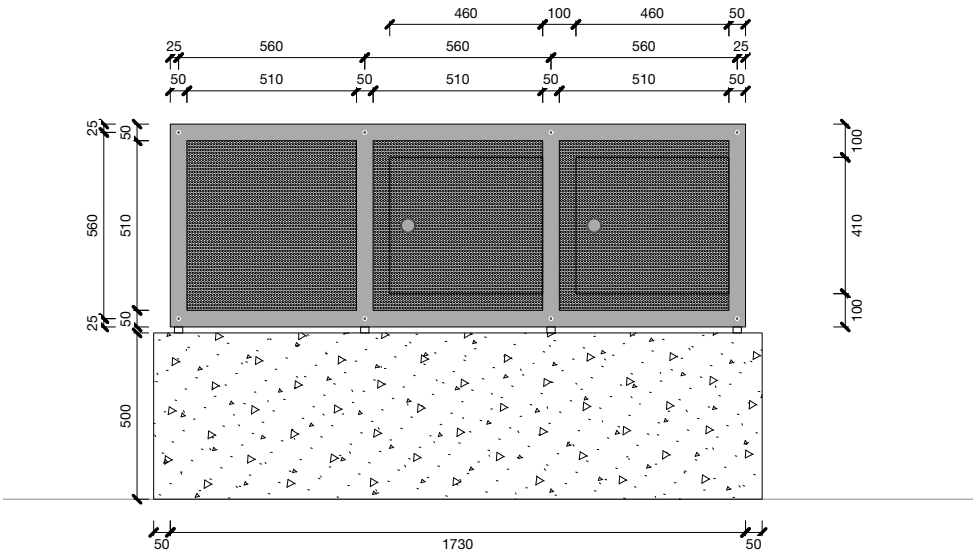
C

Dimensions



Please note: Concrete plinth shown is optional only. Sign can also be mounted on wall or supported by steel legs.

Front Elevation 1:20
Overall & Panel Dimensions



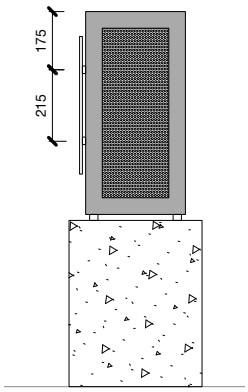
Back Elevation 1:20
Access & Frame Dimensions

5.3

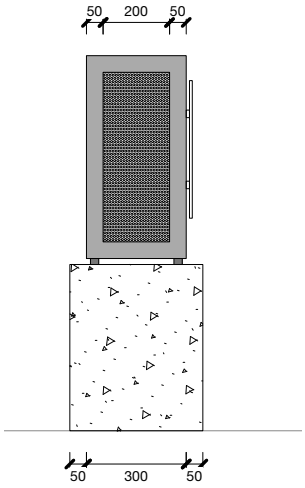
Community Facilities Entry Signage

C

Dimensions



Road Side Elevation 1:20
Panel Fixing Dimensions



Non-Road Side Elevation 1:20
Side Overall Dimensions

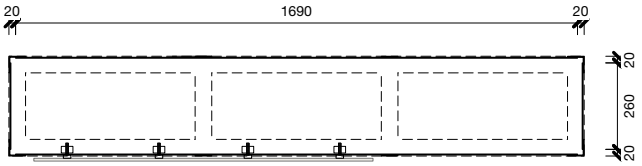
Please note: Concrete plinth shown is optional only. Sign can also be mounted on wall or supported by steel legs.

5.3

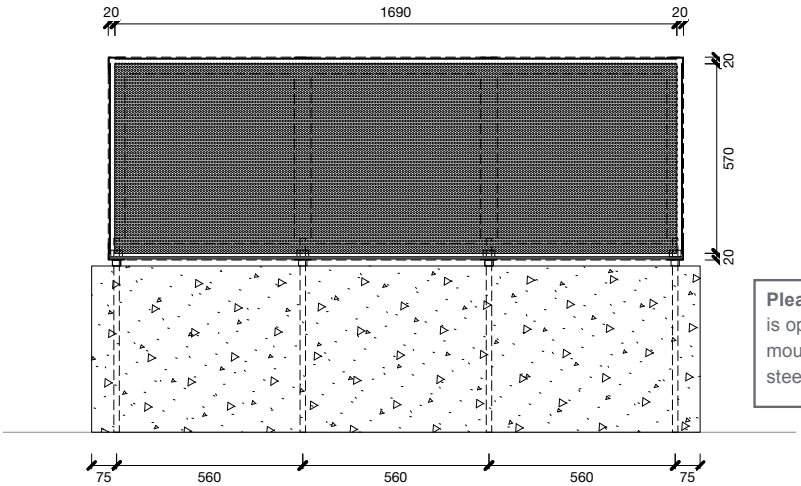
Community Facilities Entry Signage

C

Dimensions



Section Plan 1:20
Perforated Steel DImensions



Section 1:20
Perforated Steel & Internal Dimensions

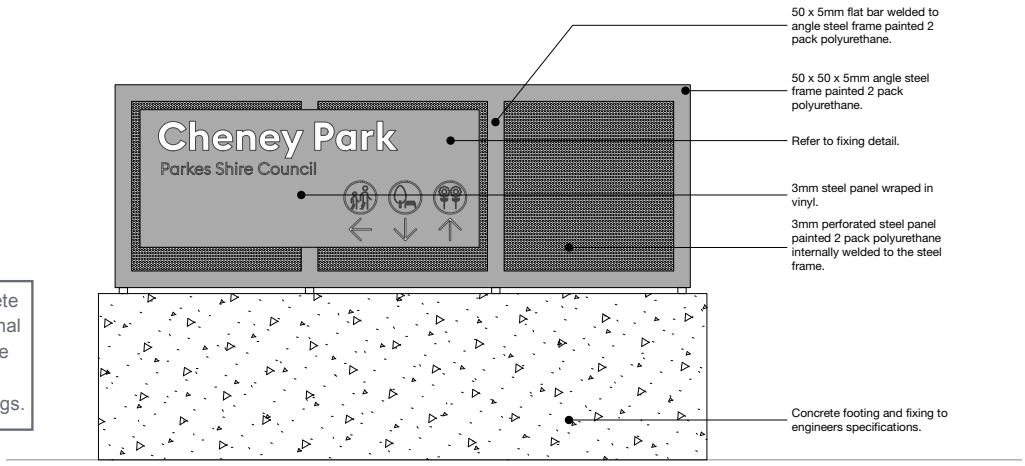
Please note: Concrete plinth shown is optional only. Sign can also be mounted on wall or supported by steel legs.

5.3

Community Facilities Entry Signage

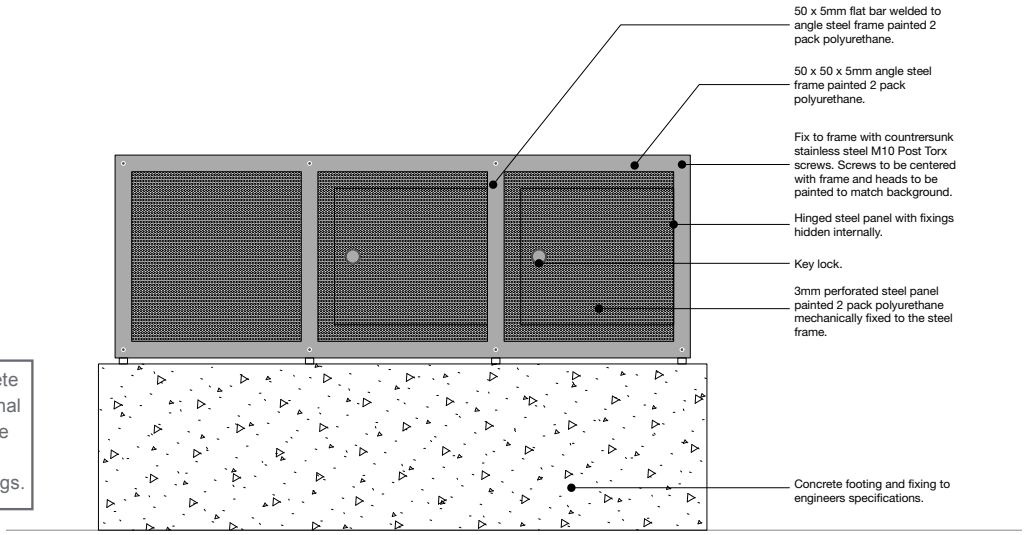
C

Annotations



Please note: Concrete plinth shown is optional only. Sign can also be mounted on wall or supported by steel legs.

Front Elevation 1:20



Please note: Concrete plinth shown is optional only. Sign can also be mounted on wall or supported by steel legs.

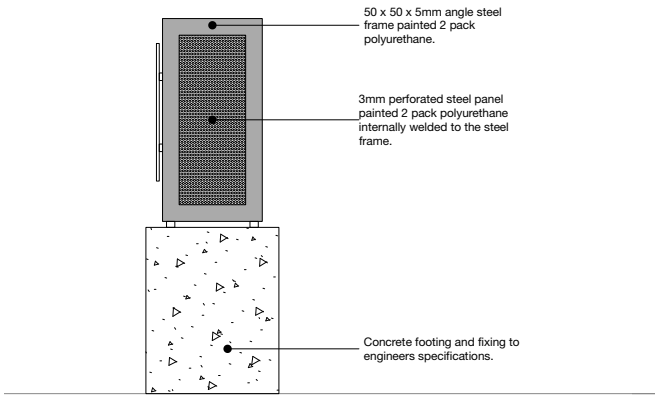
Back Elevation 1:20

5.3

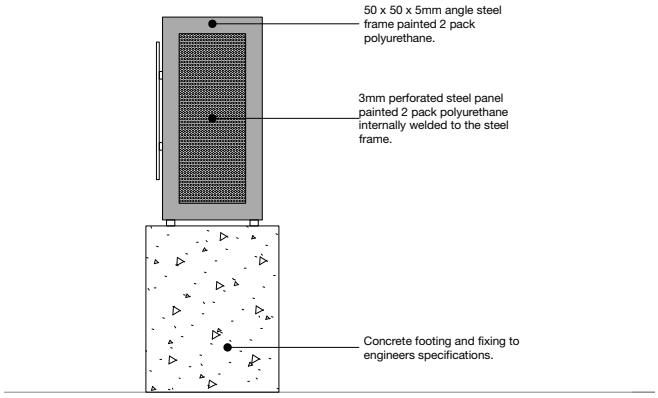
Community Facilities Entry Signage

C

Annotations



Road Side Elevation 1:20



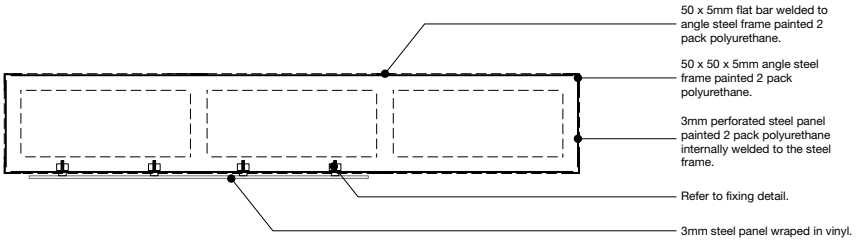
Non-Road Side Elevation 1:20

5.3

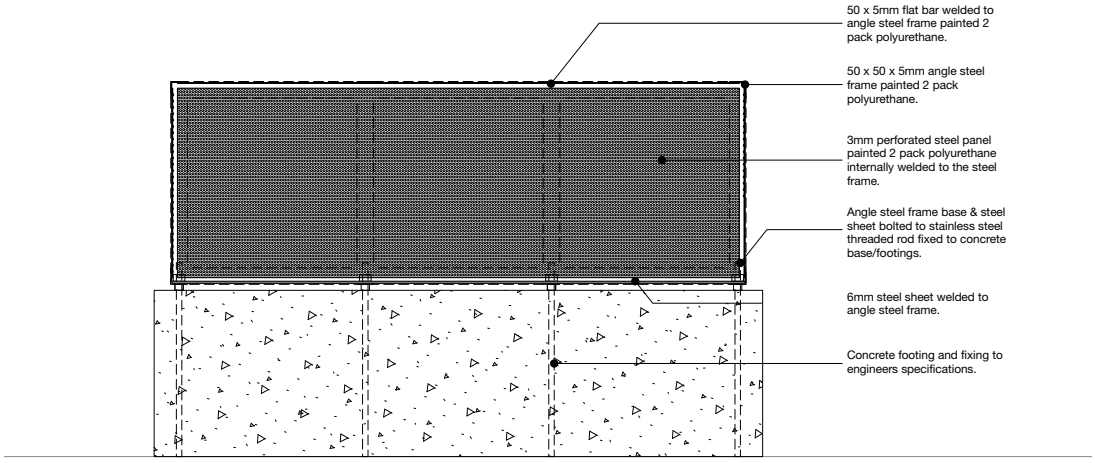
Community Facilities Entry Signage

C

Annotations



Section Plan 1:20



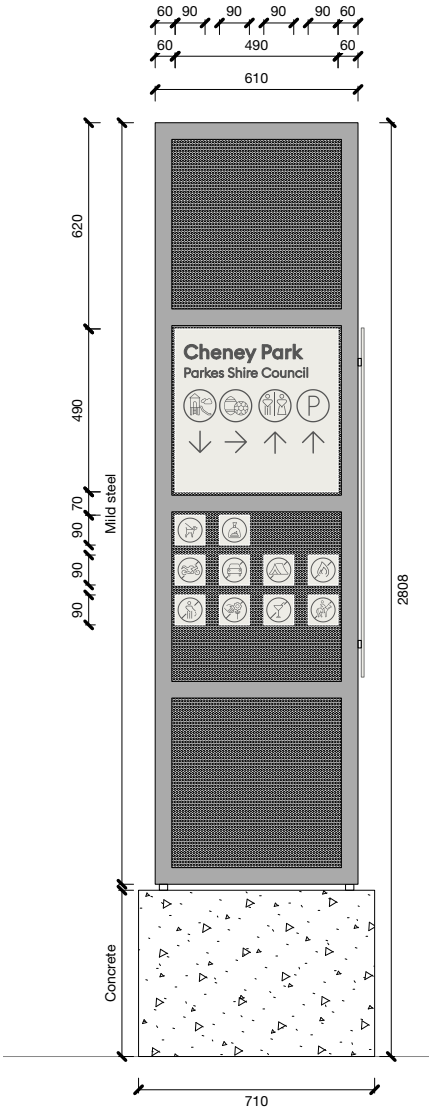
Section 1:20

5.4

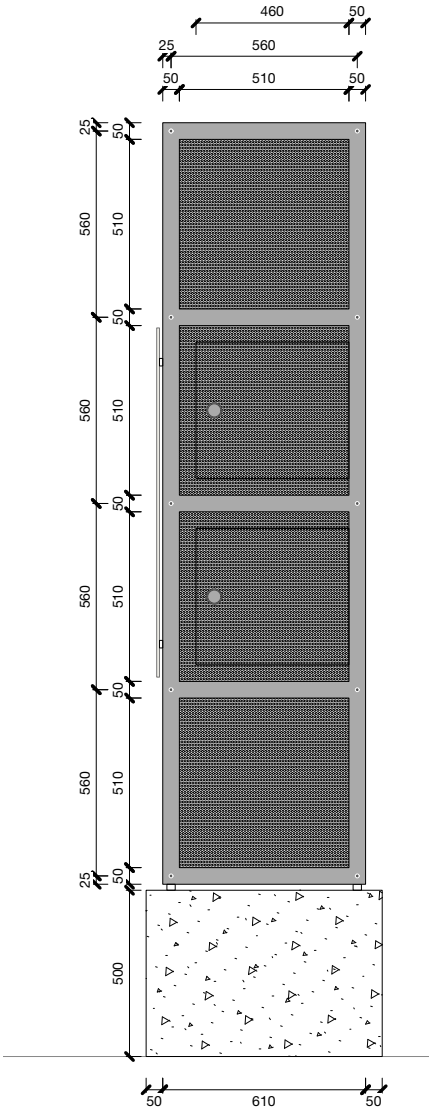
Community Facilities Information Signage

F

Dimensions



Front Elevation 1:20
Overall & Panel Dimensions



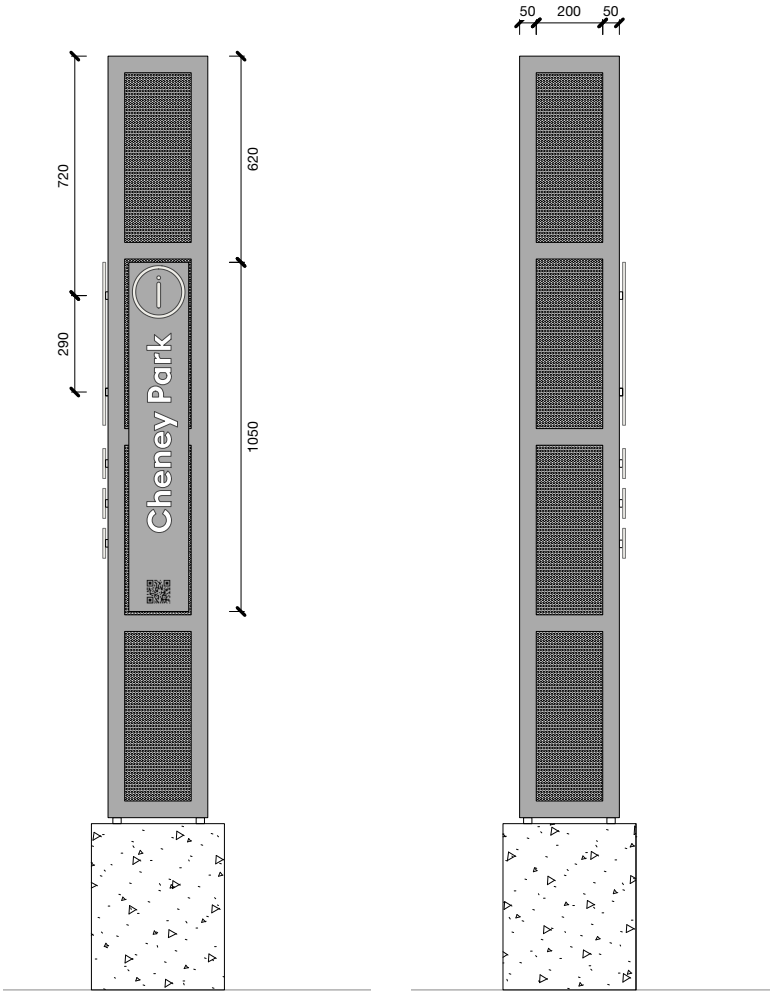
Back Elevation 1:20
Access & Frame Dimensions

5.4

Community Facilities Information Signage

F

Dimensions



Road Side Elevation 1:20
Panel & Panel Fixing Dimensions

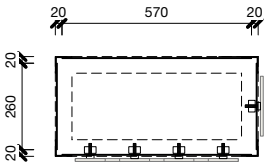
Non-Road Side Elevation 1:20
Side Overall Dimensions

5.4

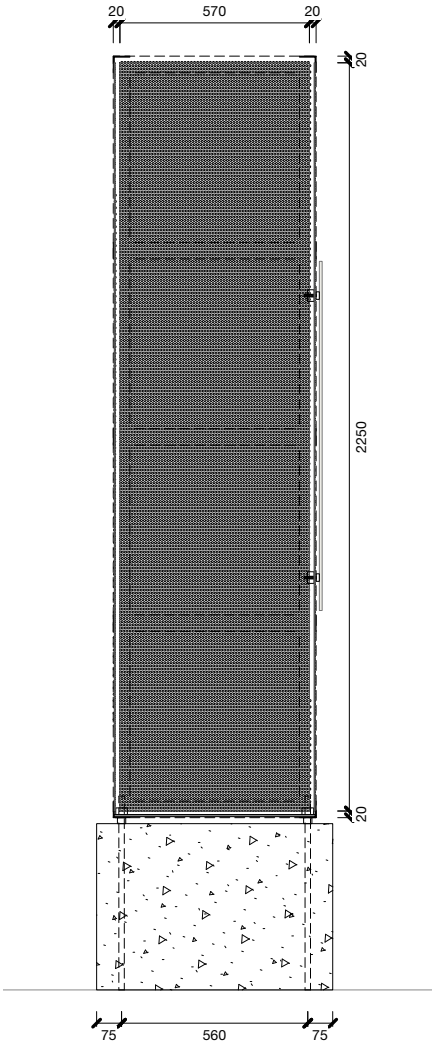
Community Facilities Information Signage

F

Dimensions



Section Plan 1:20
Perforated Steel Dimensions



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Perforated Steel & Internal Dimensions

5.4

Community Facilities Information Signage

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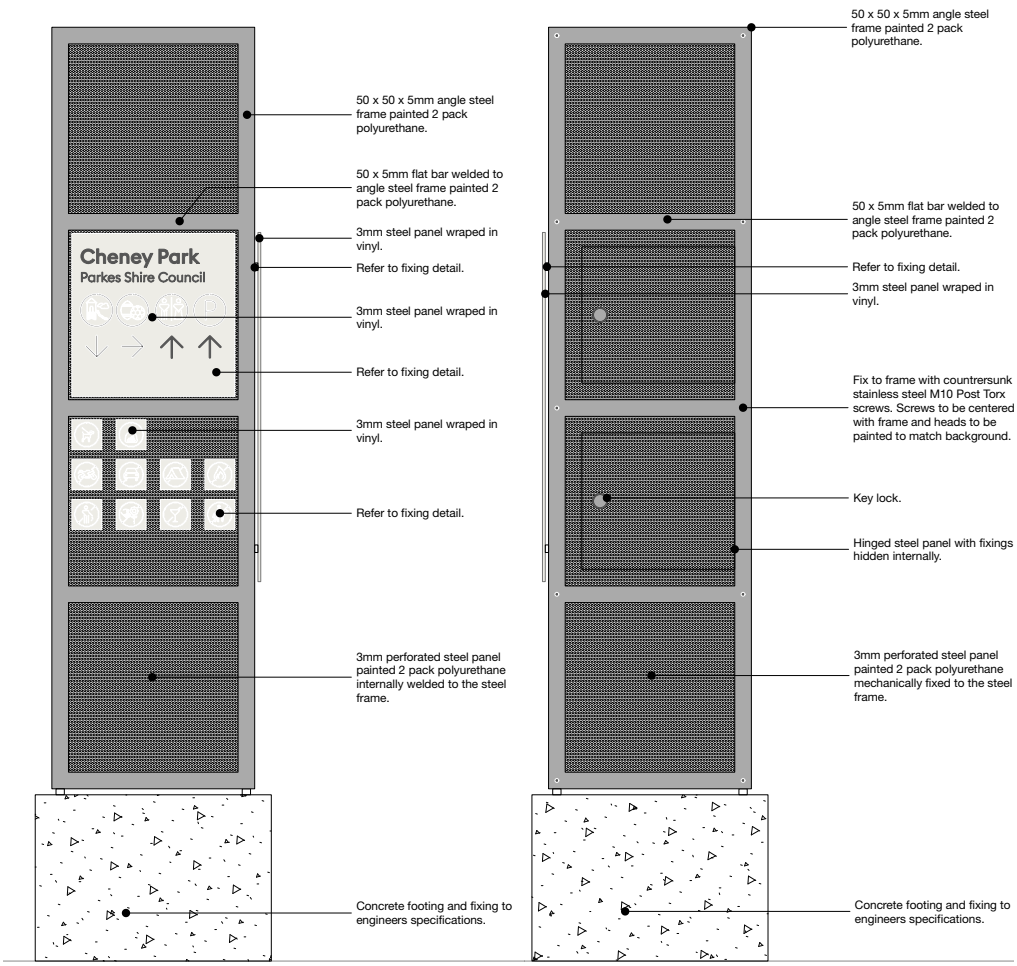
Annotations



Front Elevation 1:20

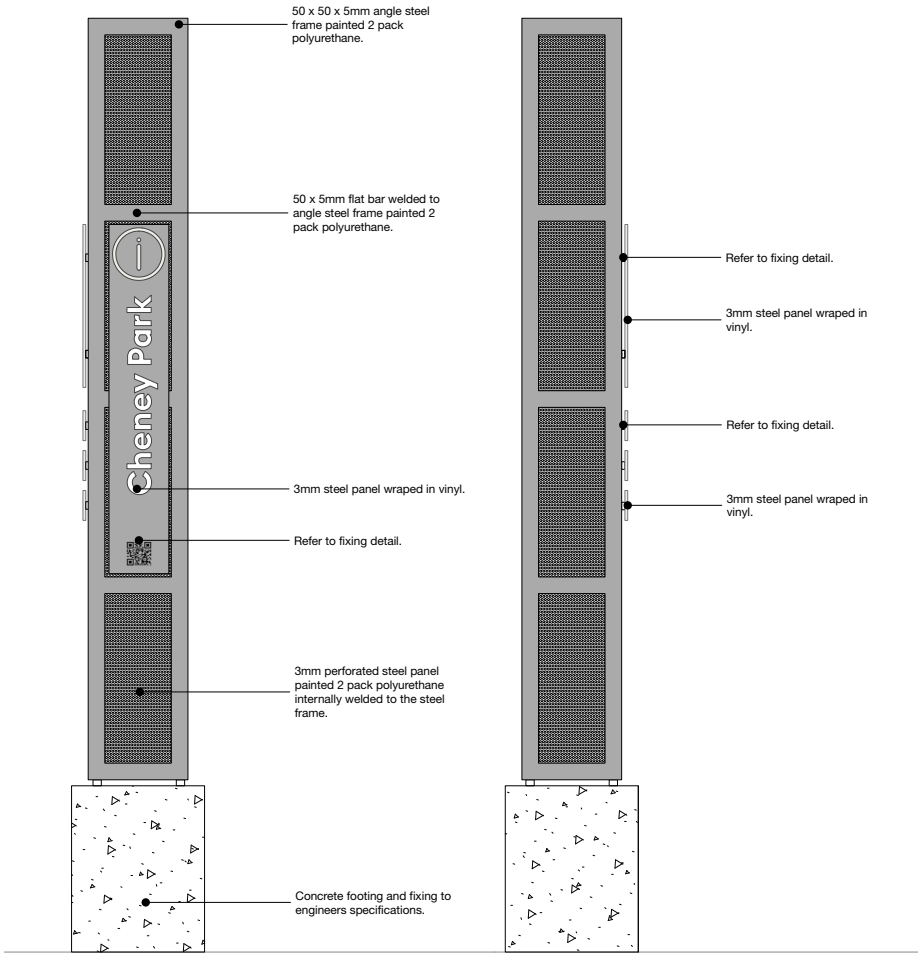
Back Elevation 1:20

5.4

Community Facilities Information Signage

F

Annotations



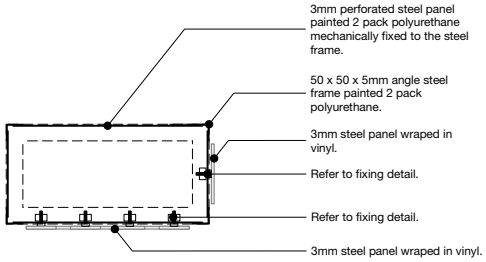
Road Side Elevation 1:20 **Non-Road Side Elevation 1:20**

5.4

Community Facilities Information Signage

F

Annotations



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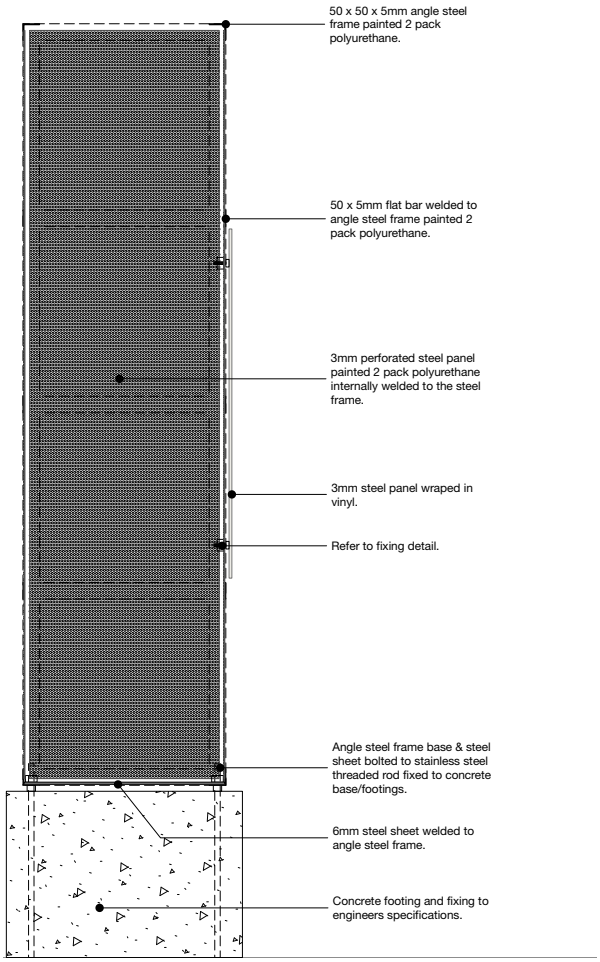


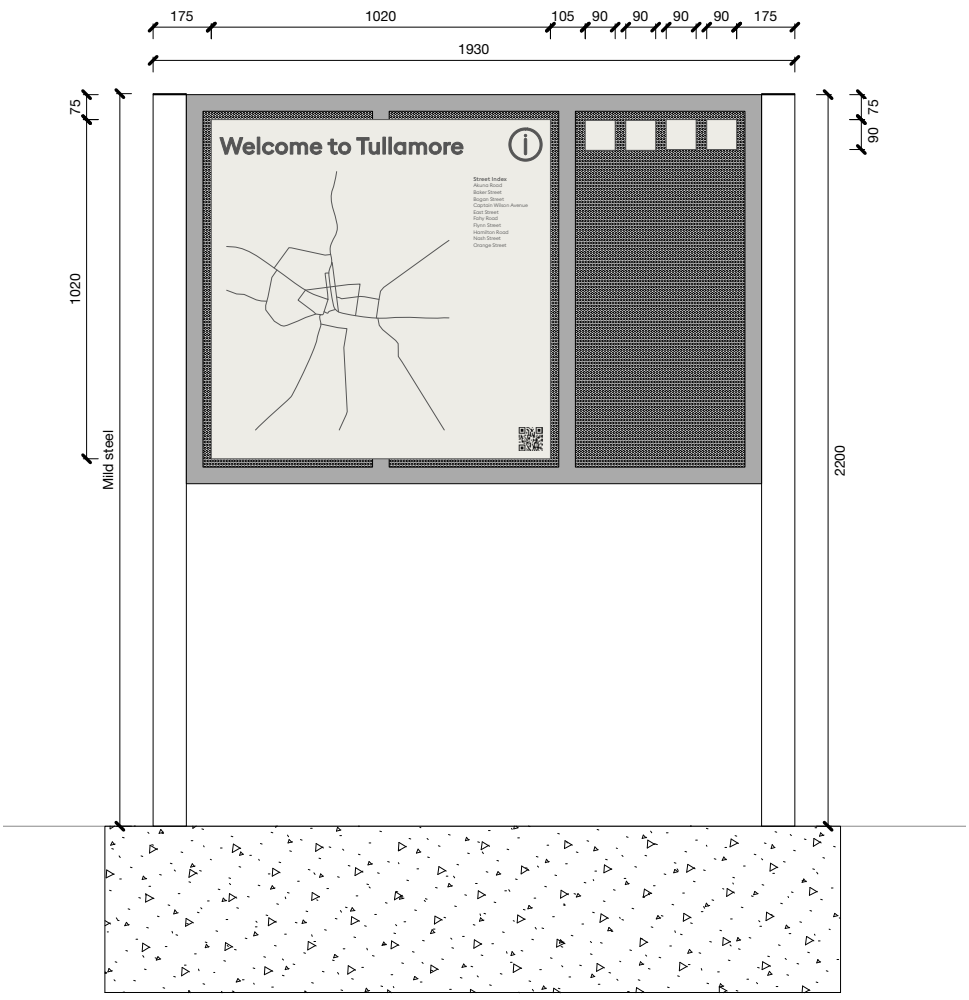
Section 1:20

5.5

Town Centre & Visitor Information Signage

I

Dimensions

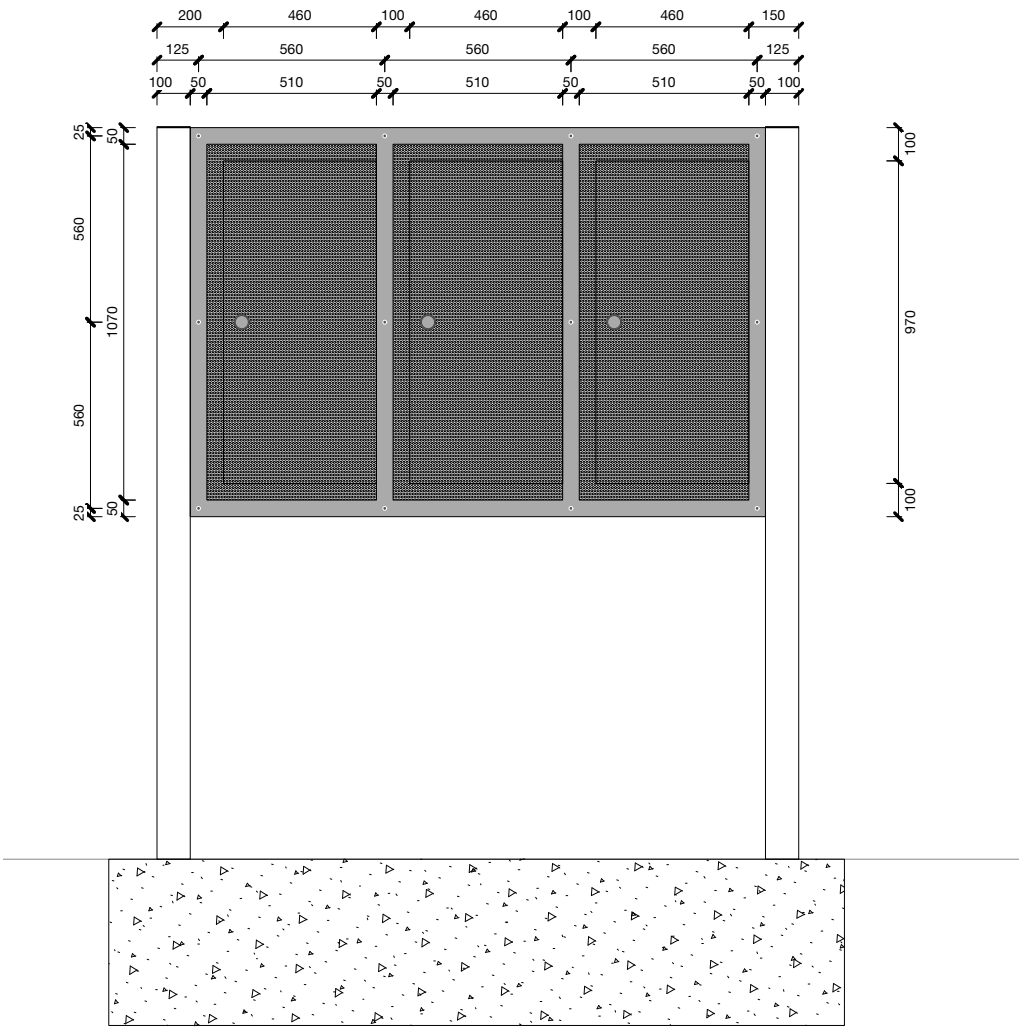


Front Elevation 1:20
Overall & Panel Dimensions

5.5

Town Centre & Visitor Information Signage

Dimensions



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Access & Frame Dimensions

5.5

Town Centre & Visitor Information Signage

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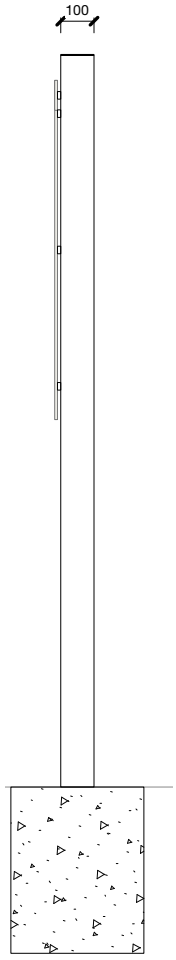
Dimensions



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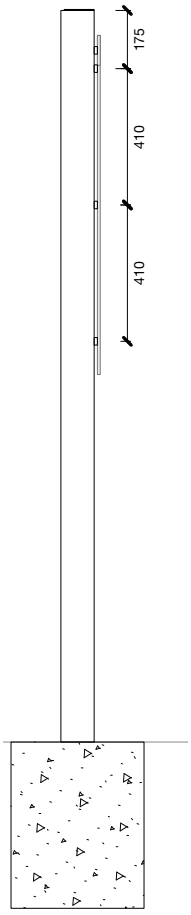

Non-Road Side Elevation 1:20
Panel Fixing Dimensions

5.5

Town Centre & Visitor Information Signage

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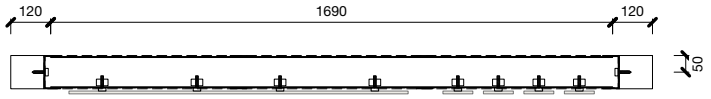
Dimensions



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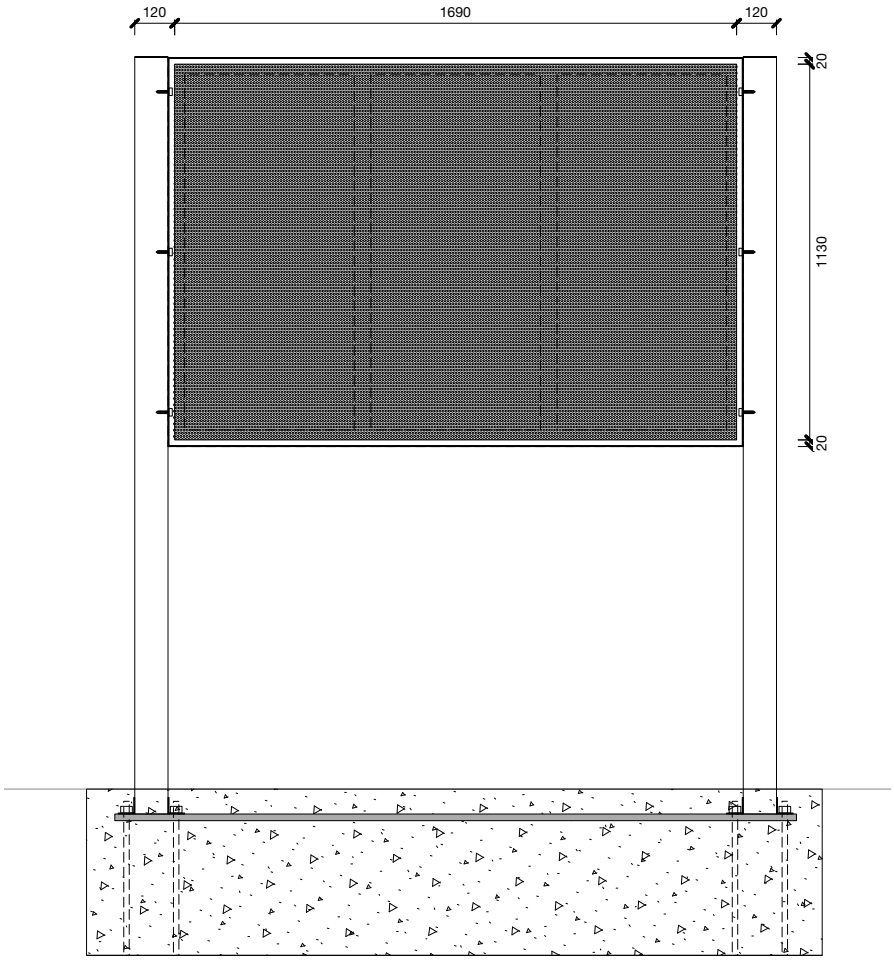
Perforated Steel & Internal Dimensions



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Perforated Steel & Internal Dimensions

5.5

Town Centre & Visitor Information Signage

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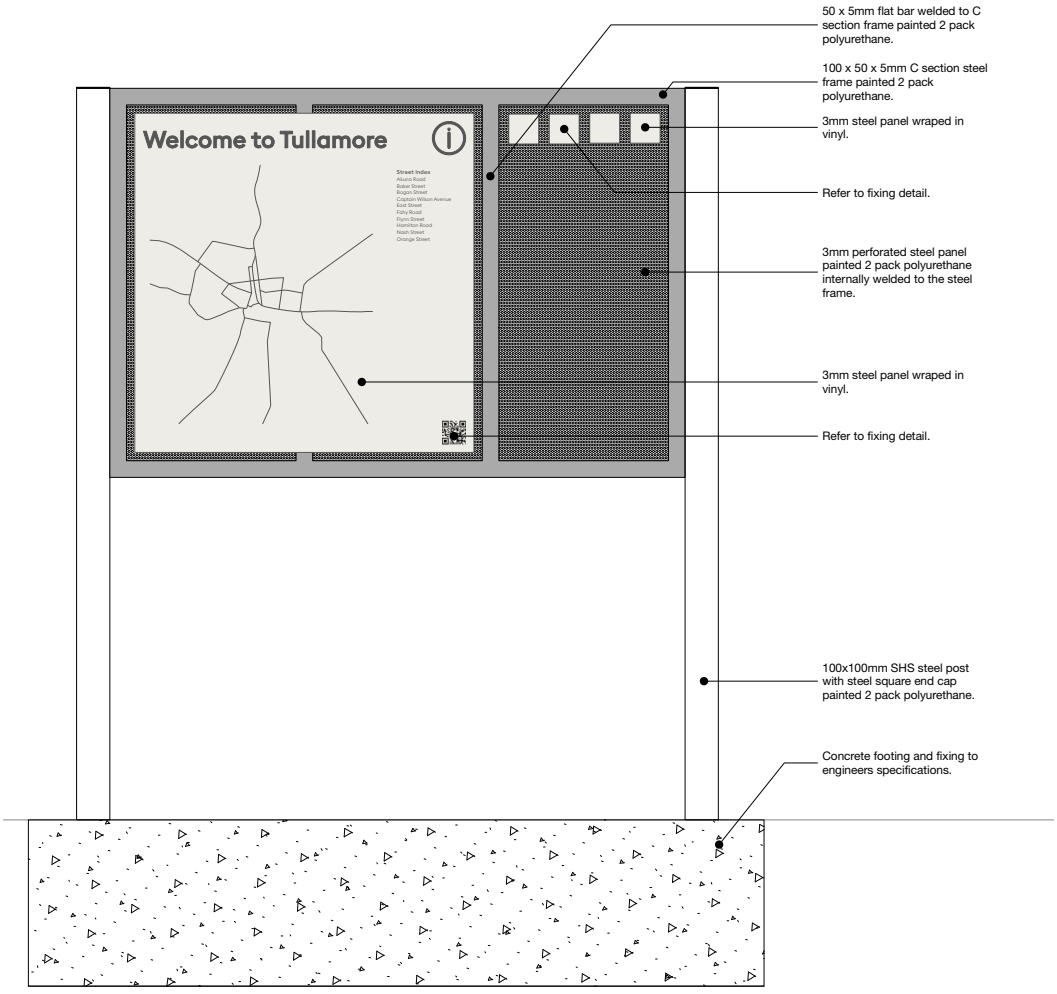

Front Elevation 1:20

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Town Centre & Visitor Information Signage

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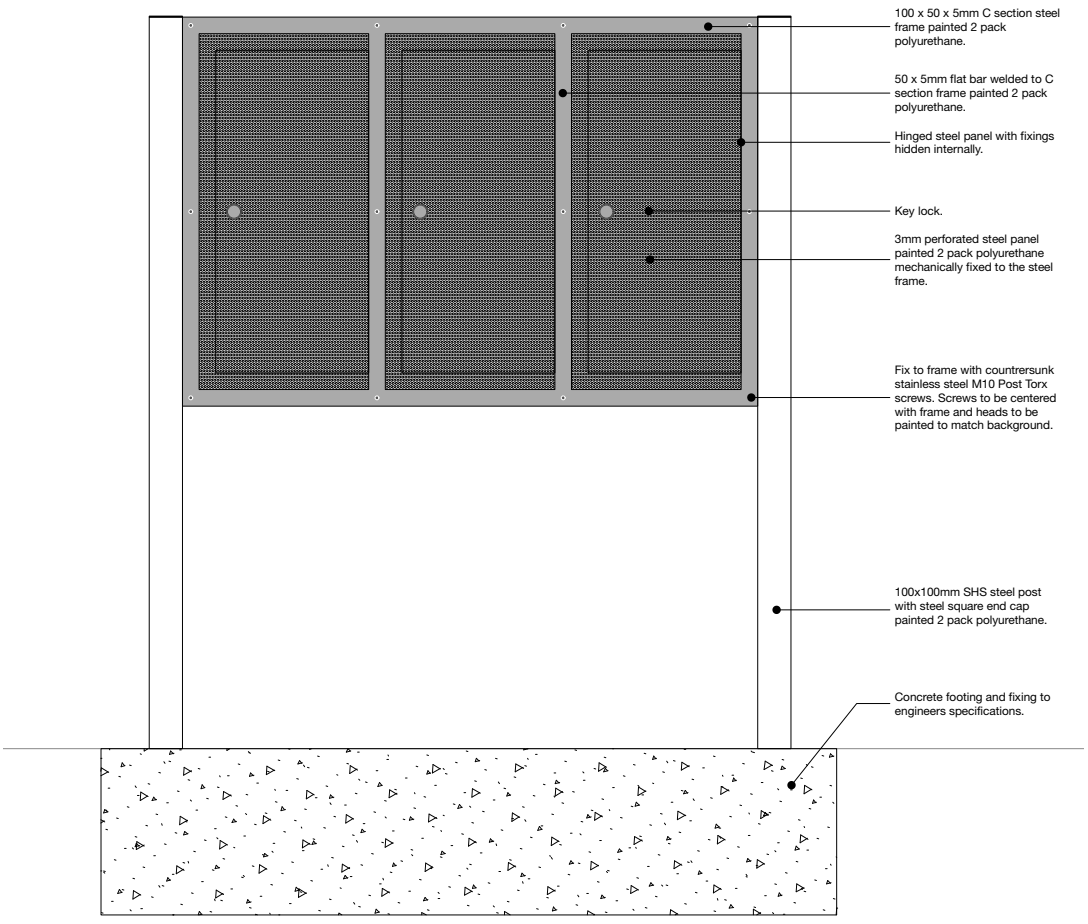

Back Elevation 1:20

5.5

Town Centre & Visitor Information Signage

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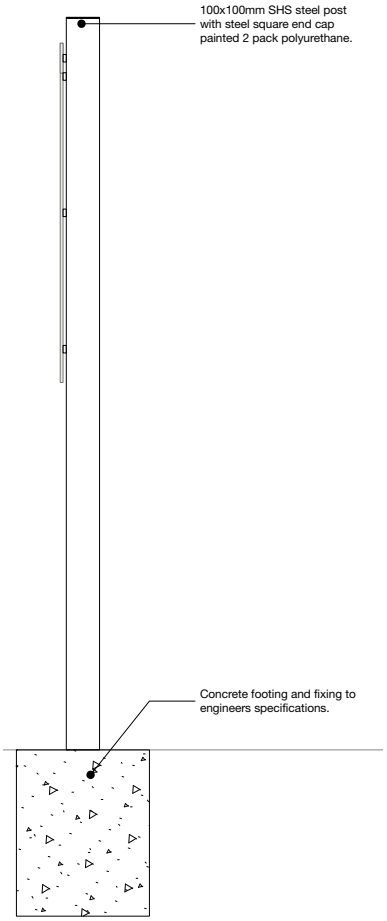
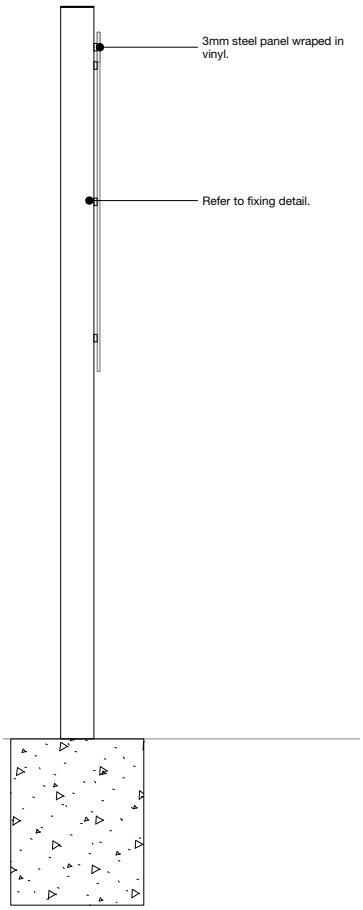


Road Side Elevation 1:20



Non-Road Side Elevation 1:20

5.5

Town Centre & Visitor Information Signage

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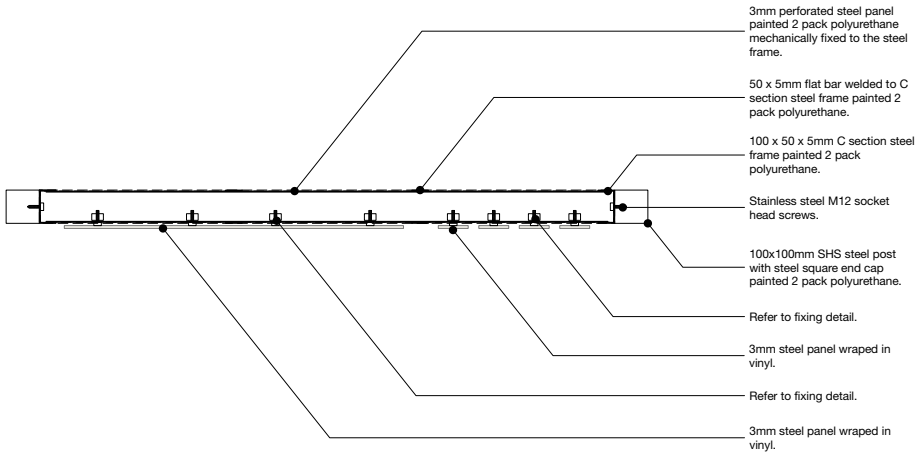
Annotations



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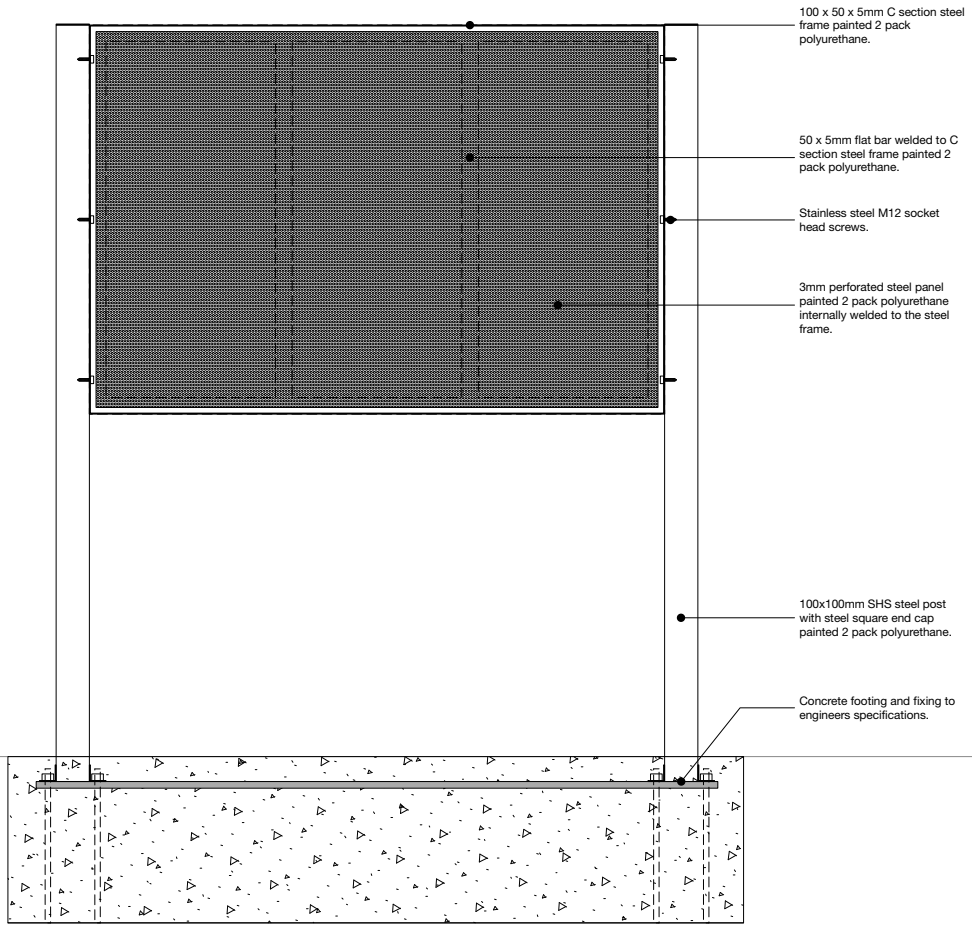


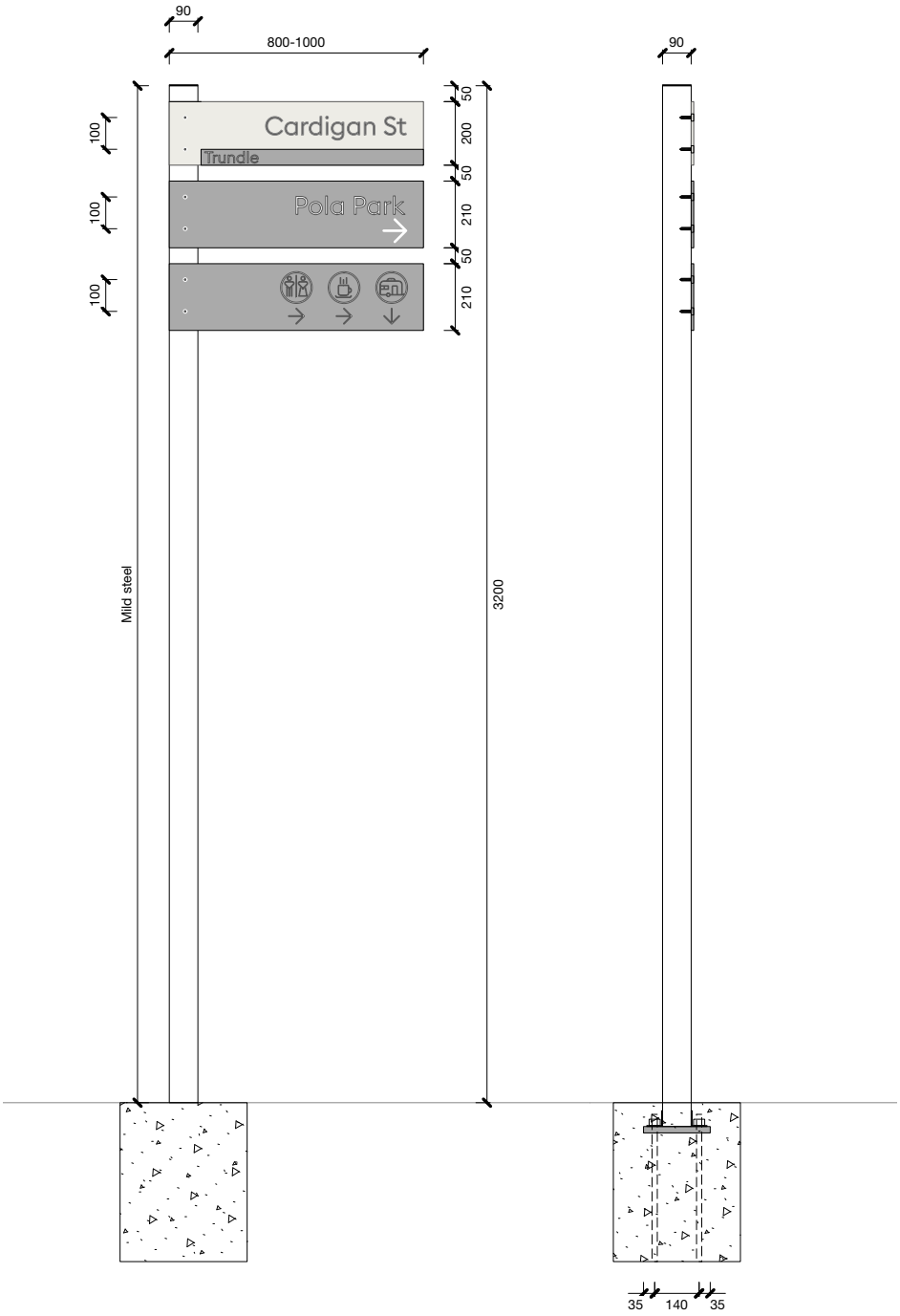
Section 1:20

5.6

Street Signage

S

Dimensions



Front Elevation 1:20
Overall & Panel Dimensions

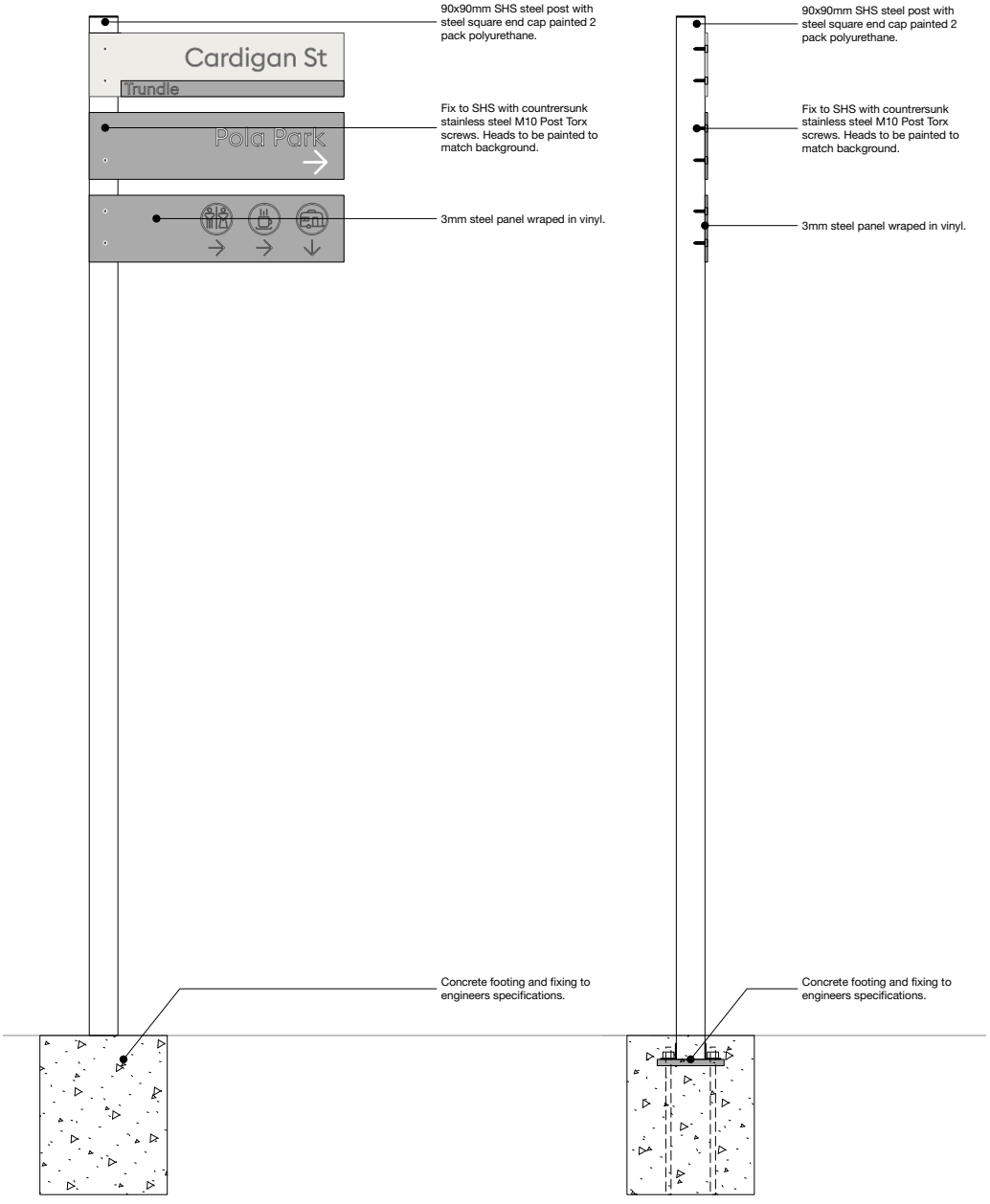
Side Section 1:20
Side Overall Dimensions

5.6

Street Signage

S

Annotations



Front Elevation 1:20

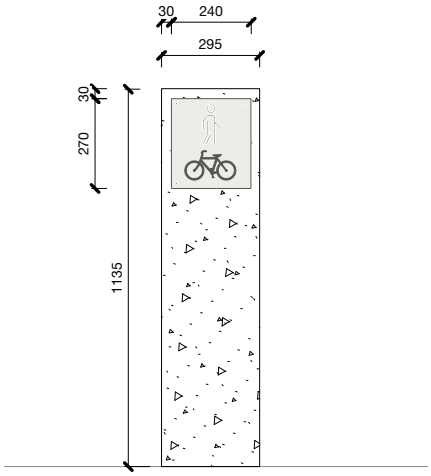
Side Section 1:20

5.7

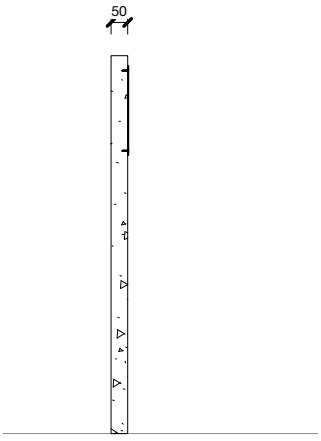
Walkway & Cycleway Signage

W

Dimensions



Front Elevation 1:20
Overall & Panel Dimensions



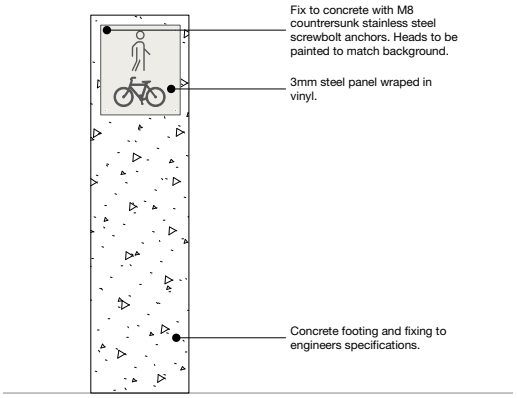
Section 1:20
Side Overall Dimensions

5.7

Walkway & Cycleway Signage

W

Annotations



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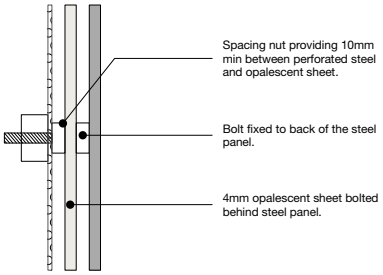
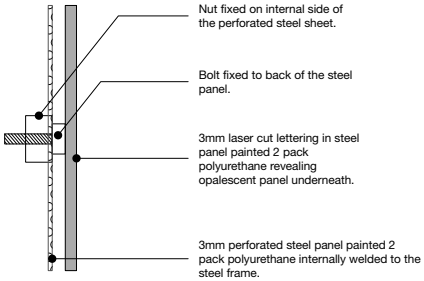
5.8
Fixing Detail



Town Entry Signage Fixing Detail
Section 1:5



Typical Fixing Detail
Section 1:5

22 JULY 2024

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

planning proposal

Bogan Gate Explosives Reserve

PARKES SHIRE COUNCIL

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EXECUTIVE SUMMARY

Currajong has been engaged by Solar Mining Services to prepare a Planning Proposal to permit heavy industries on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate.

Solar Mining Services lease buildings from Lexa Enterprises Pty Ltd towards the central portion of Lot 2 DP 1064474 for the operation of an Ammonium Nitrate Emulsion Facility. Also leasing space on Lot 2 DP 1064474 is Johnex Pty Ltd for explosives manufacturing and storage, Howards and Sons for fireworks storage. Lexa Enterprises also has several other agreements with other parties for use of buildings located at the former army camp complex for non-explosives purposes.

The Solar Mining Services Ammonium Nitrate Emulsion Facility is fully operational in accordance with Development Consent No. DA2020/0073 granted by Parkes Shire Council on 18 November 2020 and a Manufacture Explosives Licence No. XMNF200034 issued by WorkSafe NSW on 19 January 2023.

This Planning Proposal has been prepared to facilitate the processing of a new Development Application that has been prepared by Currajong for an increase in annual production of Ammonium Nitrate Emulsion at the Solar Mining Services facility from 960 tonnes per annum to 20,000 tonnes per annum.

On 18 April 2024 Solar Mining Services and Parkes Shire Council staff met to agree on the process for the finalisation of the Development Application for the proposed alterations and additions to the Solar Mining Services Ammonium Nitrate Emulsion Facility. At this meeting it was agreed that Currajong would prepare a Planning Proposal to permit heavy industries on Lot 2 DP 1064474 under the Parkes Local Environmental Plan 2012.

The Planning Proposal seeks to amend the Parkes Local Environmental Plan 2012 by inserting Item 3 in Schedule 1 Additional Permitted Uses, as follows:

> (3) Development for the purposes of heavy industries is permitted on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate with development consent.

The subject land has been used for heavy industry type activities since WWII when the Australian Defence Forces established the Bogan Gate Explosives Reserve and Army Camp. Since the sale of Lot 2 DP 1064474 in 2004, the site has been used Johnex Pty Ltd for explosives manufacturing and Howards and Sons for fireworks storage. More recently, Solar Mining Services has established an Ammonium Nitrate Emulsion facility at the site.

The Planning Proposal is not seeking to permit new land-uses onto the subject land. Instead, the proposal is aimed at formalising the location of existing heavy industries located on Lot 2 DP 1064474.

The need for the Planning Proposal is a result of the finalisation of a Development Application for an increase in annual production of Ammonium Nitrate Emulsion at the Solar Mining Services facility from 960 tonnes per annum to 20,000 tonnes per annum. To provide greater certainty of the permissibility of the proposed development beyond that proven under existing use rights, Parkes Shire Council has requested Solar Mining Services to submit a Planning Proposal to Council for changes to the Parkes Local Environmental Plan 2012.

A summary of the primary assessment findings of the Planning Proposal is as follows:

- Heavy industries are already established on Lot 2 DP 1064474 in the form of the Johnex Pty Ltd explosives manufacturing and storage facility, Howards and Sons fireworks storage sheds and the Solar Mining Services Ammonium Nitrate Emulsion Facility. Safe separation distances and other safety, operational and environmental controls are in force at the site, as administered by WorkSafe NSW. An Environment Protection Licence is also administered over part of the site in relation to Johnex operations.
- The continued use of the land for heavy industries is not inconsistent with the Central West and Orana Regional Plan 2041 or the Parkes Shire Local Strategic Planning Statement 2020 or any applicable State Environmental Planning Policies or Ministerial Directions.
- Necessary infrastructure and services are already connected to the site.
- Site constraints and opportunities are well understood and regulated on Lot 2 DP 1064474, as per development consent conditions, environment protection licence conditions and explosives licences in force at the site.
- The likely environmental, social and economic impacts of the proposal are acceptable, and positive in the majority.
- The Planning Proposal is not determined to be of significance to State and Federal governments.

The Planning Proposal is presented for assessment by Parkes Shire Council in a form that is consistent with the recommendations of the NSW Department of Planning, Housing and Infrastructure Local Environmental Plan Making Guidelines. It provides the necessary reporting basis for Parkes Shire Council to progress an amendment to the Parkes Local Environmental Plan 2012.

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PLANNING, PROPERTY + PROJECT MANAGEMENT

TABLE OF CONTENTS

1.	**PROJECT INTRODUCTION**	**7**
1.1	Project Overview	7
1.2	Project Background	7
1.3	Structure and Form	8
1.4	Supporting Documentation	9
2.	**THE EXISTING ENVIRONMENT**	**12**
2.1	Location and Title	12
2.2	Land-use	13
2.3	Surrounding Land-use	14
2.4	Topography, Slope and Landform	15
2.5	Water Resources	16
2.6	Biodiversity	17
2.7	Heritage	18
2.8	Access, Transport and Traffic	19
2.9	Environmental Hazards	20
2.10	Operational Hazards	21
2.11	Infrastructure and Services	22
3.	**EXISTING PLANNING FRAMEWORK**	**23**
3.1	Parkes Local Environmental Plan 2012	23
3.1	Parkes Shire Development Control Plan 2021	24
3.2	Parkes Section 94A Contributions 2016	24
4.	**DESCRIPTION OF THE PROPOSAL**	**25**
4.1	Description of the Development Proposal	25
4.2	Description of the Planning Proposal	25
5.	**STRATEGIC ALIGNMENT**	**26**
6.	**PLANNING PROPOSAL - PART 1**	**27**
6.1	Objectives and Intended Outcomes	27
7.	**PLANNING PROPOSAL - PART 2**	**28**
7.1	Explanation of Provisions	28
8.	**PLANNING PROPOSAL - PART 3**	**29**
8.1	Need for the Planning Proposal	29
8.2	Relationship to the strategic planning framework	31
8.3	Environmental, Social and Economic Impact	41
8.4	Infrastructure (Local, State and Commonwealth)	45
8.5	State and Commonwealth Interests	46
9.	**PLANNING PROPOSAL - PART 4**	**47**
9.1	Project Mapping	47
10.	**PLANNING PROPOSAL - PART 5**	**48**
10.1	Consultation - Pre-lodgement Stage	48
10.2	Community Consultation	48
11.	**PLANNING PROPOSAL - PART 6**	**49**
11.1	Project Timeline	49

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PLANNING, PROPERTY + PROJECT MANAGEMENT

TABLE OF SUPPORTING INFORMATION

SCHEDULE OF FIGURES

Figure 1 - Site Location Map 12
Figure 2 - Land-use Activities Map 13
Figure 3 - Land-use Map 14
Figure 4 - Topography and Landform Map 15
Figure 5 - Water Resources and Features Map 16
Figure 6 - Land-use Map 16
Figure 7 - Biodiversity Resources Map 17
Figure 8 - Heritage Map 18
Figure 9 - Roads Map 19
Figure 10 - Environmental Hazards Map 20
Figure 11 - Operational Hazards Map 21
Figure 12 - Infrastructure and Servicing Map 22
Figure 13 - Parkes LEP 2012 Existing Zoning Map 23
Figure 14 - Project Timeline 50

SCHEDULE OF TABLES

Table 1 - Format of the document 8
Table 2 - Planning Proposal Assessment - Regional Plan 31
Table 3 - Planning Proposal Assessment - Parkes LSPS 32
Table 4 - Preliminary SEPP Assessment 34
Table 5 - SIA Guideline - Social Impact Assessment 42

SCHEDULE OF APPENDICES

Appendix A. BGER Masterplan 52
Appendix B. Parkes Shire Council Existing Use Rights Letter 54
Appendix C. SMS Statement of Environmental Effects 57
Appendix D. Development Consent No. DA2020/0073 64
Appendix E. Madison Marcus Existing Use Rights Letter 74
Appendix F. Environmental Assessment Requirements (EAR 1753), issued by the NSW DPE 99
Appendix G. Arndell Surveying Detail Survey 123
Appendix H. Greenice Process and Risk Report 125
Appendix I. GHD Traffic Impact Assessment 153
Appendix J. Currajong Preliminary Biodiversity Assessment and Scoping Report 217
Appendix K. Acoustik Noise and Vibration Impact Assessment 255
Appendix L. SMS Bushfire Management Plan, prepared by SMS 278
Appendix M. Envirowest Preliminary Contamination Investigation 299
Appendix N. Water Quality Management Plan, prepared by SMS 345

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

01

PROJECT INTRODUCTION

1.1 Project Overview

Currajong has been engaged by Solar Mining Services Pty Ltd (SMS) to prepare a Planning Proposal relating to the Bogan Gate Explosives Reserve (BGER) operating on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate.

The Planning Proposal seeks to amend the Parkes Local Environmental Plan (LEP) 2012 by inserting Item 3 in Schedule 1 Additional Permitted Uses, as follows:

> (3) Development for the purposes of heavy industries is permitted on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate with development consent.

The Planning Proposal has been prepared in accordance with the NSW Planning, Housing and Infrastructure (DPHI) Local Environmental Plan Guideline, dated August 2023.

The Planning Proposal aims to rationalise the location of existing heavy industries located at the BGER, which includes Johnex Pty Ltd (for explosives manufacturing and storage), Howards and Sons (fireworks storage) and SMS for Ammonium Nitrate Emulsion (ANE) manufacturing and storage. These businesses are some of the largest employers in the Bogan Gate district and provide vital explosives and explosive precursor products to the mining, quarrying and civil engineering sectors in NSW.

The proposed changes to the Parkes LEP 2012 will provide greater certainty of the permissibility of proposed new development at the BGER beyond that proven under existing use rights. It will also provide existing businesses operating on Lot 2 DP 1064474 with greater confidence on the long term-viability of the BGER for their business operations and future development plans. It will also provide surrounding landholders and residents at Bogan Gate with more information about existing operations being conducted at the site.

1.2 Project Background

Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate was first used as an explosive storage and testing facility by the Australian Military during WWII and subsequently acquired by the Commonwealth of Australia for defence purposes on 9 June 1960.

A Masterplan and Masterplan User Requirement Report was prepared by the Australian Military Forces in August 1962. The Masterplan User Requirement Report stated the explosives reserve was designed to store and process between 12,000 and 22,000 tons of explosives, with a range of activities described as 'inspection, repair, modification, maintenance and destruction of ammunition stocks as directed by AHQ.'

The explosives reserve continued to be owned by the Commonwealth until 8 April 2004 when Lots 2 and 4 DP 1064474 were transferred to Timber Creek Holdings Pty Ltd. At this time the improvements on the subject land included the old Bogan Gate Army Camp (comprising of communal army barracks, free-standing dwellings, depot and storage sheds, mess hall and other administration / community style facilities) as well as multiple explosives storage sheds with earthen mounds, roads and drainage infrastructure.

From 2004 onwards, explosives storage and manufacturing was conducted from the existing buildings located on Lots 2 and 4 DP 1064474, including leases to Nowra Brickworks NSW Pty Ltd, Yallawadgera (T/A Bogan Gate Explosives Reserve), Johnex Explosives Pty Ltd and Howards and Sons Pty Ltd and more recently SMS.

On 9 February 2022 Timber Creek Pty Ltd transferred Lot 2 DP 1064474 to the current owner, Lexa Enterprises Pty Ltd. Lexa Enterprises Pty Ltd rents exclusively to the BGER who have granted various leases for existing land-use activities on the site, including a lease to Johnex for explosives manufacturing and storage operations, Howards and Sons for explosives storage and more recently a lease to SMS for an ANE facility.

The SMS ANE Facility is established on Lot 2 DP 1064474 in accordance with Development Consent No. DA2020/0073 granted on 18 November 2022. A Manufacture Explosives Licence No. XMNF200034 has also been granted by SafeWork NSW on 19 January 2023. The Pro Cert Group issued an Occupation Certificate for the SMS ANE Facility, dated 7 December 2022. The facility is fully functional and has commenced manufacturing and storage of limited supplies of ANE.

In August 2023, SMS submitted Pre-DA documentation to Parkes Shire Council seeking feedback in relation to a draft Environmental Impact Statement (EIS) proposing an increase in production of ANE at their SMS ANE Facility up to 20,000 tonnes per annum. In this documentation was written advice generated from Maddison Marcus dated 1 November 2022 that established the use of Lot 2 DP 1064474 for explosives manufacturing and storage was a lawful existing use under Section 109(1) of the Environmental Planning and Assessment Act (EP&A Act) 1979.

On 18 April 2024, SMS and Parkes Shire Council staff met to agree on the process for the finalisation of the Development Application for the proposed alterations and additions to the SMS ANE Facility. At this meeting it was agreed that Currajong would prepare a Planning Proposal to permit heavy industries on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate under the Parkes LEP 2012.

1.3 Structure and Form

The Planning Proposal has been prepared in accordance with the NSW DPHI Local Environmental Plan Guideline, dated August 2023.

Section 2 of the DPHI Local Environmental Plan Guideline includes detailed guidance on what content needs to be included in a Planning Proposal.

Table 1 includes a checklist of all of the information required by the DPHI Local Environmental Plan Guideline and a reference on where the information can be found within this Planning Proposal. The Guideline requires that the Planning Proposal must be prepared to a high standard and complying generally with the requirements detailed in Table 1.

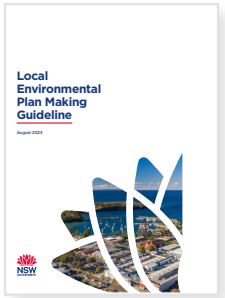


Table 1 - Format of the document

Section No	Section Heading	Description
Section 1	Project Introduction	Section 1 includes introductory information relating to the project, including a project overview and relevant background information.
Section 2	The Existing Environment	Section 2 includes a detailed description of the project, including location, land title and land-use descriptions as well as an assessment of the existing environmental conditions applying to the land.
Section 3	Existing Planning Framework	Section 3 includes a description of the existing planning framework applying to the subject land including provisions under the Parkes LEP 2012.
Section 4	Description of the Proposal	Section 4 includes a detailed description of the existing heavy industries operating at the BGER. This section also describes the scope of the proposed changes to the Parkes LEP 2012.
Section 5	Strategic Alignment	Section 5 includes detailed information describing how the proposed development aligns with the strategic planning framework applying to the subject land.
Section 6	Planning Proposal - Part 1	Section 6 addresses the Part 1 matters for consideration under the DPHI Local Environmental Plan Guideline.
Section 7	Planning Proposal - Part 2	Section 7 addresses the Part 2 matters for consideration under the DPHI Local Environmental Plan Guideline.
Section 8	Planning Proposal - Part 3	Section 8 addresses the Part 3 matters for consideration under the DPHI Local Environmental Plan Guideline.
Section 9	Planning Proposal - Part 4	Section 9 addresses the Part 4 matters for consideration under the DPHI Local Environmental Plan Guideline.
Section 10	Planning Proposal - Part 5	Section 10 addresses the Part 5 matters for consideration under the DPHI Local Environmental Plan Guideline.
Section 11	Planning Proposal - Part 6	Section 10 addresses the Part 6 matters for consideration under the DPHI Local Environmental Plan Guideline.

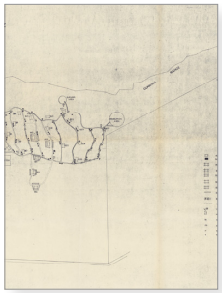
1.4 Supporting Documentation

The Planning Proposal is supported by a number of specialist reports, studies and design details that have been developed to support the DA for proposed alterations and additions to the SMS ANE Facility. These documents have been included as Appendices to the Planning Proposal as a means of demonstrating that existing heavy industries already operate at the BGER and the site is capable of accommodating heavy industry operations. A description of these documents is included as follows:

Appendix A

Bogan Gate Masterplan and User Requirement Report

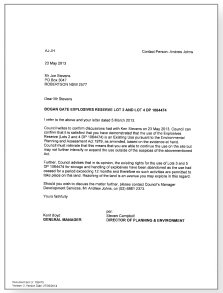
A Masterplan was prepared by the Australian Military Forces in August 1962. A Masterplan User Requirement Report was also prepared which stated the explosives reserve was designed to store and process between 12,000 and 22,000 tons of explosives, with a range of activities described as 'inspection, repair, modification, maintenance and destruction of ammunition stocks as directed by AHQ.'



Appendix B

Parkes Shire Council Existing Use Rights Letter

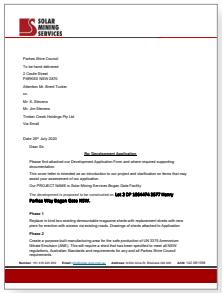
Parkes Shire Council provided a letter on 23 May 2013 that advised it was satisfied that the existing use of the BGER on Lot 2 DP 1064474 is an existing use pursuant to the EP&A Act 1979.



Appendix C

SMS Statement of Environmental Effects

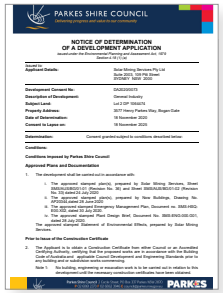
A Statement of Environmental Effects for the original SMS ANE Facility was approved by Parkes Shire Council in accordance with Development Consent No. DA2020/0073 on dated 18 November 2020, along with an SMS Design Brief and other DA documentation.



Appendix D

Development Consent No. DA2020/0073

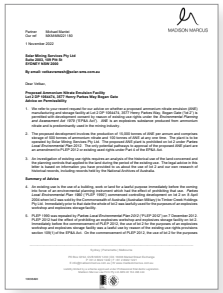
DA2020/0073 for the SMS ANE Facility was approved by Parkes Shire Council on dated 18 November 2020 for the manufacturing of 960 tonnes of ANE and associated storage of ANE and other chemicals.



Appendix E

Madison Marcus Existing Use Rights Letter

Environmental Law Specialists Madison Marcus provided a letter to SMS dated 1 November 2022 that advised of their research / investigation of the BGER and that, in their opinion, the site has existing use rights as defined under the EP&A Act 1979 and the proposed alterations and additions to the SMS ANE Facility is permitted with development consent under Part 4 of the Act.



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Appendix F

Environmental Assessment Requirements (EAR 1753), issued by the NSW DPE, dated 24 January 2023

On 24 January 2023 DPHI provided their Environmental Assessment Requirements (EAR 1753) for proposed alterations and additions to the SMS ANE Facility on Lot 2 DP 1064474. The SEARs are included in the Planning Proposal as they provide an indication of the scope of investigations required for new developments at the BGER.

Appendix G

Arndell Surveying Detail Survey

A Site Detail and Contour Survey has been completed by Arndell Surveyors, dated 15 August 2023 that shows the location of existing features of the natural and built environment at the BGER.

Appendix H

Greenice Process and Risk Report

A process and risk at the SMS ANE Facility has been prepared by Greenice Pty Ltd, dated 13 September 2023. The report has been included in the Planning Proposal as it provides an indication of the suitability of the BGER for heavy industry operations, including proposed alterations and additions to the SMS ANE Facility.

Appendix I

GHD Traffic Impact Assessment

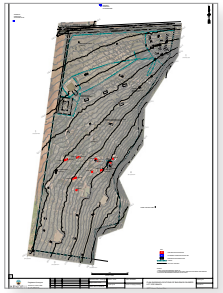
A TIA prepared by GHD on 16 August 2023 for the proposed alterations and additions to the SMS ANE Facility has been included in the Planning Proposal to provide details on traffic conditions at the BGER and the suitability of the site for continued heavy industry land-use. The TIA findings have been noted by TfNSW and Parkes Shire Council as part of Pre-DA consultation.

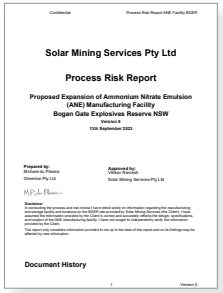
Appendix J

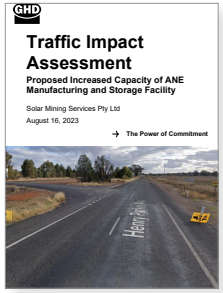
Currajong Preliminary Biodiversity Assessment and Scoping Report 24 February 2023

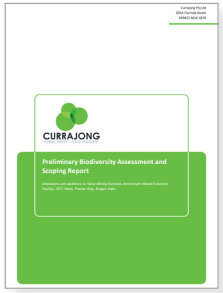
The PBASR prepared by Curraong has been included in the Planning Proposal to describe flora and fauna conditions at the BGER and the suitability of the site for continued heavy industry land-use.











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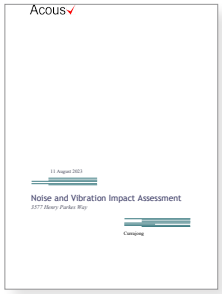
Appendix K

Acoustick Noise and Vibration Impact Assessment, prepared by Acoustik, dated 10 August 2023

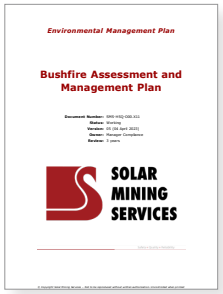
A Noise and Vibration assessment prepared by Acoustik, dated 10 August 2023 has been included int eh Planning Proposal showing noise conditions in and around the BGER and the buffer distances provided between existing heavy industries and nearby sensitive land-use. Technical findings of assessment work demonstrates compliance with the relevant noise criteria established under the Protection of the Environment Operations Act 1997.



Appendix L

SMS Bushfire Management Plan, prepared by SMS, dated 4 April 2023

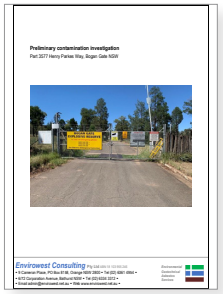
The SMS Bushfire Management Plan, dated 4 April 2023 is included in the Planning Proposal to show existing conditions and potential hazard areas at the SMS ANE Facility and wider BGER. NSW RFS and other emergency responders have reviewed the plan and are generally accepting of emergency response procedures in the plan.



Appendix M

Envirowest Preliminary Contamination Investigation

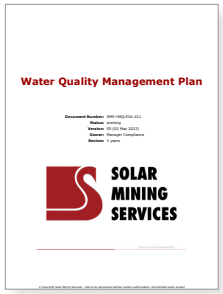
A Preliminary Contamination Investigation was carried out by Envirowest, dated 4 February 2021 that identified no evidence of contamination at the SMS ANE Facility. Whilst not an exhaustive study of the whole of the BGER that report provides information about past use and the recommendations for alterations and additions to existing heavy industry operations at the BGER, with the site generally being regarded as suitable for continued heavy industry use.



Appendix N

Water Quality Management Plan, prepared by SMS, dated 2 May 2023

The SMS Water Quality Management Plan dated 2 May 2023 has been included to provide extra detail on stormwater management at the BGER, which is considered to be robust and suitable for heavy industry operations.



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02

THE EXISTING ENVIRONMENT

2.1 Location and Title

The land which is the subject of this Planning Proposal is comprised of Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate.

The site is located approximately 500m east of Bogan Gate and approximately 35km west of Parkes.

The total area of Lot 2 DP 1064474 is calculated to be approximately 227 hectares.

Figure 1 shows the site and it's location within the Parkes Local Government Area.

Figure 1 - Site Location Map



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2.2 Land-use

Lot 2 DP 1064474 was used by the Australian Military as an explosive storage and testing facility during WWII. The site was formerly acquired by the Commonwealth of Australia for defence purposes on 9 June 1960. A Masterplan and Masterplan User Requirement Report was prepared by the Australian Military Forces in August 1962.

The explosives reserve continued to be owned by the Commonwealth until 8 April 2004 when Lots 2 and 4 DP 1064474 were transferred to Timber Creek Holdings Pty Ltd. At this time the improvements on the subject land included the old Bogan Gate Army Camp (comprising of communal army barracks, free-standing dwellings, depot and storage sheds, mess hall and other administration / community style facilities) as well as multiple explosives storage sheds with earthen mounds, roads and drainage infrastructure.

From 2004 onwards, explosives storage and manufacturing was conducted from the existing buildings located on Lot 2 DP 1064474. Current land-uses on the site are as follows:

- Johnex - has a manufacturing and storage plant located on the central part Lot 2 DP 1064474. The Johnex facility is involved in the manufacture and storage of ANFO, packaged explosives, ANE and other high explosives and initiating systems.
- Howards and Sons - uses explosives storage buildings located towards the southern part of Lot 2 DP 1064474, with fireworks stored in several sheds.
- SMS ANE Facility - a relatively new facility constructed in accordance with DA2020/0073 located towards the centre of Lot 2 DP 1064474.
- Rental Accommodation - several dwellings and sheds associated with the old Bogan Gate Army Camp are leased to private parties.

Figure 2 shows the land-use activities currently being undertaken on Lot 2 DP 1064474.

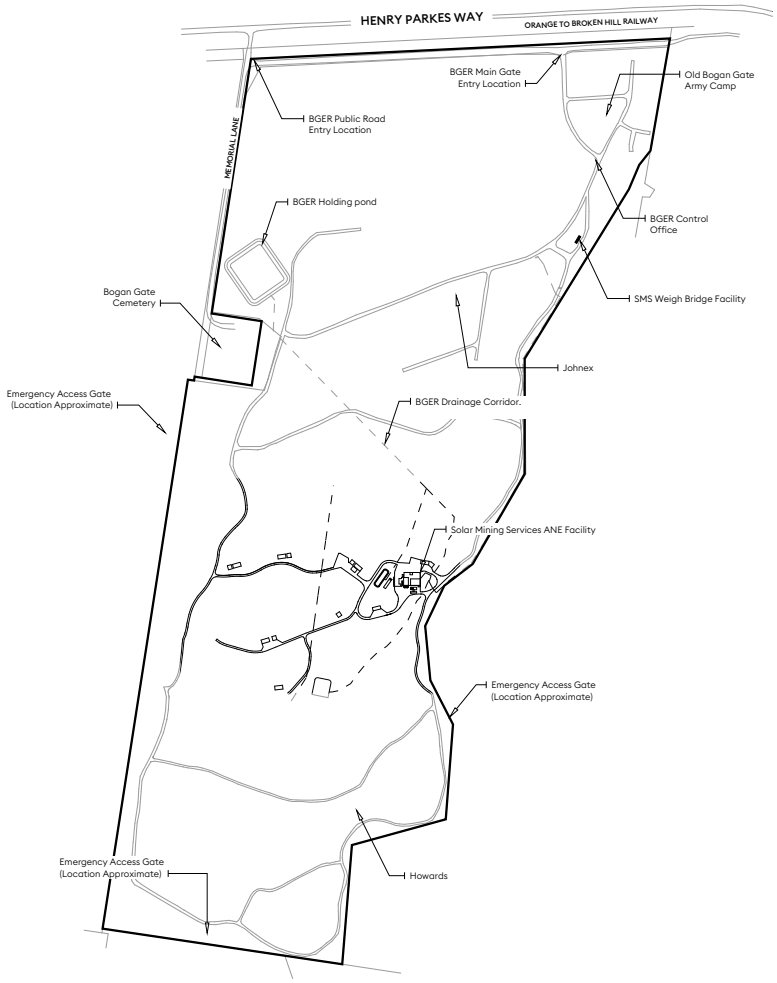

Figure 2 - Land-use Activities Map

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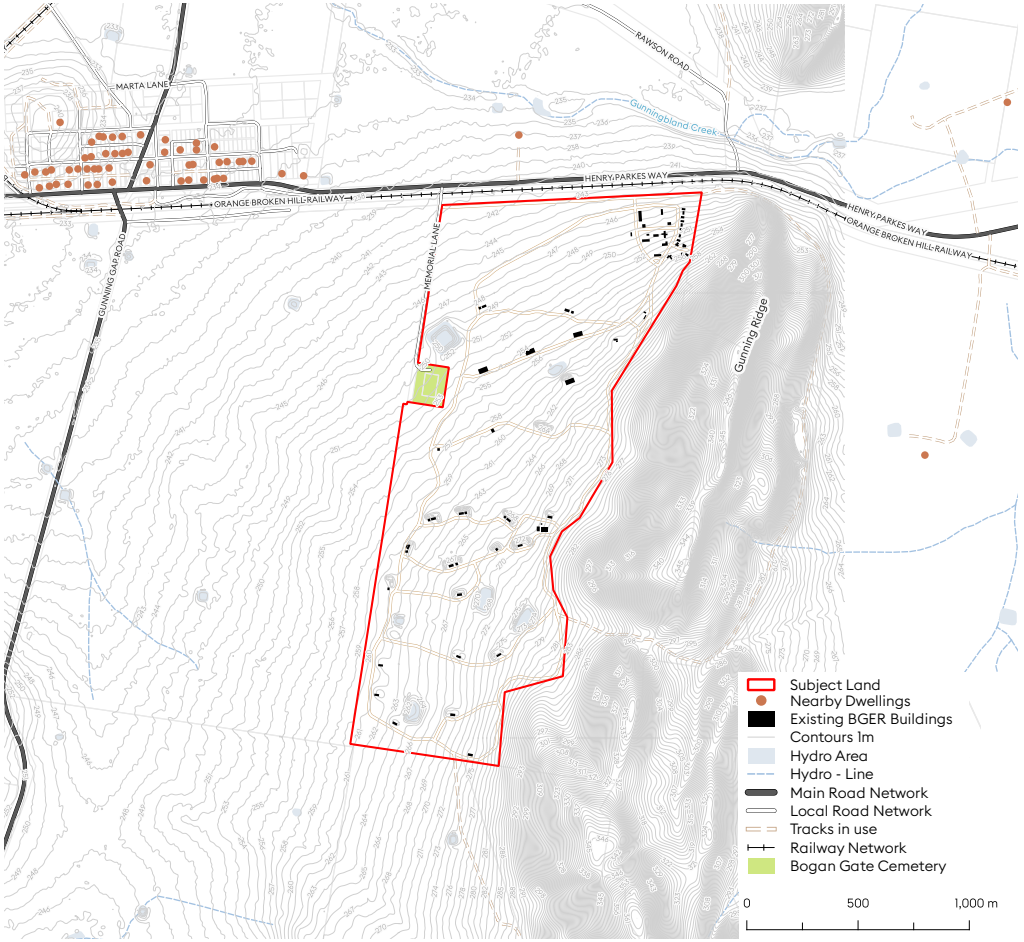
2.3 Surrounding Land-use

An analysis of the surrounding environment has been completed and the following observations are made:

- Lot 2 DP 1064474 site is located on the eastern edge of Bogan Gate.
- The site has frontage to the Henry Parkes Way and Memorial Lane.
- The Bogan Gate Cemetery is located on the western boundary of Lot 2 DP 1064474.
- The land surrounding Lot 2 DP 1064474 is zoned RU1 Primary Production and used for broad-acre agriculture purposes, with ancillary isolated dwellings. Vegetation on farms has been modified and consists mostly of vegetation corridors and isolated paddock trees with a grassy / weedy / cropped ground-cover. The nearest dwelling is located approximately 250m north of Lot 2 DP 1064474 on the northern side of the Henry Parkes Way.
- Other notable land-use activities in the area includes the Gunning Ridge to the east, which holds the largest remnant of native vegetation in the locality.

Figure 3 shows the land-use pattern within the surrounding area.

Figure 3 - Land-use Map



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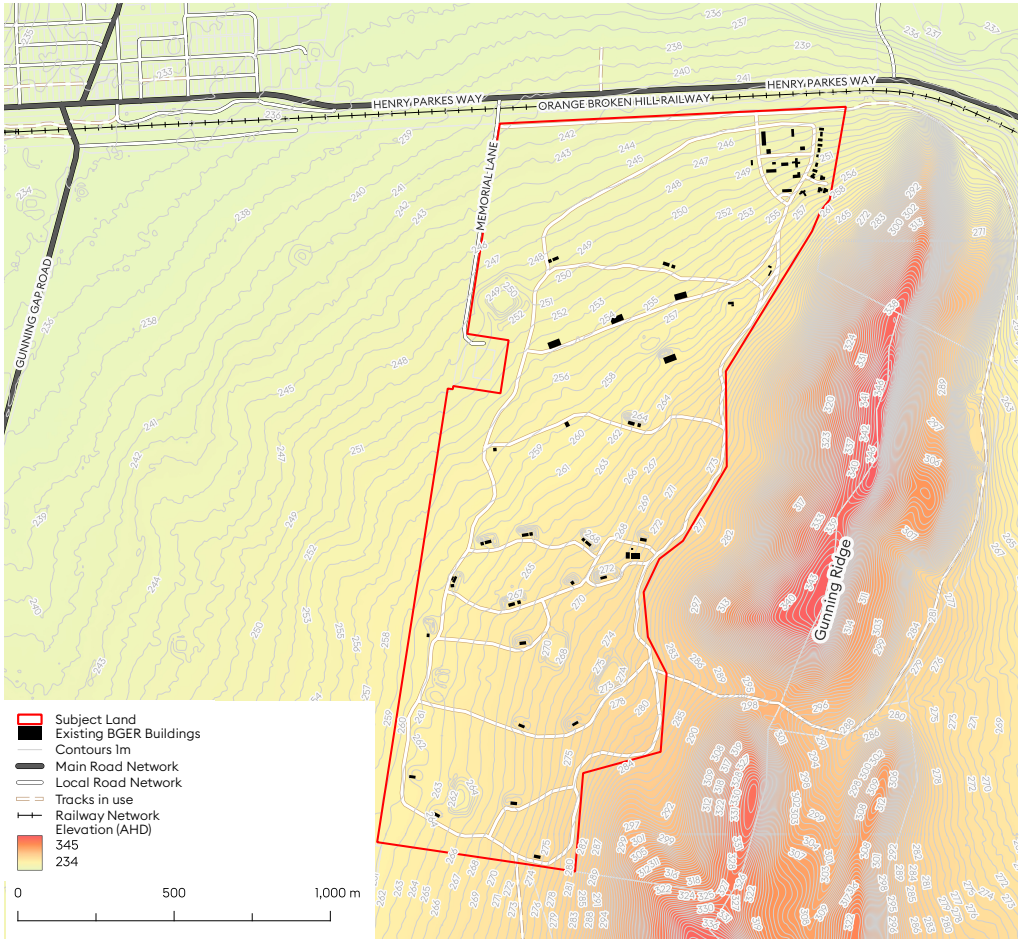
2.4 Topography, Slope and Landform

Lot 2 DP 1064474 is located on the lower slope of the western side of the Gunning Ridge which has an elevation of RL 360, some 120 metres higher than the surrounding landscape around Bogan Gate.

The site forms part of the Jemalong Range and Slopes, with prominent strike ridges of upper Devonian quartz sandstone, with general elevation between 250m to 400m above sea level. Elevated areas have prominent asymmetry with steeper eastern faces of stepped cliffs and narrow benches. Lower colluvial slopes of coalescing alluvial fans on small streams. Thin very stony soils on ridges with abundant currawang (Acacia doratoxylon), red stringybark (Eucalyptus macrorhyncha), red ironbark (Eucalyptus sideroxylon), Dwyer's red gum (Eucalyptus dwyeri) and black cypress pine (Callitris endlicheri).

The site generally has a gentle slope to the west, as shown in Figure 4.

Figure 4 - Topography and Landform Map



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2.5 Water Resources

The subject land is not mapped in the Parkes LEP 2012 as containing vulnerable groundwater resources or being flood affected.

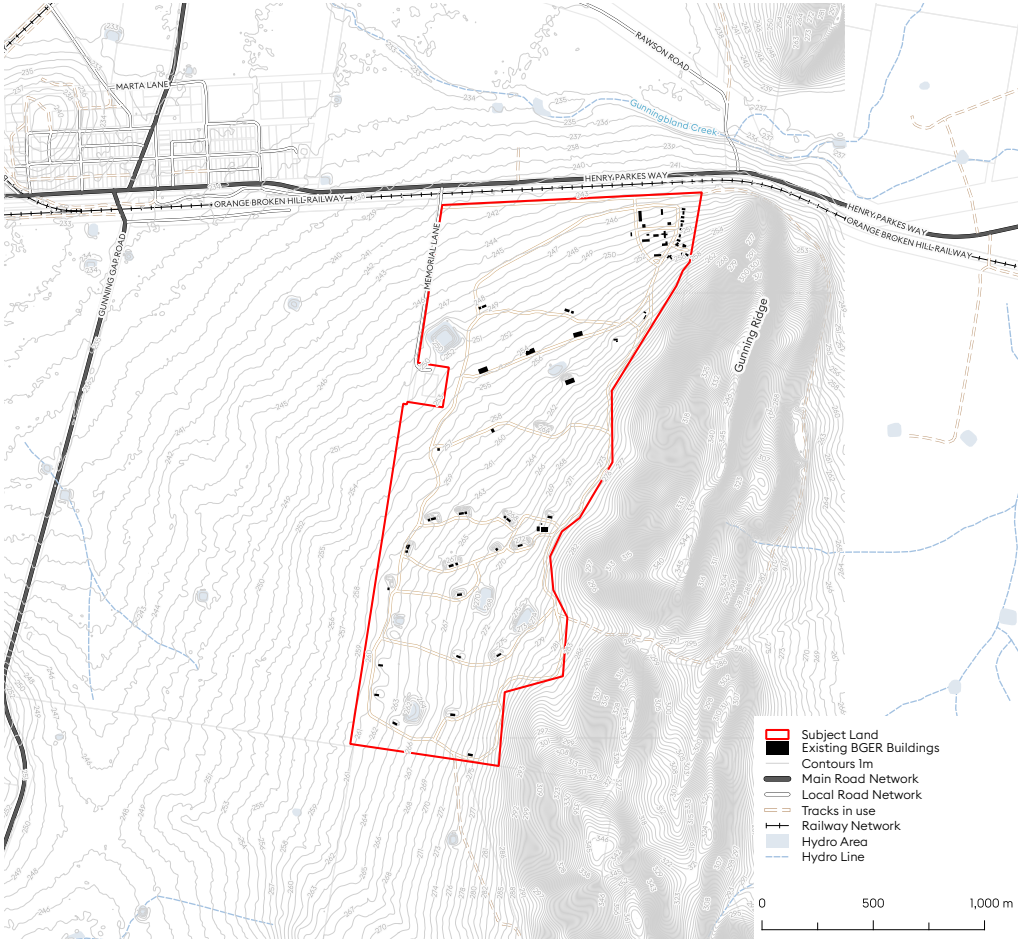
The nearest natural water body is the Gunningbland Creek located approximately 1km north of the BGER. The are no permanent water courses on the land or high value riparian areas / wetlands observed to be located on the land.

A robust system of stormwater management devices is established at the BGER, including road table drains, contour banks, swales and catch dams.

The likelihood of a flood inundating the BGER is low. Water quality impacts are also assessed to be low.

Figure 5 shows the topography and general water course features of the BGER and surrounding land.

Figure 5 - Water Resources and Features Map



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2.6 Biodiversity

The site is largely influenced by historic settlement in and around Bogan Gate and the BGER.

The BGER comprises a number of fixed buildings, roads and drainage improvements. Areas that are cleared of built improvements are generally sown down to exotic grasses, with patches of native and regrowth vegetation generally along the perimeter of the site and along drainage corridors.

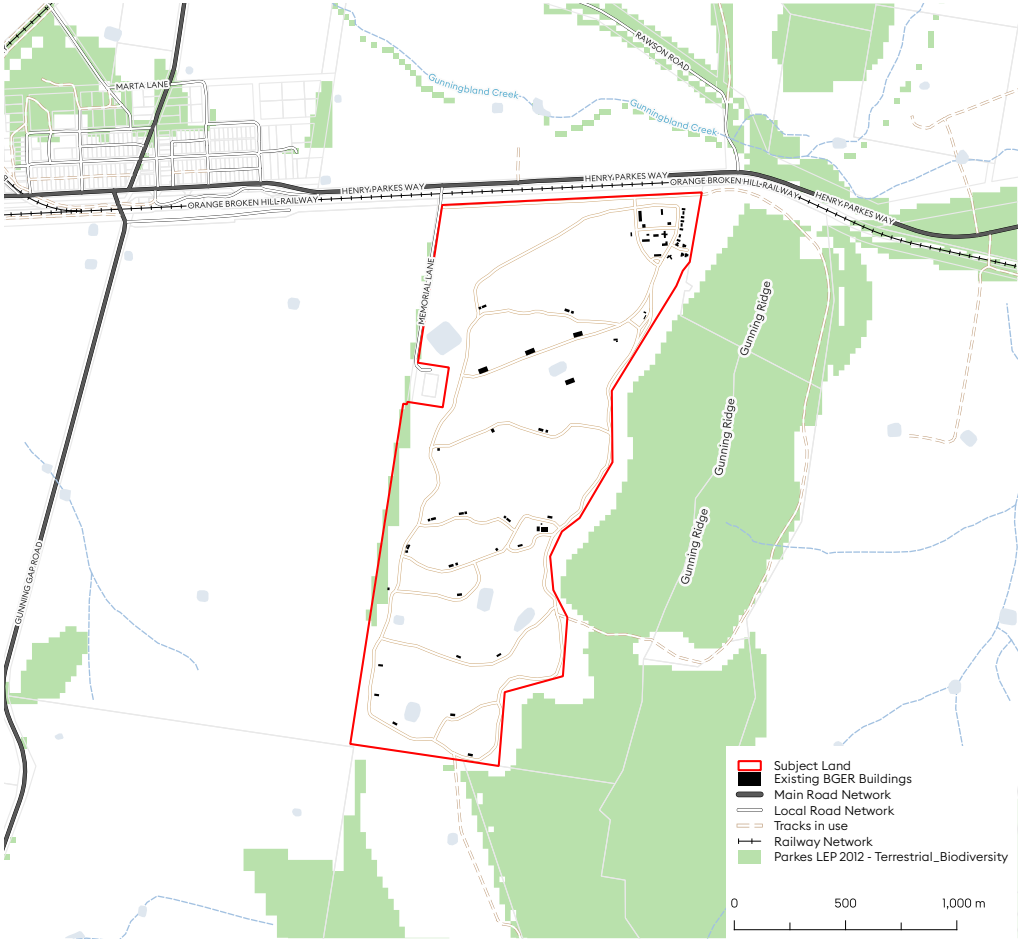
A review of the Parkes LEP 2012 Terrestrial Biodiversity Map confirms a small section of the western perimeter of the site is mapped as biodiversity. This remnant vegetation comprises Inland Grey Box Woodland and Red Ironbark (Eucalyptus sideroxylon) with White Cypress Pine (Callitris columellaris) and Black Cypress Pine (Callitris endlicheri) and a grassy / weedy understorey). The habitat value on Lot 2 DP 1064474 is assessed as low.

The Gunning Ridge to the east of Lot 2 DP 1064474 comprises a large remnant of native vegetation, which is mapped as Terrestrial Biodiversity on Parkes LEP 2012 mapping.

No clearing of native vegetation as defined under Local Land Services Act 2013 (LLS Act 2013) is proposed under this Planning Proposal and there are no significant impacts on threatened species or habitats.

Figure 6 shows the location of native vegetation in and around the subject land.

Figure 6 - Biodiversity Resources Map



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2.7 Heritage

The site is largely influenced by historic settlement in and around Bogan Gate and the BGER.

European Heritage

A review of Schedule 5 of the Parkes LEP 2012 confirms the subject land is not listed as a heritage item. There are no listed heritage items within Bogan Gate or within a close proximity to the BGER.

Built heritage aspects associated with the Australian Military use during and post WWII have been considered. The whole site (collectively) is considered to have historical significance. No building / structure on Lot 2 DP 1064474has been identified as being particularly rare or having significant heritage values.

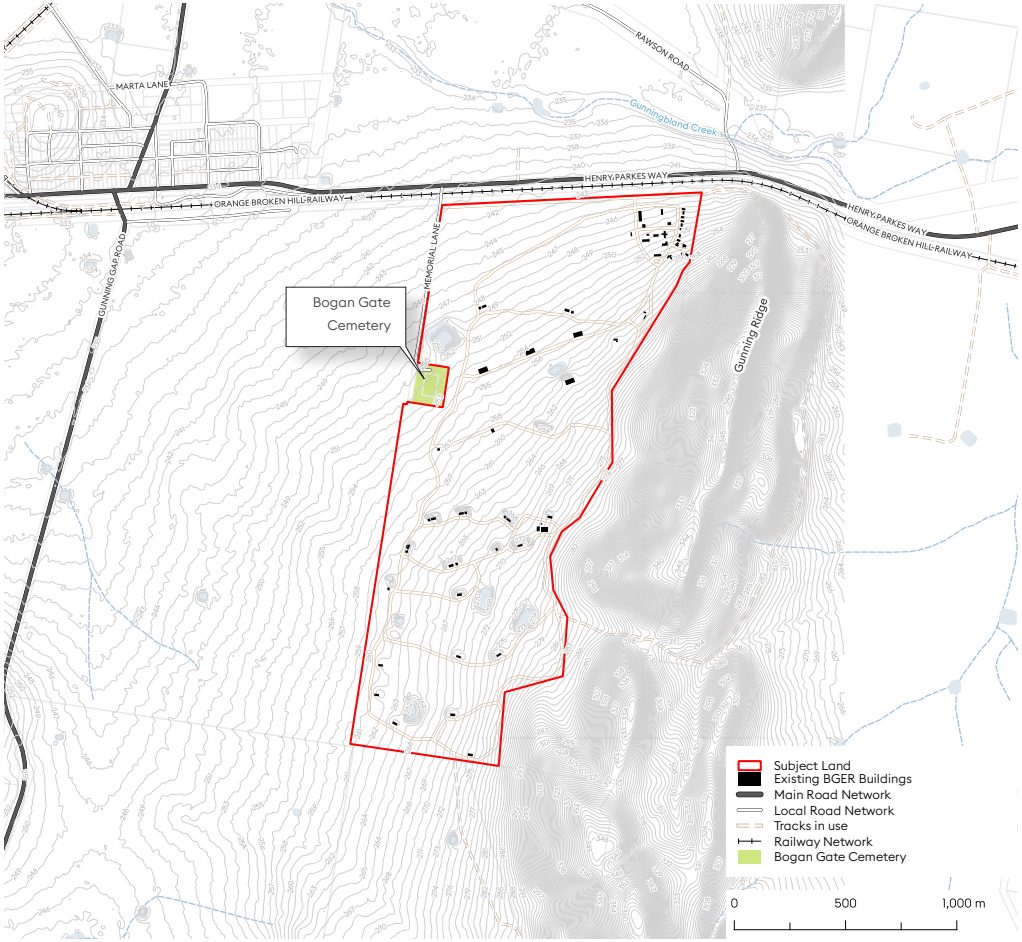
The Bogan Gate Cemetery to the west of the site is identified to be the only site with potential local heritage significance. The continued uses at the BGER are not incompatible with the heritage significance of the Bogan Gate Cemetery.

Aboriginal Heritage

A search of the Aboriginal Heritage Management System (AHIMS) has been completed to determine whether there are any known items, places or relics of Aboriginal cultural heritage significance located on the site, or within 200m of Lot 2 DP 1064474. The results did not identify any Aboriginal sites or places within the search area.

Figure 7 shows the BGER and adjoining Bogan Gate Cemetery, and confirms there are no properties listed under Schedule 5 of the Parkes LEP 2012.

Figure 7 - Heritage Map



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2.8 Access, Transport and Traffic

Vehicular access to the BGER is already provided via internal roads that connect to Memorial Lane and then onto the Henry Parkes Way.

The Orange to Broken Hill Railway is located on the southern side of the Henry Parkes Way, including a level crossing of Memorial Lane with signage.

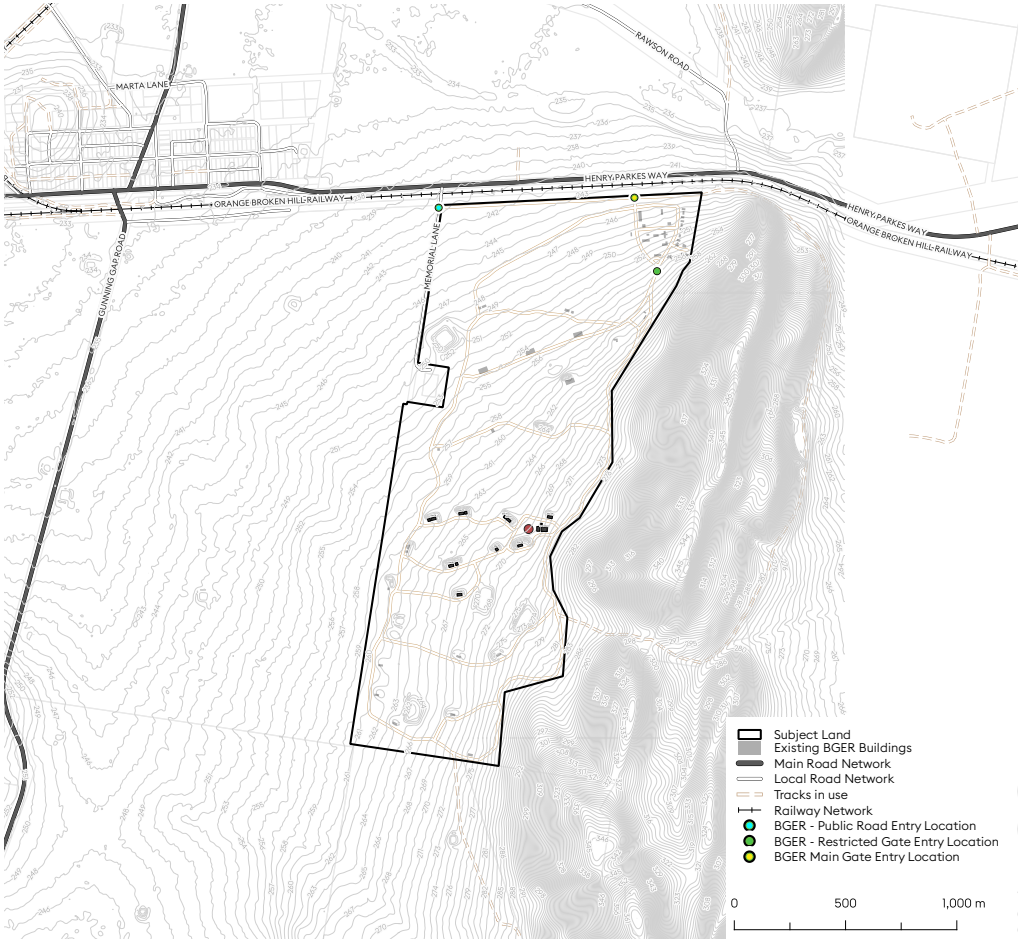
Access to the BGER would continue via Memorial Lane and then onto the Henry Parkes Way. Review of the geometry of the existing intersection of Memorial Lane and the Henry Parkes Way has been undertaken by GHD to determine whether the design vehicles accessing the BGER can be accommodated at the intersection. Swept path analysis confirms that left in and out auxiliary lanes will be required at the intersection to accommodate an A-Double tanker.

A review of the road crash history of the local area does not highlight any specific locations with a significant cluster of crashes that may suggest an inherent safety issue with the intersection of the Henry Parkes Way and Memorial Lane. There have been no crashes on the Henry Parkes Way within 350m of the intersection with Memorial Lane and Henry Parkes Way. There was one crash in 2018 resulting in serious injury at the intersection of Rawson Road and Henry Parkes Way (approximately 1.3km east of the intersection of Memorial Lane and Henry Parkes Way).

There are currently no public transport facilities (bus stops etc) or pedestrian footpaths or cycleways connecting immediately to the subject land.

A map showing the existing road and railway network is included in Figure 8.

Figure 8 - Roads Map



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2.9 Environmental Hazards

Bushfire

The BGER has established emergency procedures and an emergency response plan that must be complied with by Johnex, Howards and SMS. Land along the eastern boundary of Lot 2 DP 1064474 is identified as Bushfire Prone Land. Regular consultation with NSW RFS, Fire and Rescue NSW and other emergency responders is undertaken by the landowner and individual leaseholders at the BGER. SMS has developed a Bushfire Management Plan, dated 4 April 2023 that complies with Chapter 8 of the RFS Guideline, Planning for Bushfire Protection 2019.

Flooding

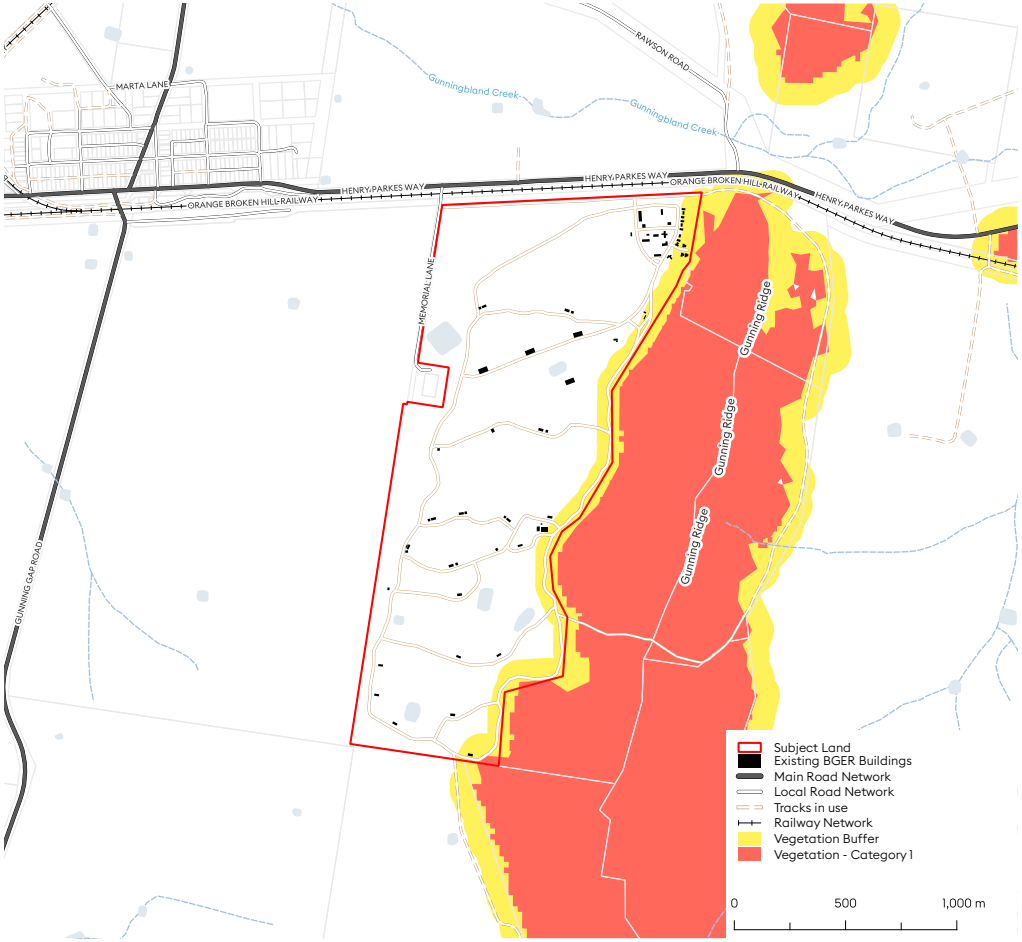
The subject land is not mapped in the Parkes LEP 2012 as being impacted by flooding. The nearest natural water body is the Gunningbland Creek located approximately 1km north of the BGER. A robust system of stormwater management is already established at the BGER, including road table drains, contour banks, swales and catch dams.

Contamination

The subject land does not feature in any database pertaining to the management / regulation of contaminated land. A preliminary contamination investigation was undertaken on part of Lot 2 DP 1064474 by Envirowest, dated 4 February 2021. The Envirowest investigations revealed no evidence of contamination. No physical evidence of contamination is visible from inspection of the site. The site is considered suitable for heavy industry land-use as proposed in the Planning Proposal.

Figure 9 shows the current bushfire prone areas to the east of the BGER, with no other hazards identified in any known database.

Figure 9 - Environmental Hazards Map



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2.10 Operational Hazards

The Work Health and Safety Act (WHS) 2011 and WHS Regulation 2017 provides the framework for the management and handling of hazardous substances and dangerous goods in NSW.

Chapter 9 of the WHS Regulation 2017 prescribes the provisions for major hazard facilities, with Table 15.1 of Schedule 15 detailing the threshold quantities where chemical industry operations are deemed to be major hazard facilities.

The Johnex operations at the BGER are deemed to comprise a major hazards facility under the WHS Regulation 2017. As such, the Johnex site operations by an Explosives Licence administered by WorksSafe NSW under the WHS Act 2011 and an Environment Protection Licence administered by the NSW Environment Protection Authority (EPA) under the POEO Act 1997.

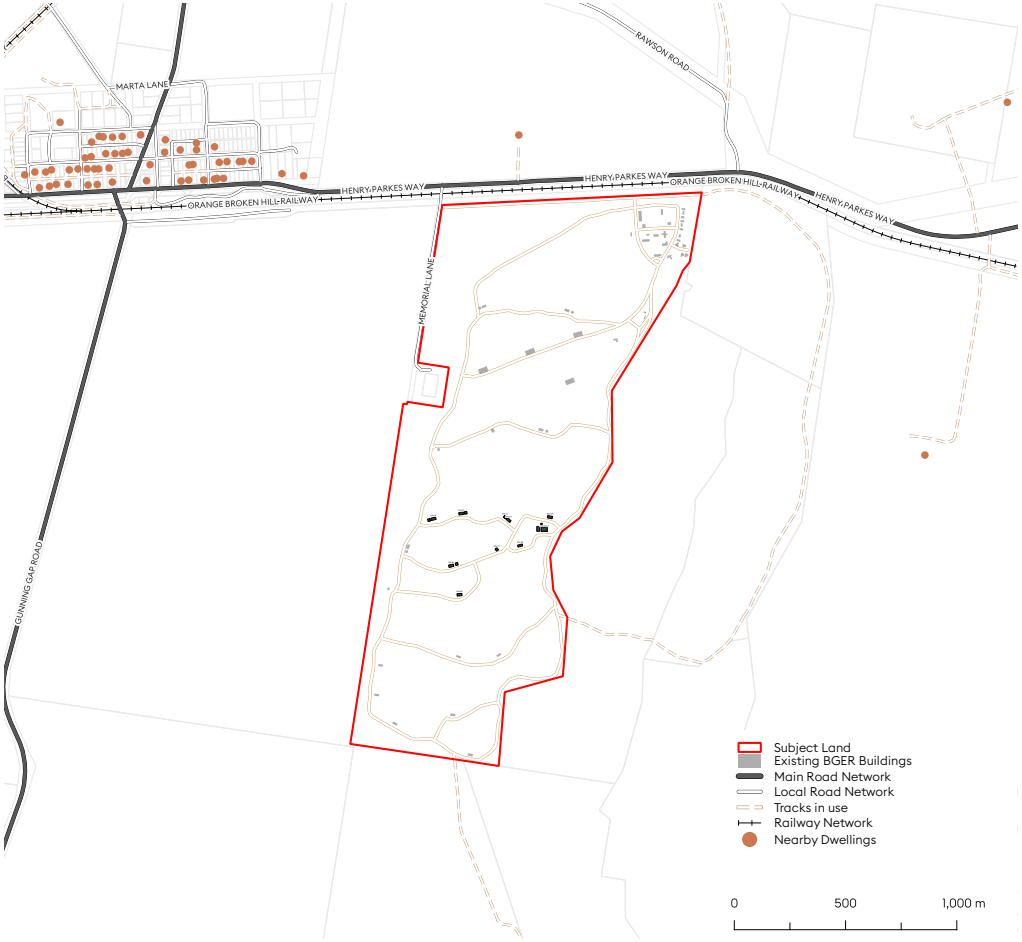
Howards and Sons and SMS operations involve manufacturing / storage of chemicals well below the threshold triggers listed in Table 15.1 of the WHS Regulation 2017 and the POEO Act 1997.

The BGER has established emergency procedures and an emergency response plan that must be complied with by Johnex, Howards and SMS.

Any new development(s) at the site are subject to rigorous risk assessment, such as the Process and Risk Report prepared by Greenice, dated 13 September 2023 for proposed SMS ANE Facility Alterations and Additions.

Figure 10 shows the BGER and nearby sensitive land-uses.

Figure 10 - Operational Hazards Map



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2.11 Infrastructure and Services

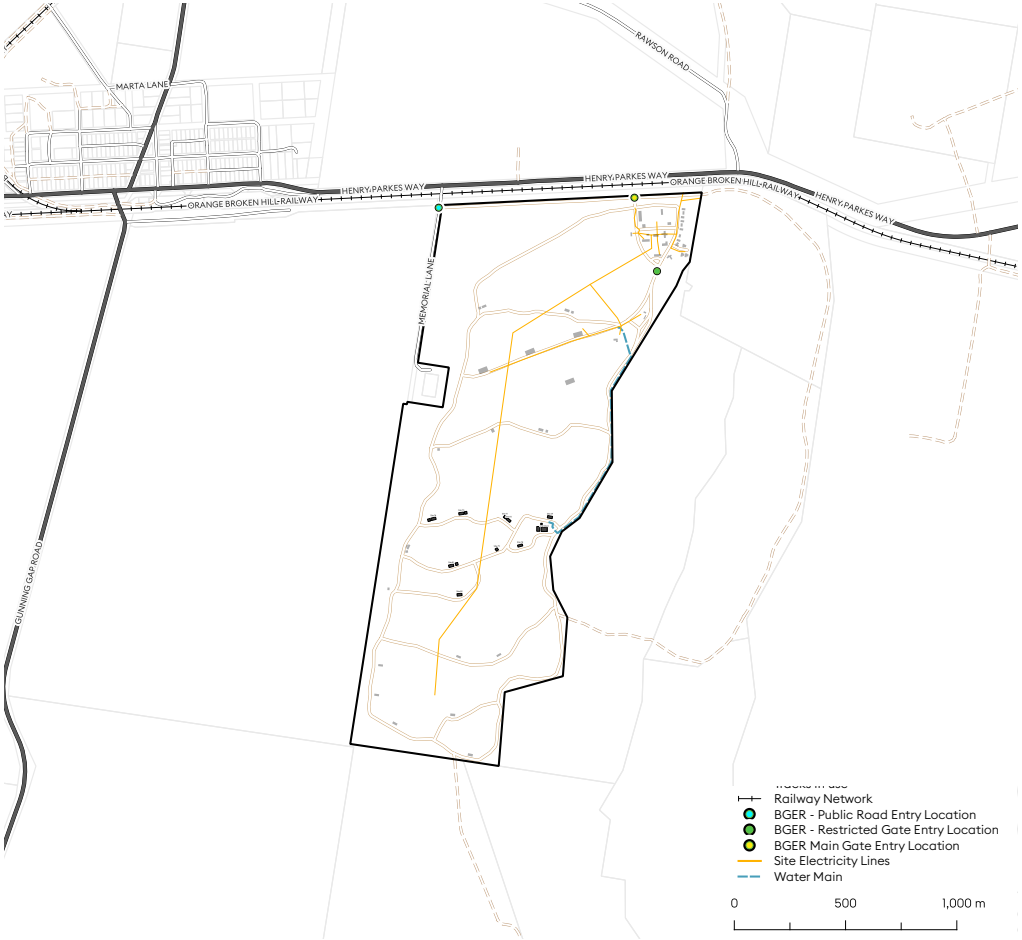
The BGER has an existing connection to the reticulated water supply system servicing Bogan Gate as well as existing road connections, electricity supply and telecommunications. Waste and wastewater management is generally managed at individual premises via on-site wastewater management systems.

No upgrades to utilities is required as part of the Planning Proposal.

To provide for safe movement of long vehicles onto the Henry Parkes Way, the intersection of Memorial Lane and Henry Parkes Way is proposed to be upgraded to provide auxiliary left turn lanes to accommodate the design vehicle for left-in and left-out truck movements only.

Figure 11 shows the location of existing infrastructure available at the BGER.

Figure 11 - Infrastructure and Servicing Map



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03

EXISTING PLANNING FRAMEWORK

3.1 Parkes Local Environmental Plan 2012

The Parkes LEP 2012 is the principal environmental planning instrument applying to the subject land.

The Parkes LEP 2012 provides the statutory framework for planning, development and building within the Parkes Shire through zoning controls, development standards and other planning provisions.

The BGER is currently zoned RU1 Primary Production under the Parkes LEP 2012. Heavy Industries are currently not permitted on land zoned RU1 Primary Production under the Parkes LEP 2012.

Schedule 1 of the Parkes LEP 2012 provides for the inclusion of additional permitted uses on certain prescribed land, notwithstanding Land Use Table prohibitions.

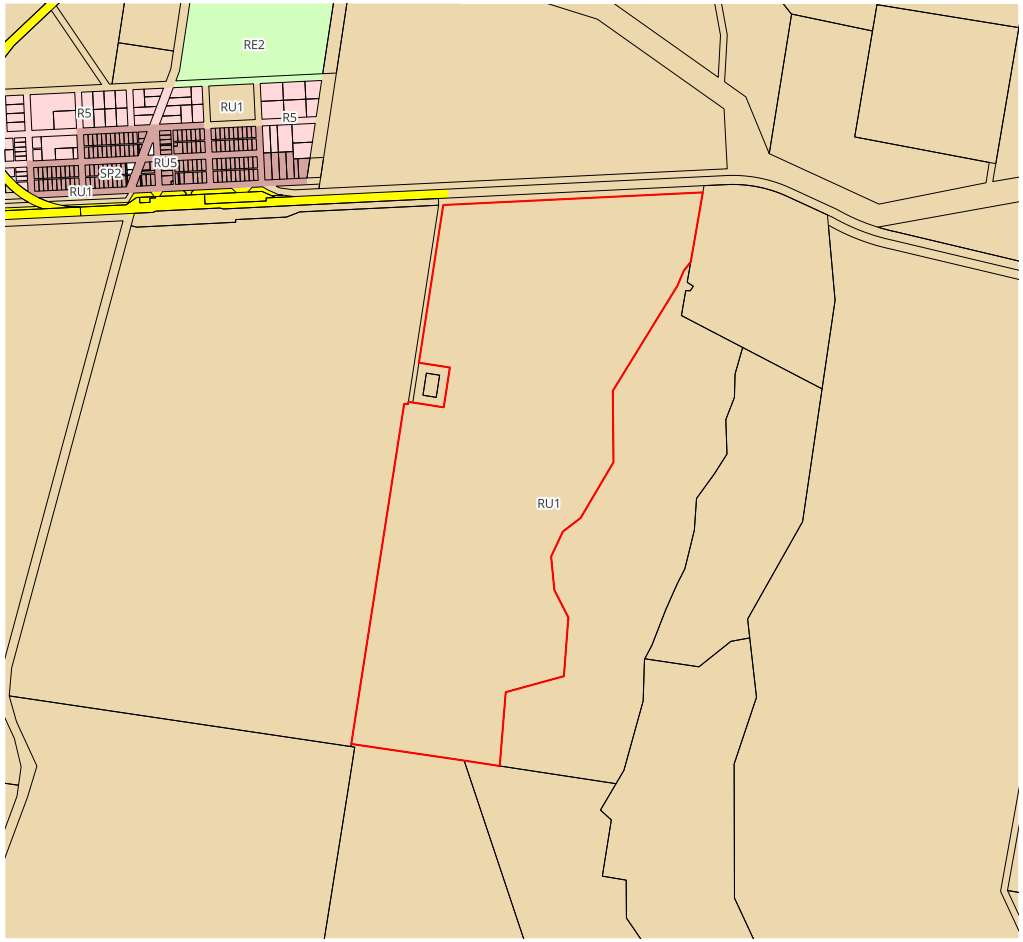
It is proposed to include a new additional permitted use in Schedule 1 of the Parkes LEP 2012 to permit heavy industries on Lot 2 DP 1064474 with development consent.

Figure 12 shows the existing zoning framework applying to the subject land under the Parkes LEP 2012.

LEGEND - LAND USE ZONES

E1	E1 Local Centre	RE1	Public Recreation
E3	E3 Productivity Support	RE2	Private Recreation
C1	C1 National Parks and Nature Reserves	RU1	Primary Production
C2	C2 Environmental Conservation	RU3	Forestry
C3	C3 Environmental Management	RU4	Primary Production Small Lots
E4	E4 General Industrial	RU5	Village
R1	R1 General Residential	SP2	Infrastructure
R2	R2 Low Density Residential	SP3	Tourist
R5	R5 Large Lot Residential	W2	Recreational Waterways

Figure 12 - Parkes LEP 2012 Existing Zoning Map



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3.1 Parkes Shire Development Control Plan 2021

The Parkes Shire Development Control Plan (DCP) 2021 applies to the whole of the Parkes Shire and provides detailed planning and design guidelines to support the Parkes LEP 2012.

The Parkes DCP 2021 provides development controls relating to residential, commercial, industrial and associated infrastructure development. There are also a number of site-specific chapters to be considered in the assessment of development applications lodged with Council for particular development types and at particular locations.

The following parts of the Parkes DCP 2021 contain provisions which are likely to be relevant to any future development of the subject land.

- Part A - Introduction
- Part D - Rural Development
- Part F - Industrial Development

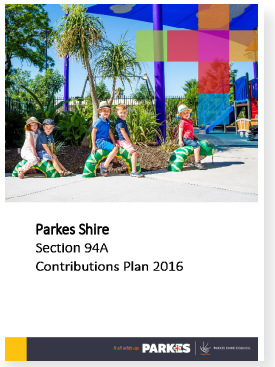


3.2 Parkes Section 94A Contributions 2016

The Parkes Section 94A (now Section 7.12) Contributions Plan 2016 provides the framework for the provision of public infrastructure as a result of new development in the Parkes Shire.

The payment of a Section 7.12 Contribution Levee would likely be a requirement of any future development of the BGER to which this Planning Proposal relates.

According to the plan, the contributions received will be used towards the maintenance and improved of open space and community facilities.



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04

DESCRIPTION OF THE PROPOSAL

4.1 Description of the Development Proposal

SMS have engaged Currajong to prepare a DA for proposed alterations and additions to the SMS ANE Facility. The principal objective of this development proposal is to increase the processing capacity of the SMS ANE Facility beyond its approved 960 tonnes of ANE per annum to up to 20,000 tonnes of ANE per annum. Other objectives for the development proposal are to:

- Provide for the growing demand for ANE from the mining, quarrying and civil construction sectors in NSW from the SMS ANE Facility at the BGER.
- Provide ANE to NSW customers by road, thereby avoiding excessive storage and transport.
- Minimise to the greatest extent possible, impacts to the local environment, Bogan Gate community and other stakeholders in the Parkes Shire.
- Ensure the operation of the SMS ANE Facility at the BGER is safe, reliable and cost effective, contributing to the delivery of mining and civil projects and the economy of the region.

The proposed manufacturing increases can be undertaken within the existing manufacturing plant, served by five (5) outlying chemical storage sheds that will feed the plant with the raw materials required to make ANE. Three (3) of these sheds are proposed new sheds to be constructed for AN storage. Two (2) new horizontal tanks are also required for ANE storage as well as two additional water storage tanks. Existing internal roads are to be used to link the SMS ANE Facility at the BGER to Memorial Lane and the Henry Parkes Way.

It is intended the DA would be lodged with Parkes Shire Council on or around the same time as the Planning Proposal.

The main aspects of the proposed alterations and additions to the SMS ANE Facility are shown in Figure 2.

4.2 Description of the Planning Proposal

The Planning Proposal seeks to amend the Parkes LEP 2012 by inserting Item 3 in Schedule 1 Additional Permitted Uses, as follows:

> (3) Development for the purposes of heavy industries is permitted on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate with development consent.

Heavy industries are already established on Lot 2 DP 1064474 in the form of the Johnex Pty Ltd Explosives Facility, Howards and Sons fireworks storage operations and the Solar Mining Services Ammonium Nitrate Emulsion Facility.

The heavy industry land-uses established at the BGER are shown in Figure 2.

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05

STRATEGIC ALIGNMENT

The existing landform and building configurations at the BGER are ideally suited for the manufacture and storage of explosives and other precursor products such as ANE.

The existing BGER has been designed to ensure maximum protection and separation from surrounding land-uses in the unlikely event of fire or explosion at the facility.

The Planning Proposal to formalise existing use of the land for heavy industries is considered to be an appropriate response, given there are three operational heavy industry businesses at the site and demand for products remains consistently high.

In particular, the BGER has the following advantages:

- The site has a history of explosives storage and manufacturing.
- The site is suitably separated from sensitive land-uses and infrastructure.
- Manufacturing and storage operations can be continued through utilisation of existing buildings, plant, infrastructure and safety / security systems already established at the site.
- All potential environmental and amenity impacts associated with the proposal are able to be suitably mitigated within the site, as demonstrated in previous approvals and licences granted over the site for existing heavy industry uses.
- The proximity to robust transport networks, delivering connectivity to nearby mines and quarries, with potential for dispatch of products to interstate destinations via the main road and railways network.
- The employment-generating opportunities for Bogan Gate and the wider Parkes Shire, with over 20 FTE jobs being generated from heavy industry activities at the BGER.
- The proposal aligning with the strategic vision for the Parkes Shire and the Central West and Orana Region by supporting mining, quarrying and civil construction industries, which are important industry sectors for the economy.
- The strengths of the BGER to provide smart, efficient and reliable explosives manufacturing and storage solutions to NSW customers.

If the Planning Proposal did not proceed, there would be less certainty about whether new heavy industry development proposals would be able to proceed under existing zoning. This uncertainty could influence the appetite of the landowner / leaseholders to maintain facilities at the BGER to the high standards required. It could also lead to less investment and employment at Bogan Gate and the wider Parkes Shire in this particular industry sector. Additionally, the BGER's contribution to the economy would be limited to current processing limits, which are estimated to not meet current and future demands in NSW.

The Planning Proposal is justified on the basis that it is a long-standing precinct of heavy industry development that generally complies with all safety separation distances required, has good connections to main roads and rail networks, and will create long-term employment opportunities in the region.

06

PLANNING PROPOSAL PART 1

Plan Making Guidance - Part 1

The NSW DPHI Local Environmental Plan Making Guidelines require Part 1 of the Planning Proposal to:

- Provide a clear and concise description of the Planning Proposal and be written in plain English, so it is easily understood by the community.
- Provide a description of the objectives and intended outcomes of the planning proposal so that they are specific enough to reflect the objective of the proposal yet flexible enough to allow for alternatives.

6.1 Objectives and Intended Outcomes

Section 3.33(2)(a) of the EP&A Act 1979 requires a Planning Proposal to include a statement of the objectives or intended outcomes of the proposed amendments.

Objective

To amend the Parkes LEP 2012 to permit heavy industries at the existing BGER on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate with development consent.

Intended Outcomes

- Rationalise the existing heavy industry uses currently being carried out on Lot 2 DP 1064474.
- Ensure the existing and future use of Lot 2 DP 1064474 delivers an equitable balance between heavy industry production and storage, transport and public safety and amenity.
- Provide opportunity for alterations and additions to existing heavy industries, subject to all consent conditions, approvals and licences being granted.

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07

PLANNING PROPOSAL PART 2

Plan Making Guidance - Part 2

The NSW DPHI Local Environmental Plan Making Guidelines require Part 2 of the Planning Proposal to:

- Provide a detailed statement of how the objectives or intended outcomes will be achieved by amending the LEP.
- Provide an explanation of provisions, clearly stated and containing enough information on the proposal to assist legal drafting of the LEP.
- Provide information relating to the proposed zones and / or development standards if known at this stage in the Planning Proposal.

7.1 Explanation of Provisions

Section 3.33(2)(b) of the EP&A Act 1979 requires the Planning Proposal to include an explanation of the provisions that are to be included in the proposed amending instrument.

Intended Provisions

The Planning Proposal seeks to amend the Parkes LEP 2012 by inserting Item 3 in Schedule 1 Additional Permitted Uses, as follows:

> (3) Development for the purposes of heavy industries is permitted on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate with development consent.

No other changes to the Parkes LEP 2012 are proposed.

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08

PLANNING PROPOSAL PART 3

Plan Making Guidance - Part 3

The NSW DPHI Local Environmental Plan Making Guidelines require Part 3 of the Planning Proposal to:

- Provide a detailed assessment of the proposal's strategic and site-specific merit to determine whether the Planning Proposal should be supported.
- Integrate findings from supporting studies and investigations.
- Provide justification for the proposed amendments to the LEP.
- Consider the interaction between these findings and whether the proposal will align with the strategic planning framework.
- Consider whether the proposal will have any environmental, social or economic impacts.

The assessment criteria for strategic merit includes:

- Whether the proposal gives affect to the relevant Regional Plan.
- Whether the proposal demonstrates consistency with the relevant LSPS or endorsed Strategy.
- Whether the proposal responds to a change in circumstances that has not been recognised by the existing planning framework.

The LEP should include site-specific merit assessment of:

- The natural environment on the site and other affected land.
- Existing, approved and likely future uses of the land.
- Services and infrastructure requirements of the proposal.

8.1 Need for the Planning Proposal

8.1.1 Is the Planning Proposal a result of any strategic study or report?

The need for the Planning Proposal is not a direct result of any strategic study or report prepared by Parkes Shire Council. The land is already largely zoned for Primary Production purposes and heavy industry activities and infrastructure are already established at the site. It intended to formalise existing heavy industry uses on Lot 2 DP 1064474 to reflect long-standing existing business activities being carried out at the BGER, including existing explosives manufacturing and storage operations currently being carried out by Johnex, Howards and Sons and SMS.

The need for the Planning Proposal is a result of the findings of engagement and consultation with Parkes Shire Council regarding the requirements for future development of the land. Justification for the Planning Proposal has been provided generally throughout this report, however the following key reasons underpin the proposed changes to the Parkes LEP 2012:

- The use of the BGER for explosives manufacturing and storage is long-established.
- The BGER has been generally designed to ensure maximum protection and separation from other land-uses in the unlikely event of fire or explosion at the facility.
- The BGER is already zoned RU1 Primary Production, however the Parkes LEP 2012 does not permit heavy industries requiring separation from other development due to the nature of the processes involved. The Standard LEP Instrument makes provision for the inclusion of heavy industries in the RU1 Primary Production zone, with nearby LEPs administered by Forbes and Narromine Councils permitting heavy industries in their RU1 Primary Production zones.
- Heavy industries are already established on Lot 2 DP 1064474 in the form of the Johnex Pty Ltd Explosives Facility, Howards and Sons fireworks storage operations and the SMS ANE Facility.
- Positive outcomes are expected to result in terms of greater certainty for businesses established at the BGER and for the mining, quarrying and civil construction industries that are reliant on products delivered from the BGER for their operations.

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8.1.2 Is the Planning Proposal the best means of achieving the objectives or intended outcomes, or is there a better way?

The most efficient and effective means of achieving the objectives and intended outcomes of the Planning Proposal is to include heavy industries as an additional permitted use on Lot 2 DP 1064474 in the Parkes LEP 2012.

Consultation has been ongoing with Parkes Shire Council where they have advised the processing of a Planning Proposal to permit heavy industries on Lot 2 DP 1064474 is the best means of achieving the intended outcomes for SMS, the BGER and wider Bogan Gate district.

The following alternatives have been considered in consultation with Parkes Shire Council, but do not provide an appropriate pathway to formalise existing uses being conducted at the BGER as described in this Planning Proposal:

+ Continued reliance on existing use rights provisions to permit new development and alterations and additions to existing development at the BGER.
+ Change of zoning from RU1 Primary Production to E4 General Industrial.

8.2 Relationship to the strategic planning framework

8.2.1 Will the planning proposal give effect to the objectives and actions of the applicable regional plan?

The Central West and Orana Regional Plan 2041 establishes a strategic framework, vision and direction for land use, addressing future needs for housing, jobs, infrastructure, a healthy environment, access to green spaces and connected communities. It leverages the region's central location and builds on it's strengths to provide smart, efficient and reliable connections that bring residents and visitors closer to jobs, centres, education and the natural environment.

The Central West and Orana Regional Plan 2041 is structured around 23 objectives, which belong to the following themes:

- Region-shaping investment.
- A sustainable and resilient place.
- People, centres, housing and communities.
- Prosperity, productivity and innovation.

The following objectives are particularly relevant in the context of the Planning Proposal:

- Objective 1 - Deliver the Parkes Special Activation Precinct and share its benefits across the region.
- Objective 3 - Sustainably manage extractive resource land and grow the critical minerals sector.
- Objective 4 - Leverage inter-regional transport connections.
- Objective 7 - Plan for resilient places and communities.
- Objective 12 - Sustain a network of healthy and prosperous centres.
- Objective 18 - Leverage existing industries and employment areas and support new and innovative economic enterprises.
- Objective 19 - Protect agricultural production values and promote agricultural innovation, sustainability and value-add opportunities the existing and future road, rail and air transport networks and infrastructure.

Table 2 includes a brief assessment of the Planning Proposal against the relevant objectives and priorities in the Regional Plan.

Table 2 - Planning Proposal Assessment - Regional Plan

Objective	Preliminary Assessment
1	Implementation of the changes in the Planning Proposal will allow for continued operation of existing heavy industries established at the BGER. Planning and development of the site for heavy industry type industries has been long-running, with a Masterplan and Masterplan User Requirement Report first being prepared by the Australian Military Forces in August 1962. The BGER is well suited to the manufacture and storage of explosives and other explosive precursor products such as ANE, as the site consists of natural undulating landforms as well as constructed formations that are well protected and separated from nearby sensitive land-users and infrastructure. Existing operations are regulated by a number of government agencies, including WorkSafe NSW, EPA, NSW Fire and Rescue, NSW Rural Fire Service and Parkes Shire Council. The site is ideally located in close proximity to main roads and railways and the Parkes Special Activation Precinct. The industries at the BGER provide important products for the mining, quarrying and civil engineering as well as fireworks events. The Planning Proposal is of a scale that is of local planning significance. Notwithstanding, the proposal is demonstrated to provide vital services to larger scale mining, industry and tourism sectors, which align with the relevant key objectives of the Regional Plan.
3	
4	
7	
12	
18	
19	



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8.2.2 Is the planning proposal consistent with a council LSPS that has been endorsed by the Planning Secretary or another endorsed local strategy or strategic plan?

The Parkes Shire Local Strategic Planning Statement (LSPS) 2020 contains planning priorities and actions for a 20-year vision for the Parkes Shire outlining how growth and change will be managed into the future. The planning themes / priorities include:

- Connecting the Central West to the World.
- Supporting Our Needs.
- Preserving What's Important.
- Accommodating Residential Growth and Development.
- Growing the Economy.

Table 3 includes an assessment of the Planning themes / priorities in the LSPS that are considered to be of particular relevance to the Planning Proposal.

Table 3 - Planning Proposal Assessment - Parkes LSPS

Direction	Preliminary Assessment
Connecting the Central West to the World	The existing heavy industries established at the BGER provide important products to the mining, quarrying and civil engineering sectors in the Parkes Shire. The employment generated at the BGER is of vital support to the Bogan Gate community and wider Parkes Shire. The existing landform and building configurations at the BGER are ideally suited for the manufacture and storage of explosives and other precursor products such as ANE, as the site consists of natural undulating landforms as well as constructed formations that are well protected and separated from nearby sensitive land-users and infrastructure. The existing businesses operating at the BGER have been designed to ensure maximum protection and separation from other land-uses in the unlikely event of fire or explosion at the facility. Existing / future development would be able to avoid environmentally sensitivity areas, such as native vegetation, drainage contours and bushfire prone land. The changes proposed to the Parkes LEP 2012 are generally considered to be of significance only to the site and immediate surrounds, and do not create any inconsistencies with the planning priorities and actions contained in the Parkes LSPS 2020.
Supporting Our Needs	
Growing the Economy	



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8.2.3 Is the planning proposal consistent with any other applicable State or regional studies or strategies?

The following strategies / studies have been considered in the preparation of the Planning Proposal:

- Future Transport Strategy 2056.
- Net Zero Plan.
- State Infrastructure Strategy, a 20 year Economic Vision for Regional NSW.
- Central West and Orana Regional Plan 2041.
- NSW State Planning Policy (Resilience and Hazards) 2021.
- NSW RFS Guideline: Planning for Bush Fire Protection, 2019.
- NSW DPIE Major Projects. Key Guidance. Hazards and Risks, including various guidelines such as the Hazardous Industry Risk Assessment Guidelines, 2011.

8.2.4 Is the planning proposal consistent with applicable State Environmental Planning Policies?

Table 4 shows a list of the State Environmental Planning Policies that have applicability to land within the Parkes LGA.

Table 4 includes an assessment on whether there are provisions within the each SEPP that need to be considered in relation to the Planning Proposal.

Where it is identified that further assessment is required, this work is presented in the following pages.

Table 4 - Preliminary SEPP Assessment

Name of SEPP	Applicability	Further Assessment Warranted?
SEPP (Biodiversity and Conservation) 2021	Applicable	Yes
SEPP (Sustainable Buildings) 2022	Not applicable	No
SEPP (Exempt and Complying Development Codes) 2008	Not applicable	No
SEPP (Housing) 2021	Not applicable	No
SEPP (Industry and Employment) 2021	Not applicable	Yes
SEPP (Planning Systems) 2021	Applicable	Yes
SEPP (Primary Production) 2021	Not applicable	No
SEPP (Precincts - Central River City) 2021	Not applicable	No
SEPP (Precincts - Eastern Harbour City) 2021	Not applicable	No
SEPP (Precincts - Western Parkland City) 2021	Not applicable	No
SEPP (Precincts - Regional) 2021	Not applicable	No
SEPP (Resilience and Hazards) 2021	Applicable	Yes
SEPP (Resources and Energy) 2021	Not applicable	No
SEPP (Transport and Infrastructure) 2021	Applicable	Yes

SEPP (Biodiversity and Conservation) 2021

The Biodiversity and Conservation SEPP 2021 aims to protect the biodiversity values of trees and other vegetation in non-rural areas of the State and preserve the amenity of non-rural areas of the State through the preservation of trees and other vegetation. Provisions protecting bushland, trees, heritage items, waterways, wetlands and koalas are also included in the SEPP.

The site is largely influenced by historic settlement in and around Bogan Gate and the Bogan Gate Army Camp and explosives reserve. The BGER comprises a large number of fixed buildings, roads and drainage improvements within a cleared area sown down to exotic grasses, surrounded by patches of native and regrowth vegetation. As a result, the site is predominately cleared of native vegetation, with native vegetation generally limited along the perimeter of the site. Habitat value on Lot 2 DP 1064474 is generally assessed as low.

The SEPP is applicable to the assessment of the Planning Proposal as it has potential to facilitate a land-use / development outcome that could result in the clearing of native vegetation, should native vegetation exist over the site to the extent that clearing would trigger the Biodiversity Offset Scheme Threshold (BOST) established under the Biodiversity Conservation Act 2016.

No clearing of native vegetation as defined under Local Land Services Act 2013 and at levels triggering the BOS is required as part of the Planning Proposal. A Currajong PBASR dated 24 February 2023 has been undertaken to assess biodiversity impacts under Section 1.7 of the EP&A Act 1979 (which takes into consideration Part 7 of the BC Act 2016) reveals no significant affects on threatened species or their habitats.

A small section of the western perimeter of the site is mapped as biodiversity under the Terrestrial Biodiversity Map in the Parkes LEP 2012. This area comprises Inland Grey Box Woodland and Red Ironbark (Eucalyptus sideroxylon) with White Cypress Pine (Callitris columellaris) and Black Cypress Pine (Callitris endlicheri) and a grassy / weedy under storey).

Having regard to the above, the Planning Proposal does not create any inconsistencies with the provisions contained in this SEPP.

SEPP (Planning Systems) 2021

The Planning Systems SEPP 2021 provides the framework to determine whether a proposed development is:

+ State Significant Development.
+ State Significant Infrastructure.
+ Regionally Significant Development.

The Johnex operations at the BGER are deemed to comprise a major hazards facility under the WHS Regulation 2017 which would be a trigger for new development potentially being considered as State significant development. The Johnex site is also covered by an EPL administered by EPA under the POEO 1997.

Howards and SMS operations involve manufacturing / storage of chemicals well below the threshold triggers listed in Table 15.1 of the WHS Regulation 2017 and the POEO Act 1997.

The SMS DA for proposed alterations and additions does not propose to exceed the limits of AN storage as per Table 15.1 of Schedule 15 of the WHS Regulation 2017, and is therefore not trigger State Significant Development. The proposal is also not Designated Development of a kind that makes it Regionally Significant Development. Accordingly, the proposed SMS ANE Facility alterations and additions is Local Development, as defined under the Planning Systems SEPP 2021.

The site is considered suitable for existing / proposed heavy industry land-use as outlined in the Planning Proposal. As such, the Planning Proposal does not create any inconsistencies with the provisions contained in this SEPP.

SEPP (Resilience and Hazards) 2021

The subject land does not feature in any of the databases maintained by the Office of Environment and Heritage or EPA pertaining to the management / regulation of contaminated sites.

A preliminary contamination investigation has been undertaken on the site where SMS is established by Envirowest, dated 4 February 2021, which revealed no evidence of contamination.

The Johnex operations at the BGER are deemed to comprise a major hazards facility under the WHS Regulation 2017, with Johnex facility operations being controlled under an EPL administered by the EPA under the POEO Act 1997.

Howards and SMS operations involve manufacturing / storage of chemicals well below the threshold triggers listed in Table 15.1 of the WHS Regulation 2017 and the POEO Act 1997.

As such, the Planning Proposal does not create any inconsistencies with the provisions contained in this SEPP.

SEPP (Transport and Infrastructure) 2021

The Transport and Infrastructure SEPP 2021 aims to facilitate the effective delivery of infrastructure across NSW by providing a consistent planning framework for infrastructure provision, and identifying where a more detailed assessment or consultation response may be required for specific types of infrastructure development.

Existing heavy industries at the BGER (combined) would not qualify as traffic generating development as per Schedule 3 of the Transport and Infrastructure SEPP 2021. Access to the BGER will continue via Memorial Lane and then onto the Henry Parkes Way, which is a classified road.

Consultation has been initiated with TfNSW about the proposed alterations and additions to the SMS ANE Facility and the proposed upgrades to the intersection of Henry Parkes Way and Memorial Lane. Preliminary feedback from TfNSW and Parkes Shire Council has not indicated any objections to proposed road upgrades under controlled conditions.

Having regard to the above, the Planning Proposal does not create any inconsistencies with the provisions contained in this SEPP.

8.2.5 Is the planning proposal consistent with applicable Ministerial Directions (section 9.1 Directions)?

An assessment of the Planning Proposal against each Section 9.1 Ministerial Direction is included as follows:

Focus Area 1 - Planning Systems

Direction 1.1 - Implementation of Regional Plans

The Direction applies to the Planning Proposal as it relates to land to which the Central West and Orana Regional Plan 2041 applies. The Direction requires the Planning Proposal to be consistent with the requirements of the Central West and Orana Regional Plan 2041. An assessment against the Regional Plan is included in this Planning Proposal. No inconsistencies have been identified. The Planning Proposal is assessed to be consistent with Ministerial Direction 1.1.

Direction 1.2 - Development of Aboriginal Land Council Land

The Direction does not apply to the Planning Proposal as it does not relate to any land that is shown on the Land Application Map of Chapter 3 of the State Environmental Planning Policy (Planning Systems) 2021.

Direction 1.3 - Approval and Referral Requirements

The Direction generally requires the Planning Proposal not to include provisions requiring concurrence, consultation or referral of a DA to a Minister of a public authority without prior approval. The Planning Proposal seeks only to make changes to Schedule 1 of the Parkes LEP 2012 dealing with additional permitted use. The changes proposed to the Parkes LEP 2012 will not alter existing consultation or concurrence obligations prescribed in legislation for new development. The Planning Proposal is assessed to be consistent with Ministerial Direction 1.3.

Direction 1.4 - Site Specific Provisions

The Direction applies when a Planning Proposal will allow a particular development to be carried out. Direction 1.4(1) applies because the Planning Proposal involves an additional permitted use on Lot 2 DP 1064474 with consent. Direction 1.4(2) requires that a Planning Proposal must contain or refer to drawings that show details of the proposed development. In this particular Planning Proposal, plans have been shown of general site conditions and surrounds. No changes to mapping in the Parkes LEP 2012 is required. The Planning Proposal is assessed to be consistent with Ministerial Direction 1.4.

Focus Area 2 - Planning Systems - Place Based

Ministerial Directions 1.5 to 1.22 are not applicable to the subject land. Further consideration is not considered to be necessary.

Focus Area 2 - Design and Place

This Focus Area was blank when the Directions were made.

Focus Area 3 - Biodiversity and Conservation

Direction 3.1 - Conservation Zones

Direction 3.1(1) requires that a Planning Proposal must include provisions that facilitate the protection and conservation of environmentally sensitive areas. Direction 3.1(2) requires that the Planning Proposal must not reduce the conservation standards that apply to the land. The Planning Proposal does not propose any changes of zoning or development on land that is identified as an environmentally sensitive area. The Planning Proposal is consistent with the terms of Ministerial Direction 3.1.

Direction 3.2 - Heritage Conservation

Direction 3.2(1) requires that a Planning Proposal must contain provisions that facilitate the conservation of any environmental heritage items identified in a study of the environmental heritage of the area, Aboriginal objects or places protected under the National Parks and Wildlife Act 1974 or identified by an Aboriginal heritage survey prepared by or on behalf an Aboriginal Land Council, Aboriginal body or public authority.

The planning proposal is assessed to be consistent with this Ministerial Direction for the following reasons:

- The Planning Proposal does not impact on any known items of Aboriginal cultural heritage significance.
- The subject land is not mapped in the Parkes LEP 2012 as a heritage item.
- Built heritage aspects associated with the Australian Military use during and post WWII have been considered, with no building / structure being identified as particularly rare or having significant heritage values.
- The Bogan Gate Cemetery to the west of the site is identified to be the only site with potential local heritage significance. The continued uses at the BGER are not incompatible with the heritage significance of the Bogan Gate Cemetery.
- The suitability of the land for heavy industry land-use has already been established by the existing buildings and improvements at the BGER.
- The Planning Proposal does not change, alter or reduce any of the existing provisions in Parkes LEP 2012 which facilitate the protection and conservation of heritage areas.

Clause 5.10 would continue to apply to any future development on the land, and provides an appropriate regulatory framework for the assessment of heritage issues and matters as part of a DA to Parkes Shire Council.

Direction 3.3 - Sydney Drinking Water Catchments

The Direction does not apply to the Planning Proposal as it does not affect land in any of the Local Government Areas located within the Sydney Drinking Water Catchment.

Direction 3.4 - Application of C2 and C3 zones and Environmental Overlays in Far North Coast LEPs.

The Direction does not apply to the Planning Proposal as it does not affect land on the New South Wales Far North Coast.

Direction 3.5 - Recreation Vehicle Areas

Direction 3.5(1) requires that a Planning Proposal must not enable land to be developed for the purposes of a recreation vehicle area where:

+ The land is within a conservation zone.
+ Where the land comprises a beach or a dune adjacent to or adjoining a beach.
+ Where the land is not within an area or zone referred to in paragraphs (a) or (b) unless the relevant planning authority has taken into consideration the provisions of the guidelines entitled Guidelines for Selection, Establishment and Maintenance of Recreation Vehicle Areas, Soil Conservation Service of NSW, September, 1985.
+ The provisions of the guidelines entitled Recreation Vehicles Act 1983, Guidelines for Selection, Design, and Operation of Recreation Vehicle Areas, State Pollution Control Commission, September 1985.

The Planning Proposal is assessed to be consistent with this Ministerial Direction for the following reasons:

+ The proposal does not involve land within a C3 Environmental Management zone.
+ The proposal is to allow the land to be developed for primary production and heavy industry land-uses only.

Direction 3.6 - Strategic Conservation Planning

This Direction does not apply to the Planning Proposal as it does not relate to land that is identified as 'avoided land' or a 'strategic conservation area' under State Environmental Planning Policy (Biodiversity and Conservation) 2021.

Direction 3.7 - Public Bushland

This Direction does not apply to the Planning Proposal as it does not relate to land in a prescribed LGA.

Direction 3.8 - Willandra Lakes Region

This Direction does not apply to the Planning Proposal as it does not relate to land identified as the Willandra Lakes World Heritage Property.

Direction 3.9 - Sydney Harbour Foreshores and Waterways area

This Direction does not apply to the Planning Proposal as it does not relate to land within the Foreshores and Waterways Area.

Direction 3.10 - Water Catchment Protection

This Direction does not apply to the Planning Proposal as it does not relate to land within a regulated catchment.

Focus Area 4 - Resilience and Hazards

Direction 4.1 - Flooding

Direction 4.1 requires that a Planning Proposal must include provisions that give effect to and are consistent with:

+ The NSW Flood Prone Land Policy.
+ The principles of the Floodplain Development Manual 2005.
+ The Considering flooding in land use planning guideline 2021.
+ Any adopted flood study and/or floodplain risk management plan prepared in accordance with the principles of the Floodplain Development Manual 2005 and adopted by the relevant council.

The Planning Proposal is assessed to be consistent with the requirements of Direction 4.1 for the following reasons:

+ The subject land is not located within the Flood Planning Area defined by the Parkes LEP 2012.
+ The Planning Proposal does not seek to enable hazardous industries or hazardous storage establishments on flood affected land.
+ Robust stormwater drainage structures are established at the BGER, with no recorded issues related to stormwater flooding or the like.
+ No flood related issues are assessed to apply to the safe occupation / efficient evacuation of the BGER.
+ The proposal is unlikely to result in a significantly increased requirement for government spending on emergency management services, and flood mitigation and emergency response measures, including road infrastructure, flood mitigation infrastructure and utilities.

Direction 4.2 - Coastal Management

The Direction does not apply to the Planning Proposal as it does not affect land within the coastal zone, as defined under the Coastal Management Act 2016.

Direction 4.3 - Planning for Bushfire Protection

The Direction applies to the Planning Proposal as parts of the BGER are mapped as bushfire prone land. The BGER has an emergency response plan dealing with bushfires. Individual businesses operating at the BGER also have their own plans and procedures dealing with fire, such as the SMS Bushfire Management Plan, dated 4 April wo23 which deals with the management of fires and emergency evacuation procedures, asset protection zones between buildings and potential bushfire fuel sources. NSW RFS and NSW Fire and Rescue conduct regular inspections at the BGER to ensure adequate fire protection systems are in place at the site.

Direction 4.4 - Remediation of contaminated land

The Direction applies to the Planning Proposal as it relates to land, a part of which is known to contain an area of potential land contamination.

Direction 4.4(1) requires that a Planning Proposal authority must not include in a particular zone (within the meaning of the local environmental plan) any land to which this direction applies if the inclusion of the land in that zone would permit a change of use of the land, unless:

+ The Planning Proposal Authority has considered whether the land is contaminated, and

- If the land is contaminated, the planning proposal authority is satisfied that the land is suitable in its contaminated state (or will be suitable, after remediation) for all the purposes for which land in the zone concerned is permitted to be used, and
- If the land requires remediation to be made suitable for any purpose for which land in that zone is permitted to be used, the planning proposal authority is satisfied that the land will be so remediated before the land is used for that purpose.

Direction 4.4(2) requires, before including any land to which this direction applies in a particular zone, the Planning Proposal Authority is to obtain and have regard to a report specifying the findings of a preliminary investigation of the land carried out in accordance with the contaminated land planning guidelines.

The subject land does not feature in any database pertaining to the management / regulation of contaminated land. A preliminary contamination investigation was undertaken on part of the BGER by Envirowest, dated 4 February 2021, which revealed no evidence of contamination. No physical evidence of contamination is visible from inspection of the site.

The site is considered suitable for heavy industry land-use as proposed in the Planning Proposal. As such, the Planning Proposal does not create any inconsistencies with the provisions contained in this SEPP.

Direction 4.5 - Acid Sulphate Soils

The Direction does not apply to the Planning Proposal as it does not affect land having a probability of containing acid sulfate soils.

Direction 4.6 - Mine Subsidence and Unstable Land

The Direction does not apply to the Planning Proposal as it does not affect land that is within a declared mine subsidence district.

Focus Area 5 - Transport and Infrastructure

Direction 5.1 - Transport and Infrastructure

Direction 5.1(1) requires that a Planning Proposal must locate zones for urban purposes and include provisions that give effect to and are consistent with the aims, objectives and principles of:

- Improving Transport Choice – Guidelines for planning and development (DUAP 2001).
- The Right Place for Business and Services – Planning Policy (DUAP 2001).

The Planning Proposal does not create, alter and remove a zoning provision relating to urban land. The development scenario that is to be facilitated by this Planning Proposal is not be expected to compromise the safety or function of the surrounding road network.

Direction 5.2 - Reserving land for public purposes

Direction 5.2(1) requires that a Planning Proposal must not create, alter or reduce existing zonings or reservations of land for public purposes without the approval of the relevant public authority and the Planning Secretary (or an officer of the Department nominated by the Secretary).

The Planning Proposal is consistent with Direction 5.2(1) as it does not seek any changes to alter the extent of public land.

Direction 5.3 - Development Near Regulated Airports and Defence Airfields

The Direction does not apply to the Planning Proposal as it does not create, alter or remove a zone or provision relating to land near a regulated airport.

Direction 5.4 - Shooting Ranges

The Direction does not apply to the Planning Proposal as it does not create, alter or remove a zone or provision relating to land adjacent to and / or adjoining an existing shooting range.

Focus Area 6 - Housing

Direction 6.1 - Residential Zones

The Direction does not apply as the Planning Proposal as it does not involve residential development.

Direction 6.2 - Caravan Parks and Manufactured Home Estates

The Planning Proposal does not seek to identify suitable zones, locations and provisions for caravan parks or manufactured home estates. The permissibility of these land-use types in any existing zone under the Parkes LEP 2012 will not be changed as a result of this Planning Proposal. The Planning Proposal is not inconsistent with the requirements of the Direction.

Focus Area 7 - Industry and Employment

Direction 7.1 - Business and Industrial Zones

The Direction does not apply to the Planning Proposal as it does not affect land within an existing or proposed business or industrial zone.

Direction 7.2 - Reduction in non-hosted short-term rental accommodation period

The Direction does not apply to the Planning Proposal as it does not affect land within the Byron LGA.

Direction 7.3 - Commercial and Retail Development along the Pacific Highway, North Coast

The Direction does not apply to the Planning Proposal as it does not affect land within those council areas on the North Coast that the Pacific Highway traverses.

Focus Area 8 - Resources and Energy

Direction 8.1 - Mining, Petroleum Production and Extractive Industries

The Direction does not apply to the Planning Proposal as it does not have the effect of:

+ Prohibiting the mining of coal or other minerals, production of petroleum, or winning or obtaining of extractive materials.
+ Restricting the potential development of resources of coal, other minerals, petroleum or extractive materials which are of State or regional significance by permitting a land use that is likely to be incompatible with such development.

Focus Area 9 - Primary Production

Direction 9.1 - Primary Production

The Direction does not apply to the Planning Proposal as it does not rezone land from a rural zone to a residential, business, industrial, village or tourist zone.

Direction 9.2 - Rural Lands

The Planning Proposal affects land within an existing or proposed rural or conservation zone. It does not proposes changes to the existing minimum lot size on land within a rural or conservation zone.

Direction 9.3 - Oyster Aquaculture

This Direction does not apply to the Planning Proposal as it does not affect land within a 'Priority Oyster Aquaculture Area'.

Direction 9.4 - Farmland of State and Regional Significance on the NSW Far North Cost

This Direction does not apply to the Planning Proposal as it does not affect land within a Far North Coast LGA.

8.3 Environmental, Social and Economic Impact

8.3.1 Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected because of the proposal?

The historic agricultural, explosive storage and manufacturing, army camp and heavy industry uses on the property have resulted in a landscape that is highly disturbed and largely cleared of native vegetation, with the predominate landform cover being buildings, hardstands, roads and pasture grass.

A review of the Terrestrial Biodiversity Map in the Parkes Local Environmental Plan 2012 confirms a small section of the western perimeter of the site is mapped as biodiversity. Figure 6 shows the location of native vegetation in and around the subject land.

Site inspection confirms remnant vegetation comprising Inland Grey Box Woodland and Red Ironbark (Eucalyptus sideroxylon) with White Cypress Pine (Callitris columellaris) and Black Cypress Pine (Callitris endlicheri) and a grassy / weedy under storey). The habitat value of these isolated pockets of vegetation on Lot 2 DP 1064474 is assessed as low.

No clearing of native vegetation as defined under Local Land Services Act 2013 at levels triggering the BOST is required as part of the Planning Proposal.

A Currajong PBASR dated 24 February 2023 has been undertaken to assess biodiversity impacts under Section 1.7 of the EP&A Act 1979 (which takes into consideration Part 7 of the BC Act 2016) reveals no significant affects on threatened species or their habitats.

8.3.2 Are there any other likely environmental effects of the planning proposal and how are they proposed to be managed?

Operational Safety

The BGER has established its own emergency procedures that must be complied with by all leasees at the site, including Johnex, Howards and SMS.

There are three existing businesses operating at the BGER that are also regulated by WorkSafe NSW to store / manufacture produce explosives and other precursor explosive products at the site.

To obtain a WorkSafe licence, certain risk assessments must be undertaken demonstrating compliance with the WHS Regulation 2017 and other relevant standards and guidelines.

The Johnex operations at the BGER are deemed to comprise a major hazards facility under the WHS Regulation 2017. The Johnex site is also covered by an EPL administered by the EPA under the POEO Act 1997.

Howards and SMS operations involve manufacturing / storage of chemicals well below the threshold triggers listed in Table 15.1 of the WHS Regulation 2017 and the POEO Act 1997.

Figure 10 shows the buffers established at the BGER from nearby sensitive land-uses.

Bushfire

The BGER has established emergency procedures and an emergency response plan that must be complied with by Johnex, Howards and SMS. Land along the eastern boundary of Lot 2 DP 1064474 is identified as Bushfire Prone Land. Consultation with the NSW Rural Fire Service (RFS) and NSW Fire and Rescue NSW has been undertaken. For example, the SMS Bushfire Management Plan, dated 4 April 2023 has been reviewed by NSW RFS to ensure compliance with Chapter 8 of the RFS Guideline, Planning for Bushfire Protection 2019.

Flooding

The subject land is not mapped in the Parkes LEP 2012 as being impacted by flooding. The nearest natural water body is the Gunningbland Creek located approximately 1km north of the SMS ANE Facility. A robust system of stormwater management is established at the BGER, including road table drains, contour banks, swales and catch dams.

Contamination

The subject land does not feature in any of the databases maintained by the Office of Environment and Heritage pertaining to the management / regulation of contaminated sites. A preliminary contamination investigation has been undertaken on the site where SMS is established by Envirowest, dated 4 February 2021, which revealed no evidence of contamination. The site is considered suitable for heavy industry land-use as proposed in the Planning Proposal.

8.3.3 Has the planning proposal adequately addressed any social and economic effects

Social Impact Assessment

An assessment of potential impacts of the Planning Proposal and the resultant SMS proposed alterations and additions has been undertaken with regards to scoping methodology outlined in the DPHI Social Impact Assessment Guideline 2017 (SIA Guideline). Table 5 provides an assessment of the Planning Proposal against the criteria in the SIA Guideline.

Table 5 - SIA Guideline - Social Impact Assessment

Matters	Key links to social impacts	Risk of impact without mitigation	Nature of Impact	Explanation
Amenity				
Acoustic	Way of life	Unlikely	Negative	The Planning Proposal is unlikely to generate impacts
Visual	Surroundings	Likely	Negative	The Planning Proposal is unlikely to generate impacts
Odour	Surroundings	Unlikely	Negative	The Planning Proposal is unlikely to generate impacts
Micro climate	Surroundings	Unlikely	Negative	The Planning Proposal is unlikely to generate impacts
Access				
Access to property	Way of life	N/A	Nil	The Planning Proposal is unlikely to generate impacts
Utilities and public transport	Access to infrastructure, services and facilities	Unlikely	Negative	Existing connections to reticulated water supply, electricity supply and telecommunications are established
Road and rail	Personal and property rights	Likely	Negative	Roads are connected to the BGER via Memorial Lane and then onto the Henry Parkes Way. A TIA has been developed outlining proposed road upgrades
Built Environment				
Public domain	Community	Likely	Nil	The Planning Proposal does not alter land zoned for public purposes
Public infrastructure	Access to infrastructure, services and facilities	Unlikely	Negative	The BGER is located close to Bogan Gate and Parkes, where public infrastructure and services are available for workers at the site
Other built assets	Surroundings; Personal and property rights	Unlikely	Nil	The Planning Proposal is unlikely to generate impacts
Heritage				
Natural	Way of life	Unlikely	Nil	The Planning Proposal is unlikely to generate impacts
Cultural	Community	Unlikely	Nil	The Planning Proposal is unlikely to generate impacts

Table 5 - SIA Guideline - Social Impact Assessment

Matters	Key links to social impacts	Risk of impact without mitigation	Nature of Impact	Explanation
Aboriginal culture	Culture	Unlikely	Negative	The Planning Proposal is unlikely to generate impacts
Built	Surroundings	Unlikely	Negative	The Planning Proposal is unlikely to generate impacts
Community				
Health	Health and wellbeing	Unlikely	Negative	The Planning Proposal is unlikely to generate impacts
Safety	Surroundings	Likely	Negative	Existing operations at the BGER are already regulated under the WHS Act 2011 and the POEO Act 1997. New development(s) are also required to address the relevant matters for consideration under the EP&A Act 1979. The Planning Proposal has addressed identified safety risks related to environmental / operational hazards
Services and facilities	Way of life, Access to infrastructure, services and facilities	Unlikely	Nil	The BGER is located close to Bogan Gate and Parkes, where public infrastructure and services are available for workers at the site
Cohesion	Way of life; Community; Culture	Likely	Positive	Existing operations at the BGER are already regulated under the WHS Act 2011 and the POEO Act 1997. New development(s) are also required to address the relevant matters for consideration under the EP&A Act 1979. The Planning Proposal has addressed identified safety risks related to environmental / operational hazards. The BGER is associated with a number of businesses that employ staff that live in the local area. Continued use of the site for heavy industries will maintain jobs and lead to positive economic impacts
Housing	Way of life, Personal and property rights	Unlikely	Negative	Existing operations at the BGER are already regulated under the WHS Act 2011 and the POEO Act 1997. New development(s) are also required to address the relevant matters for consideration under the EP&A Act 1979. The Planning Proposal has addressed identified safety risks related to environmental / operational hazards
Economic				

Matters	Key links to social impacts	Risk of impact without mitigation	Nature of Impact	Explanation
Natural resource area	Way of life	Unlikely	Negative	Existing operations at the BGER are already regulated under the WHS Act 2011 and the POEO Act 1997. New development(s) are also required to address the relevant matters for consideration under the EP&A Act 1979. The Planning Proposal has addressed identified safety risks related to environmental / operational hazards. The BGER is associated with a number of businesses that employ staff that live in the local area. Continued use of the site for heavy industries will maintain jobs and lead to positive economic impacts
Livelihood	Surroundings	Unlikely	Negative	Existing operations at the BGER are already regulated under the WHS Act 2011 and the POEO Act 1997. New development(s) are also required to address the relevant matters for consideration under the EP&A Act 1979. The Planning Proposal has addressed identified safety risks related to environmental / operational hazards
Opportunity cost	Personal and property rights	Unlikely	Negative	Existing operations at the BGER are already regulated under the WHS Act 2011 and the POEO Act 1997. New development(s) are also required to address the relevant matters for consideration under the EP&A Act 1979. The Planning Proposal has addressed identified safety risks related to environmental / operational hazards
Air				
Air emissions.	Surroundings	Unlikely	Negative	The Planning Proposal is unlikely to generate impacts
Biodiversity				
Native vegetation and fauna	Surroundings	Unlikely	Negative	The Planning Proposal is unlikely to generate impacts
Land				
Land capability, topography	Surroundings	Unlikely	Negative	The Planning Proposal is unlikely to generate impacts
Water				
Quality, availability, hydrological flows	Surroundings	Unlikely	Negative	The Planning Proposal is unlikely to generate impacts

Having regard to the findings of the Social Impact Assessment presented in Table 5, it is generally concluded that the proposed changes to Parkes LEP 2012 are unlikely to be adverse. Only positive changes are expected for the following reasons:

+ The site has a history of explosives storage and manufacturing and is suitably separated from sensitive land-uses and infrastructure.
+ Manufacturing and storage operations can be continued through utilisation of existing buildings, plant, infrastructure and safety / security systems already established at the site.
+ All potential environmental and amenity impacts associated with the proposal are able to be suitably mitigated within the site, as demonstrated in previous approvals and licences granted over the site for existing heavy industry uses.
+ The proximity to robust transport networks, means that products can be distributed efficiently and safely to customers via main roads and rail networks.
+ The ongoing employment-generating opportunities for Bogan Gate and the wider Parkes Shire, with over 20 FTE jobs currently being generated from heavy industry activities at the BGER.
+ The proposal aligning with the strategic vision for the Parkes Shire and Central West and Orana Region by supporting mining, quarrying and civil construction industries and tourism through fireworks events, which contribute strongly to the NSW economy.
+ The strengths of the BGER to provide smart, efficient and reliable explosives manufacturing and storage solutions to NSW customers.

Economic Impact Assessment

Due to the nature and scale of the Planning Proposal, a detailed Economic Impact Assessment has not been requested by Parkes Shire Council to be prepared for the Planning Proposal.

The Planning Proposal is not seeking changes to the Parkes LEP 2012 which are likely to create adverse economic consequences.

The BGER provides important products for the mining, quarrying and civil engineering sectors and employs over 20 FTE.

There would be significant economic impacts should the Planning Proposal not proceed, including:

+ There would be less certainty about whether new heavy industry development proposals would be able to proceed under existing zoning.
+ There could be less appetite of the landowner / leaseholders to maintain facilities at the BGER to the high standards required.
+ There could be less investment and employment at Bogan Gate and the wider Parkes Shire in this particular industry sector.
+ The BGER's contribution to the economy could be limited to current processing limits, which are estimated to not meet current and future demands in NSW.

The Planning Proposal is justified on the basis that it is a long-standing precinct of heavy industry development that generally complies with all safety separation distances required, has good connections to main roads and rail networks, and will create long-term employment opportunities in the region.

8.4 Infrastructure (Local, State and Commonwealth)

8.4.1 Is there adequate public infrastructure for the Planning Proposal?

The Planning Proposal seeks to amend the Parkes LEP 2012 by permitting heavy industries on Lot 2 DP 1064474. The Planning Proposal is to formalise existing heavy industries being carried out on the subject land.

Existing services and infrastructure are available at the site, including bitumen sealed roads, reticulated water supply electricity supply and telecommunications.

The Planning Proposal does not create an increased demand for public infrastructure and services.

8.5 State and Commonwealth Interests

8.5.1 What are the views of state and Federal public authorities and government agencies consulted in order to inform the Gateway determination

State Government Interests

The specific changes that are requested to the Parkes LEP 2012 are likely to have interest to NSW DPHI, Department of Primary Industries (DPI), WorkSafe NSW, the EPA, NSW RFS, NSW Fire and Rescue, TfNSW and NSW Police Force. Preliminary consultation has been carried out with all these agencies as part of the preparation of the DA for alterations and additions to the SMS ANE Facility as well as Parkes Shire Council.

Federal Government Interests

The Planning Proposal is unlikely to be of any particular interest to the Federal Government.

09

PLANNING PROPOSAL PART 4

Plan Making Guidance - Part 4

The NSW DPHI Local Environmental Plan Making Guidelines provides the following guidance:

- Mapping must be consistent with the Department's Standard Technical Requirements for Spatial Datasets and Maps, using the same format, symbology, labeling and appropriate scale.
- All existing and proposed mapping submitted to the Department as part of a Planning Proposal should be accompanied by GIS data. All LEP mapping should commence as early as possible in GIS, particularly with complex planning proposals or Principal LEPs.
- Mapping may include the subject site and immediate surrounds, current zoning, current development standards and any alternative zones if a change is proposed.
- Other relevant maps or figures may include maps illustrating changes of development standards, extent of heritage conservations areas, location of specific heritage items, extent of native vegetation, extent of environmental conservation areas and areas to which a local provision will apply.
- Additional material such as aerial photographs clearly identifying the subject site should also be included where appropriate.

9.1 Project Mapping

The Planning Proposal has been prepared to include a number of different plans and visuals that aim to assist Parkes Shire Council's understanding of the scope of the changes that are requested to the Parkes LEP 2012.

These plans show the location of the subject land, existing environmental conditions and connections to roads and infrastructure as well as the location of land-uses / businesses at the BGER.

Given the Planning Proposal involves changes to Schedule 1 of the Parkes LEP 2012, no mapping changes to the Parkes LEP 2012 are required.

10

PLANNING PROPOSAL PART 5

Plan Making Guidance - Part 5

The NSW DPHI Local Environmental Plan Making Guidelines provides that Part 5 of the Planning should describe:

- Consultation and outcomes undertaken with council, state agencies or authorities during the pre-lodgement stage.
- Any community consultation undertaken, or consultation with other key stakeholders
- The extent of consultation having regard for the public exhibition requirements in Section 1 of the guideline.
- The required public exhibition period based on the different planning proposal categories.
- Community consultation will be considered at the Gateway stage, with the Gateway determination confirming the requirements.
- The Gateway determination may also specify additional information or studies to be finalised before any consultation commences, often to make sure that everyone can make an informed opinion. In some cases, the Gateway determination may require the PPA to submit studies to the Department for review prior to public exhibition.

10.1 Consultation - Pre-lodgement Stage

Consultation has been undertaken with NSW DPHI, Department of Primary Industries (DPI), WorkSafe NSW, the EPA, NSW RFS, NSW Fire and Rescue, TfNSW and NSW Police Force. Preliminary consultation has been carried out with all these agencies as part of the preparation of the DA for alterations and additions to the SMS ANE Facility as well as Parkes Shire Council.

Engagement with adjoining landowners has been undertaken to ensure all neighbours are aware of the proposed alterations and additions to the SMS ANE Facility as well as Parkes Shire Council.

Feedback has been considered, as necessary, during the preparation of the Planning Proposal.

10.2 Community Consultation

Parkes Community Participation Plan 2022

In accordance with the Parkes Community Participation Plan 2022, the Planning Proposal will require public exhibition for a minimum of 28 days, or any other period as might be specified in a Gateway Determination issued by DPHI.

Parkes Shire Council has advised it would organise all tasks involved in the public exhibition of the Planning Proposal.

11

PLANNING PROPOSAL PART 6

Plan Making Guidance - Part 6

The NSW DPHI Local Environmental Plan Making Guidelines provides that Part 6 of the Planning Proposal should describe the project timeline as a tool for the Planning Proposal Authority, DPHI and the Parliamentary Counsel's Office to monitor the project through the LEP making process and manage resources accordingly.

As a minimum, the project timeline should describe:

- Anticipated commencement date (of Gateway determination).
- Anticipated time frame to finalise the infrastructure studies/plan.
- Anticipated time frame for completion of any additional technical studies, not completed prior to Gateway.
- Time frame for public agency consultation.
- Anticipated dates of public exhibition and, if required, a public hearing.
- Time frame for submissions to be considered.
- Time frame for the consideration of a proposal after the exhibition.
- Date the plan will be made (where council is the LPMA) or date of submission to the Department to finalise the LEP.
- Date of notification.

11.1 Project Timeline

The Planning Proposal is deemed to fall into the Standard Planning Proposal Category.

An anticipated timeline has been developed for the project and is based on the maximum time frame recommendations provided in the NSW DPHI Local Environmental Plan Making Guidelines for a standard category Planning Proposal.

The timeline is shown in Figure 13.

It may be the Planning Proposal is process quicker than the timeline shown.

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Figure 13 - Project Timeline



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CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

Appendix A. BGER Masterplan

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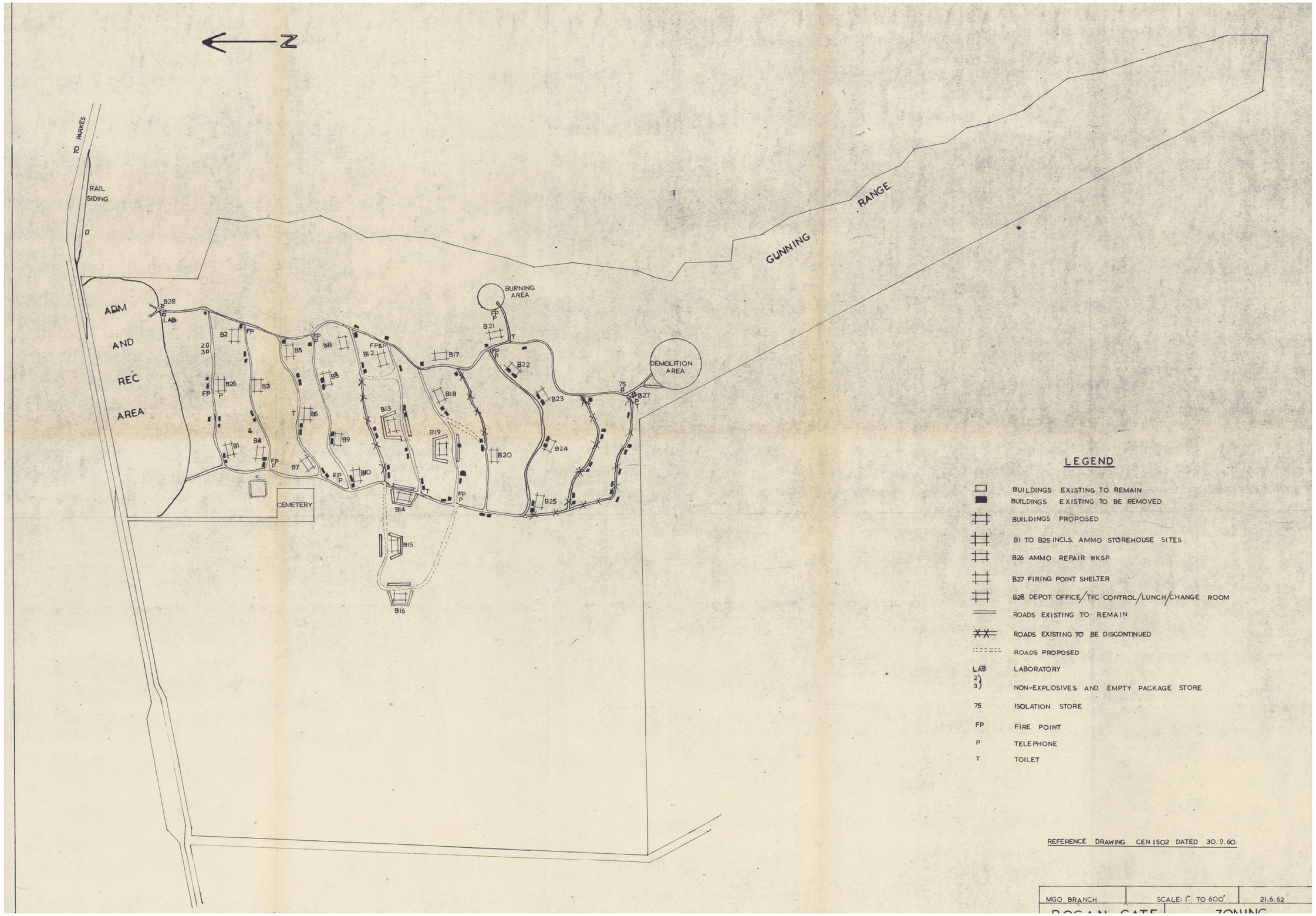
PLANNING, PROPERTY + PROJECT MANAGEMENT


N
TO PARKES
RAIL SIDING
ADM AND REC AREA
GUNNING RANGE
BURNING AREA
DEMOLITION AREA
CEMETERY
B28
LAB
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B12
B13
B14
B15
B16
B17
B18
B19
B20
B21
B22
B23
B24
B25
B26
B27
B1
FP
P
T
75
LEGEND
BUILDINGS EXISTING TO REMAIN
BUILDINGS EXISTING TO BE REMOVED
BUILDINGS PROPOSED
B1 TO B25 INCLS. AMMO STOREHOUSE SITES
B26 AMMO REPAIR WKSP
B27 FIRING POINT SHELTER
B28 DEPOT OFFICE/TFC CONTROL/LUNCH/CHANGE ROOM
ROADS EXISTING TO REMAIN
ROADS EXISTING TO BE DISCONTINUED
ROADS PROPOSED
LAB LABORATORY
2 3 NON-EXPLOSIVES AND EMPTY PACKAGE STORE
75 ISOLATION STORE
FP FIRE POINT
P TELEPHONE
T TOILET
REFERENCE DRAWING CEN 1502 DATED 30.9.60.
MGO BRANCH
SCALE: 1" TO 600'
21.6.62

Appendix B. Parkes Shire Council Existing Use Rights Letter

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PLANNING, PROPERTY + PROJECT MANAGEMENT

AJ:JH

Contact Person: Andrew Johns

23 May 2013

Mr Joe Stevens
PO Box 3047
ROBERTSON NSW 2577

Dear Mr Stevens

BOGAN GATE EXPLOSIVES RESERVE LOT 2 AND LOT 4 DP 1064474

I refer to the above and your letter dated 5 March 2013.

Council writes to confirm discussions had with Ken Stevens on 23 May 2013. Council can confirm that it is satisfied that you have demonstrated that the use of the Explosives Reserve (Lots 2 and 4 DP 1064474) is an Existing Use pursuant to the Environmental Planning and Assessment Act 1979, as amended, based on the evidence at hand. Council must reiterate that this means that you are able to continue the use on the site but may not further intensify or expand the use outside of the auspices of the abovementioned Act.

Further, Council advises that in its opinion, the existing rights for the use of Lots 3 and 5 DP 1064474 for storage and handling of explosives have been abandoned as the use had ceased for a period exceeding 12 months and therefore no such activities are permitted to take place on this land. Rezoning of the land is an avenue you may explore in this regard.

Should you wish to discuss the matter further, please contact Council's Manager Development Services, Mr Andrew Johns, on (02) 6861 2373.

Yours faithfully

Kent Boyd
GENERAL MANAGER

per:
Steven Campbell
DIRECTOR OF PLANNING & ENVIRONMENT

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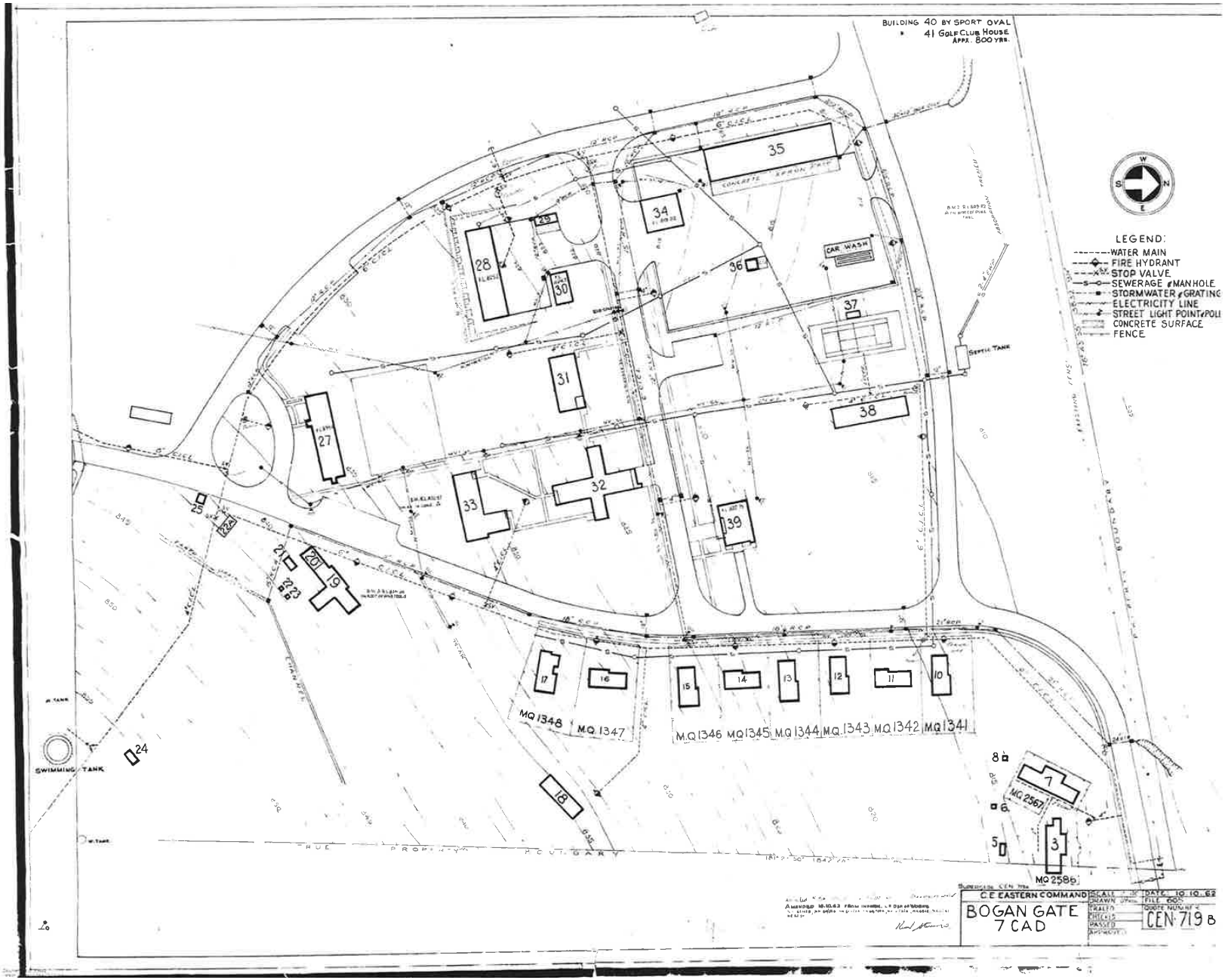
Version: 2, Version Date: 27/05/2013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41 GOLF CLUB HOUSE
APPX. 800 YRS.
LEGEND:
WATER MAIN
FIRE HYDRANT
STOP VALVE
SEWERAGE & MANHOLE
STORMWATER & GRATING
ELECTRICITY LINE
STREET LIGHT POINT & POLE
CONCRETE SURFACE
FENCE
CAR WASH
Septic Tank
SWIMMING TANK
MQ 1348
MQ 1347
MQ 1346
MQ 1345
MQ 1344
MQ 1343
MQ 1342
MQ 1341
MQ 2567
MQ 2586
C.E. EASTERN COMMAND
BOGAN GATE
7 CAD
CEN 719 B

Appendix C. SMS Statement of Environmental Effects

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PLANNING, PROPERTY + PROJECT MANAGEMENT

Statement of Environmental Effects

Proposed Development of a site at the Bogan Gate Explosive Reserve

Land Description

The development is proposed to be constructed on Lot2 DP 1064474 3577 Henry Parkes Way Bogan Gate NSW.

Description of Proposal

The erection of a demountable shed on a concrete slab to provide cover for equipment required to manufacture a chemical UN 3375 otherwise known as an emulsion precursor use in the manufacture of explosives in a safe work environment for employees. An additional consideration is to ensure we can capture any spills and ensure we contain all materials with zero discharge.
The shed roof will also serve as a water capture to optimise water use via two 50,000 litre water tanks

As an industrial process the following data is provided.

Type of business.
Manufacture of chemical UN3375

Number of staff.
4 people

Expected number of customers or clients.
We expect only 3 to 4 clients within NSW

Hours and days of operation.
Plant hours are Monday to Friday 7am till 4pm.
Operating hours will be within these times, but production days are anticipated as only being required once or twice a week based upon expectations of client's requirements.

Number: +61 418 223 269 **Email:** info@solar-sms.com.au **Address:** 9/204 Alice St, Brisbane Qld 400 **ACN:** 142 081 598

Plant, machinery, production processes.

All plant and equipment is under the regulations of the NSW Safework regulations pertaining to explosive and chemical precursors

Type and quantity of goods handled such as raw materials, finished products, waste products.

- Raw Materials consist of nitrates, water, emulsifiers, mineral oils and other non-dangerous goods. Based upon expected business it is anticipated at 80 tonnes (2 vehicle movements) per month
- Finished product is UN3375 emulsion. Anticipated at 80 tonnes (2 vehicle movements) per month
- There are no waste materials discharge from the site. All spills and waste are consumed. From time to time there could be non-dangerous goods packaging that will require disposal but infrequently. Such wastes will be disposed of at an approved local site at the commercial fees

Arrangements for transport, loading and unloading of goods (give details of frequency of truck movements and size of vehicles).

- All raw materials and finished goods will be moved to and from site by licensed dangerous goods carriers.
- On site all goods are either handled by forklifts or by pumps operated by trained SMS employees

Hazardous materials and processes.

Noise control measures.

The facility is 1.8 kilometre from the nearest on-site office.
All equipment rated below 85 dB at 1 metre distance

Dust control measures.

No dust is created and any dust entering the building is cleaned up daily as part of the start up and close down procedures

Complaints management.

We foresee no complaints arising from our activities as we are not in visual range nor do we produce and odours or releases that others may have a concern. We have a product complaint system which can be utilised if any complaint is every received. That procedures is essential within 24 hours we acknowledge a complaint has been made and where required we report the complaint to any regulator as required by our license to operate or is considered best practice. Within 7 days we will report back to the complaint originator with the results of our investigation.

Servicing arrangements.

We operate our own diesel generator units and do our own maintenance. We draw water from both the SMS captured roof water and from the BGER system.

Site Location and Analysis

The site is designated an explosive reserve and we operate under the site rules as approved by NSW Safework

Present use of the site.

Explosive Reserve

Previous uses of the site (if known).

RAAF BASE

Present uses of adjoining land.

Rural

Whether the present or any previous use is a potentially contaminating activity

For current operation no contaminating activities

For RAAF base none known

A statement as to whether or not you are aware that the site is contaminated land.

None known

Whether there has been any testing or assessment of the site for land contamination.

None known

Compliance with Planning Controls

Impact on threatened species.

None known

Integrated approval requirements.

NSW Safework

NSW Major Hazard Facility

NSW EPA

Concurrence, referral or comment from other government agencies.

NSW Safework
NSW EPA
NSW Major Hazard Facility

SEPP 33 Compliance.

In compliance (refer supporting documentation)

Parkes Local Environmental Plan 2012.

Have read and in compliance

Parkes Shire Development Control Plan 2013.

Have read and in compliance

Servicing and Infrastructure Requirements

Sewerage.

Via lease of existing facilities on site

Water Supply.

Via site pipe supply supplemented by water capture in 100,000 litre storage tanks

Stormwater.

We capture all stormwater falling on the building area and reuse
Existing site stormwater handles all other stormwater areas

Electricity supply.

We generate ourselves from diesel powered Generator

Telecommunications.

Via mobile network

Access and Traffic Requirements

Vehicle access to a public road.

Via turnoff to BGER onto Henry Parkes Way.

Proposed parking arrangements

Parking provided for 6 vehicles.

Site Management

Perimeter fencing to restrict public access to the construction site.

BGER has a fencing around the entire site in accordance with AS2187 and approved by NSW Safework

Access points forconstruction.

Via main gates with an authorise NSW Security Clearance holder at all times accompanying the constructor.

Dust control methods.

Roads within our leased area are existing gravel roads and if required dust measures are controlled via water cart if required

Assessment of Likely Impacts of the Proposal

Impacts on the natural environment (consider any impacts on creeks and waterways, existing native vegetation, native fauna, potential for soil erosion, sedimentation, landslip).

None anticipated

Impacts on the built environment (consider any impacts on heritage items, the character and amenity of the area, neighbouring views, privacy, overshadowing, drainage).

None anticipated

The likely social and economic impacts in the locality.

Local employment and increased economic activity

Site Suitability

Compatibility with land zoning.

BGER was created for the proposed development use.

Ecologically Sustainable Design

Conserve energy - passive design and energy management systems.

We have optimised power requirements as per our process requirements

Conserve water - water conservation, reuse and the use of water efficient facilities and equipment.

We have optimised water requirements as per our process requirements

Photographs

Photographs of similar explosive facilities are available on our website at https://solargroup.com/industrial-explosives/#home

Number: +61 418 223 269 **Email:** info@solar-sms.com.au **Address:** 9/204 Alice St, Brisbane Qld 400 **ACN:** 142 081 598

Appendix D. Development Consent No. DA2020/0073

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

NOTICE OF DETERMINATION OF A DEVELOPMENT APPLICATION

issued under the Environmental Planning and Assessment Act, 1979
Section 4.18 (1) (a)

Issued to:

Applicant Details:	Solar Mining Services Pty Ltd Suite 2003, 109 Pitt Street SYDNEY NSW 2000
Development Consent No:	DA2020/0073
Description of Development:	General Industry
Subject Land:	Lot 2 DP 1064474
Property Address:	3577 Henry Parkes Way, Bogan Gate
Date of Determination:	18 November 2020
Consent to Lapse on:	18 November 2025

Determination: Consent granted subject to conditions described below:

Conditions:

Conditions imposed by Parkes Shire Council

Approved Plans and Documentation

1. The development shall be carried out in accordance with:

   i. The approved stamped plan(s), prepared by Solar Mining Services, Sheet SMS/AUS/BG/01-01 (Revision No. 36) and Sheet SMS/AUS/BG/01-02 (Revision No. 33) dated 24 July 2020
   ii. The approved stamped plan(s), prepared by Now Buildings, Drawing No. AP20344,dated 28 June 2020
   iii. The approved stamped Emergency Management Plan, Document no. SMS-HSQ-E00.X02, dated 30 July 2020.
   iv. The approved stamped Plant Design Brief, Document No. SMS-ENG-000.G01, dated 28 July 2020.

   The approved stamped Statement of Environmental Effects, prepared by Solar Mining Services.

Prior to Issue of the Construction Certificate

2. The Applicant is to obtain a Construction Certificate from either Council or an Accredited Certifying Authority, certifying that the proposed works are in accordance with the Building Code of Australia and applicable Council Development and Engineering Standards prior to any building and or subdivision works commencing.

   Note 1: No building, engineering or excavation work is to be carried out in relation to this development until the necessary construction certificates have been obtained.

Note 2: It is the responsibility of the Applicant to ensure that the development complies with the Building Code of Australia and applicable Development and engineering standards in the case of building work and the applicable Council Engineering Standards in the case of subdivision works. This may entail alterations to the proposal so that it complies with these standards.

3. Pursuant to Section 94A of the Environmental Planning and Assessment Act 1979, the monetary contribution set out in the following table is to be paid to Parkes Shire Council prior to the issue of a Construction Certificate. The contribution is current as at the date of this consent and is levied in accordance with the Parkes Shire Section 94A Contributions Plan 2016, in force from 5 August 2016, which may be viewed during office hours at Council's Customer Service Centre, 2 Cecile Street, Parkes, or on Council's website www.parkes.nsw.gov.au. The contribution payable will be calculated in accordance with the contributions plan current at the time of payment, and will be adjusted at the time of payment in accordance with the Consumer Price Index (CPI) (All Groups Index for Sydney) published by the Australian Bureau of Statistic (ABS). Contribution amounts will be adjusted by Council each quarter.

Contribution Type	Proposed Cost of Development 1	Levy %	Total Contribution	Contribution Rate remains current until
Section 94A Contribution	$750,000.00	1% above $200,000.00	$5,500.00	Next CPI Quarterly Adjustment

Note: As shown on the Development Application / Complying Development Certificate Application Form.

4. The Applicant must obtain all relevant approvals to carry out sewerage work, stormwater drainage work and water supply work from Council prior to commencing works and comply with any conditions of that permit. All work must be carried out by a licensed plumber and drainer and to the requirements of the Plumbing Code of Australia and Australian Standard AS3500 Plumbing and Drainage.

5. The Applicant must submit to Council, at least two (2) days prior to the commencement of any works, the attached 'Notice of Commencement of Building or Subdivision Works and Appointment of Principal Certifying Authority'.

6. Prior to the issue of a commencement of work, a detailed soil and sedimentation plan prepared a suitability qualified person must be submitted to and approved by Council. The soil and sedimentation plan must be in accordance with the latest publication of Managing Urban Stormwater – Soils and Construction produced by Landcom. Erosion and sedimentation controls must be in place prior to the commencement of site works and maintained throughout construction activities until the site is landscaped and/or suitably revegetated.

7. The premises is to be connected to Parkes Shire Council's reticulated water supply system by lodging a 'Water and/or Sewer Connection Application Form' and payment of relevant fees to Council and making arrangements with Council for connection of a suitably sized water meter. All works must be completed prior to construction commencing.

8. Prior to the commencement of work, a Site Investigation Report shall be prepared by a suitably qualified person in accordance with the Office of Environment and Heritage Guidelines for Consultants Reporting on Contaminated Sites and submitted to Council for approval. The Site Investigation Report must outline:

   - The extent and degree of contamination or other hazards that may be present in the soil profile (if any) at the site of the telecommunications facility,

- The risk to work health and safety and / or the environment as a result of construction works uncovering areas of contamination or other hazardous material,
- Any actions required to remediate the site prior to construction works commencing on the site,
- Any other matter required by the guidelines.

Any remediation works required by the report must be carried out prior to the commencement of work and supported by a validation report in accordance with guidelines prepared by the NSW Environmental Protection Authority.

During Works

9. Excavation work or building work involving the use of electric of pneumatic tools or other noisy operations shall be carried out only between 7.00am and 6.00pm on weekdays and 8.00 am and 1.00 pm on Saturdays. No work on Sundays or Public Holidays is permitted.

10. All loading, unloading and storage of goods, equipment, tools and building materials, or the carrying out of building operations related to the development proposal shall be carried out within the confines of the property. No loading, unloading and storage of goods, equipment, tools and building materials, or the carrying out of building operations related to the development proposal shall be carried out on the nature strip, footpath or public roadway system.

11. Building and construction materials, plant, equipment and the like must not be stored, or construction work carried out on the road reserve, footpath or roadway, unless associated with a separate approval under the Road Act 1993.

12. All building rubbish and debris, including that which can be windblown, shall be contained on site in a suitable container for disposal at an approved Waste Landfill Depot. The container shall be erected on the building site prior to work commencing and shall be maintained for the term of the construction to the completion of the development.

13. Any damage caused to footpaths, roadways, utility installations and the like by reason of demolition or construction operations shall be made good and repaired to a standard equivalent to that existing prior to commencement of works. The full cost of restoration/repairs of property or services damaged during works shall be met by the Applicant.

14. Cutting and filling on the site shall be undertaken in accordance with the approved stamped plans and be battered at a maximum slope of one vertical to two horizontal (IV:2H) and revegetated or suitably retained by a retaining structure, designed and constructed to the appropriate engineering standards.

    Note: A retaining wall or structure that does not comply with State Environmental Planning Policy (Exempt and Complying Development Codes) 2008 will require prior consent from Council.

    Note: Cutting and filling on the site and the erection of retaining walls may require the approval and certification of a suitably qualified structural/geotechnical engineer.

15. Should any contaminated, scheduled, hazardous or asbestos material be discovered before or during construction works, the applicant and contractor shall ensure the appropriate regulatory authority (eg Office of Environment and Heritage (OEH), WorkCover Authority, Council, Fire and Rescue NSW etc) is notified, and that such material is contained, encapsulated, sealed, handled or otherwise disposed of to the requirements of such Authority.

16. The development is to proceed with caution. If any Aboriginal objects are found, works should stop and the NSW Office of Environment and Heritage must be contacted. In the event that an Aboriginal relic is uncovered, work must cease immediately and the NSW Office of Environment and Heritage must be contacted.

17. Throughout the course of building operations on the land, toilet facilities are to be provided, at or in the vicinity of the work site on which work involved in the erection or demolition of a building is being carried out. Toilet facilities are to be provided at a rate of one toilet for every 20 persons or part of 20 persons employed at the site.

18. All plumbing and drainage work must be carried out by a licensed plumber and drainer in accordance with Australian Standard AS/NZS3500 Plumbing and Drainage, the Plumbing Code of Australia and the following requirements:

    (a) All roofed and hardstand stormwater shall be drained in accordance with the stamped approved plan;
    (b) Stormwater disposal drains shall be connected to all roof downpipes within fourteen (14) days of installation of the roof covering to discharge water to an approved legal discharge point.

19. A minimum 20,000 litre water supply shall be provided on the site in accordance with 'Planning for Bush Fire Protection 2006' and the following:

    - Aboveground tanks shall be constructed of non-combustible material. A 65mm metal storz fitting and ball or gate valve shall be installed in any tank.
    - The gate or ball valve, pipes and tank penetration shall be adequate for full 50mm inner diameter water flow through the Storz fitting and shall be metal rather than plastic.
    - A standard Static Water Supply (SWS) marker shall be obtained from the District NSW Rural Fire Service as part of the Static Water Supply Program once the tank water supply has been installed. The marker once issued is to be:

        (a) fixed in a suitable location so as to be highly visible;
        (b) positioned adjacent to most appropriate access for the static water supply;
        (c) fixed facing the roadway on a gatepost, fence or dedicated post, at the right hand side of the entranceway to the Static Water Supply;
        (d) fixed no less than 600mm from the ground surface to the base of the sign and not higher than 1200mm from the ground surface to the base of the sign; and,
        (e) fixed with suitable screws or nails.

    Any additional rainwater storage for fire fighting purposes identified in accordance with Condition No. 27 is required to be provided above and beyond the prescribed 20,000 litres.

Prior to issue of an Occupation Certificate

20. Prior to the occupation or use of the premises, an Occupation Certificate must be obtained from the Principal Certifying Authority for the development.

21. A Fire Safety Certificate shall be furnished to the Principal Certifying Authority for all the Essential Fire or Other Safety Measures forming part of this approval prior to the issue of any Occupation Certificate. A copy of the Fire Safety certificate must be submitted to Council by the PCA with the Occupation Certificate. An electronic copy of the Final Fire Safety Certificate (together with a copy of the current Fire Safety Schedule) shall also be forwarded to the Fire Commissioner via the following dedicated email address: afss@fire.nsw.gov.

22. Prior to the issue of an Occupation Certificate, a Fire Management and Emergency Contingency Plan (FMEC) shall be prepared by a suitably qualified person to investigate the measures required for emergency firefighting purposes at operational phase for the building and any associated storage areas. The FMEC shall determine the design of the reticulated water supply main and water storages to service the development, in light of all measures proposed to manage an emergency fire situation on the site. The FMEC shall also detail all other potential emergency scenarios that could likely occur at the facility and include the contingency plans to address these situations. The FMEC must be prepared in consultation with the NSW Fire Brigade.

23. Prior to the issue of an Occupation Certificate, a detailed Waste Management Plan (WMP) shall be prepared for the operational phase of the development. The WMP must identify the types of waste that will be generated from the development and outline the final management methods, strategies and commitments in relation to the re-use, recycling and disposal of waste.

Operational Conditions

24. An Annual Fire Safety Statement shall be furnished to the Principal Certifying Authority for all the Essential Fire or Other Safety Measures forming part of this approval within twelve (12) months after the Fire Safety Certificate was issued. A copy of the Annual Fire Safety Statement mist be submitted to Council. An electronic copy of the Annual Fire Safety Statement shall also be forwarded to the Fire Commissioner via the following dedicated email address: afss@fire.nsw.gov.

25. The maximum delivery, loading or transport vehicle entering the site is not to be greater than 17.5 metres in length.

26. All vehicles must enter and exit the site in a forward direction. There shall be no reversing of vehicles onto the public roadway system. All vehicles must be parked legally, and no vehicles are permitted to be parked over the public footpath.

27. Adequate facilities shall be provided in a screened location within the premises for the separate storage of recyclable, non-recyclable and special waste material. Arrangements shall be made for the regular removal and disposal of those waste materials. The garbage and bin storage area shall be positioned in a location that is impervious to moisture, and capable of being easily cleaned.

28. All loading and unloading of delivery vehicles, is to take place off-street and must not inhibit the free flow of vehicles accessing the site or other premises in the area. Loading facilities, internal docks or goods handling areas are to be maintained free of obstruction for the sole use of delivery vehicles.

29. Any external lights shall be operated and maintained in accordance with the Australian Standard AS4282 - Control of the Obtrusive Effects of Outdoor Lighting so as not to cause a nuisance or adverse impact on the amenity of residents of the surrounding area or to motorists on nearby roads.

30. There must be no interference with the amenity of the area by reason of the emission of any offensive noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash or dust, or otherwise as a result of the development as defined in the Protection of the Environment Operations Act 1997.

31. The type and volume of chemical's stored onsite must be in accordance with the approved stamped Plant Design Brief, Document No. SMS-ENG-000.G01, dated 28 July 2020. Any variation to the type and volume of chemical's stored onsite is to be subject to the prior consent of Council. Chemicals stored in bulk form, or work areas where spillages are likely to occur, shall be bunded in accordance with the *NSW Office of Environment and Heritage Protection Manual – "Storing and Handling Liquids: Environmental Protection".*

32. Any chemical, hazardous, toxic materials or contaminated parts must be handled and stored in accordance with the Occupational Health and Safety Regulation 2001 and NSW Safework requirements and all tanks, drums and containers of toxic and hazardous materials or contaminated parts shall be stored in a bunded area. The bund walls and floors shall be constructed of impervious materials and shall be of sufficient size to contain 110% of the volume of the largest tank plus the volume displaced by any additional tanks within the bunded area.

Prescribed conditions under the Environmental Planning and Assessment Regulation 2000

33. A development consent for development that involves any building work must be issued subject to the following conditions:
    (a) that the work must be carried out in accordance with the requirements of the *Building Code of Australia*, in force on the date of the application.
    (b) in the case of residential building work for which the *Home Building Act 1989* requires there to be a contract of insurance in force in accordance with Part 6 of that Act, that such a contract of insurance must be entered into and be in force before any building work authorised to be carried out by the certificate commences.

    Note: This condition does not limit any other conditions to which a complying development certificate may be subject, as referred to in section 85A (6) (a) of the Act.

    Note: This condition does not apply:
    (a) to the extent to which an exemption is in force under clause 187 or 188, subject to the terms of any condition or requirement referred to in clause 187 (6) or 188 (4) of the Environmental Planning and Assessment Regulation 2000, or
    (b) to the erection of a temporary building, other than a temporary structure that is used as an entertainment venue.

    Note: In this condition, a reference to the *Building Code of Australia* is a reference to that Code as in force on the date the application for the relevant complying development certificate is made.

34. A sign must be erected in a prominent position on any site on which building work, subdivision work or demolition work is being carried out:
    (a) showing the name, address and telephone number of the principal certifier for the work, and
    (b) showing the name of the principal contractor (if any) for any building work and a telephone number on which that person may be contacted outside working hours, and
    (c) stating that unauthorised entry to the site is prohibited.

    Any such sign is to be maintained while the building work, subdivision work or demolition work is being carried out, but must be removed when the work has been completed.

    Note: This condition does not apply in relation to building work, subdivision work or demolition work that is carried out inside an existing building, that does not affect the external walls of the building.

    Note: This condition does not apply in relation to Crown building work that is certified, in accordance with section 109R of the Act, to comply with the technical provisions of the State's building laws.

Note: This condition applies to a complying development certificate issued before 1 July 2004 only if the building work, subdivision work or demolition work involved had not been commenced by that date.

Note: Principal certifiers and principal contractors must also ensure that signs required by this clause are erected and maintained (see clause 227A which currently imposes a maximum penalty of $1,100).

35. Residential building work within the meaning of the *Home Building Act 1989* must not be carried out unless the principal certifier for the development to which the work relates (not being the council) has given the council written notice of the following information:
    (a) in the case of work for which a principal contractor is required to be appointed:
        (i) the name and licence number of the principal contractor, and
        (ii) the name of the insurer by which the work is insured under Part 6 of that Act,
    (b) in the case of work to be done by an owner-builder:
        (i) the name of the owner-builder, and
        (ii) if the owner-builder is required to hold an owner-builder permit under that Act, the number of the owner-builder permit.

    Note: If arrangements for doing the residential building work are changed while the work is in progress so that the information notified under the above condition becomes out of date, further work must not be carried out unless the principal certifier for the development to which the work relates (not being the council) has given the council written notice of the updated information.

    Note: The above condition does not apply in relation to Crown building work that is certified, in accordance with section 109R of the Act, to comply with the technical provisions of the State's building laws.

36. Where development involves an excavation that extends below the level of the base of the footings of a building on adjoining land, the person having the benefit of the certificate must at the person's own expense:
    (a) protect and support the adjoining premises from possible damage from the excavation, and
    (b) where necessary, underpin the adjoining premises to prevent any such damage.

    Note: This condition does not apply if the person having the benefit of the complying development certificate owns the adjoining land or the owner of the adjoining land has given consent in writing to that condition not applying.

Reasons for Conditions:

Development Application No: DA2020/0073 was assessed using current procedures developed by the Parkes Shire Council and other resource information. This includes:

- the requirements of Section 4.15 of the *Environmental Planning and Assessment Act 1979* which states:

  Section 4.15 Matters for consideration – general

  In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

  (a) the provisions of:
  - *(i) any environmental planning instrument, and*
  - *(ii) any draft environmental planning instrument that is or has been placed on public exhibition and details of which have been notified to the consent authority, and*
  - *(iii) any development control plan, and*
  - *(iv) any matters prescribed by the regulations that apply to the land to which the development application relates*

  (b) the likely impacts of that development, including environmental impacts on both the natural and built environments and social and economic impacts in the locality,

  (c) the suitability of the site for the development,

  (d) any submissions made in accordance with this Act or the regulations,

  (e) the public interest.

- the requirements of the Parkes Local Environmental Plan 2012.
- the requirements of the Parkes Shire Council Development Control Plan 2013.
- field inspection and liaison between officers of the Parkes Shire Council.

Other Approvals:	
Local Government Act, 1993 approvals granted under Section 4.12:	**N/A**
Approval bodies who have Given General Terms of Approval in relation to the Development:	**N/A**
Applicants right to make an application for review against the determination:	Pursuant to Section 8.3 of the Environmental Planning and Assessment Act 1979, an applicant may request Council to review a determination within six months after the date of determination.
Applicants Right of Appeal:	Pursuant to Section 8.7 of the Environmental Planning and Assessment Act 1979, an applicant who is dissatisfied with Council's determination may appeal to the Land and Environment Court within six months after the date of determination.
Signed:	On behalf of the consent authority:
Signature:	
Name:	Brendan Hayes **DIRECTOR PLANNING AND ENVIRONMENT**
Date:	18 November 2020

Appendix E. Madison Marcus Existing Use Rights Letter

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

MADISON MARCUS

Partner Michael Mantei
Our ref MXM:MM221180

1 November 2022

Solar Mining Services Pty Ltd
Suite 2003, 109 Pitt St
SYDNEY NSW 2000

By email: vetkavramesh@solar-sms.com.au

Dear Vetkav,

Proposed Ammonium Nitrate Emulsion Facility
Lot 2 DP 1064474, 3577 Henry Parkes Way Bogan Gate
Advice on Permissibility

1. We refer to your recent request for our advice on whether a proposed ammonium nitrate emulsion (ANE) manufacturing and storage facility at Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate ("lot 2") is permitted with development consent by reason of existing use rights under the *Environmental Planning and Assessment Act 1979* ("EP&A Act"). ANE is an explosives substance produced from ammonium nitrate and is predominantly used in the mining industry.

2. The proposed development involves the production of 15,000 tonnes of ANE per annum and comprises storage of 500 tonnes of ammonium nitrate and 100 tonnes of ANE at any one time. The plant is to be operated by Solar Mining Services Pty Ltd. The proposed ANE plant is prohibited on lot 2 under *Parkes Local Environmental Plan 2012*. The only potential pathways to approval of the proposed ANE plant are an amendment to PLEP 2012 or existing used rights under Part 4 of the EP&A Act.

3. An investigation of existing use rights requires an analysis of the historical use of the land concerned and the planning controls that applied to the land during the period of the existing use. The legal advice in this letter is based on information you have provided to us about the use of lot 2 and our own research of historical records, including records held by the National Archives of Australia.

Summary of Advice

4. An existing use is the use of a building, work or land for a lawful purpose immediately before the coming into force of an environmental planning instrument which had the effect of prohibiting that use. *Parkes Local Environmental Plan 1990* ("PLEP 1990") commenced controlling development on lot 2 on 8 April 2004 when lot 2 was sold by the Commonwealth of Australia (Australian Military) to Timber Creek Holdings Pty Ltd. Immediately prior to that date the whole of lot 2 was lawfully used for the purposes of an explosives workshop and explosives storage facility.

5. PLEP 1990 was repealed by *Parkes Local Environmental Plan 2012* ("PLEP 2012") on 7 December 2012. PLEP 2012 had the effect of prohibiting an explosives workshop and explosives storage facility on lot 2. Immediately before the commencement of PLEP 2012, the use of lot 2 for the purposes of an explosives workshop and explosives storage facility was a lawful use by reason of the existing use rights provisions section 109(1) of the EP&A Act. On the commencement of PLEP 2012, the use of lot 2 for the purposes

of an explosives workshop and explosives storage facility was an existing use as defined in (as it then was) section 106(a) of the EP&A Act.

6. Lot 2 has been continuously used for the purposes of an explosives workshop and storage facility since the commencement of PLEP 2012 on 7 December 2012. The whole of Lot 2 currently enjoys existing use rights under section 4.66(1) of the EP&A Act for the purposes of an explosives workshop and storage facility.

7. The proposed ANE plant, being a plant designed for the manufacture and storage of explosives, is permitted with development consent under section 164 of the *Environmental Planning and Assessment Regulation 2021*.

History of Lot 2

8. Lot 2 was originally part of a larger parcel of land used for explosive storage and testing area known locally as the Bogan Gate Explosives Reserve ("BGER"). The BGER was established by the Australian Military in 1942 for the purposes of storage of ammunitions used in WWII.[1] The BGER was compulsorily acquired by the Commonwealth of Australia for defence purposes on 9 June 1960.[2]

9. A masterplan prepared by the Australian Military Forces in August 1962 indicates that BGER land comprising 2,033 acres. The "Masterplan User Requirement" report was prepared in 1962 for the purpose of upgrading and expanding the BGER. The report included a site plan showing the layout of the BGER. The Report and Masterplan are attached to this advice as **Annexure A.**

10. The range of activities to be carried out at the upgraded BGER were described in the User Requirement Report as "inspection, repair, modification, maintenance and destruction of ammunition stocks as directed by AHQ". The User Requirement Report states that the BGER was designed to store and process between 12,000 and 22,000 tons of explosives. The User Requirement Report described the construction of numerous buildings including an administration "HQ" building, a transport compound comprising an office, workshop and storeroom, refuelling facility, toilets, a number of explosives storehouses, an explosives workshop and laboratory, carpenters store and numerous explosives shelters. The Masterplan showed the location of these buildings on the land.

11. The proposal outlined in the User Requirements Report and Masterplan was implemented in the years following 1962. A comparison of the property boundaries on the 1962 Masterplan and the current boundaries of lot 2 indicates that the masterplan included the whole of present day lot 2, and a "burning area" that occupied a small portion of present day lot 158 DP 750177 and lot 4 DP 1064474 to the east of lot 2.

12. Historical information about use of the adjoining Crown land to the east of lot 2 (now described as lot 158 DP 750177) indicates that this land was also used for the purpose of explosives manufacturing and testing. The land was leased to a company called Dupont and later Dyno Nobel. Information provided to me indicates that the area described as the "burning area" on the 1962 Masterplan was also used by Dupont Nobel.

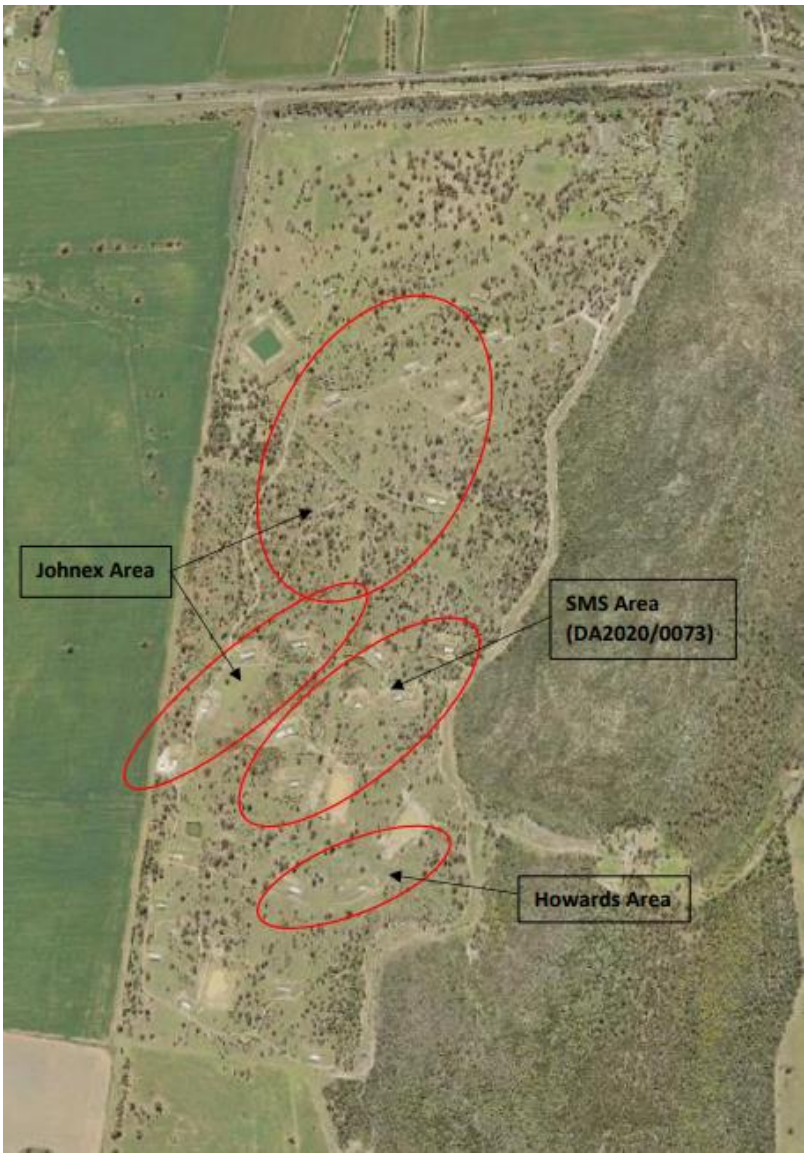
13. There is limited information about the history of lot 2 between 1962 and 2004. Much of this information is no doubt classified, the land being owned by the Commonwealth and used for military purposes. We assume for the purposes of this advice that the BGER was used for the purposes of the storage and processing of explosives by the Australian military between 1962 and 2004.

14. The BGER continued to be owned by the Commonwealth until 8 April 2004 when lot 2 was transferred to Timber Creek Holdings Pty Ltd ("Timber Creek"). Timber Creek transferred lot 2 to the current owner, Lexa Enterprises Pty Ltd, on 9 February 2022.

[1] Documents obtained from National Archives of Australia, series no. MP742/1, control 305/24/133; title: Storage of Ammunition at Bogan gate NSW – 2 base ammunition depot

[2] Commonwealth of Australia Gazette No. 39, 9 June 1960.

15. In 2005 Timber Creek leased a portion of lot 2 to Johnex Explosives for the purpose of manufacture of explosives and another portion to Howards and Sons Pyrotechnics for the purpose of manufacture and store fireworks. Existing facilities on lot 2 including explosives manufacturing plant facilities, explosives storages, site offices, storage buildings and residences. We are instructed that Johnex and Howards and Sons have continuously used the site for manufacturing and storing explosives and fireworks from 2005 to the present day. The separate areas of lot 2 used by Johnex and Howards and Sons are shown on the aerial photograph below:



(Source: maps.six.gov.au; overlay taken from site plan prepared for DA2020/0073)

16. On 23 May 2013 Parkes Shire Council wrote to a representative of Timber Creek advising that "Council can confirm that it is satisfied that you have demonstrated that the use of the explosives reserve (lots 2 and 4 DP 1064474) is an existing use pursuant to the Environmental Planning and Assessment Act 1979, as amended, based on the evidence at hand." We are instructed that the Council no longer holds the evidence on which the letter was based.

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17. On 18 November 2020 SMS obtained development consent to conduct a "general industry" on the site (Parkes Shire Council reference DA2020/0073). The architectural plans and statement of environmental effects accompanying the notice of determination indicate that the consent approved the construction of a demountable shed on a concrete slab to provide cover for equipment required to manufacture ANE. The explosives plant approved in DA2020/0073 is designed to manufacture 3,600 tonnes of ANE per annum and store up to 100 tonnes.[3] The architectural plans and statement of environmental effects are both expressly and by necessary implication incorporated into the notice of determination for DA2020/0073. We are instructed that the proposed ANE plant is to operate within the building approved in DA2020/0073.

18. A complete chronology of events relating to the establishment and continued use of the BGER compiled from the documents that we have reviewed is copied at **Annexure B** to this advice.

History of Planning Controls including PLEP 2012

19. Lot 2 has been affected by a number of statutes and planning instruments since 1942. We do not have a complete history of planning controls applying to the BGER since 1942, however for the reasons explained below, those details are not necessary.

20. Our research indicates the land was affected by the following instrument and zoning:

Period	Instrument	Zone
7/12/2012 to Present	Parkes LEP 2012	RU1 Primary Production
14/12/1990 to 7/12/2012	Parkes LEP 1990	1(a) Rural "A"
Prior to 14/12/1990	IDO 1 – Shire of Goobang	Not Known

21. Lot 2 was located within zone 1(a) Rural "A" under *Parkes Local Environmental Plan 1990* ("PLEP 1990"). The zoning table for the 1(a) Rural "A" zone nominates uses that are permitted without development consent and prohibited. All other uses not nominated are permitted with development consent on land in the 1(a) Rural "A" zone. The manufacturing and storage of explosives was not a type of development that was nominated as prohibited or permitted with development consent, and accordingly would have been permitted with development consent while PLEP 1990 remained in force.

22. Lot 2 is presently located within zone RU1 Primary Production under *Parkes Local Environmental Plan 2012* ("PLEP 2012"). The zoning table for the RU1 zone nominates uses that are permitted with and without development consent. All other uses not nominated are prohibited on land in zone RU1. The proposed ANE plant, being a manufacturing activity, is a type of industry. The only types of industry that are permitted with or without development consent in the RU1 zone are extractive industry, home industry and rural industry. Those expressions are defined in the dictionary to PLEP 2012 none of which describe an industry of the character of the proposed ANE plant. The only potential pathway to approval of the proposed ANE plant under PLEP 2012, as it currently stands, is by existing use rights under Part 4 of the EP&A Act.

Advice on Existing Use Rights

23. In NSW planning law an existing use is the use of a building, work or land for a lawful purpose immediately before the coming into force of an environmental planning instrument which had the effect of prohibiting that use.[4] An existing use is presumed to be abandoned if it "ceases to be actually so used" for a continuous period of 12 or 24 months depending on the date of the cessation.[5] An existing use that is not abandoned may continue to operate despite any restriction in the EP&A Act or any environmental planning

[3] Plant Design Brief, Document No. SMS-ENG-000.G01, dated 28 July 2020, p5 & 14.
[4] S4.65(a) EP&A Act
[5] S4.66(3) & (4) EP&A Act

instrument applying to the land. The onus of proving existing use rights rests with the person relying on those rights.[6]

24. The *Environmental Planning and Assessment Regulation 2021* permits an existing use, with development consent, to be enlarged, expanded or intensified, altered and rebuilt,[7] provided the proposed development is carried out only on the land on which the existing use was carried out immediately before the "relevant date".[8] The Regulations are deemed to be included in all environmental planning instruments.

25. Modern day town planning controls in NSW commenced on 5 April 1945 with the introduction of Part XII of the *Local Government Act 1919* ("LG Act"). Part XII enabled the preparation of planning scheme ordinances that contained detailed controls on the carrying out of development. Our research indicates that the earliest planning scheme ordinance that applied to lot 2 was *Shire of Goobang Interim Development Order No.1* ("IDO 1"). We assume for the purposes of this advice that planning approval was **not required** for the BGER under Part XII of the LG Act or IDO 1. Neither Part XII of the LG Act, and by implication IDO 1, were expressed to bind the Crown. Even if they did bind the Crown, they were set aside at least in respect of the Crown in the right of the Commonwealth, by section 109 of the Australian Constitution.[9]

26. When the EP&A Act commenced on 21 December 1979 it expressly applied to the Crown, not only in the right of NSW but also the Crown "in all its other capacities", including the Crown in the right of the Commonwealth.[10] The EP&A Act and planning instruments made under the Act, continued to be subject to the limitations on the legislative power of the Parliament of NSW in the Australian Constitution. The EP&A Act as presently in force, continues to apply to the Crown in the right of the Commonwealth subject to the same limitations.

27. A restriction in the EP&A Act or subordinate legislation, including an environmental planning instrument, that prohibits or requires consent for the BGER is inconsistent with the power of the Federal Parliament in section 51(vi) of the Australian Constitution to make laws with respect to the military defence of the Commonwealth. Any such restrictions in the EP&A Act and accompanying subordinate legislation that is inconsistent with a law of the Commonwealth is "deemed to be invalid" to the extent of the inconsistency under section 109 of the Australian Constitution. The BGER was no doubt established under a law of the Commonwealth. Accordingly, the BGER facility on lot 2 was a lawful use (being a use to which no State planning law applied) until lot 2 was sold in 2004 to Timber Creek Holdings Pty Ltd.

Characterisation of the Lawful Use of Lot 2 at the Relevant Date

28. When the Commonwealth/Australian Military sold lot 2 to Timber Creek on 8 April 2004 the use of lot 2 as an explosives reserve ceased to be protected by section 109 of the Australian Constitution and became subject to the controls contained in the EP&A Act and PLEP 1990. In effect, PLEP 1990 "came into force" in respect of lot 2 on 8 April 2004. That date is the "relevant date" for existing use rights.

29. Characterisation of an existing use depends on the actual physical use being carried out on the land and the purpose to which for which that use is seen to serve. Where, as was the case with the BGER, a use comprises multiple activities of different kinds, the use is characterised "at a level of generality which is necessary and sufficient to cover the individual activities, transactions or processes carried on, not in terms of the detailed activities, transactions or processes".[11] Immediately prior to 8 April 2004, lot 2 was used for an explosives workshop in which explosives were repaired, modified, and maintained, and explosives storage.[12] These various activities can be described at a level of generality as "explosives workshop and

[6] *Penrith Waste Services Pty Ltd v Penrith CC* (1998) 101 LGERA 98

[7] EP&A Regulation 2021 cl 162 to 167

[8] "relevant date is defined as the date on which an environmental planning instrument having the effect of prohibiting the existing use first came into force effect - EP&A Regulations 2021 cl 162(2)

[9] "The Law of Land Development in NSW" Wilcox M; The Law Book Company 1967, p206

[10] S6 EP&A Act as made

[11] *Royal Agricultural Society (NSW) v Sydney City Council* (1987) 61 LGRA 305

[12] User Requirement Report and Masterplan 1962

explosives storage facility". The extent of the land area on which these activities took place was the whole of lot 2.

30. When lot 2 was sold to Timber Creek on 8 April 2004, PLEP 1990 applied. PLEP 1990 required development consent for an explosives workshop and explosives storage facility. No consent was required by reason of section 109(1) of the EP&A Act (the continuing consent provision) as it then was, which prevented an environmental planning instrument operating so as to require consent to be obtained under the EP&A Act for the "continuance of a use of a building, work or land for a lawful purpose". The BGER was a lawful purpose prior to 8 April 2004 for the reasons outlined above.

31. PLEP 2012 commenced to apply to the land on 7 December 2012. The commencement of PLEP 2012 had the effect of prohibiting development for the purposes of an explosives workshop and explosives storage facility on lot 2. The use of lot 2 continued to be protected by existing use rights because immediately prior to the commencement of PLEP 2012, the use of lot 2 for an explosives workshop and explosives storage facility was a lawful use under section 109(1) of the EP&A Act. On the commencement of PLEP 2012, the continuing use of lot 2 became protected under section 107(1) of the EP&A Act (the existing use provisions).

32. There is no direct evidence that is publicly available, at least that we aware of, to establish that lot 2 was in fact being used for explosives processing and storage immediately prior to its sale to Timber Creek Holdings Pty Ltd. That fact can be assumed having regard to the presumption of regularity. The presumption or regularity is a legal doctrine that arises when there is no direct evidence of a particular state of affairs, and a public official or public authority subsequently does an act or exercises a power which depended for its validity upon the existence of that state of affairs. In those circumstances the subsequent act carries with it a legal presumption of the prior state of affairs.[13]

33. The granting of development consent by Parkes Shire Council to DA 2020/0073 gives rise to the presumption that lot 2 was in fact being used for explosives processing and storage immediately prior to its sale to Timber Creek. DA2020/0073 could not have been granted unless Parkes Shire Council was satisfied that lot 2 was in fact being used for explosives processing and storage immediately prior to its sale to Timber Creek Holdings Pty Ltd and accordingly benefited from existing use rights.

34. Although not strictly falling within the presumption of regularity, the letter from Parkes Shire Council dated 25 May 2013 saying that lot 2 "benefited from existing use rights" at that time, together with the absence of any enforcement action by the Council to require Johnex or Howards and Sons to cease using lot 2 for the manufacture and storage of explosives, supports an inference that lot 2 was in fact being used for explosives processing and storage immediately prior to its sale to Timber Creek.

Continuance of the Existing Use on Lot 2

35. We are instructed that in 2005 Timber Creek Holdings Pty Ltd leased part of lot 2 to Johnex Explosives for the purpose of manufacture of explosives and another portion to Howards and Sons Pyrotechnics for the purpose of manufacture and store fireworks. One of those leases is registered on the title to lot 2. We are instructed that these companies commenced operations on the land shortly after entering into the leases. The use of parts of the site by Johnex and Howards and Sons was for the purposes of the existing use and had the effect of continuing the existing use.

36. The manufacture and storage of explosives by Johnex and Howards and Sons on a portion of the site had the effect of continuing the existing use over the whole of lot 2. Once an existing use commences, a continuation of the existing use in some form is sufficient to prevent abandonment of the existing use. There is no legal principle of which we are aware that an existing use can be partly abandoned.

37. If our instructions are wrong and Johnex and Howards and Sons have ceased using lot 2 for the manufacture and storage of explosives, the presumption of abandonment can be rebutted if there is a **subjective intention** on the part of the owner of the land to resume the existing use, despite the use

[13] See summary of case law in *Dosan Pty Ltd v Rockdale City Council* [2001] NSWLEC 252

having ceased to be actually used for a period of more than 12 or 24 months.[14] If necessary, we are instructed that Solar Mining Services can obtain a statement from Timber Creek Holdings Pty Ltd that it intended to lease lot 2 to future occupiers, including SMS, for the purpose of the manufacture and storage of explosives.

Permissibility of the Proposed ANE Plant

38. The proposed ANE plant is either an enlargement, or an alteration to, the existing use, being an enlargement or alteration from the manufacture and storage of military explosives to the manufacture and storage of explosives for industrial purposes. The manufacture and storage of ANE is a type of activity that occurs in an explosives workshop and storage facility. Sections 164 and 165 of the *Environmental Planning and Assessment Regulation 2021* permit an existing use to be enlarged or building used for an existing use to be altered with development consent provided the enlargement or alteration is: (a) for the existing use of the building or work and for no other use, and (b) carried out only on the land on which the existing use, building or work was erected or carried out immediately before the relevant day. Both of those preconditions are satisfied in the case of the proposed ANE plant.

39. The proposed ANE plant is permitted with development consent under Part 4 of the EP&A Act.

Yours faithfully



Madison Marcus Law Firm

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Partner
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[14] *Dosan Pty Ltd v Rockdale CC* (2001) 117 LGERA 363

ANNEXURE A – 1962 "BGER USER REQUIREMENTS REPORT" AND MASTERPLAN

TELEPHONE FA 0455
Extension 313

AUSTRALIAN MILITARY FORCES

SECURITY REGISTRY ARMY 51/441/22

Quote in Reply
420/73/321(Qtg)

HEADQUARTERS
EASTERN COMMAND
VICTORIA BARRACKS
PADDINGTON, NSW

Aug 62

3 SEP 1962

AHQ (CANBERRA)

Copy to : AHQ (MELBOURNE)
(For DOS)
(Less attachments)

7 CAD, BOGAN GATE : MASTER PLANNING

Reference AHQ 51/441/22 of 11 Apr 62

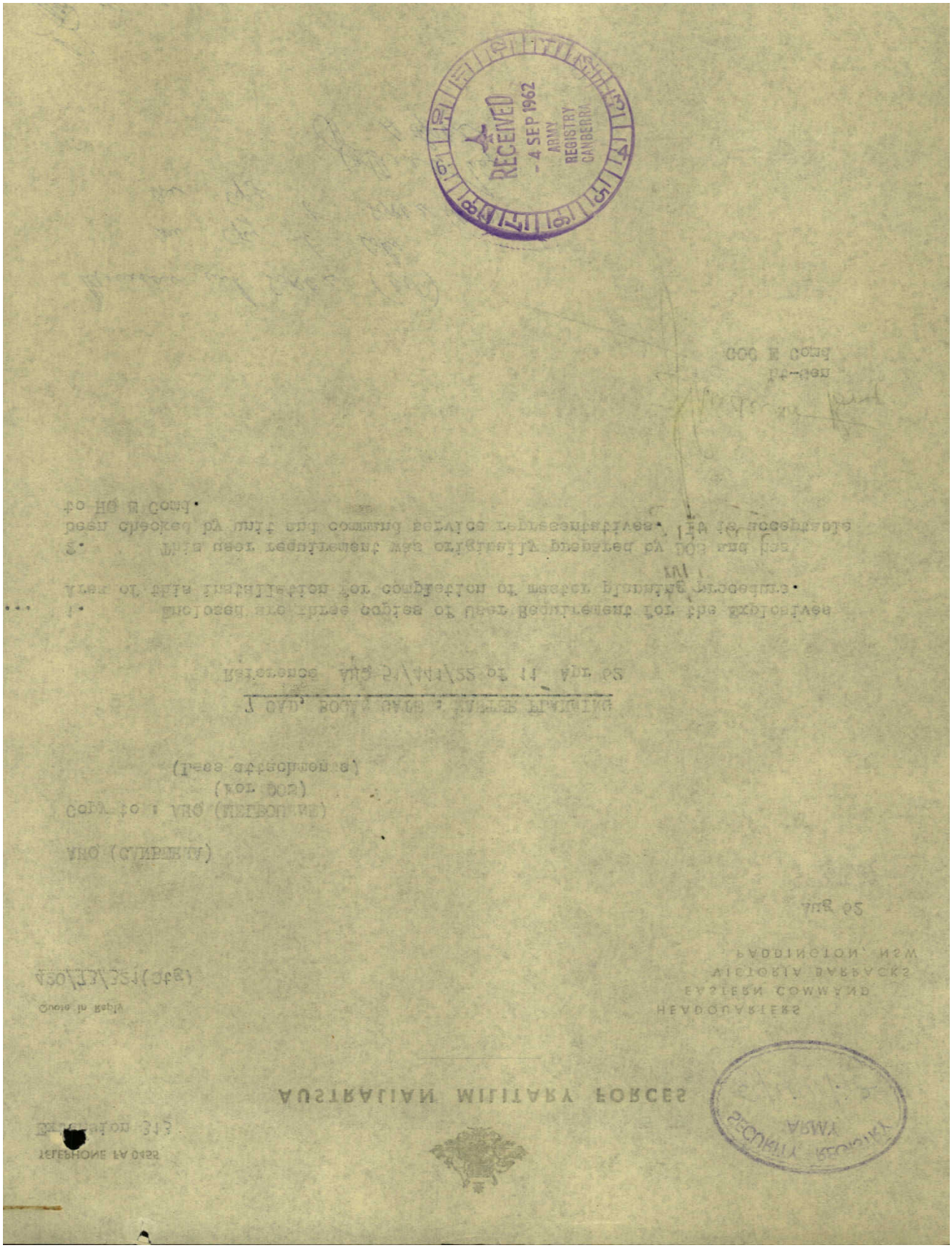
... 1. Enclosed are three copies of User Requirement for the Explosives Area of this installation for completion of master planning procedure.

2. This user requirement was originally prepared by DOS and has been checked by unit and command service representatives. It is acceptable to HQ E Comd.

Lt-Gen
GOC E Comd

Discussed with SOREZ (MP)
one copy to Cols
one copy to SOREZ (MP)
4 Sep 62

4 Sep 62


RECEIVED
- 4 SEP 1962
ARMY
REGISTRY
CANBERRA

MASTER PLANNING

USER REQUIREMENT

7 CENTRAL AMMUNITION DEPOT - EXPLOSIVES AREA

GENERAL.

1. DESIGNATION: 7 Central Ammunition Depot (7 CAD).

2. LOCATION AND CONDITIONS.

(a) Located at BOGAN GATE, N.S.W., on the SYDNEY-BROKEN HILL railway line.

(b) Depot site is approximately two (2) miles from BOGAN GATE township (population approx 100) 22 miles WEST of PARKES (population approx 8000) and 290 miles from SYDNEY.

(c) Area. The total area is approximately 2033 acres consisting of:-

(i) 839½ acres of cleared land acquired vide CAG No. 36 of 29 Jun 50.

(ii) 1193½ acres of timbered land, formerly National Forest No. 25, acquired vide CAG No. 39 of 9 Jun 60.

(d) There are no other units in the area.

(e) Climate.

(i) BOGAN GATE is approx 900 feet above sea level.

(ii) Average rainfall is 20 inches, but heavy rain storms are experienced.

(iii) Surrounding country is flat and open, with prevailing winds from the WEST. Heavy local dust storms occur during summer.

(iv) Winter frosts are frequent and persist until late in the morning, while sustained periods of heat exceeding 100 deg F. are experienced in the summer. Maximum and minimum recorded temperatures are 110 deg F. and 28 deg F.

(f) Fire Hazard. The combination of climatic factors and the nature of the country poses a high fire danger in the season.

(g) Termites, rabbits and blowfly are present in the area.

(h) The installation is divided into an Administrative and Explosives Area. This user requirement deals only with those aspects affecting the technical function of the explosives area.

3. FUNCTION.

(a) Peace.

(i) Holds portion of central ammunition stocks for mobilization requirements, and replenishment of Command stocks as directed by AHQ.

(ii) Receives ammunition from local and overseas production.

(iii) Inspection, repair, modification, maintenance and destruction of ammunition stocks as directed by AHQ.

(iv) This unit will remain in its present location, and no change of peacetime role is envisaged in the foreseeable future.

(b) War.

(i) The function of this unit does not change on mobilisation.

(ii) It will, however, become necessary to increase the storage capacity, probably up to 22,000 tons, by the provision of temporary storage accommodation. The existing boundaries of the Army owned property are sufficient to meet this expansion.

4. PERSONNEL.

(a) Peace IV/145F/1(PE).

	ARA	Civ	Total
Officers	4	-	4
Warrant Officers	2	-	2
S/Sgts and Sgts (incl att)	8	2	10
Rank and file (incl att)	12	23(a)	35(a)
Total all ranks (incl att)	26	25(a)	51(a)

Notes: (a) Includes one female.
(b) An additional ten to fifteen casual assistant storemen are employed throughout the year.
(c) No foreseeable significant variations anticipated in peace.

(b) War.

HE not yet promulgated.

5. VEHICLES AND PLANT

(a) Peace. IV/145F/1(PE).

Truck utility ¼ ton	4
Truck carryall ¾ ton	1
Truck ambulance	1
Truck 2½ ton cargo	3
Truck tank 2½ ton water	1
Truck firefighting 2½ ton	1
Tractor, wheeled, agricultural	1
Trailer ½ ton cargo	2
Trailer 3 ton cargo	4
Trailer van, 5 ton, ammo repair shop	2

5. VEHICLES AND PLANT (cont).

(b) War.

HE not yet promulgated.

BUILDINGS.

6. ADM & Q.

The following functional elements are required to be located in the Adm HQ building:-

(a) Single office accommodation in accordance with current scale for:-

Chief Ordnance Officer
Deputy COO
Ammunition Technical Officer
Adjutant/Quartermaster

(b) General office accommodation in accordance with current scale for:-

(i) Control Office consisting of three personnel, plus approx. 140 sq. ft for accounting records.

(ii) Typist and twenty-line telephone switchboard.

(iii) Technical library, stationery and registry files.

(iv) Duty room to accommodate one occupant outside normal working hours. This room to be adjacent and with ready access to telephone switchboard.

(c) Toilet and ablution facilities to be provided in accordance with current scale.

(d) Control Point. See Para 13(g).

(e) Q Stores etc. } In accordance with E Comd
Sleeping Quarters } user requirement

(f) Married Quarters. There is no requirement for married quarters in the explosives area. Married quarters in Administrative Area to be in accordance with E Comd user requirement.

7. CATERING.

In accordance with E Comd user requirement.

8. TRANSPORT.

A Transport compound is required outside of the explosives area to provide:-

(a) Covered accommodation for vehicles on establishment.

(b) Office for one occupant and transport records.

(c) A storeroom for servicing equipment and tools.

(d) Unit repair workshop for RAEME attached.

8. TRANSPORT (cont).

(e) Vehicle servicing ramp for unit maintenance, with shelter to enable servicing in all weather.

(f) Sealed car wash with adequate provision for drainage.

(g) Petrol issue point with pump and underground storage tank.

(h) Oil and lubricant store.

(j) Fire station equipment storeroom.

(k) Hardstanding required throughout transport compound.

(l) Ablution facilities required. Adjacent toilet facilities are acceptable.

9. MEDICAL.

RAP/First Aid facilities required outside of the explosives area in accordance with E Comd user requirement.

10. INSTRUCTIONAL.
11. AMENITIES.
12. RELIGIOUS.

In accordance with E Comd user requirement.

13. TECHNICAL BUILDINGS.

(a) Explosives Storehouses.

(i) The planned nominal capacity of this depot is 12,000 tons.

(ii) All existing storage accommodation consists of temporary wartime buildings of timber frame, corrugated iron walls and roof, and is not acceptable within the requirements of Ammunition and Explosives Regulations (Land Service) (AERs). Refer Annex "A" classified schedule of existing buildings.

(iii) Explosives storehouses to be erected as new works are to be in accordance with Drawing No. ECD15675 Type Plan Ammunition Store. These buildings each have a nominal capacity of 540 tons, and twenty-two (22) such buildings will be required to provide sufficient accommodation.

(iv) Proposed siting of the new storehouses is shown on Zoning Diagram attached as Annex "B". Twenty five (25) sites have been selected to permit optional siting.

(v) The selection of the sites shown on Annex "B" has been determined by requirements for both inside and outside safety distances.

(vi) Buildings containing Category Z explosives are required to be traversed in accordance with AERs. Whilst provision has been made for Category Z storage in the siting of a number of buildings, it is intended initially to have only five (5) storehouses effectively traversed.

13. TECHNICAL BUILDINGS (cont).

(a) Explosives Storehouses (cont).

(vii) Isolation. An explosives isolation store of approx 400 sq. ft. is required in the explosives area. Storehouse No. 75 would be satisfactory for this purpose.

(b) Ammunition Repair Workshop.

An ammunition repair workshop to provide facilities for repair, derusting, painting and packaging of ammunition and components, tool store, office, shower and toilets. Building type required is to be generally in accordance with Drawing No. NA 1453. —?

(c) A laboratory with facilities for inspection, sampling and tests. ~~Existing building would be satisfactory with modifications.~~ New building

(d) A non-explosive and empty package store of approx 3500 sq ft is required. Storehouses No. 2 and 3 would be satisfactory for this purpose.

(e) A Depot Equipment and Expense Store of approx. 600 sq. ft. is required. Plus AIC stores.

(f) Facilities are required for storage of low flash point solvents and similar expense stores/supplies. Accommodation within transport POL building is acceptable providing stock can be segregated from normal POL.

(g) A building is required at the entrance to the explosives area to provide the following facilities:-

(i) Depot Office and Control Point - one occupant.

(ii) Change room with lockers, showers ablutions and toilets for thirty personnel.

(iii) Lunch room for twenty personnel.

(iv) Observation of and easy access to explosives area gate.

(h) Six toilets are required in the explosives area, each to provide service for up to ten personnel. Each toilet to be provided with wash basin.

(j) A demolition firing point shelter is required to accommodate two personnel. Shelter is to provide frontal, side and overhead protection and to be fitted with armour plate observation window. Control board and poles for aerial cables for six firing circuits to be provided.

(k) Carpenters shop and timber store to be provided. This may be located outside the explosives area.

(l) All explosives storehouses are to be provided with protection against lightning and accumulation of static electricity in accordance with Ammunition and Explosives Regulations (Land Service) and British Standard Code of Practice CP 326:101, Protection of Structures against Lighting.

13. TECHNICAL BUILDINGS (cont).

(m) Fire points, consisting of a shelter approx 8 ft long by 3 ft wide by 5 ft high, to accommodate knapsack sprays, extinguishers, buckets etc. are required throughout the explosives area as shown on Zoning Diagram, Annex 'B'.

FIXED EQUIPMENTS (EXTERNAL).

14. SECURITY.

(a) The explosives area is required to be fenced in accordance with AHQ memo of 8 Jun 62, "Security of Ammunition Depots".

(b) A security fence is required around storehouses B2 for attractive small arms ammunition, and around B12 for both SAA and demolition explosives.

(c) Gates and stock grids are required at main entrance to explosive area adjacent to Depot office, also at NW end and WEST side of explosives area.

(d) Security lighting is required for attractive items storehouses, vide AHQ memo of 8 Jun 62 "Security of Ammunition Depots". There is no requirement for other security lighting within the explosives area.

(e) A fire alarm warning device is required to provide clearly audible signals to all parts of the explosives and barracks areas. A push button or similar system is required throughout the explosives area and at Adm HQ building to provide a means of initiating the warning device.

15. FUNCTIONAL.

(a) Cranes.
(b) Hoists.
(c) Street Lighting.

No special requirement in explosives area.

(d) Ramps. Vehicle servicing ramp required in transport compound.

ENGINEER SERVICES.

16. COMMUNICATIONS.

(a) Roads. Sealed all weather roads 15 ft wide are required throughout the explosives storage area to service all buildings, burning and demolition areas. Main point of entry from PARKES - CONDOBLIN Road is via barracks area to Depot Office. Maximum anticipated vehicle loading is 15 ton load capacity.

(b) Rail. A rail siding with loading platform approx 200 ft, transit store approx 2000 sq. ft. and overhead cover is required. Existing facilities are acceptable with the addition of an open sided overhead cover of approx 100 ft at loading platform.

(c) There is no waterway/airway requirement.

17. WATER SUPPLY.

(a) Water reticulation is required to ammunition repair workshop and laboratory. A filling point is also required in the explosives area for refilling unit fire tanker when engaged on fire fighting, burning off and similar duties. A fire hydrant would suffice for this purpose.

(b) A 1000 gal roof catchment storage tank is required at each explosives storehouse.

(c) Fire fighting mains and hydrants. A fire hydrant is required at ammunition repair workshop and non-explosive/empty package store. There is no other special requirement elsewhere in the explosives area.

18. SEWERAGE.

(a) Sewerage/septic tank service required at ammunition repair workshop.

(b) Service provided to remaining toilets in explosives area to be other than EC type.

19. DRAINAGE.

(a) Surplus water from explosives storehouse roof catchment, and ammunition repair workshop to be drained clear of buildings.

(b) Surface drainage required throughout explosives area to prevent scouring of roads and hardstandings, and control erosion.

20. ELECTRICITY.

(a) Three phase power required to ammunition repair workshop and carpenters shop. Single phase 240V required to laboratory, depot office, non-explosive/empty package storehouse and depot equipment store.

(b) Ammunition repair workshop and laboratory installation to be in accordance with Ammunition and Explosives Regulations (Land Service) Part 1.

(c) Power required for external security lights on storehouses containing attractive items.

21. TELEPHONES.

(a) A switchboard is required to provide two outside lines and twenty internal subscribers.

(b) Telephone service within the explosives area may be supplied by a series of party lines provided this method is efficient.

22. RADIO.

There is some danger that currents induced by radio or radar short wave transmitters may cause premature firing of electric detonators in ammunition components. For this reason there would be an objection to the installation of radio or radar short wave transmitters adjacent to the explosives area.

23. GAS.

No special requirement.

24. GARBAGE.

Refuse and waste from explosives area disposed of by burning and/or buried within area.

25. INSTRUCTIONAL.

No special requirement.

26. RECREATIONAL.

No special requirement.

27. FUNCTIONAL.

(a) Hardstanding is required as follows:-

(i) Each explosives storehouse loading platform area.

(ii) Ammunition repair workshop.

(iii) Rail siding.

(iv) Unit transport compound.

(v) Car park areas.

(b) Car parks are required for:-

(i) Employees - up to eight (8) vehicles.

(ii) Visitors - up to three (3) vehicles.

28. LANDSCAPING.

As the explosives area is mainly contained in what was formerly a State Forest there is very little requirement for tree planting. Some tree planting will be necessary on the western sector (839A 3R), particularly in relation to proposed storehouses in this area, to provide wind breaks, noise and dust reduction and erosion control.

29. ATTACHMENTS.

(a) A Zoning Diagram showing the proposed siting of new buildings in the explosives area is attached as Annex 'B'.

(b) A classified schedule of existing buildings is attached as Annex 'A'.

USER REQUIREMENT - 7 CAD

CLASSIFIED SCHEDULE OF EXISTING BUILDING

Bldg No	Present Use	Proposed Use	Classification
1	Depot Equipment	Remove	
~~1~~ 87	AIU Office	"	
2	Explosives Storehouse	Non-explosives &	
3	" "	Empty package store	
4	" "	Remove	
5	" "	"	
6	Non-explosives Storehouse	"	
7	" " "	"	
8	Explosives Storehouse	"	
9	" "	"	
10	" "	"	
11	" "	"	
12	" "	"	
13	" "	"	
14	" "	"	
15	" "	"	
16	" "	"	
17	" "	"	
18	" "	"	
~~[illegible]~~ 84	Sub Depot Office	"	
19	Explosives Storehouse	"	
20	" "	"	
21	" "	"	
22	" "	"	
23	" "	"	
24	" "	"	
25	" "	"	
26	" "	"	
27	" "	"	
28	" "	"	
29	Isolation Storehouse	"	

USER REQUIREMENT - 7 CAD

CLASSIFIED SCHEDULE OF EXISTING BUILDING (Cont)

Bldg No	Present Use	Proposed Use	Classification
30	Explosives Storehouse	Remove	
31	" "	"	
32	" "	"	
33	" "	"	
34	" "	"	
35	" "	"	
36	" "	"	
37	" "	"	
38	" "	"	
39	" "	"	
40	" "	"	
41	" "	"	
42	" "	"	
43	" "	"	
44	" "	"	
45	" "	"	
46	" "	"	
47	" "	"	
48	" "	"	
49	" "	"	
50	" "	"	
51	" "	"	
52	" "	"	
53	" "	"	
54	" "	"	
55	" "	"	
56	" "	"	
57	" "	"	
58	" "	"	
59	" "	"	
60	" "	"	

Annex "A"

USER REQUIREMENTS - 7 CAD

CLASSIFIED SCHEDULE OF EXISTING BUILDING (Cont)

Bldg No	Present Use	Proposed Use	Classification
61	Explosives Storehouse	Remove	
62	" "	"	
63	" "	"	
64	" "	"	
65	" "	"	
66	" "	"	
67	" "	"	
68	" "	"	
69	" "	"	
70	" "	"	
71	" "	"	
72	" "	"	
73	" "	"	
74	" "	"	
75	" "	Isolation Store	
76	" "	Remove	
77	" "	"	
78	" "	"	
79	" "	"	
80	" "	"	
81	" "	"	
82	" "	"	
	ARW	"	
	ARW	"	
	Laboratory	No Change	
~~182~~) 86	Married Quarter	Remove	
~~1835~~) 85	Garage.		

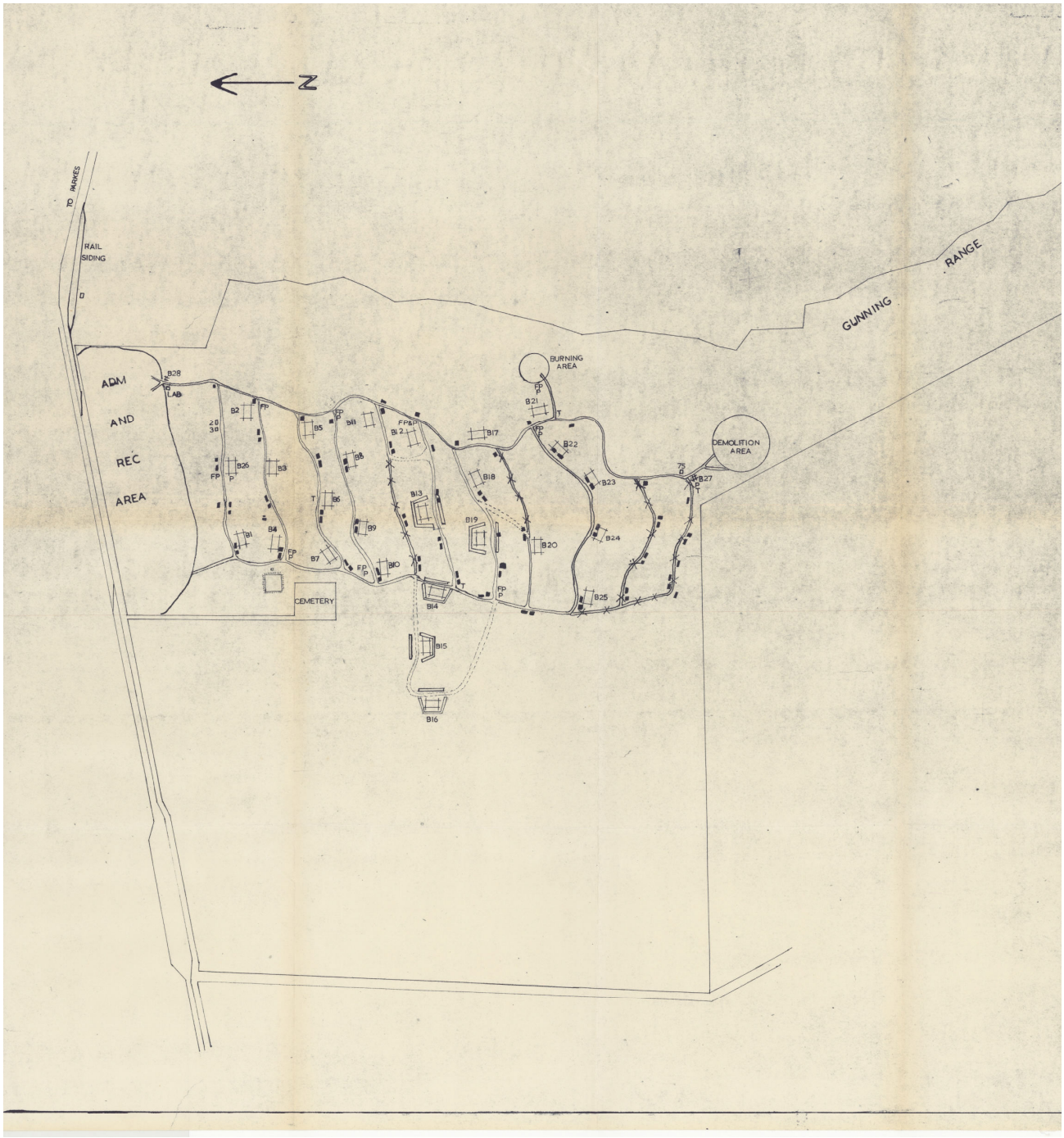
DOCUMENT PLEASE SEND YOUR REQUEST TO REF @ NAA.GOV.AU

LEGEND

	BUILDINGS EXISTING TO REMAIN
	BUILDINGS EXISTING TO BE REMOVED
	BUILDINGS PROPOSED
	B1 TO B25 INCLS. AMMO STOREHOUSE SITES
	B26 AMMO REPAIR WKSP
	B27 FIRING POINT SHELTER
	B28 DEPOT OFFICE/TFC CONTROL/LUNCH/CHANGE ROOM
	ROADS EXISTING TO REMAIN
	ROADS EXISTING TO BE DISCONTINUED
	ROADS PROPOSED
LAB	LABORATORY
2) 3)	NON-EXPLOSIVES AND EMPTY PACKAGE STORE
75	ISOLATION STORE
FP	FIRE POINT
P	TELEPHONE
T	TOILET

REFERENCE DRAWING CEN 1502 DATED 30.9.60.

MGO BRANCH	SCALE: 1" TO 600'	21.6.62
BOGAN GATE 7 CAD	ZONING DIAGRAM EXPLOSIVES AREA	


N
TO PARKES
RAIL SIDING
ADM AND REC AREA
B28
LAB
B2
B26
B3
B1
B4
B5
B6
B7
B8
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B10
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B23
B24
B25
B27
BURNING AREA
DEMOLITION AREA
CEMETERY
GUNNING RANGE

ANNEXURE B - Chronology of Events

Bogan Gate Explosives Reserve

Date	Event
1942	Australian Military commenced use of land now described as Lot 2 DP 1064474 as an ammunition depot for the storage of ammunition surplus to operational reserves and accommodation for officers and troops
5/04/1945	Part XIIA *Local Government Act 1919* commenced
9/06/1960	Land compulsorily acquired by the Commonwealth of Australia for the purposes of defence
3/9/1962	Masterplan for ammunitions depot prepared by Australian Military Forces – included Lot 2 DP 1064474
1974	Dupont commences explosives manufacturing on Lot 158 DP 750177
21/12/1979	*Environmental Planning and Assessment Act 1979* commenced
14/12/1990	Parkes LEP 1990 commenced (Shire of Goobang IDO 1 repealed)
2001	Dyno ceases explosives manufacturing on Lot 158 DP 750177, but continues lease until present
2001 – 2005	Gold West operates explosives factory on Lot 158 DP 750177
8/04/2004	Lot 2 DP 1064474 sold by Commonwealth to Timber Creek Holdings Pty Ltd
2005 to Current	Part Lot 2 DP 1064474 leased to Johnex Explosives and Howards Fireworks
20/01/2006	Lot 158 DP 750177 NSW Gazette Notice Crown Lands Assessment for Leased for Commercial Explosives Facility
7/12/2012	Parkes LEP 1990 repealed and Parkes LEP 2012 commenced
23/05/2013	Parkes Shire Council letter confirming existing use rights for use of lots 2 and 4 DP 1064474 as “explosives reserve”
18/11/2020	Development Consent DA2020/0073 issued by Parkes Shire Council for “general industry” on Lot 2 DP 1064474
2020	Part Lot 2 DP 1064474 leased to Solar Mining Services Pty Ltd
9/2/2022	Lot 2 DP 1064474 sold to Lexa Enterprises Pty Ltd

Appendix F. Environmental Assessment Requirements (EAR 1753), issued by the NSW DPE

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

Department of Planning and Environment

24 January 2023

Mr Hugh Halliwell
205A Clarinda Street
Parkes NSW 2870

EF22/16067
SEAR 1753

Dear Mr Halliwell

Clause 2 of Schedule 3 of the Environmental Planning and Assessment Regulation 2021
3577 Henry Parkes Way, Bogan Gate (Lot 2 DP 1064474)
Planning Secretary's Environmental Assessment Requirements (SEAR) 1753

Thank you for your request for the Planning Secretary's Environmental Assessment Requirements (SEARs) for the preparation of an Environmental Impact Statement (EIS) for the above development proposal. I have attached a copy of these requirements.

In support of your application, you indicated that your proposal is both designated and integrated development under Part 4 of the *Environmental Planning and Assessment Act 1979* and requires an approval under the *Protection of the Environment Operations Act 1997*. In preparing the SEARs, the Department of Planning and Environment (the Department) has consulted with the Environment Protection Authority (EPA). Unfortunately, the EPA was unable to respond in time. The EPA's advice and input into the SEARs will be forwarded separately upon receipt by the Department.

The Department has also consulted with SafeWork NSW, Transport for NSW and NSW Rural Fire Service. A copy of their additional requirements for the EIS are attached.

If other integrated approvals are identified before the Development Application (DA) is lodged, you must undertake direct consultation with the relevant agencies, and address their requirements in the EIS.

If your proposal contains any actions that could have a significant impact on matters of National Environmental Significance, then it will require an additional approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval is in addition to any approvals required under NSW legislation. If you have any questions about the application of the EPBC Act to your proposal, you should contact the Commonwealth Department of Climate Change, Energy, the Environment and Water on (02) 6274 1111.

Should you have any further enquiries, please contact Shaun Williams, Planning and Assessment, at the Department on (02) 8275 1345 or via shaun.williams@planning.nsw.gov.au.

Yours sincerely

Joanna Bakopanos
A/Director
Industry Assessments
as delegate of the Planning Secretary

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*.
Schedule 3 of the Environmental Planning and Assessment Regulation 2021.

Designated Development

SEAR Number	SEAR 1753
Proposal	Increase in processing capacity and storage of the existing Ammonium Nitrate Emulsion (ANE) manufacturing and storage facility including: • manufacturing of up to 15,000 tonnes of ANE per annum • storage of up to 450 tonnes of Ammonium Nitrate (AN) at any one time • storage of up to 100 tonnes of ANE at any one time
Location	3577 Henry Parkes Way, Bogan Gate (Lot 2 DP 1064474)
Applicant	Solar Mining Services Pty Ltd
Date of Issue	24 January 2023
General Requirements	The Environmental Impact Statement (EIS) must comply with the assessment requirements and meet the minimum form and content requirements in sections 190 and 192 of the *Environmental Planning and Assessment Regulation 2021.*
Key Issues	The EIS must include an assessment of all potential impacts of the proposed development on the existing environment (including cumulative impacts if necessary) and develop appropriate measures to avoid, minimise, mitigate and/or manage these potential impacts. As part of the EIS assessment, the following matters must also be addressed: – **strategic and statutory context** – including: – a demonstration that the proposal is consistent with all relevant planning strategies, environmental planning instruments, development control plans (DCPs), or justification for any inconsistencies – a list of any approvals that must be obtained under any other Act or law before the development may lawfully be carried out. – a description of how the proposed expansion integrates with existing on-site operations – a description of any amendments to and/ or additional licence(s) or approval(s) required to carry out the proposed development. – **suitability of the site** – including: – a detailed justification that the site can accommodate the proposed increase in processing capacity, having regard to the scope of the operations and its environmental impacts and relevant mitigation measures – site layout plans depicting the proposed internal layout, including the location of machinery and equipment. – **hazards and risk** – a Preliminary Hazard Analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011). The PHA must also include the following: – details of the existing operations that occur on-site based on the existing consent as modified, including location and maximum

	quantities of storage, processing, and production capacity on existing dangerous goods – details of location of industrial or residential (if any) developments surrounding Solar Mining's operation and the closest distance from these developments to solar mining's AN storage or ANE operation – details of compliance with *Work Health and Safety Act 2011* and *Explosive Act 2003* for both existing and proposed operations. – verification the development can comply with all relevant standards and codes of practice, including and not limited to AS 4326 and SAFEX for AN storage – hazard identification and the associated safeguards/mitigations – consideration of risks from both the existing and proposed operation, and including but not limited to the following scenarios: o AN explosion from the storage shed. The quantity of AN involved in the explosion should take into account the separation distance between the AN stack o ANE explosion from storage tanks based on the maximum tank storage quantity o Fire or explosion event as a result of the process failure for ANE manufacturing process – demonstration the risk from the overall operations can comply with the Department's Hazardous Industry Advisory Paper No. 4, 'Risk Criteria for Land Use Safety Planning', including and not limited to propagation risk to the neighbouring AN related facility operated by Johnex. – **traffic and transport** – including: – details of road transport routes and access to the site – road traffic predictions for the development during construction and operation, including cumulative impacts – swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site – an assessment of impacts to the safety and function of the road network and the details of any road upgrades required for the development. – **biodiversity** – including: – accurate predictions of any vegetation clearing on site or for any road upgrades – an assessment of the proposal in accordance with the Biodiversity Assessment Method (BAM) including the potential impacts on any threatened species, populations, endangered ecological communities or their habitats and groundwater dependent ecosystems. – a detailed assessment of the potential impacts on any threatened species, populations, endangered ecological communities or their habitats, groundwater dependent ecosystems and any potential for offset requirements. – details of weed management during construction and operation in accordance with existing State, regional or local weed management plans or strategies – a detailed description of the measures to avoid, minimise, mitigate and/or offset biodiversity impacts. – **air quality** – including: – a description of all potential sources of air and odour emissions during construction and operation – an air quality impact assessment in accordance with relevant Environment Protection Authority guidelines, including consideration of cumulative impacts – a description and appraisal of air quality impact mitigation and monitoring measures.

	– **noise and vibration** – including:
	  – a description of all potential noise and vibration sources during construction and operation, including road traffic noise
	  – a noise and vibration assessment in accordance with the relevant Environment Protection Authority guidelines, including consideration of cumulative impacts
	  – a description and appraisal of noise and vibration mitigation and monitoring measures.
	– **soil and water** – including:
	  – a description of local soils, topography, drainage and landscapes
	  – details of water usage for the proposal including existing and proposed water licencing requirements in accordance with the *Water Act 1912* and/or the *Water Management Act 2000*
	  – an assessment of potential impacts on floodplain management and any impact to flooding in the catchment
	  – details of sediment and erosion controls
	  – a detailed site water balance
	  – an assessment of potential impacts on the quality and quantity of surface and groundwater resources
	  – details of the how the proposed stormwater and wastewater management systems (including sewage) integrate with existing on-site operations, water monitoring program and other measures to mitigate surface and groundwater impacts
	  – characterisation of the nature and extent of any contamination on the site and surrounding area
	  – a description and appraisal of impact mitigation and monitoring measures.
	– **waste management** – including:
	  – details of waste handling including, transport, identification, receipt, stockpiling and quality control including off-site reuse and disposal
	  – the measures that would be implemented to ensure that the proposed development is consistent with the aims, objectives and guidelines in the NSW Waste Avoidance and Sustainable Materials Strategy 2041.
	– **community and stakeholder engagement** – including:
	  – a detailed community and stakeholder participation strategy which identifies who in the community has been consulted and a justification for their selection, other stakeholders consulted and the form(s) of the consultation, including a justification for this approach
	  – a report on the results of the implementation of the strategy including issues raised by the community and surrounding occupiers and landowners that may be impacted by the proposal
	  – details of how issues raised during community and stakeholder consultation have been addressed and whether they have resulted in changes to the proposal
	  – details of the proposed approach to future community and stakeholder engagement based on the results of the consultation.
	– **visual** – including an impact assessment at private receptors and public vantage points.
	– **heritage** – including Aboriginal and non-Aboriginal cultural heritage.

Environmental Planning Instruments and other policies	The EIS must assess the proposal against the relevant environmental planning instruments, including but not limited to: • State Environmental Planning Policy (Transport and Infrastructure) 2021 • State Environmental Planning Policy (Biodiversity and Conservation) 2021 (Chapters 2 and 4) • State Environmental Planning Policy (Primary Production) 2021

	• State Environmental Planning Policy (Resilience and Hazards) 2021 (Chapters 2, 3 and 4) • Parkes Local Environmental Plan 2012 • relevant development control plans and section 7.11 plans.
Guidelines	During the preparation of the EIS you should consult the Department's Register of Development Assessment Guidelines which is available on the Department's website at https://www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Industries. Whilst not exhaustive, this Register contains some of the guidelines, policies, and plans that must be taken into account in the environmental assessment of the proposed development.

Consultation	During the preparation of the EIS, you must consult the relevant local, State and Commonwealth government authorities, service providers and community groups, and address any issues they may raise in the EIS. In particular, you should consult with the:
	• SafeWork NSW
	• Fire & Rescue NSW
	• Australian Rail Track Corporation
	• Department of Planning and Environment, specifically the:
	  ○ Environment and Heritage Group
	  ○ Water Group
	  ○ Environment Protection Authority
	  ○ National Parks and Wildlife Services
	  ○ Crown Lands Division
	• Heritage NSW
	• Department of Primary Industries
	• Department of Regional NSW, specifically:
	  ○ Resources and Geoscience Division
	• Transport for NSW
	• NSW Rural Fire Service
	• WaterNSW
	• Parkes Shire Council
	• the surrounding landowners and occupiers that are likely to be impacted by the proposal.
	Details of the consultation carried out and issues raised must be included in the EIS.

Further consultation after 2 years	If you do not lodge an application under Section 4.12(8) of the *Environmental Planning and Assessment Act 1979* within 2 years of the issue date of these SEARs, you must consult with the Planning Secretary in relation to any further requirements for lodgement.

Department of Planning and Environment

Our ref: DOC22/1110006
Your ref: SEAR 1753

Shaun Williams
Senior Environmental Assessment Officer
Industry Assessments
Department of Planning and Environment
shaun.williams@planning.nsw.gov.au

Dear Shaun

Request for SEARs – Ammonium nitrate emulsion manufacturing and storage facility expansion

I refer to your email dated 13 December 2022 seeking input into the Department of Planning and Environment's Environmental Assessment Requirements (EARs) for the preparation of an Environmental Impact Assessment (EIS) to expand an ammonium nitrate emulsion manufacturing and storage facility.

The Biodiversity, Conservation and Science Directorate (BCS) has considered your request and provides EARs for the proposed development in **Attachments A** and **B**.

BCS recommends the EIS needs to appropriately address the following:

1. Biodiversity and offsetting
2. Water and soils
3. Flooding

If you have any questions about this advice, please do not hesitate to contact me via liz.mazzer@environment.nsw.gov.au or (02) 6883 5325

Yours sincerely,

Liz Mazzer
A/Senior Team Leader Planning North West
Biodiversity, Conservation and Science Directorate

14 December 2022

Attachment A - Environmental Assessment Requirements

Attachment B - Guidance Material

BCS's Recommended Environmental Assessment Requirements (EARs) for expansion of an ammonium nitrate emulsion manufacturing and storage facility at Bogan Gate

BCS	Biodiversity, Conservation and Science Directorate of the NSW Department of Planning and Environment
The Department	NSW Department of Planning and Environment
NPWS	National Parks and Wildlife Service

1. The Proposal

All components of the proposed development must be clearly described, including:

- the location of the proposed development and its context in the locality
- the rationale for the project
- the size, scale and type of the proposed development
- the pre-construction, construction, operational, and, where relevant, decommissioning and rehabilitation phases of the proposed development, and the methods proposed to implement these phases
- plans and maps of the proposed development showing the locations of relevant phases and infrastructure
- the staging and timing of the proposed development
- the proposed development's relationship to any other proposals and developments

2. Environmental Impacts of the Proposal

The proponent must consider, assess, quantify and report on the likely environmental impacts of the proposal if applicable, particularly:

- Biodiversity
- National Park estate: land reserved or acquired under the *National Parks and Wildlife Act 1974*
- Flooding, floodplain issues and coastal erosion
- Cumulative impacts

The Secretary's Environmental Assessment Requirements should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned. A full list of guidelines and reference material is presented in **Attachment B**. Appropriate justification should be provided in instances where the matters below are not addressed.

3. Biodiversity

Biodiversity Assessment Methodology for the Biodiversity Offsets Scheme (BOS)

The EIS should include an assessment of the following:

a. The EIS must assess the impact of the proposed development on biodiversity values to determine if the proposed development is "likely to significantly affect threatened species" for the purposes of Section 7.2 of the Biodiversity Conservation Act 2016 (BC Act), as follows:

   a. The EIS must demonstrate and document how the proposed development exceeds, or does not exceed, the biodiversity offsets scheme threshold as set out in Section 7.4 of the BC Act 2016 and Clause 7.1 of the Biodiversity Conservation Regulation 2017 (BC Regulation) by determining whether the proposed development involves:

      i. **The clearing of native vegetation exceeding the thresholds** listed under Clause 7.23 of the BC Regulation, **or**

      ii. The clearing of native vegetation, or other action, **on land included on the Biodiversity Values Map** published under Clause 7.23 of the BC Regulation (this map includes areas of outstanding biodiversity value, as declared under Section 3.1 of the BC Act).

   b. If the proposal does not trigger any of the criteria in (a) above, then the EIS must determine whether the proposed development is likely to have a significant impact based on '*the test for determining whether proposed development likely to significant affect threatened species or ecological communities'* in Section 7.3 of the BC Act.

   c. Where there is reasonable doubt regarding potential impacts, or where information is not available, then a significant impact upon biodiversity should be considered likely when applying the test in Section 7.3 of the BC Act. Where it is concluded that there is no significant impact, the EIS must justify how the conclusion has been reached.

   d. If the development exceeds the thresholds in (a) or (b), then the EIS must be accompanied by a biodiversity development assessment report (BDAR) prepared in accordance with Part 6 of the BC Act. That is, the Biodiversity Assessment Methodology applies.

Required Information

Where development is considered "likely to significantly impact on threatened species" and a Biodiversity Development Assessment Report is required, the following requirements apply:

- Biodiversity impacts related to the proposal are to be assessed in accordance with the Biodiversity Assessment Method 2020 and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), Biodiversity Conservation Regulation 2017 (s6.8) and Biodiversity Assessment Method.
- The BDAR must document the application of the avoid, minimise and offset hierarchy including assessing all direct, indirect, uncertain and prescribed impacts in accordance with the Biodiversity Assessment Method.
- The BDAR must include details of the measures proposed to address the offset obligation as follows:
  - The total number and classes of biodiversity credits required to be retired for the proposal.
  - The number and classes of like-for-like biodiversity credits proposed to be retired.
  - The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules.
  - Any proposal to fund a biodiversity conservation action.
  - Any proposal to make a payment to the Biodiversity Conservation Fund.

- If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.

The BDAR must be prepared by a person accredited to apply the Biodiversity Assessment Method under s6.10 of the *Biodiversity Conservation Act 2016*.

NOTE – A BDAR template and guidance document has been created to assist accredited assessors to prepare a BDAR. It has been developed in accordance with best practice, the minimum information requirements and to support BDAR reviewers. The BDAR Template can be found here and the Guidance for the BDAR Template can be found here.

Where a BDAR is not required and a threatened species assessment is prepared to support a conclusion of "no significant impact", the EIS must include a field survey of land identified as native vegetation and/or native species habitat inclusive of non-vegetative habitat, namely, karst, caves, crevices, cliffs, rocky outcrops and other features of geological significance and habitat associated with human made structures. This should be conducted and documented in accordance with the relevant guidelines including the Threatened Species Survey and Assessment Guidelines: Field Survey Methods for Fauna – Amphibians (DECCW, 2009), Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - Working Draft (DEC, 2004) and Guidelines for Threatened Species Assessment (Dept Planning, July 2005). The approach should also reference the field survey methods and assessment information on the Department of Planning, Industry and Environment website including the BioNet Atlas, Threatened Species Profiles, taxon specific survey guidelines and BioNet Vegetation Classification (see Attachment 2).

Category 1 – exempt land

Clearing of native vegetation on land that meets the definition of Category 1 - exempt land (as defined under the Local Land Services Act 2013 (LLS Act)) does not require assessment or offsetting under the Biodiversity Conservation Act 2016. Prescribed impacts as outlined in chapter 6 of the Biodiversity Assessment Method (2020) must still be considered on Category 1 - exempt land. In addition, potential impacts to Matters of National Environmental Significance under the Environment Protection and Biodiversity Conservation Act 1999 on Category 1 – exempt land must be considered.

Section 60F Local Land Services Act 2013 (LLS Act) Act provides the transitional arrangements that are in place until a comprehensive NVR Map with all the land categories is published. During the 'transitional period' assessors can make a reasonable approximation of land categorisation for unpublished layers, in consultation with the landholder.

Where a reasonable approximation is required, it is recommended that:

- assessors first identify whether land meets criteria for Category 2 - Regulated Land, prior to Category 1 - Exempt Land.
    - In some circumstances, land may meet multiple map criteria i.e. criteria for Category 2 - Regulated Land, AND Category 1 - Exempt Land
    - In most circumstances' Category 2 - Regulated Land criteria will determine the categorisation of the land, rather than Category 1 - Exempt Land criteria.

Section 60I of the LLS Act defines the criteria in which land can be classified as Category 2 Regulated Land, this includes land which:

- was not cleared of native vegetation as at 1 January 1990;
- was unlawfully cleared of native vegetation between 1 January 1990 and 25 August 2017;

- contains native vegetation that was grown or preserved with the assistance of public funds (other than funds for forestry purposes);
- contains grasslands that are not low conservation grasslands;
- is subject to a private land conservation agreement;
- is a 'set aside' under a Land Management (Native Vegetation) Code;
- is an offset under a property vegetation plan or a set aside under the former native vegetation laws;
- is subject to an approved conservation measure that was the basis for other land being biocertified;
- is identified as coastal wetlands or littoral rainforest;
- is identified as koala habitat;
- is a declared RAMSAR wetland; or
- is mapped as containing Critically Endangered species of plants or a Critically Endangered Ecological Community

The above criteria are inclusive of both Category 2 Vulnerable Regulated Land and Sensitive Regulated Land categories.

Where an assessor identifies land that does not meet the criteria for Category 2 Vulnerable or Sensitive Regulated land, the assessor should then assess whether or not the land meets the definition of Category 1 – exempt land.

Where the assessor identifies land as Category 1 – exempt land it must be adequately demonstrated that the identified land meets the criteria as set out in section 60H of the LLS Act. Multiple pieces of evidence should be used to demonstrate a Category 1 – exempt land designation. This might include:

- Publicly available data sets on the SEED data portal, such as:
  - Land use mapping – used to identify and map existing and historical agricultural land use in NSW – see the 2017 landuse map
  - Woody vegetation extent – used to identify and map native vegetation extent – see 2008 Woody extent 2011 woody extent
  - State-wide Landcover and Tree Survey (SLATS) woody clearing for NSW – used to identify detectable clearing events since January 1990 – available here
- Published information on the Native Vegetation Regulatory Map, including Category 2-sensitive regulated, Category 2-vulnerable regulated, and excluded land - available here
- Site-based information and records, including:
  - Current and historical high-resolution aerial photography
  - current and historical photographs of the subject land
  - historical land management records maintained by the landowner
  - vegetation survey data collected on the subject land
  - documentation demonstrating history of authorised clearing and/or development

The published *Native Vegetation regulatory map: method statement* should be reviewed to determine how the datasets can be best interrogated to support any identification of Category 1 – exempt land.

Where there is uncertainty or datasets/information are conflicting, a precautionary approach should be applied and the land should be categorised as Category 2 – regulated land.

Where Category 1 – exempt land is likely to be present on a development site, early engagement with BCS is encouraged. Prior to the Biodiversity Development Assessment Report being submitted to the consent authority, the accredited assessor should submit a proposed land categorisation method to the BCS North West Planning team at *rog.nw@environment.nsw.gov.au* for endorsement.

4. NPWS Managed Estate

Land reserved or acquired under the *National Parks and Wildlife Act 1974* (NPW Act)

If the proposed development is within, adjacent to, or in close proximity to, NPWS managed conservation estate (e.g. a national park, nature reserve, state conservation area, land which is declared wilderness under the *Wilderness Act 1987*), or is within, adjacent to, or in close proximity to, a watercourse that flows directly into NPWS managed conservation estate, then the EIS must address impacts upon such area/s.

Where NPWS managed estate is likely to be impacted, the EIS should include:

- The following (as appropriate):
  - Evidence that the proponent has consulted with BCS on the legal permissibility of the proposal under the NPW Act.
  - In the case of proposals on land declared as wilderness under the *Wilderness Act 1987*, evidence that the proponent has consulted with BCS on the appropriateness of the proposal. That is, whether it is consistent with the objects of the *Wilderness Act 1987* (section 3) and the management principles for wilderness areas (section 9).
  - Alternative options that have been explored to avoid impacts on the NPWS managed estate (on-park) and a clear justification of any on-park components of the proposal.
  - If on-park impacts are considered unavoidable, consideration of the issues, including details of any compensation proposal, consistent with the Department's *Revocation, Recategorisation and Road Adjustment Policy* (2012) for proposals that are located wholly or partly in a National Park or other land acquired or reserved under the *National Parks and Wildlife Act 1974*.
- Consideration of the matters identified in the *Guidelines for consent and planning authorities for Developments adjacent to National Parks and Wildlife Service Land* (NPWS, 2020) where a proposal adjoins or is immediate vicinity of NPWS managed estate, or is upstream of NPWS managed estate, which include:
  - The nature of the impacts, including direct and indirect impacts
  - The extent of the direct and indirect impacts
  - The duration of the direct and indirect impacts
  - The objectives of the reservation of the land
- A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified direct and indirect impacts associated with the proposal. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

5. Water

- The EIS must map features relevant to water, including:
  - Rivers, streams, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
  - Wetlands (as described in s4.2 of the Biodiversity Assessment Method).
  - Groundwater.
  - Groundwater dependent ecosystems.
- The EIS must describe background conditions for any water resource likely to be affected by the proposal, including:
  - Existing surface and groundwater.
  - Hydrology

- Water Quality Objectives (as endorsed by the NSW Government) including groundwater as appropriate that represent the community's uses and values for the receiving waters. Indicators and trigger values/criteria for the identified environmental values in accordance with the ANZECC (2000) *Guidelines for Fresh and Marine Water Quality* and / or local objectives, criteria or targets endorsed by the NSW Government
- *Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions* (OEH/EPA, 2017).

- The EIS must assess the impacts of the proposal on water quality, including:
  - The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the proposal protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.
  - Identification of proposed monitoring of water quality.
  - Consistency with any relevant certified Coastal Management Program (or Coastal Zone Management Plan).
- The EIS must assess the impact of the proposal on hydrology, including:
  - Water balance including quantity, quality and source.
  - Effects upon rivers, wetlands, estuaries, marine waters and floodplain areas.
  - Effects upon water-dependent fauna and flora including groundwater dependent ecosystems.
  - Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
  - Changes to environmental water availability, both regulated / licensed and unregulated / rules-based sources of such water.

6. Flooding

- The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
  - Flood prone land (ie land susceptible to the probable maximum flood event).
  - Flood planning area, the area below the flood planning level.
  - Hydraulic categorisation (floodway and flood storage areas).
  - Flood hazard.
- The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 10% Annual Exceedance Probability (AEP), 1% AEP flood levels and the probable maximum flood, or an equivalent extreme event.
- The EIS must model the effect of the proposal (including fill) on the current flood behaviour for a range of design events as identified above, and the 0.5% AEP and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
- All site drainage, stormwater quality devices and erosion / sedimentation control measures should be identified in the EIS and the onsite treatment of stormwater and effluent runoff and predicted stormwater discharge quality from the proposal should be detailed.
- Modelling in the EIS must consider and document:
  - Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.

- The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood (PMF), or an equivalent extreme flood.
- Impacts of the proposal on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories.
- Impacts of earthworks and stockpiles within the flood prone land up to the PMF level. The assessment should be based on understanding of cumulative flood impacts of construction and operational phases.
- Relevant provisions of the NSW Floodplain Development Manual 2005.

- The EIS must assess the impacts on the proposal on flood behaviour, including:
  - Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
  - Consistency with Council floodplain risk management plans.
  - Consistency with any Rural Floodplain Management Plans.
  - Compatibility with the flood hazard of the land.
  - Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
  - Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
  - Whether there will be a direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
  - Appropriate mitigation measures to offset potential flood risk arising from the proposal. Any proposed mitigation work should be modelled and assessed on the overall catchment basis in order to ensure it fits its purpose and meets the criteria of the Council where it is located, and to ensure it has no adverse impact to surrounding areas.
  - Any impacts the proposal may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.
  - Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.
  - Emergency management, evacuation and access, and contingency measures for the proposal during both construction and operational phases considering the full range of flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the NSW SES.
  - Any impacts the proposal may have on the social and economic costs to the community as a consequence of flooding.

ATTACHMENT B

Guidance Material

Title	Web address
Relevant Legislation	
Biodiversity Conservation Act 2016	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2016-063*
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	*https://www.legislation.gov.au/Details/C2014C00140/Download*
Environmental Planning and Assessment Act 1979	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1979-203*
Fisheries Management Act 1994	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1994-038*
National Parks and Wildlife Act 1974	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1974-080*
Protection of the Environment Operations Act 1997	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1997-156*
Water Management Act 2000	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-2000-092*
Wilderness Act 1987	*https://www.legislation.nsw.gov.au/view/html/inforce/current/act-1987-196*
Biodiversity	
Biodiversity Values Map	*https://www.lmbc.nsw.gov.au/Maps/index.html?viewer=BVMap*
Biodiversity Assessment Method (OEH, 2020)	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-2020*
Biodiversity Development Assessment Report Template	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/biodiversity-development-assessment-report-template-220210.docx?la=en&hash=1A4829C7ACA5A51ECE414A767C27361893706CEC*
Guidance for the Biodiversity Development Assessment Report Template	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/guidance-for-the-biodiversity-development-assessment-report-template*
Changes to the Biodiversity Assessment Method from 2017 to 2020	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/changes-to-the-biodiversity-assessment-method-from-2017-to-2020*
BAM 2020 Operational Manual Stage 1	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-manual-2020-operational-manual-stage-1*
BAM Operational Manual Stage 2	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-operational-manual-stage-2*

Title	Web address
BAM 2020 Operational Manual Stage 3	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-operational-manual-stage-3*
BAM Calculator User Guide	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/biodiversity-assessment-method-user-guide*
Serious and irreversible impacts of development on biodiversity	*https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/biodiversity-offsets-scheme/serious-and-irreversible-impacts*
Practice Note - Guidance for assessors and decision makers in applying modified benchmarks to assessments of vegetation integrity: Biodiversity Assessment Method	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/guidance-assessors-decision-makers-applying-modified-benchmarks-to-assessments-vegetation-integrity*
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/guidance-decision-makers-determine-serious-irreversible-impact-190511.pdf*
Accreditation Scheme for Application of the Biodiversity Assessment Method Order 2017	*https://www.legislation.nsw.gov.au/view/pdf/asmade/sl-2017-471*
Ancillary rules: Biodiversity conservation actions	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-biodiversity-conservation-actions-170496.pdf*
Ancillary rules: Reasonable steps to seek like-for-like biodiversity credits for the purpose of applying the variation rules	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-reasonable-steps-like-for-like-biodiversity-credits-170498.pdf*
Ancillary rules: Impacts on threatened species and ecological communities excluded from application of variation rules	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/ancillary-rules-impacts-on-threatened-entities-excluded-from-variation-170497.pdf?la=en&hash=C38840BFF49F012433532DF72E3D90C741E4DAC1*
The Department's Threatened Species Website	*https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species*
NSW BioNet (Atlas of NSW Wildlife)	*www.bionet.nsw.gov.au/*
Surveying Threatened Plants and their Habitats - NSW Survey Guide For The Biodiversity Assessment Method (DPIE 2020).	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/surveying-threatened-plants-and-their-habitats-survey-guide-for-the-biodiversity-assessment-method*
Threatened Biodiversity Survey and Assessment: Guidelines for Developments and Activities - November 2004	*https://www.environment.nsw.gov.au/surveys/BiodiversitySurveyGuidelinesDraft.htm*
Threatened species survey and assessment guidelines: field survey methods for fauna – amphibians	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/threatened-species-field-survey-methods-for-fauna-amphibians*

Title	Web address
NSW Survey Guide for Threatened Frogs	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/nsw-survey-guide-for-threatened-frogs*
Surveying 'species credit' threatened bats and their habitats – NSW survey guide for the Biodiversity Assessment Method	*https://www.environment.nsw.gov.au/research-and-publications/publications-search/species-credit-threatened-bats-nsw-survey-guide-for-biodiversity-assessment-method*
Bat calls of NSW - region-based guide to the echolocation calls of Microchiropteran bats	*https://www.environment.nsw.gov.au/surveys/Batcalls.htm*
Community Biodiversity Survey Manual	*https://www.environment.nsw.gov.au/surveys/CommunityBiodiversitySurveyManual.htm*
BioNet Vegetation Classification - NSW Plant Community Type (PCT) database	*www.environment.nsw.gov.au/research/Vegetationinformationsystem.htm*
The Departments Data Portal (access to online spatial data)	*http://data.environment.nsw.gov.au/*
Fisheries NSW policies and guidelines	*https://www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitat-conservation*
National Park Estate	
Guidelines for consent and planning authorities for Developments adjacent to National Parks and Wildlife Service Land (NPWS, 2020)	*https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Parks-reserves-and-protected-areas/Development-guidelines/developments-adjacent-npws-lands-200362.pdf*
List of national parks	*https://www.nationalparks.nsw.gov.au/conservation-and-heritage/national-parks*
Revocation, recategorisation and road adjustment policy (OEH, 2012)	*http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm*
List of aquatic reserves	*www.dpi.nsw.gov.au/fisheries/habitat/protecting-habitats/mpa*
Water	
Water Quality Objectives	*http://www.environment.nsw.gov.au/ieo/index.htm*
ANZECC & ARMCANZ (2000) Water Quality Guidelines	*https://www.waterquality.gov.au/anz-guidelines/resources/previous-guidelines/anzecc-armcanz-2000*
Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions	*http://www.environment.nsw.gov.au/research-and-publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning*
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	*http://deccnet/water/resources/AWQGuidance7.pdf*
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	*http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf*
Flooding	
Floodplain development manual	*http://www.environment.nsw.gov.au/floodplains/manual.htm*

Title	Web address
Floodplain Risk Management Guidelines	*http://www.environment.nsw.gov.au/topics/water/coasts-and-floodplains/floodplains/floodplain-guidelines*
NSW Climate Impact Profile	*http://climatechange.environment.nsw.gov.au/*
Climate Change Impacts and Risk Management	*https://www.environment.gov.au/climate-change/adaptation/publications/climate-change-impact-risk-management*

NSW GOVERNMENT

SafeWork

Shaun Williams
Senior Environmental Assessment Officer
Department of Planning, Industry & Environment

Via email: shaun.williams@planning.nsw.gov.au

Dear Shaun

SEARs Request for Input: ANE manufacturing and storage facility expansion – 3577 Henry Parkes Way, Bogan Gate (Lot 2 DP 1064474) – SEAR 1753

Thank you for the opportunity to comment on the proposed facility expansion by Solar Mining Services (SMS) at Bogan Gate.

SafeWork NSW Inspectors have been working with the facility for some time and we recently granted a licence under the NSW Explosive legislation for the facility to allow it to start production. The current explosive licence permits storage of up to 150 tonnes of Ammonium Nitrate (noting the scoping report states 200 tonnes of AN which is incorrect), and 50 tonnes of Ammonium Nitrate Emulsion ANE).

SafeWork NSW staff involved in review and assessment of the existing site for the purpose of granting an Explosive licence have reviewed the SEARS documentation and we have concerns regarding the proposal. Of greatest concern is that there will probably be insufficient separation from the ANE plant (increasing from 50 tonnes to 100 tonnes) to Shed 69 (50 m tonnes AN).

Further detail of our concerns / commentary is provided below.

SafeWork NSW assessment of separation distances

SafeWork NSW has assessed the proposal according to separation distance requirements of the Queensland Explosives information bulletin no. 53 – Storage requirements for storage of security sensitive ammonium nitrate (SSAN) - (QLD-IB53) and the NSW Discussion Paper for AN separation distances, both of which are currently actively considered in licence assessments.

Background to the assessment

- The existing SMS facility was assessed according to IB53. SMS was informed in 2020 or earlier that, at a minimum, QLD - IB53 should be consulted for separation distances.
- Because the existing facility is licensed to store 150 tonnes of AN, this assessment assumes that the new AN shed will store 300 tonnes of AN and it will be located at approximately -33.121264° 147.822498°.
- This assessment assumes that the ANE stored by SMS has a TNT equivalence of 80%.
- This assessment is preliminary and cannot be relied upon without detailed information about store locations, quantities, and distances.

ANE Plant

- The increase to 100 t of ANE storage will result in non-compliance of the distance from the ANE Plant to Shed 69. The available distance is 69 m but the required distance will increase from 64 m to 79 m. Decreasing the proposed ANE store from 100 tonnes to 75 tonnes would reduce the required separation to 70 m.
- It is possible that there will be sufficient distance from the ANE Plant to the new AN shed, depending on its exact location. The required separation is 79 m according to the AEISG ANE Code.

New AN Shed

- It is possible that there will be sufficient distance from the new AN shed to the ANE Plant, depending on the exact location of the new AN shed. The required separation is 82 m according to the NSW Discussion Paper for AN separation distances.
- There is insufficient separation from the new AN shed to the nearest Protected Works Class B, which is Johnex admin building 61. The available separation is approximately 840 m, depending on the exact location of the new AN shed. The required separation is 1017 m according to the NSW Discussion Paper for AN separation distances. Note that the required separation from Protected Works Class B according to QLD IB53 is 815 m, with which the new AN shed would comply.
- There is insufficient separation from the new AN shed to the nearest Vulnerable Facility, which is the railway line near the entrance to the Bogan Gate Explosives Reserve. The available separation is approximately 1500 m. The required separation is 2033 m according to QLD IB53 and the NSW Discussion Paper for AN separation distances.

Specific comment on Scoping Report section 5.1.4 – Site separation

Proposed separation distances

The report states "*Figure 9 broadly shows the separation distances required for the proposed capacity increases at the SMS ANE facility from residences, based on the manufacture of 15,000 tonnes of ANE and storage of 450 tonnes of AN and 100 tonnes of ANE at the site."*

Comment:

- Comments in the previous section about Shed 69, Shed 70 and the ANE Plant apply equally to Figure 9.
- Figure 9 depicts a "QD Buffer" of 1017 m around the new AN storage shed but does not describe the quantity of AN that will be stored in the new shed. It is not known how this distance was calculated and Figure 9 does not provide distances for the full range of protected works.

"Buffer Distances"

The report states "Figure 10 broadly shows the separation distances required between existing / proposed AN and ANE storages at the site and surrounds."

Comment:

- Figure 10 refers to "Buffer Distances" but does not provide a definition of the term.
- Figure 10 does not provide distances for the "Buffer Distances". It only provides circles on a sketch of the BGER.
- Without this information, the circles cannot be verified.

Comment on Figures 8-10

The report does not present a full or detailed picture of the stored quantities and locations of AN and ANE. The information about separation distances does not address all types of on-site and off-site protected works and does not explain which protected works are relevant to the terms "QD Buffer" and "Buffer Distances".

The report does not identify the publications or methods used to determine the distances, and in the case of Figure 10 does not state any distances.

The report cannot be used as an assessment of compliance with separation distances required under explosives legislation.

Comment on 6.1 – Statutory context

The report does not identify that the facility and the proposal are subject to the Explosives Act 2003 and the Explosives Regulation 2013 and does not assess compliance with these instruments.

Comment on 9.1 – Government stakeholder engagement

The report states that "SMS have held several meetings and discussions with the following government agencies to progress the proposal".

The Dangerous Goods & Explosives team of SafeWork NSW, which assesses and grants licences to manufacture and store AN and ANE, was informed by Solar Mining Systems that the SEARS proposal had been submitted to the Department of Planning and Environment but has not held any discussions with Solar Mining Systems about the proposal. The detail of the proposal was only known when a copy of the report was received from the Department of Planning and Environment.

Finally, we strongly recommend that Fire & Rescue NSW are consulted on the proposal prior to any consent being given.

Yours sincerely



Andrew Battye
Manager, Dangerous Goods & Explosives

23 December 2022

NSW RURAL FIRE SERVICE

Department of Planning and Environment (Sydney Offices)
GPO Box 39
Sydney NSW 2001

Your reference: SEAR 1753
Our reference: DA20221215012277-SEARS-1

ATTENTION: Shaun Williams

Date: Monday 16 January 2023

Dear Sir/Madam,

Development Application
State Significant – SEARS – Industry
3577 Henry Parkes Way Bogan Gate NSW 2876, 2//DP1064474

I refer to your correspondence regarding the above proposal which was received by the NSW Rural Fire Service on 14/12/2022.

The proposal appears to be generally consistent with the aims and objectives of *Planning for Bush Fire Protection 2019*, however any development (as proposed) must comply with clause 8.3.9 (*Hazardous Industry*) of *Planning for Bush Fire Protection 2019*.

For any queries regarding this correspondence, please contact Bryce Pascoe on 1300 NSW RFS.

Yours sincerely,

Adam Small
Supervisor Development Assessment & Plan
Built & Natural Environment

Postal address

NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address

NSW Rural Fire Service
4 Murray Rose Ave
SYDNEY OLYMPIC PARK NSW 2127

T (02) 8741 5555
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www.rfs.nsw.gov.au

Transport for NSW

WST22/00228 | SF2022/254668

Industry Assessments
Department of Planning & Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Attention: Shaun Williams 20th January 2023

SEARs-1753: Request for Secretary's Environmental Assessment Requirements (SEARs)
Ammonium Nitrate Emulsion (ANE) manufacturing and storage facility expansion

Dear Mr Williams,

Thank you for referring the abovementioned request for SEARs via email on 13 December 2022 inviting comment from Transport for NSW (TfNSW).

TfNSW has reviewed the Scoping Report, prepared by Currajong Pty Ltd dated 24 November 2022 for the expansion of the existing Ammonium Nitrate Emulsion (ANE) manufacturing and storage facility approved under DA2020/0073 granted by Parkes Shire Council on 18 December 2020.

TfNSW understands the proposal includes:

- Increasing the ANE manufacturing to 15,000 tonnes per annum.
- Storing up to 450 tonnes of Ammonium Nitrate (AN) and 100 tonnes of ANE at any one time.
- Deliveries of semi-trailer tankers or rigid truck configurations carrying approximately 24,000 litres of ANE. A total of 6 truck movements per day is estimated to be generated from the proposal. It is noted that B-doubles, road trains or other long configurations will not be used.
- The use of existing buildings as well as the proposed construction of a storage shed to the north-east of the existing ANE manufacturing plant.

It is further understood the development will utilise the intersection of Henry Parkes Way (HW61) and Memorial Lane (local road) to access the site within the Bogan Gate Explosive Reserve.

To ensure TfNSW's key interests are addressed, TfNSW requests the Environmental Impact Assessment (EIA) be accompanied by a Traffic Impact Assessment (TIA), prepared in accordance with the *Austroads Guide to Traffic Management* Part 12, *Australian Standards*, TfNSW Supplements, and *Roads and Maritime Guide to Traffic Generating Developments*. The TIA is to contain information listed in **Attachment A.**

TfNSW encourages early discussions with proponents regarding the traffic and network matters associated with the development. If you wish to discuss this matter further, please contact Phoebe Wilkinson, on 0418 437 829. On determination of this matter, please forward a copy of the final SEARs to TfNSW at development.west@transport.nsw.gov.au.

Yours faithfully

Andrew McIntyre
Manager Development Services West
Regional and Outer Metropolitan

Attachment A: Traffic Impact Assessment (TIA)

The TIA is to address the impact of traffic generation on the public road network and measures employed to ensure traffic efficiency and road safety during construction, operation and decommissioning of the project.

The TIA is to be tailored to the scope of the proposed development and include, but not limited to, the following:

- Project schedule:
  - Hours and days of work, number of shifts and start and end times,
  - Phases and stages of the project, including construction and operation.
- Traffic volumes including:
  - Existing background traffic,
  - Project-related traffic for each phase or stage of the project,
  - Projected cumulative traffic at commencement of operation, and a 10-year horizon post-commencement.
- Traffic characteristics including:
  - Number and ratio of heavy vehicles to light vehicles,
  - Peak times for existing traffic,
  - Peak times for project-related traffic including commuter periods,
  - Interactions between existing and project-related traffic.
  - Source(s) for input materials and quantification of traffic generation associated with the haulage of the source materials.
- Road safety assessment of key haulage route/s.
- Controls for transport and use of any dangerous goods in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*, the *Australian Dangerous Goods Code* and *AS4452 Storage and Handling of Toxic Substances*.
- Identify the necessary road network infrastructure upgrades that are required to cater for and mitigate the impact of project related traffic on both the local and classified road network for the development (for instance, road widening and/or intersection treatments). In this regard, preliminary concept drawings need to be submitted with the EIS application for any identified road infrastructure upgrades. It should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of TfNSW and Council.
- Proposed road facilities, access and intersection treatments are to be identified and be in accordance with Austroads Guide to Road Design including provision of Safe Intersection Sight Distance (SISD).
- Consideration of the local climate conditions that may affect road safety during the life of the project (e.g. fog, wet and dry weather).
- The layout of the internal road network, parking facilities and infrastructure.
- Impact on rail corridors and level crossings detailing any proposed interface treatments. Note, the rail manager for rail corridors in the vicinity of the site is ARTC.
- Propose a Driver Code of Conduct for haulage operations which could include, but not be limited to:
  - Safety initiatives for haulage through residential areas and/or school zones.
  - An induction process for vehicle operators and regular toolbox meetings.

  A public complaint resolution and disciplinary procedure.

Appendix G. Arndell Surveying Detail Survey

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT



ARNDELL SURVEYING
Registered Surveyors
48 Reid St. Parkes, NSW
Ph: (02) 6862 2208
Email: arndellsurvey@bigpond.com

				Reduction Ratio: 1:4000 @A1
				Height Datum: AHD
				Datum Source: GDA2020
A	15/08/2023	SIMPLIFIED PLAN	AA	Projection: MGA ZONE 55

Job No. 11890 | Date: 15/08/2023
Drawn by: BI | Client: Currajong Planning
Checked by: AA

PLAN SHOWING LOCATIONS OF BUILDINGS ON BGER
LOT 2 DP1064474

3577 Henry Parkes Way

Drawing No.
Revision A
Sheet 1 of 1

Appendix H. Greenice Process and Risk Report

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

Solar Mining Services Pty Ltd

Process Risk Report

Proposed Expansion of Ammonium Nitrate Emulsion (ANE) Manufacturing Facility

Bogan Gate Explosives Reserve NSW

Version 5

13th September 2023

Prepared by:
Michael du Plessis

Greenice Pty Ltd

Approved by:
Vetkav Ramesh

Solar Mining Services Pty Ltd

Disclaimer
In conducting the process and risk review I have relied solely on information regarding the manufacturing and storage facility and locations on the BGER site provided by Solar Mining Services (the *Client*). I have assumed the information provided by the Client is correct and accurately reflects the design, specifications, and location of the ANE manufacturing facility. I have not sought to independently verify the information provided by the Client.

This report only considers information provided to me up to the date of this report and so its findings may be affected by new information.

Document History

Version No.	Date	Description	Approved by
1	24/04/2023	For initial review by planning consultant	Vetkav Ramesh
2	29/5/2023	Update separation distances following site survey	Vetkav Ramesh
3	28/7/2023	Update following review by Currajong Town Planning	Vetkav Ramesh
4	1/8/2023	Draft for review	Vetkav Ramesh
5	13/9/2023	Amended AN quantity in line with EIS	Vetkav Ramesh

Executive Summary

Solar Mining Services Pty Ltd (SMS) has constructed an ammonium nitrate emulsion (ANE) manufacturing facility on the Bogan Gate Explosives Reserve (BGER) located approximately

1.5km east of Bogan Gate and 35km west of Parkes in NSW. Under the conditions of the DA2020/0073 granted by Parkes Shire Council, the SMS manufacturing plant is limited to 960t of ANE per annum. A SafeWork NSW Explosives Manufacture Licence XMNF200034 has also been granted which allows ANE manufacturing and storage of 50t of ANE and 166t of Ammonium Nitrate (AN) at the SMS facility.

This report has been prepared in support of a development application for an increase in annual production of the plant from 960t per annum to 20,000t per annum. There will be no change to the plant processes or equipment to meet the proposed increase in production.

Additional storage of ANE and AN will be required to meet the increased production demand. There are adequate buffer zones between the additional ANE and AN storage facilities and infrastructure on the BGER and external to the site (public areas). Increased storage quantities of AN and ANE will not expose adjacent facilities on the BGER and the external public to increased levels of risk. Exclusion zones between the SMS facility and external infrastructure meet the requirements of relevant standards.

Table of Contents

1. INTRODUCTION 4
2. STANDARDS, POLICIES, GUIDELINES AND CODES OF PRACTICE 5
3. FACILITY OVERVIEW 6
3.1 Site Location, Surrounding Land Uses and Layout 6
3.2 Process Description 7
3.2.1 Delivery and Storage of Ammonium Nitrate 8
3.2.2 Preparation of the Oxidiser Solution 9
3.2.3 Preparation of Fuel Oil Blend 10
3.2.4 Emulsion Manufacture 11
3.2.5 Storage and Load Out of ANE 12
4. HAZARDOUS MATERIAL PROPERTIES 12
4.1 Ammonium Nitrate (Oxidizing Agent Class 5.1 UN1942) 12
4.2 Ammonium Nitrate Emulsion - ANE (Oxidizing Agent Class 5.1 UN3375) 12
4.3 Ammonium Nitrate Solution - ANSOL (Oxidizing Agent Class 5.1) 13
5. SCHEDULE OF CHEMICALS AND RAW MATERIALS 13
5.1 Schedule 15 Chemicals 13
6. HAZARD AND RISK ASSESSMENT APPROACH 14
6.1 Hazard and Incident Identification 14
6.1.1 Preliminary Risk Assessment 15
6.1.2 Detailed Review of Existing Risk Assessments 15
6.1.3 BGER Specific Hazard Studies 15
6.1.4 Broad Brush Risk Assessment 15
6.2 Identification of Key risks 15
6.3 Critical Controls 16
6.3.1 Pump Safety Systems 16
6.3.2 Process Temperature Control 17
6.3.3 Programmable Logic Controller (PLC) 17
6.3.4 High Level Protection on ANSOL Tanks 18
6.3.5 Emergency Stops 18
6.3.6 Emergency Response Plan 18
6.3.7 Housekeeping 18
6.3.8 Operator Presence and Competency 18
6.3.9 Site Security 19
7. SAFETY MANAGEMENT SYSTEM 19
8. RISK ASSESSMENT AND CONSEQUENCE ALALYSIS 20
8.1.2 Risk Scenarios 20
8.1.3 Risk Assessment Process 21
8.1.4 Risk Assessment Assumptions 21
8.1.5 Separation Distances (Quantity Distances – QD) 21
8.1.6 Consequence Analysis 23
9. CONCLUSIONS AND RECOMMENDATIONS 24
APPENDIX 1: SEPARATION DISTANCES 25
APPENDIX 2: PROPOSED PLANT LAYOUT 27

1. INTRODUCTION

Solar Mining Services Pty Ltd (SMS) has constructed an ammonium nitrate emulsion (ANE) manufacturing facility on the Bogan Gate Explosives Reserve (BGER) located approximately 1.5km east of Bogan Gate and 35km west of Parkes in NSW. This facility was constructed in accordance with Development Consent No. DA2020/0073 granted by Parkes Shire Council on 18th November 2020. Under the conditions of the DA2020/73, the production capacity of the plant is limited to 960t of ANE per annum. The plant was granted a five year explosives manufacturing and storage licence by SafeWork NSW on January 2023 (XMNF200034).

This report has been prepared in support of a development application for an increase in annual production of ANE from the plant from 960t per annum to 20,000t per annum. The development will be lodged on the NSW Planning Portal for assessment and determination by the relevant consent authority; being Parkes Shire Council. There will be no change to the plant processes or equipment to meet the proposed increase in production.

SMS propose to amend to DA2020/0073 and XMNF200034 to allow for additional storage of ANE and AN on the site. It is noted that an Environment Protection Licence from the NSW Environment Protection Authority (EPA) will also need to be obtained for the increased levels of dangerous goods production.

The report focuses on the risk profile of manufacturing and storage operations and covers the following aspects in support the statutory approvals required:

- Location of the SMS facility on the BGER and the proximity to other operations on the site and external public infrastructure,
- Manufacturing technology to be used in the plant,
- Chemicals that will be stored and used on the site,
- The properties and hazards of the chemicals to be manufactured, processed, and stored on site,
- Manufacturing and storage hazards and critical control measures, and
- Compliance with Australian standards, codes of practice and guidelines.

2. STANDARDS, POLICIES, GUIDELINES AND CODES OF PRACTICE

The risk assessment and hazard analysis approach for this facility follows the integrated approach in the NSW Planning Guidelines and policies, Australian Standards, and explosive industry guidelines. These are listed below:

- NSW DPIE Major Projects. Key Guidance. Hazards and Risks. Assessment of chemical, biological, and chemical hazards and risks.
- NSW State Planning Policy No 33 – Hazardous and Offensive Development
- Planning for Bush Fire Protection, A guide for councils, planners, fire authorities and developers, Issued by NSW Rural Fire Service, November 2019.
- NSW Planning Guidelines for risk assessment, hazard analysis and risk criteria:
  - Assessment Guideline. Multilevel Risk Assessment, 2011
  - Hazardous Industry Planning Advisory Paper no 4. Risk Criteria for land Use Safety Planning, 2011.
  - Hazardous Industry Planning Advisory Paper No 6. Hazard Analysis, 2011
- NSW Work Health and Safety Regulation 2017 (Major Hazard Facilities)
- Code of Practice - *Storage and Handling of UN3375, Edition 5 July 2018*, published by the Australian Explosives Industry Safety Group (AEISG)
- Code of Practice - *Storage and Handling of Solid Ammonium Nitrate, Edition 1 June 2022*, published by the Australian Explosives Industry Safety Group (AEISG)
- AS 2187.1 - 1998 Explosives - Storage, transport and use – Storage.
- Hazards in Emulsion Explosives Manufacture and Handling by Andy Begg, SAFEX Topical Papers Series Paper no. 05/2008.

- Good Practice Guide: Storage of Solid Technical grade Ammonium Nitrate by the International Working Group on Ammonium Nitrate. SAFEX Good Practice Guide Series GPG 02.

The following statutory guidelines and instruments have been reviewed and are not applicable to the risk and hazard assessment for an ammonium nitrate emulsion manufacturing and storage facility.

- Dangerous goods (Road and Rail and Transport) Act 2008
- Environmental Hazardous Chemicals Act 1985
- Australian Dangerous Goods Code (ADG Code)

3. FACILITY OVERVIEW

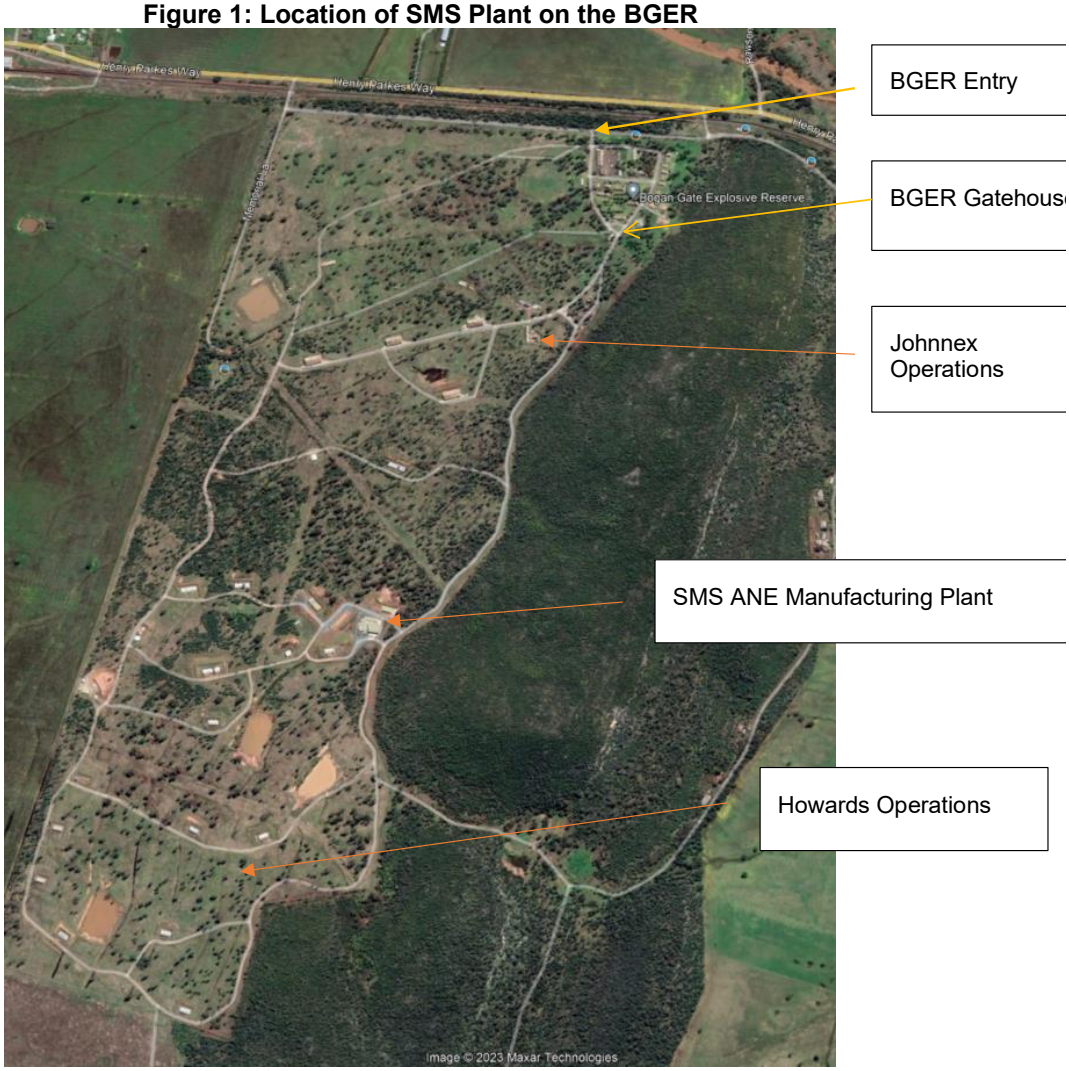
3.1 Site Location, Surrounding Land Uses and Layout

The SMS ANE plant is located on a lease on the Bogan Gate Explosive Reserve (BGER) located about 35km from Parkes, NSW. There are two other explosives related entities on the site:

- Johnnex – packaged emulsion manufacture, storage of ammonium nitrate, ANE and Class 1 explosives
- Howards Fireworks – storage of fireworks

The aerial photograph below shows the location of SMS facility on the BGER.

Figure 1: Location of SMS Plant on the BGER



3.2 Process Description

The SMS plant manufactures ammonium nitrate emulsions (ANE). ANE is not an explosive and is classed as a 5.1 Oxidiser (UN3375). The ANE processing plant is located within steel sheds on a concrete pad. In addition to the ANE processing plant, the facility also includes tanks for storage of finished ANE, diesel fuel as well as other chemical storage sheds and other ancillary services.

The SMS facility has been licensed by SafeWork NSW to manufacture ANE and store ANE and AN.

Figure 2: SMS ANE Manufacturing Facility



The process steps for manufacturing ANE are:

- Deliver and store of ammonium nitrate,
- Dissolve AN prills / CN or Urea granules in water to form an oxidiser solution,
- Mix surfactant (emulsifier) and diesel oils to make a fuel blend,
- Pump the oxidiser solution and fuel blend through a blender to create ANE, and
- Pump the ANE through a cooler into storage tanks ready for despatch.

3.2.1 Delivery and Storage of Ammonium Nitrate

Ammonium nitrate prill (AN) is delivered to the site, in “bulk” bags (normally of nominal weight 1.25t or 1.2t, depending on source), by road truck. On arrival, the materials are offloaded and stored into dedicated AN storage sheds. AN bags are transported from the sheds to the production facility by forklift and small truck and placed in a day storage area within the production plant.

Figure 3: Delivery of AN bags



Figure 4: Storage of AN bags in the Shed



3.2.2 Preparation of the Oxidiser Solution

An aqueous oxidiser solution of ammonium nitrate, urea and / or calcium nitrate (dependant on the product being manufactured) along with trace elements such as nitric acid and sodium hydroxide, is prepared to meet specifications for pH and concentration. The oxidiser solution is prepared in dedicated oxidiser tanks. The tanks are fitted with agitators and stainless-steel heating coils. Tanks have temperature indicators. Heat is provided through a closed-circuit steam heating loop delivered by a diesel fired steam boiler.

Oxidiser solution preparation begins with the addition of a predetermined amount of water to the solution tanks using a flow meter (as specified on the product batch sheet). The water is heated above a temperature of 60°C. When the solution is above the agitator blade levels, then the agitators are started.

AN/CN or urea in the form of a small beads, (prills or granules), contained in bulk bags, is lifted using a forklift above hopper of the feed auger for the solution tank and emptied. The feed auger transfers the feedstock from the hopper into the solution tank holding the set amount of water. The solution is then heated to a temperature of above 80°C but less than 90°C.

Due to the endothermic reaction (absorption of energy) that occurs between the oxidiser and water when it is dissolving, the solution cools. Heat is continuously applied through the coils to ensure the solution is held above the 56°C crystallisation point. Ammonium nitrate is progressively added in this manner until the specified amount has been added as per the solution batch sheet. Urea or calcium nitrate can then be then added using the same process as required, depending on formulation.

Nitric acid or sodium hydroxide is then transferred from a 200l plastic drum through a dosing pump into the solution tank for pH correction.

The solution is then heated and mixed using the agitators for a set period as prescribed on the specific product batch sheet. A sample of the solution is then collected for quality control / quality

assurance (QA/QC). The quality test entails testing for pH and concentration. Corrections to pH are made by adding sodium hydroxide (if too low) or nitric acid (if too high). Corrections to concentration are made by the addition of water or more solid oxidiser material.

Figure 5: AN Dosing Augers and AN Solution Tanks



3.2.3 Preparation of Fuel Oil Blend

A mixture of diesel oil and a proprietary surfactant (emulsifier) component are prepared in fuel oil blend tanks to meet specifications for viscosity. The predetermined amount of diesel fuel is transferred from bulk storage and added to the fuel oil blend tank using a transfer pump and flow meter. Surfactant is transferred from 1,000 L IBC pods and added to the fuel oil blend tank using a transfer pump and weigh cells. The two components are mixed using tank agitators for a prescribed period prior to conducting quality control tests. The fuel oil blend quality test consists of testing the viscosity (level of resistance to flow) using a standard cup.

Figure 6: Fuel Blend Tanks



3.2.4 Emulsion Manufacture

The oxidiser solution is blended with the fuel blend to form the ammonium nitrate emulsion (ANE). The fuel blend and the oxidiser solutions are pumped at pre-set flow rates to the blender unit. The blender comprises a high-speed agitator system which imparts a vigorous mixing action to blend the two products into an emulsion.

The emulsion from the blender unit is then transferred into a hopper. The emulsion is then transferred to the ANE storage tanks using a progressive cavity (PC) pump. Prior to being transferred to the ANE storage tanks, the emulsion may be cooled in a heat exchanger unit. The PC pump discharge housing is fitted with both a high- and low-pressure sensor and a high temperature sensor. These sensors are both hard wired to trip amplifiers and interface relays. This ensures that the pump is automatically shut down in the event of over pressure and or overheating from deadheading of the pump or a blockage. There is also a mechanical failsafe device in the form of a bursting disc that is independent of any interlock or other safety device.

A sample of the ANE is collected from the ANE hopper for quality testing at regular intervals. This final quality test involves establishing the viscosity of the ANE using a viscometer. Corrections to the viscosity are made by changing the process flow and blender settings. A quality test is also conducted on the final product to measure product density using a cup and scales. Any density test result outside of the specified range would prompt the plant operator to stop production and investigate. There is also a rework tank which allows out of spec ANE to be reworked by adding a controlled quantity of this material back into the blender.

Figure 7: Emulsion Blender, Hopper, and Rework Tank



3.2.5 Storage and Load Out of ANE

After manufacture, ANE is stored in four, 25t horizontal storage silos (total 100t), pending transfer into tankers for transport to customer sites.

Transfer of ANE from the storage tanks to the tanker is achieved using a gear pump with nitrile rubber impellers (Napco pump). This pump is fitted with temperature and pressures sensors as well as a bursting discs, in accordance with AEISG emulsion pumping guidelines.

4. HAZARDOUS MATERIAL PROPERTIES

4.1 Ammonium Nitrate (Oxidizing Agent Class 5.1 UN1942)

Ammonium nitrate prill (AN) is a white solid oxidiser (Class 5.1), which under certain conditions can thermally decompose generating some toxic gases (NO_x) and, when heated under strong confinement, may decompose violently. AN is a strong oxidising agent that will sustain combustion as it produces oxygen as one of its decomposition products.

AN prill occurs in two forms – porous prill (PPAN) which is designed to absorb fuel oil in the manufacture of ANFO and dense prill (HDAN) that is generally used to manufacture AN solution. AN prill is hydroscopic and therefore small amounts of additives are added as a prill coating to reduce the chance of consignments of AN forming into lumps. These anti-caking agents need to be carefully controlled to ensure that they do not sensitise the AN (i.e. effectively adding a fuel) that can increase the sensitivity of AN to heat. This control is performed at the source factory and every incoming shipment is accompanied by a Certificate of Analysis / Conformance.

For decomposition to occur, the temperature of the AN must be increased well above its melting point of 169°C. Decomposition proceeds with both endothermic reactions and exothermic reactions occurring simultaneously. In the decomposition process, the solid material is converted into a gas. If the AN is not confined, the decomposition can achieve a steady state temperature of approximately 292°C at one bar pressure. This is a self-sustaining decomposition that will generate mainly NO_x and ammonia fumes.

However, in certain extreme circumstances the reaction may run away when the heat generated exceeds the heat lost. This is difficult to achieve due to both the low decomposition rates of pure AN and the endothermic reaction effect when the material is unconfined. For a runaway reaction to occur the material must be strongly confined which allows the exothermic reaction effect to dominate and the pressure builds up accelerating the reaction. On the BGER plant there will be vents on tanks and temperature gauges linked to the PLC control system to ensure that overheating or overpressure cannot occur.

Another hazard is sensitising contamination of solid AN either in manufacturing or in storage (e.g. by mixing with sensitising materials) which in some circumstances can lead to an increase in the risk of decomposition / explosion. Typical contaminants are organic compounds such as spilled fuel oil, acids and other oxidising agents. On the BGER plant there will be strict protocols to ensure that incompatible materials are stored separately.

AN prill is classified as a Security Sensitivity Ammonium Nitrate (SSAN).

4.2 Ammonium Nitrate Emulsion - ANE (Oxidizing Agent Class 5.1 UN3375)

ANE is a viscous fluid containing ANSOL, fuel oil and emulsifiers. Under certain conditions ANE may thermally decompose generating some toxic gasses (NOx). ANEs are not flammable, and do not burn at the range of temperatures and pressures experienced in manufacture, storage, and handling.

ANE is a Division 5.1 oxidiser. The ANE manufactured at the proposed BGER facility are not classed as explosives. The formulations have successfully passed the UN Series 8 tests (a, b, c and d) that allow these mixtures to be classified as a non-explosive pre-cursor and transported as such. ANE to be manufactured at the BGER facility are classified as UN 3375, a 5.1 Oxidising Agent.

The main hazard associated with ANE is decomposition due to excessive heating and/or contamination which can cause accelerating decomposition to the point where explosion or detonation can occur, especially if the decomposing gases are sufficiently confined (e.g. in an inadequately vented storage tank, pump, process vessel etc.).

In processing of ANE the main hazards occur in pumping. It is essential that the ANE is not allowed to overheat in the pumping process through deadheading or dry running of the pump. For this reason, the international explosives industry has developed guidelines for pumping ANE. These guidelines and pump standards will be implemented at the BGER facility.

Sensitivity to accidental decomposition/detonation is increased by the presence of energetic sensitising materials or chemical contaminants. ANE is insensitive to friction, impact, and sparks.

ANE is a poor conductor of heat and contains a high-water content, which acts as a heat sink in the event of the material being heated in a fire.

ANE is classified as a Security Sensitivity Ammonium Nitrate (SSAN).

4.3 Ammonium Nitrate Solution - ANSOL (Oxidizing Agent Class 5.1)

Hot concentrated ammonium nitrate solutions (>60%) are Division 5.1 oxidising agents and are a hot clear liquid routinely found at temperatures up to 130°C in factory environments. Burns from oxidiser solutions are very severe as they are both thermal and chemical burns. High concentration ANSOL (above 80%) can thermally decompose under certain conditions such as change in pH or water content. Some of the gaseous products of ANSOL decomposition are toxic (various NO_x gases).

At the SMS facility, the maximum temperature of the ANSOL manufactured will be 90°C and the maximum target concentration is approximately 83%.

Certain contaminants and incompatible chemicals can catalyse the decomposition of ANSOL. Contaminants that may increase the risk of decomposition include acids, chlorides, organics, alkali metals, and nitrites.

ANSOL does not burn but, as an oxidising agent, it will support fire, even in the absence of an external source of oxygen. ANSOL is insensitive to friction, impact, and sparks.

ANSOL is not classified as a Security Sensitivity Ammonium Nitrate (SSAN).

5. SCHEDULE OF CHEMICALS AND RAW MATERIALS

5.1 Schedule 15 Chemicals

The current SafeWork NSW Manufacturing Licence allows a total storage of 166t of AN. Table 1 shows the Schedule 15 chemicals that will be stored on site to allow for increased production. Storage in Shed 70 will be increased to 110t. Sheds 69 will no longer be used for AN and will store

non-dangerous goods. Two new storage sheds Shed 70b and 70c will be utilized for AN storage. Shed 69a will continue to serve as the AN day store to be used during plant operating hours. Refer to table 5 below.

All the Schedule 15 chemicals in table 1 are below the Major Hazard Facility (MHF) threshold levels. The facility is therefore not a Major Hazard Facility under the NSW Work Health and Safety Regulation 2017.

Table 1: Inventory of Schedule 15 Chemicals

Material	UN No.	DG Class	MHF Threshold (t)	Quantity Stored (t)	% MHF Threshold	Type of Storage
Prilled AN	1942	5.1	2,500	450	18	3 Steel sheds on concrete bases
Ammonium Nitrate Emulsion (ANE)	3375	5.1	200	105	53	4 Stainless steel tanks
						Stainless steel rework tank (1.5t)
Total Site MHF Threshold %					**71**	

Table 2: Other Raw Materials to be Used and Stored on Site

Material	Type	Quantity	Type of storage (TBC)
Diesel oil	C1 Combustible Liquid	61,000L	Self-bunded trans tank in a concrete bund
Surfactant	Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code)	10,000L	1,000 L IBC stored in a concrete bund
Calcium Nitrate	Not classified as Dangerous Goods	72,000kg	1,200kg bulk bag.
Nitric Acid	Class 8 PGII UN2790	1,000L	200L drums stored on bund in DG Store and within the manufacturing area
Sodium Hydroxide	Class 8	1000 kg	200L drums on pallets stored in a Designated Storage Container
Sodium Thiocyanate (50% Solution)	Not classified as Dangerous Goods.	12,000L	1,000L IBC store on concrete floor in a stand-alone small shed.
Urea	Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code)	50 t	1t bulka bags stored in cladded shed.
ANSOL	Class 5.1 PGIII UN2426	16,000 L	2 x 8,000 L Tanks

6. HAZARD AND RISK ASSESSMENT APPROACH

6.1 Hazard and Incident Identification

This section describes the risk and hazard analysis approach that SMS uses to assess hazards and risks. This is an integrated process for safety assurance that follows the guidance in the NSW Assessment Guideline, Multi-level Risk Assessment (2011). The risk assessment and hazard

analysis approach will also be compliant with the guidelines and recommendations in NSW HIPAP 4 and 6.

The risk assessment and hazard analysis process for the BGER facility includes the following elements:

6.1.1 Preliminary Risk Assessment

Prior to the construction of the ANE plant, SMS conducted a preliminary risk assessment based on SMS' experience in designing and building ANE plants. The plant design is based on a proven plant design used in Australia and around the world. The outcome of the risk assessment process provided the broad design and operating principles for the BGER facility.

SMS has ensured that learnings from explosives incidents that have happened all over the world are incorporated in the initial high level risk assessment for the BGER plant.

SMS has access to extensive engineering and technical resources with deep experience in hazard identification and risk assessment. SMS has called upon the expertise of its parent company, Solar Industries India and external consultants in Australia. These resources were actively involved in the preliminary risk assessment process and subsequent risk assessments during the construction of the plant and prior to plant commissioning.

6.1.2 Detailed Review of Existing Risk Assessments

This detailed risk assessment process built on the outcomes generated by the high level risk assessment. SMS conducted a rigorous review of the hazard studies conducted by Solar Industries India for similar facilities that Solar Industries has built in India and other parts of the world. These hazard studies were all conducted using cross-functional teams from Solar, technology vendor and external consultants.

6.1.3 BGER Specific Hazard Studies

Although the emulsion production plant is based on a standard, proven design, there are specific requirements implanted in the final plant design and layout to meet Australian standards, site conditions and market needs.

The SMS facility was also subjected to a detailed explosives hazard study process. This study approach originally developed by ICI (UK) has been widely implemented across the explosives industry worldwide. The SMS process was conducted by a multi-disciplinary team including Solar Industries India and external Australian experts.

6.1.4 Broad Brush Risk Assessment

Upon commissioning of the facility, a pre-production risk review was conducted to assess the operational requirements and to ensure that all major risks have been identified and managed in the day-to-day operation of the facility.

6.2 Identification of Key risks

Based on the hazard and risk assessment approach, SMS has identified the key risks that apply to the BGER facility.

International experience shows that uncontrolled heating of ammonium nitrate and ammonium nitrate mixtures can result in explosions and is a key risk in the manufacture of ANE. The main causes of uncontrolled heating arise from:

- ANE pumps overheating,
- Fires under ANE storage tanks,
- Ammonium nitrate emulsion mixtures being overheated and allowed to dry out,
- Contamination of solid ammonium nitrate causing a run–away decomposition, and
- Fires near ammonium nitrate storage areas.

In line with relevant guidelines, key risks are framed around the potential for uncontrolled heating of ANE and solid ammonium nitrate and the control measures to avoid overheating. There is a considerable body of knowledge from HAZOP studies and risk assessments conducted ANE plants. Table 3 shows key risk scenarios and control measures that have been implemented in the BGER plant. Hazard studies and risk assessments have been conducted on all manufacturing and operational elements of the SMS facility to ensure that critical controls are adequate and that risks have been reduced so as far as is reasonably practicable.

Table 3: Key Risk Scenarios for the SMS Facility

Operational Element	Process Description	Hazards	Consequence	Controls
ANE Manufacture - emulsion pumping	High pressure pumping of ANE	PC pump over pressure/ overheating	Explosion of ANE in process	High pressure & temp trips on PC pumps
ANSOL Mixing	Transfer of AN prill via auger and dissolving of AN in water	Overheating	Fire	Control systems & trips on heating circuit and boilers
AN Delivery	Loading AN to storage from truck	Truck/Auger fire	Fire	Accredited DG contractor Maintenance procedures
AN Storage	Bulk storage of HDAN bulka bags in AN sheds	Truck or bushfire Contamination with incompatible materials	Explosion of AN storage	Accredited DG contractor Separation of incompatible materials
ANE Storage	Storage of finished ANE in four 25t tanks prior to loading on tanker	Fire under tank	Explosion of ANE storage	Plant design ensures fuels cannot pool under ANE tanks
ANE Load Out	Pumping of ANE from tanks to road tanker for transport to mine	Pump over pressure/overheating	Explosion of ANE storage	Pump temp trips Bursting disk

6.3 Critical Controls

In line with international explosives industry best practices and specific knowledge from the technology vendor, the following critical control systems have been implemented at the SMS facility:

6.3.1 Pump Safety Systems

The highest risk element of ANE manufacture involves the high pressure of ANE in the blender and static mixers. The international explosives industry has adopted pump standards that define the required pump specification and the types of safety systems that need to be installed to ensure safe operation of ANE and ANSOL pumps. The pump standard implemented at the BGER facility is in accordance with the Australian Explosives Industry and Safety Group (AEISG): *Code of Practice Ammonium Nitrate Emulsions, Suspensions or Gels - ANEs (UN3375), Edition 5, 2018* which specifies requirements for pumps used for ANE.

Pump safety systems are a critical control in the manufacture of ANE. SMS has implemented the key requirement that the pump should have a pump protection system to detect and prevent deadheading (high pressure), dry operation (low flow) and or high temperature. Pump safety systems implemented on the plant include:

- Emulsion specified progressive cavity (PC) pump
- High temperature and pressure trips
- Bursting disc

6.3.2 Process Temperature Control

A steam boiler is used for heating of the ANSOL and fuel blend tanks. The PLC system controls the heating process to ensure that the ANSOL temperature does not exceed 90 C.

In addition to heating sensors, the ANSOL and fuel blend tanks have independent analogue temperature indicators that allow operators to monitor temperature during the manufacturing process.

Any fault or failure in the temperature control resulting in elevated solution temperature will be identified by the operator using the independent temperature gauges.

The steam boiler is a commercial unit with full safety monitoring systems and trips.

6.3.3 Programmable Logic Controller (PLC)

The ANE manufacturing plant is operated from control panels linked to Programmable Logic Controllers (PLCs). It consists of an engineered set of hardware and software controls which are used to manage ANSOL and fuel blend preparation and ANE manufacture. This means that a minimal level of operator manual input is required to operate these processes.

There are three Human Machine Interface (HMI) control panels for the PLCs. One is in the oxidiser blend, one for the fuel blend makeup area and one in the area where the emulsion is blended.

The PLC systems are linked to a hardwired trip system to ensure that once a process is up and running and an operational problem occurs, the system will revert to a "Safe State" (i.e. manufacturing stops and all upstream systems are placed into recirculation or stopped) to avoid adverse safety, health and environmental (SH&E) consequences.

The processes within the manufacturing plant managed by the PLC systems are:

- Pumping of oxidiser blend, fuel blend and pre-emulsion,
- Oxidiser solution mixing and heating,
- Fuel blend preparation,
- Blending and refinement of emulsion,
- Control of the flow and quantities of raw ingredients,
- Displays of temperature, high and low pressure, and level sensors, and
- Display of alarms when triggered by hard wire trip system.

Operator intervention will be required to open and close valves to tanks and to load solid oxidiser material via the auger into the ANSOL tank. The PLC monitors these operations and alarms are triggered if a change in pre-set conditions occur.

The process parameters controlled by the PLC system cannot be changed by operators or any other personnel. Any changes to the PLC program can only be changed by an authorised control engineer from Solar Industries India under the auspices of the Management of Change procedure for the BGER facility.

The critical trips such as temperature and pressure sensors will be linked to the PLC but operate independently of the PLC system. In the event of a fault, the trips will send an alarm to the PLC control panel and stop all upstream & downstream process' independently (see below).

6.3.4 High Level Protection on ANSOL Tanks

The ANSOL tanks use high level switches that are wired to the PLC. The high level switch identifies when the ANSOL tank is at 90% and isolates the water addition valve and, if in Transfer mode, the ANSOL Transfer pump.

6.3.5 Emergency Stops

Emergency stop buttons provided in locations throughout the plant. Emergency stop buttons cut power to the manufacturing and transfer operations, effectively stopping all mixing, heating, pumping, or blending activities which may be the source of any unwanted high temperature or high pressure.

Each individual piece of equipment has an individual E-Stop fitted. There will be additional Emergency Shutdown E-Stops throughout the facility that shut down the entire manufacturing process (aside from the water pump as it is required to utilise fire hose reels).

6.3.6 Emergency Response Plan

The Emergency Response Plan is designed to mitigate the consequence of a major incident occurring on the manufacturing facility site. Reduction of the consequences of an explosion is achieved through evacuation. A critical element of the Emergency Response Plan is to have a credible evacuation plan that will ensure that there will be a high likelihood that within 45 minutes of the evacuation being initiated there is no person within a Protected Class B (PWB) distance from the plant. This means the plant Emergency Response Plan will be fully integrated with both the BGER site emergency procedures and emergency response plan of Johnex.

6.3.7 Housekeeping

Site procedures require a high standard of housekeeping to ensure that incompatible materials are separated and stored appropriately. Housekeeping inspections are conducted weekly. Waste management procedures prevent the build-up of waste on site.

6.3.8 Operator Presence and Competency

Operators are always present during manufacturing and transfer activities undertaken at the BGER site. In particular:

- Competent operators will always present within the ANE manufacturing area during the manufacturing process.
- Competent operators will always present during the ANSOL and fuel blend manufacturing and transfer processes,
- Competent operators will always present during ANE load out to delivery tankers,
- Competent delivery driver will always be present during filling of diesel storage tank, and
- Competent operator will be present during delivery of bulk AN into the AN storage sheds.

Operational control measures for manual tasks and operation of the PLC system will be for operators to follow operating instructions. A comprehensive set of operational instructions for the plant and site operations has been developed. A training needs analysis is in place for each operator and training in the required operational procedures conducted. Records of the training needs analysis, copies of procedures and training assessments are held for each operator.

6.3.9 Site Security

The SMS facility is located within a fenced area on the BGER with locked gates to ensure the security of Security Sensitive Ammonium Nitrate (SSAN) stored on the site. Security monitoring systems, cameras and alarms have been installed. Site security is also integrated with the BGER site security systems.

7. SAFETY MANAGEMENT SYSTEM

A comprehensive Safety Management System (SMS) has been developed for the SMS facility. This document describes all the policies, standards, processes, and procedures for the safe and efficient operation of SMS facility. Table 4 shows how the requirements of the SMS are addressed by policy and procedure documents. Each of these elements has a defined process with reference to procedures and forms in supporting management systems.

Table 4. Safety Management System Elements

SMS Requirement	How Addressed
Leadership, management, accountability, and commitment	• Health & Safety Policy • Accountability & Responsibility • Responsibility Matrix • Management Review • Delegation of SHE Responsibilities
Hazard and risk management	• Risk management • Engineering Design and Risk Analysis • Hazard Reporting
Information and documentation	• Integrated Management System
Design and construction	• Basis of Safety • Engineering Design and Risk Analysis
Incident management	• Incident Management • Incident Investigation and Reporting • Incident Reporting Matrix
Management of change	• Change Management • Clearance Certificate & Permit to Work
Contractor management	• Subcontractor Management
Emergency preparedness and response	• Incident and Emergency Procedures
Purchasing	• Purchasing controls and management
Asset Integrity	• Scheduled Maintenance • Defect Management
Systems of work	• Systems of work

SMS Requirement	How Addressed
Personnel	• Training/Competent People • Training Needs Analysis • Communication& Consultation • Site Authorisations
Monitoring, auditing, review, and improvement	• Continual Improvement • Performance Standards & Metrics • Inspections and Audits • Objectives and Targets
Health and fitness for work	• Occupational Health
Environment and waste management	• Care for the Environment

8. RISK ASSESSMENT AND CONSEQUENCE ALALYSIS

8.1.2 Risk Scenarios

The risk scenarios that have been considered for the SMS facility in this section. They consider the local conditions, including bushfire hazard areas and meteorological conditions. On this basis the risk scenarios are:

Explosion of ANE during manufacturing (10 kg in process)

The continuous ANE manufacturing process minimises the amount of in-process ANE in the system (in pumps, pipes, and mixers). It is estimated that the amount of in-process ANE during production will be approximately 10kg. In this scenario it is assumed that explosion of in-process ANE would occur *without warning*. This is the worst case scenario. In practice, prior warming would be provided by the control systems on the plant linked to the PLC control system and alarms. These safety systems would shut the plant down immediately.

Explosion of AN storage as a result of fire (maximum 170 t of AN per storage)

There are 4 AN storage sheds on the site as shown in the table below. They are separated from each other so it is assumed that in the unlikely event that an entire storage explodes, the explosion would not propagate to an adjacent AN store. In this scenario it is assumed that explosion in an AN storage would occur *with warning*.

Table 5: Proposed AN Storage Sites[1]

AN Storage Site	Capacity (t)	NEQ (t) - 32% TNT
Shed 70[2]	110	36
Shed 70b[3]	170	55
Shed 70c[3]	170	55

1. Shed 69a is the day store and will continue to be used as a temporary store. AN will be transported from the AN storage site to the day store and unused AN returned at the end of the day. Total quality of AN on site will not exceed 450t as shown in table 1.
2. Existing shed
3. New sheds

Explosion of ANE storage as a result of fire (maximum 105 t of ANE)

The industry reference case is the incident at Porgera (PNG), where burning fuel from a spill engulfed ANE tanks that eventually exploded. The SMS facility has been designed such that ANE storage and fuel are separated from the ANE manufacturing area and that even a fuel spill from the manufacturing unit cannot flow or be directed to the ANE storage tanks. The explosion of 4 storage tanks and the ANE rework tank (ie total of 105 t) has been considered as a criterion for consequence analysis. In the scenario it is assumed that explosion of the ANE storage would occur *with warning*.

Table 6: ANE Storage Sites

ANE Storage Site	Capacity (t)	NEQ (t) - 80% TNT
4 ANE tanks and Rework Tank	105t	84

8.1.3 Risk Assessment Process

The risk assessment process follows the standard explosives industry process recommended in SAFEX Good Practice Guide GPG-02. The process steps are:

- Determine the TNT Equivalence of materials involved (AN and ANE). The TNT equivalence of AN is 32% and ANE 80%
- Based on the quantities of materials, determine the Net Explosives Quantity (NEQ) for AN and ANE
- Calculate the separation distance to the Maximum Allowable Overpressures for the various exposed locations and buildings. If the distance is equal or greater than the distance to the Maximum Allowable Overpressures, then an adequate buffer zone exists between the location of the potential explosive event and the exposed site then there is no need to continue the risk assessment process.

8.1.4 Risk Assessment Assumptions

The separation distance between the AN and ANE storages meets the requirements of the AEISG ANE Code, Qld IB53 and AS2187.1 (refer to Appendix 1). Therefore, it is assumed that should explosion of an AN store or ANE store occur, there would be no knock-on effect leading to sympathetic explosion of the other stores. There are therefore six potential explosive sites (PES):

- PES1, 2, 3, 4: Single AN storage with a maximum NEQ of 55 t,
- PES5: ANE storage with a NEQ 84 t (four 90 ANE tanks and rework tank aggregated),
- PES6: In-process ANE with NEQ of 10 kg

In the case of the explosion of ANE in-process (PES6), the separation of the mixer, ANE pump and hopper from the ANE storage tanks and the AN stores is adequate to prevent sympathetic explosion of AN and ANE stores (refer Appendix 1). Risk reduction to employees working in the plant is achieved through the implementation of the best practice control measures discussed in Section 6.3. The layout of the plant has been designed such that a safe, minimum separation will be achieved.

8.1.5 Separation Distances (Quantity Distances – QD)

An exposed site (ES) is defined in the SAFEX Good Practice Guide GPG-02 as infrastructure or a building where people may be exposed to blast effects (from the explosion overpressure), or critical public infrastructure like railway lines, powerlines etc that may be damaged by blast effects.

Exposed sites are classified as Protected Works A, B or as a Vulnerable Facility. ANE Associated Works are offices, workshops, stores, ablutions, that are directly associated with the operation of the ANE premises. External infrastructure not directly involved in the operation of the facility may also be classed as Associated Works if they are fully integrated into the emergency plan for the facility This situation may arise if there are multiple operations on a particular site. This is the case at the BGER where Johnnex and Howards Fireworks also have operations on the site.

Protected Works Class A include the following:

- Public street, road or thoroughfare, railway, navigable waterway, dock, wharf, pier or jetty, marketplace, public recreation and sports ground or other open place where the public is accustomed to assemble,
- Open place of work in another occupancy, river-wall, seawall, reservoir, water main (above ground), radio or television transmitter, main electrical substation, and
- Private road which is a principal means of access to a church, chapel, college, school, hospital, or factory.

Protected Works Class B include the following:

- Dwelling house, public building, church, chapel, college, school, hospital, theatre, cinema or other building or structure where the public is accustomed to assembling,
- Shop, factory, warehouse, store, building in which any person is employed in any trade or business, depot for the keeping of flammable or dangerous goods, and
- Major dam

Vulnerable Facility includes, but is not restricted to, the following:

- Multistorey buildings, e.g. above 4 storeys,
- Large glass fronted buildings of high population,
- Health care facilities, childcare facilities, schools,
- Public buildings or structures of major historical value,
- Major traffic terminals, e.g. railway stations, airports, and
- Major public utilities, e.g. gas, water, electricity works.

Appendix 1 shows the actual and required separation distances from the plant. The required separation distances from the ANE storage references the AEISG ANE Code (which references AS2187.1) and the separation distances from AN storage which references Qld IB53.

The Johnnex packaged emulsion plant and administration office is treated as an Associated Works. These facilities have been fully integrated into the SMS Emergency Plan. The SMS Emergency Plan incorporates credible evacuation scenarios for *with warning* explosives materials (ANE and AN) that covers to the SMS plant as well as the adjacent Johnnex plant. A credible evacuation scenario is one with a high likelihood that within 45 minutes of the evacuation being initiated there is no person in a building within PWB distance and no person in the open within PWA distance.

There are no Vulnerable Facilities close to the SMS facility.

In all cases, the exposed sites are located further away from the PES than the required separation distances in the AESIG ANE Code and AS 2187.1. This applies to both internal (within the SMS facility, and adjacent facilities on the BGER) and external to the site.

No further risk analysis for AN and ANE storage is required because the separation distances between potential explosives sites and exposed sites are greater than the distances to the maximum allowed overpressure at the exposed sites. This means there is an adequate buffer zone between the facility and infrastructure within the SMS facility and external to the BGER site.

8.1.6 Consequence Analysis

In compliance with the requirements of NSW HIPAP 6, the consequence of the explosion of AN and ANE has been considered. The consequence analysis is based on the acceptable explosion overpressure at the exposed sites to minimise injuries to people and damage to infrastructure. The maximum allowable overpressures are taken from NSW HIPAP 4, which is the recognised standard to ensure an acceptable safety level in relation to the overpressures if a high consequence explosion of AN and ANE occurs.

Table 7. Maximum Allowable Overpressure for Exposed Sites (NSW HIPAP 4)

Type of Infrastructure/Facility	Maximum Allowable Overpressure
Associated Works	21 kPa
Protected Works Class A	14 kPa
Protected Works Class B	7 kPa

The overpressure at all exposed sites will be lower than the maximum allowable overpressure pressure because the exposed sites are further away from the six potential explosion sites than what is required in the AESIG ANE Code, Qld IB53 and AS2187.1. The level of risk for the increased storage of AN and ANE on the site is tolerable and meets the acceptable risk criteria in HIPAP 4.

9. CONCLUSIONS AND RECOMMENDATIONS

1. The SMS ANE manufacturing facility is based on standard, proven ANE manufacturing technology. Appropriate safety control systems and procedures have been incorporated into the plant design in accordance with international explosives industry best practice and the AEISG ANE Code. The plant has been licensed by SafeWork NSW to manufacture ANE and store ANE and AN.

2. The key hazards and risks scenarios for the plant have been identified and appropriate explosives industry control measures have been put in place to ensure that the overall risk to employees and the public can be reduced so far as is reasonably practicable.

3. The existing plant can deliver increased production rates without any changes to processes and equipment.

4. Additional ANE and AN storage will be required on the site to meet higher levels of production. There are adequate buffer zones between the ANE and AN storages and infrastructure on the BGER and external public infrastructure.

5. A comprehensive Safety Management System has been developed for the SMS facility that incorporates requirements to operate the plant at increased rates of production.

6. The Emergency Plan for the SMS facility will be upgraded to include credible evacuation scenarios that are fully integrated with other operations on the BGER. Evacuation plans will be integrated into the BGER emergency plan and site communication system.

APPENDIX 1: SEPARATION DISTANCES

Table A1.1 – Separation Distances on the BGER

Potential Explosion Site (PES)	NEQ (t)	Johnnex ANE Store Exposed Site (ES)		Johnnex AN Store Exposed Site (ES)		Johnnex Class 1 Magazine Exposed Site (ES)			Johnnex (Associated Works) Exposed Site (ES)			Nearest House (PWB) Exposed Site (ES) (Jim's House)	
		Actual (m)	Required (m)	Actual (m)	Required (m)	75t Actual (m)	100t Actual (m)	Required (m)	Office Actual (m)	Factory Actual (m)	Required (m)	Actual (m)	Required (m)
ANE Store[1]	84	724	209	669m	79	585	604	209	918	762	349	1,349	969
AN Store Shed 70[2]	36	605	157	655m	59	428	463	157	924	657	262	1,367	583
AN Store Shed 70B[2]	55	563	182	705m	68	470	421	182	982	716	303	1,424	674
AN Store Shed 70C[2]	55	540	182	747m	68	485	406	182	1013	745	303	1,460	674

Table A1.2 Separation Distances to External Infrastructure

Potential Explosion Site (PES)	NEQ (t)	Cemetery (PWA) Exposed Site (ES)		Railway Line (PWA) Exposed Site (ES)		Highway (PWA) Exposed Site (ES)		Communication Tower (PWA) Exposed Site (ES)		Nearest Dwelling outside BGER (PWB)		Nearest Dwelling in Bogan Gate township	
		Actual (m)	Required (m)	Actual (m)	Required (m)	Actual (m)	Required (m)	Actual (m)	Required (m)	Actual (m)	Required (m)	Actual (m)	Required (m)
ANE Store[1]	84	714	646	1,541	646	1,571	646	1,416	646	1,780	969	1,925	969
AN Store Shed 70[2]	36	576	341	1,467	341	1,498	341	1,319	341	1,712	583	1,789	583
AN Store Shed 70B[2]	55	625	394	1,530	394	1,559	394	1,380	394	1,777	674	1,837	674
AN Store Shed 70C[2]	55	647	394	1,560	394	1,587	394	1,407	394	1,803	674	1,856	674

Table A1.3 Separation Distances between AN and ANE Stores

Potential Explosion Site (PES)	NEQ (t)	ANE Store Exposed Site (ES)		Shed 70B Exposed Site (ES)		Shed 70 Exposed Site (ES)		Shed 70C Exposed Site (ES)	
		Actual (m)	Required (m)	Actual (m)	Required (m)	Actual (m)	Required (m)	Actual (m)	Required (m)
ANE Store[1]	84	-	-	145	79	146	79	155	79
AN Store Shed 70[2]	36	147	59	44	8	-	-	76	8
AN Store Shed 70B[2]	55	145	68	-	-	44	8	10	8
AN Store Shed 70C[2]	55	161	68	10	8	76	8	-	-

Notes to tables A1.1 – A1.3:

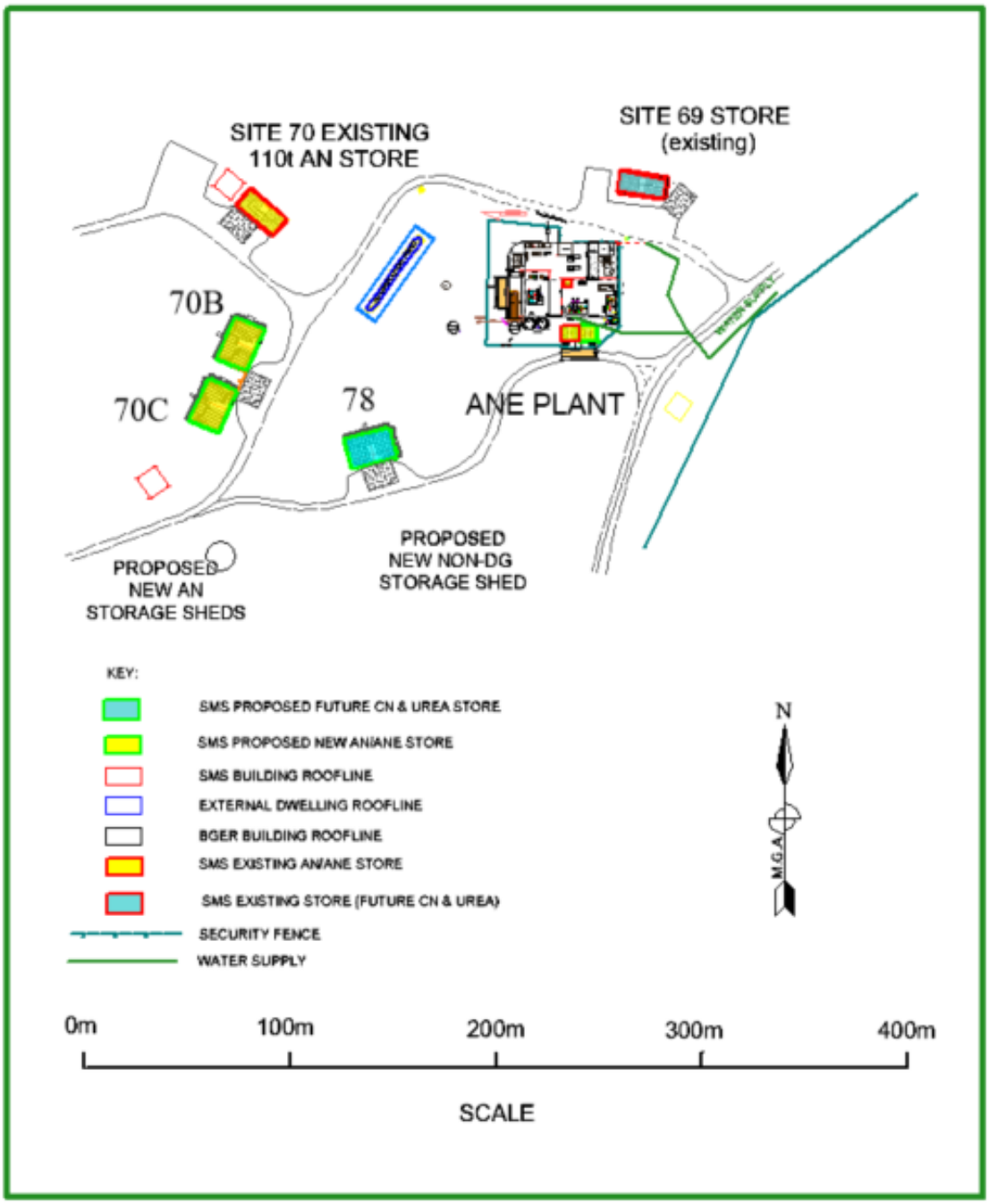
1. Reference AEISG ANE Storage Code
2. Qld IB53

Table A1.4 Separation Distances between in Process ANE and Other Stores and Facilities

Potential Explosion Site (PES)	NEQ (kg)	ANE Store Exposed Site (ES)		Closest AN Store Exposed Site (ES)		Lunchroom (Associated Works)** Exposed Site (ES)		Toilet (Associated Works)** Exposed Site (ES)	
		Actual (m)	Required (m)	Actual (m)	Required (m)	Actual (m)	Required (m)	Actual (m)	Required (m)
ANE in Process	10	16	10	17	4	13	4	46	4

** Low activity area so separation distance to AN store applies (see table 6.3, AEISG Code)

APPENDIX 2: PROPOSED PLANT LAYOUT



Appendix I. GHD Traffic Impact Assessment

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

Traffic Impact Assessment

Proposed Increased Capacity of ANE Manufacturing and Storage Facility

Solar Mining Services Pty Ltd

August 16, 2023

→ **The Power of Commitment**



Project name		Bogan Gate Traffic Impact Assessment					
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Contents

1. Introduction **1**
1.1 Background 1
1.2 Haulage vehicle 1
1.3 Purpose of this report 1
1.4 Site location 2
1.5 Scope and limitations 3
1.6 Report structure 4
2. Existing conditions **5**
2.1 Existing road network 5
2.1.1 Road hierarchy 5
2.1.1.1 Henry Parkes Way 5
2.1.1.2 Memorial Lane 6
2.2 Railway crossing 7
2.2.1 Location 7
2.2.2 Frequency of train 8
2.3 Existing traffic volumes 8
2.3.1 Traffic surveys 8
2.4 Existing road permit 10
2.5 Crash data 10
2.6 Ground survey 11
2.6.1 Existing traffic control signs 11
2.6.2 Sight distance 11
3. Impact assessment **12**
3.1 Development overview 12
3.2 Internal road network, parking facilities and infrastructure 14
3.3 Staff, operations and vehicle movements 14
3.4 Swept path analysis 15
3.4.1 Henry Parkes Way/Memorial Lane 15
3.4.2 Memorial Lane/BGER Service Road 16
3.4.3 BGER Service Road and Entrance 17
3.5 A-Double u-turn facility 17
3.6 Traffic 2033 18
3.7 Intersection turn treatment 18
3.8 Control for transport and use of any dangerous goods 19
3.9 Driver Code of Conduct 19
3.10 Construction Traffic Management Plan 20
4. Summary and conclusion **22**

Table index

Table 1.1	TfNSW requirements	3
Table 2.1	Henry Parkes Way key features	5
Table 2.2	Memorial Lane key features	6
Table 2.3	Train Frequency	8
Table 2.4	Trip distribution data	9
Table 3.1	Staff and Operation (Approved and Proposed)	14

Figure index

Figure 1.1	Proposed heavy vehicle configuration A-Double (30 metre) to access the site	1
Figure 1.2	ANE Manufacturing and Storage Facility	2
Figure 1.3	Road network	3
Figure 2.1	Henry Parkes Way east of Memorial Lane looking west	6
Figure 2.2	Memorial Lane looking south from Henry Parkes Way	7
Figure 2.3	Railway Crossing at Memorial Lane	7
Figure 2.4	Current peak hour traffic volumes	9
Figure 2.5	PBS 2B – Tier 1 mass approved route map	10
Figure 2.6	Crash statistics in the vicinity of the facility	10
Figure 2.7	Existing traffic control signs	11
Figure 2.8	Sight distance and safe intersection sight distance	11
Figure 3.1	Proposed development	13
Figure 3.2	Short stacking issue with A-Doubles (existing conditions)	15
Figure 3.3	Proposed widening at the intersection of Memorial Lane and Henry Parkes Way	16
Figure 3.4	Turning paths at Memorial Lane/BGER Service Road intersection (A-double)	16
Figure 3.5	A-double entering and exiting to/from the gate	17
Figure 3.6	A-double doing U- turn	17
Figure 3.7	Future peak hour traffic volumes 2033	18
Figure 3.8	Warrants for the speed limit greater and equal to 100km/h, and turn calculations	18
Figure 3.9	Calculated Q_M (turning volumes) for horizon year 2033	19
Figure 3.10	Turning Lane Warrants	19

Appendices

Appendix A Swept Path Analysis and Intersection Upgrade Requirements

Appendix B TfNSW TIA Requirements

Appendix C Driver Code of Conduct

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The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

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1. Introduction

1.1 Background

GHD has been commissioned by Currajong (on behalf of Solar Mining Services) to undertake a Traffic Impact Assessment (TIA) to support a development application for an expansion of the existing Ammonium Nitrate Emulsion (ANE) manufacturing and storage facility (hereafter referred as the facility), operated by Solar Mining Services (the proponent) at 3577 Henry Parkes Way, Bogan Gate.

The expansion of the existing ANE facility has triggered an Environmental Impact Statement (EIS), for which the Department of Planning, Industry and Environment (DPIE) has issued the proponent a requirement for a traffic and transport assessment as part of the Planning Secretary's Environmental Assessment Requirements (SEAR) for the facility's expansion.

The existing facility currently holds a permit for the manufacturing of up to 960 tonnes per annum of ANE as per DA2020/0073 granted by Parkes Shire Council on 18 November 2020. The facility proposes to increase the processing capacity to permit the following:

– Manufacturing of up to 20,000 tonnes of ANE per annum.
– Storage of up to 450 tonnes of Ammonium Nitrate (AN) at any one time.
– Storage of up to 100 tonnes of ANE at any one time.

1.2 Haulage vehicle

With the expansion of the existing facility, the proponent is also seeking vehicle access for B-Double (26 metre) and A-Double (30 metre) vehicles (refer to Figure 1.1 for the reference A-Double vehicle) to access/egress the site. The existing DA for the site limits heavy vehicle deliveries to the site to 19 metre semi-trailers.

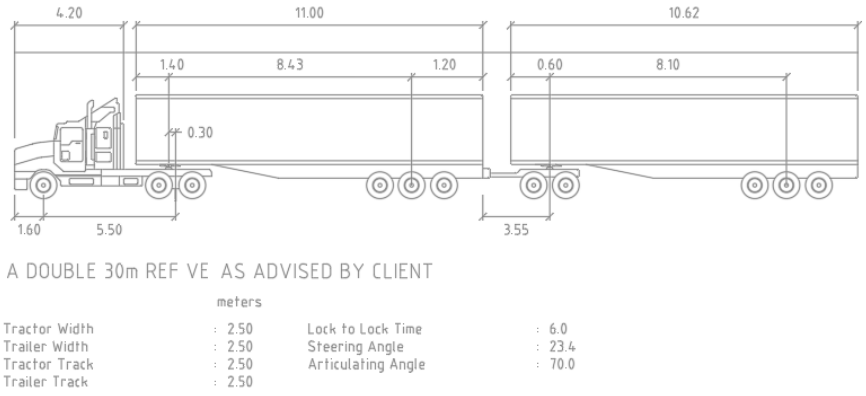


Figure 1.1 Proposed heavy vehicle configuration A-Double (30 metre) to access the site

1.3 Purpose of this report

The purpose of this report is to satisfactorily address the traffic and transport assessment requirements for the SEAR for the facility's expansion, inclusive of TfNSW requirements outlined in Appendix B:

– Details of road transport routes and access to the site.
– Road traffic predictions for the development during construction and operation, including cumulative impacts.
– Swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site.
– An assessment of impacts on the safety and function of the road network and the details of any road upgrades required for the development.

Additional assessment has also been included in this report to assess the safe access of A-Doubles vehicles to the site (as the largest heavy vehicle type).

1.4 Site location

The facility is located at 3577 Henry Parkes Way on the southern side of Lot 2 DP 1064474 as shown in Figure 1.2 below, approximately 33 kilometres west of Parkes.



Figure 1.2 ANE Manufacturing and Storage Facility

Source Google Maps Modified by GHD

Access to the proposed facility (refer to Figure 1.3) will be provided via Memorial Lane (as per the current arrangement), which intersects Henry Parkes Way at a priority controlled (Give Way) intersection.

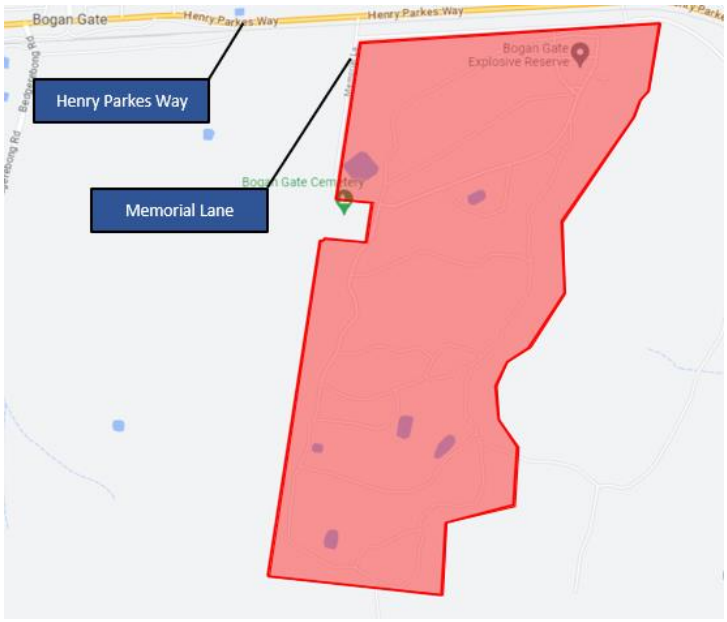


Figure 1.3 Road network

Source Google Maps modified by GHD

1.5 Scope and limitations

As part of the SEARs, Transport for NSW has requested the traffic assessment for the site to address the following requirements:

Table 1.1 TfNSW requirements

Requirements	Comments
– Project schedule: • Hours and days of work, number of shifts and start and end times • Phases and stages of the project, including construction and operation	Addressed in Section 3.3
– Traffic volumes including: • Existing background traffic • Project- related traffic for each phase or stage of the project • Projected cumulative traffic at commencement of operation, and a 10-year horizon post-commencement	Addressed in Section 2.3.1 and Section 3.6
– Traffic characteristics including: • Number and ratio of heavy vehicles to light vehicles • Peak times for existing traffic • Peak times for project- related traffic including commuter periods • Interactions between existing and project- related traffic • Sources for input materials and quantification of traffic generation associated with the haulage of the source materials	Addressed in Section 2.3.1 and Section 3.3
– Road safety assessment of key haulage routes	Addressed in Section 2.6.1 and Section 2.6.2
– Controls for transport and use of any dangerous goods in accordance with State Environmental Planning Policy No.33 – Hazardous and Offensive Development, the Australian Dangerous Goods Code and AS4452 Storage and Handling of Toxic Substance.	Addressed in Section 3.8

Requirements	Comments
– Identify the necessary road network infrastructure upgrades that are required to cater for and mitigate the impact of project related traffic on both the local and classified road network for the development (for instance, road widening and/or intersection treatments). In this regard, preliminary concept drawings need to be submitted with the EIS application for any identified road infrastructure upgrades. It should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of TfNSW and Council.	Addressed in Section 3.4 and Section 3.5
– Proposed road facilities, access and intersection treatments are to be identified and be in accordance with Austroads Guide to Road Design including provision of Safe Intersection Sight Distance (SISD).	Addressed in Section 2.6.2
– Consideration of the local climate conditions that may affect road safety during the life of the project (e.g. fog, wet and dry weather).	Addressed in Section 2.6.1 and Section 2.6.2
– The layout of the internal road network, parking facilities and infrastructure.	Addressed in Section 3.2
– Impact on rail corridors and level crossings detailing any proposed interface treatments. Note, the rail manager for rail corridors in the vicinity of the site is ARTC.	Addressed in Section 2.2
– Propose a Driver Code of Conduct for haulage operations which could include, but not be limited to: • Safety initiatives for haulage through residential areas and/or school zones • An induction process for vehicle operators and regular toolbox meetings	Addressed in Section 3.9

The development of the Traffic Assessment has relied on the following information and assumptions:

– Concept plans for the proposed ANE manufacturing and storage facility were sourced from the Scoping Report prepared by Curranjong.
– Existing traffic volume information was sourced from traffic surveys conducted by Transport for NSW (TfNSW) in 2018.
– An annual growth rate of 2.5 percent has been applied to the current volumes to determine the projected 2033 background traffic volumes.
– Trip generation and traffic distribution assumptions were made on a first principles basis in relation to information provided by the client.
– No site visit was completed by GHD staff. The conditions of the surrounding network were based on information supplied by the traffic surveys and Google Maps / Street view, as well as a ground survey undertaken by a survey consultant of the intersection of Memorial Lane/Henry Parkes Way, and the adjacent heavy rail crossing of the Parkes to Broken Hill line.
– Road upgrades necessary to allow A-Double access to the site has also been identified, based on a reference A-Double vehicle provided by the proponent.

1.6 Report structure

The TIA is structured as follows:

– Section 1 Introduction
– Section 2 Existing Conditions
– Section 3 Impact Assessment
– Section 4 Summary and Conclusions

2. Existing conditions

2.1 Existing road network

2.1.1 Road hierarchy

Functional road classification involves the relative balance of mobility and access functions. Transport for NSW (TfNSW) define four levels in a typical functional road hierarchy, ranking from high mobility and low accessibility to high accessibility and low mobility. These road classes are:

Arterial Roads – generally controlled by Transport for NSW, typically no limit in flow and designed to carry vehicles long distance between regional centres.

Sub-Arterial Roads – can be managed by either Transport for NSW or local council. Typically, their operating capacity ranges between 10,000 and 20,000 vehicles per day, and their aim is to carry through traffic between specific areas in a subregion or provide connectivity from arterial road routes (regional links).

Collector Roads – provide connectivity between local roads and the arterial road network and typically carry between 2,000 and 10,000 vehicles per day.

Local Roads – provide direct access to properties and the collector road system and typically carry between 500 and 4,000 vehicles per day.

A summary of the key roads in proximity to the proposed subdivision is provided below.

2.1.1.1 Henry Parkes Way

Henry Parkes Way (refer to Figure 2.1) is an arterial road that intersects Memorial Lane at a priority controlled intersection. Henry Parkes Way has the following key features as outlined in Table 2.1 below.

Table 2.1 Henry Parkes Way key features

Feature	Description
Carriageway	An undivided carriageway with a single travel lane in either direction, and a broken barrier line in the centre.
Parking	On-street parking typically is unavailable on Henry Parkes Way.
Speed Limit	100 km/h
Pedestrian Facilities	No dedicated facilities
Bicycle Facilities	No dedicated facilities
Vehicle Permit	Permitted route for both B-Double (26 metre) and Performance Based Standards (PBS) vehicles up to 30 metre in length, including A-Doubles.
Public Transport	Bus stops are not provided on Henry Parkes Way at the intersection with Memorial Lane.



Figure 2.1 Henry Parkes Way east of Memorial Lane looking west

Source: Google Streetview (April 2010)

2.1.1.2 Memorial Lane

Memorial Lane (refer to Figure 2.2) is a local road that provides access to the facility. In proximity to the facility, Memorial Lane has the following key features as outlined in Table 2.2 below.

Table 2.2 Memorial Lane key features

Feature	Description
Carriageway	Typically an undivided carriageway, with a single travel lane in each direction. Memorial Lane has a carriageway width of approximately six metres, without kerb and gutter.
Parking	There is insufficient road reserve width to support on-street parking.
Speed Limit	50 km/h
Pedestrian Facilities	No footpaths are provided on Memorial Lane
Bicycle Facilities	No dedicated facilities
Vehicle Permit	General access vehicles only (up to semi-trailers)
Public Transport	No dedicated facilities



Figure 2.2 Memorial Lane looking south from Henry Parkes Way

Source: Google Streetview (April 2010)

2.2 Railway crossing

2.2.1 Location

A heavy railway crossing is located approximately 30 metres south of the Henry Parkes Way intersection with Memorial Lane, as shown in Figure 2.3 below.



Figure 2.3 Railway Crossing at Memorial Lane

Source: Google Streetview (June 2023)

2.2.2 Frequency of train

The frequency of the trains passing through the railway crossing was extracted from the ARTC website and summarised in Table 2.3 below.

Table 2.3 Train Frequency

Day	Cootamundra West- Broken Hill (Number of Trains through Railway Crossing)	Broken Hill – Cootamundra West (Number of Trains through Railway Crossing)
Monday	3	2
Tuesday	2	4
Wednesday	5	4
Thursday	3	1
Friday	2	2
Saturday	2	3
Sunday	1	4

The data in Table 2.3 indicated, train frequencies vary from a low of five daily services (on a Sunday) to a high of nine daily services (on a Wednesday).The maximum permitted section train speeds in the vicinity of the level crossing is 145 kilometres per hour for passenger train services (NSW Train Link Explorer service), and 115 kilometres per hour for freight services.

2.3 Existing traffic volumes

2.3.1 Traffic surveys

A traffic survey was conducted by TfNSW in 2018 on the eastern approach to Bogan Gate on Henry Parkes Way, with 998 bi-directional vehicles per day, including 24.1 percent heavy vehicles. Comparing the 2018 traffic volumes with 2017 traffic volumes, the annual traffic growth rate was 0.5 percent.

According to the Austroads, *Guide to Traffic Management Part 6: Intersection Interchanges and Crossing Management*, the Design Peak Hour Traffic Volume for rural roads typically ranges from 11 percent to 16 percent of daily traffic. A design peak hour of 12.5 percent was adopted for Henry Parkes Way, which equated to a peak hour volume of 125 (bi- directional) vehicles per hour (2018).

Assuming an conservative linear growth rate of 2.5 percent, a design peak hour volume would equate to 141 (bi-directional) vehicles in 2023.

For the purpose of estimating existing trip directionality (i.e. eastbound vs westbound trips), 70 percent of movements were assumed to be travelling to the east in the morning (AM) peak, with 30 percent travelling to the west, with these movements reversed for the afternoon (PM) peak.

Currently, the facility is approved for up to six truck trips (in and out) per day and ten light vehicles trips (in and out) per day, with a total of 16 vehicles movement (in and out) per day. For a conservative approach, it is assumed that all the vehicle movement will occur in each of the AM and PM peak periods, with eight movements in each peak periods.

For the AM peak, it is assumed that 70 percent will be inbound trips and 30 percent will be outbound trips with a reverse of those movements in the PM peak.

For trip distribution it has been assumed the majority of movements will occur from/to the direction of Parkes, as detailed in Table 2.4. below.

Table 2.4 Trip distribution data

Peak hour	Inbound		Outbound	
	From the east	From the west	To the east	To the west
AM peak hour	80%	20%	80%	20%
PM peak hour	80%	20%	80%	20%

The existing peak hour traffic volumes based on the assumptions described above are displayed in Figure 2.4.

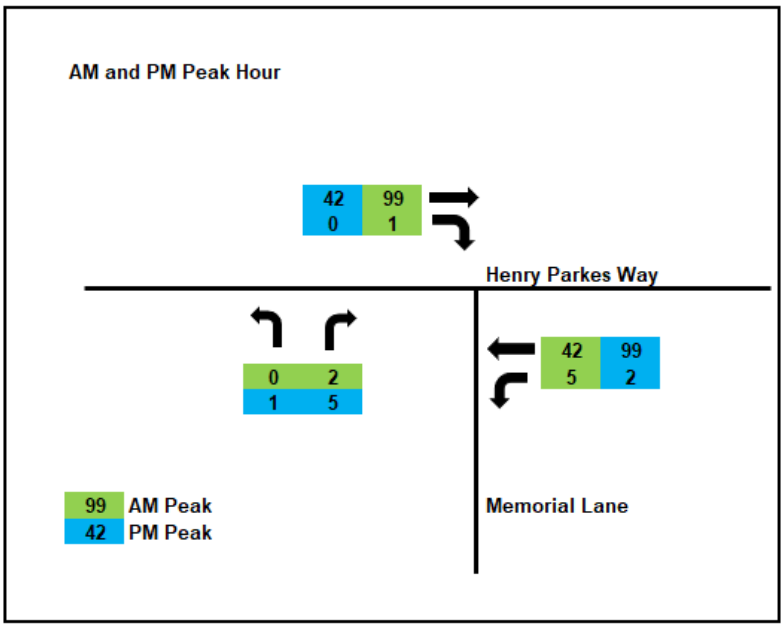


Figure 2.4 Current peak hour traffic volumes

2.4 Existing road permit

The TfNSW PBS (Performance Based Standards) Map (refer Figure 2.5) indicates that the Henry Parkes Way is a PBS 2B Tier-1 approved route, catering for high productivity vehicles of up to 30 metres in length.

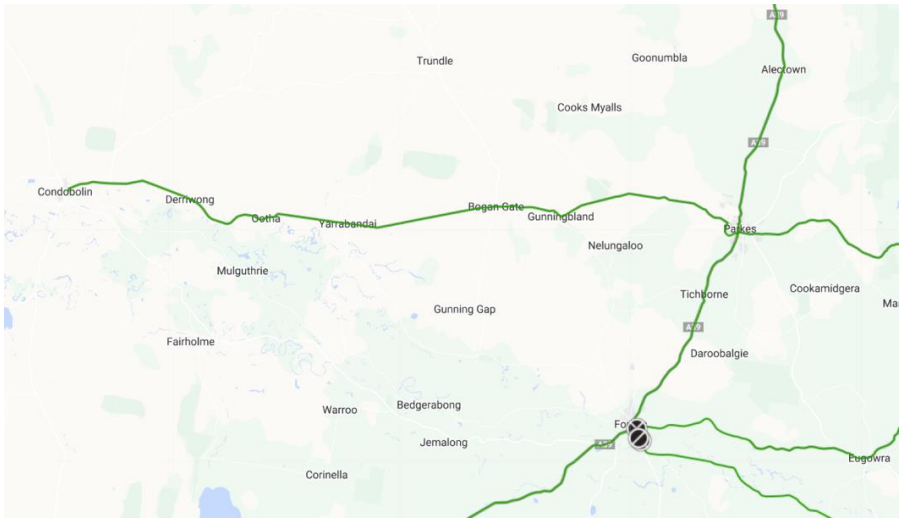


Figure 2.5 PBS 2B – Tier 1 mass approved route map

Source: Transport for NSW, Performance Based Standard Map

Being a low volume local road, Memorial Lane is a general access road, with heavy vehicle access limited to 19 metre semi-trailers.

2.5 Crash data

A review of crash data provided from the TfNSW Centre for Road Safety website has been undertaken. The review is based on five years (2017-2021) for roads within the vicinity of the subject site as shown in Figure 2.6 below. The data indicates that:

– There have been no crashes on Henry Parkes Way within 350 metres of the intersection with Memorial Lane. However, a crash has been recorded in 2018 approximately 1.3 kilometres east of the intersection at the Rawson Road/Henry Parkes Way intersection, which was categorised as a serious injury crash.
– There has been no recorded crashes on Memorial Lane.



Figure 2.6 Crash statistics in the vicinity of the facility

Source: TfNSW Centre for Road Safety modified by GHD

2.6 Ground survey

A ground survey was undertaken on the immediate area of the Henry Parkes Way and Memorial Lane intersection including the adjacent heavy railway crossing. The survey identified existing road and railway crossing signage, vegetation, spot road heights, intersection sight distance, utilities, road edgeline, shoulders, and confirmed distances between the intersection of Henry Parkes Way and the heavy railway crossing.

2.6.1 Existing traffic control signs

The existing warning signs identified from the survey were assessed against Transport for NSW standards and were found to be satisfactory.

However, the extent of the survey did not assess existing warning signs south of the railway crossing. As such, it is recommended that warning signs south of level crossing be confirmed through an additional site visit (as shown in Figure 2.7 below).

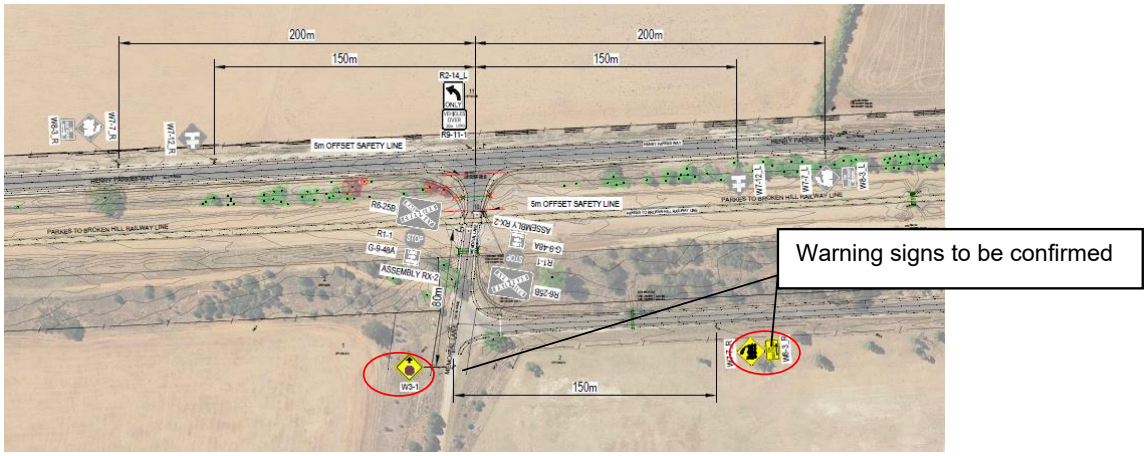


Figure 2.7 Existing traffic control signs

Source: MetroMap modified by GHD

2.6.2 Sight distance

As per Transport for NSW standards, the minimum sight distance and safe intersection sight distance required on either side on Henry Parkes Way are 205 and 320 metres, respectively.

The surveyed data was exported to AutoCAD and the available sight distance and safe intersection sight distance was checked. From Figure 2.8, it is noted that some vegetation clearing adjacent to the intersection would be required to maintain minimum sight and safe intersection sight distances'.

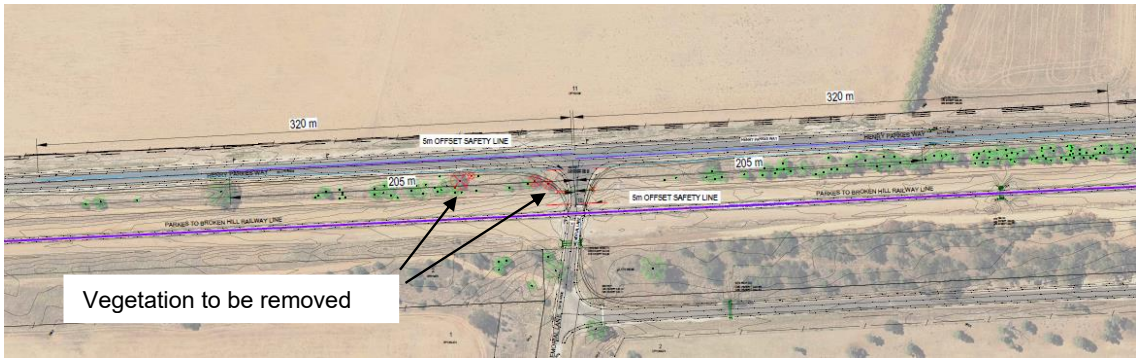


Figure 2.8 Sight distance and safe intersection sight distance

Source: MetroMap modified by GHD

3. Impact assessment

3.1 Development overview

In terms of the development, it is noted that:

- The site (refer Figure 3.1) of the Solar Mining Services (SMS) ANE manufacturing and storage facility is located on the southern portion of Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate.
- Lot 2 DP 1064474 is owned by Lexa Enterprises Pty Ltd who have granted various leases for existing land-use activities on the site, including a lease to SMS for ANE manufacturing and storage.
- The proposed development is characterised as a heavy industry, which is prohibited on land zoned RU1 Primary Production.
- The proposal seeks to increase the production capacity at the SMS ANE facility to the following:
  - Manufacturing of up to 20,000 tonnes of Ammonium Nitrate Emulsion (ANE) per annum
  - Storage of 450 tonnes of Ammonium Nitrate (AN) at any one time
  - Storage of 100 tonnes of ANE at any one time
- Other materials are stored at the existing premises, such as Calcium Nitrate (CN) and diesel, and will remain at their current storage limits approved under DA2020/0073.
- The site is located approximately 35 kilometres west of Parkes and the nearest residences to the site are located approximately 1.5 kilometres to the north of the facility, within the minimum safety distances recommended for the residences.

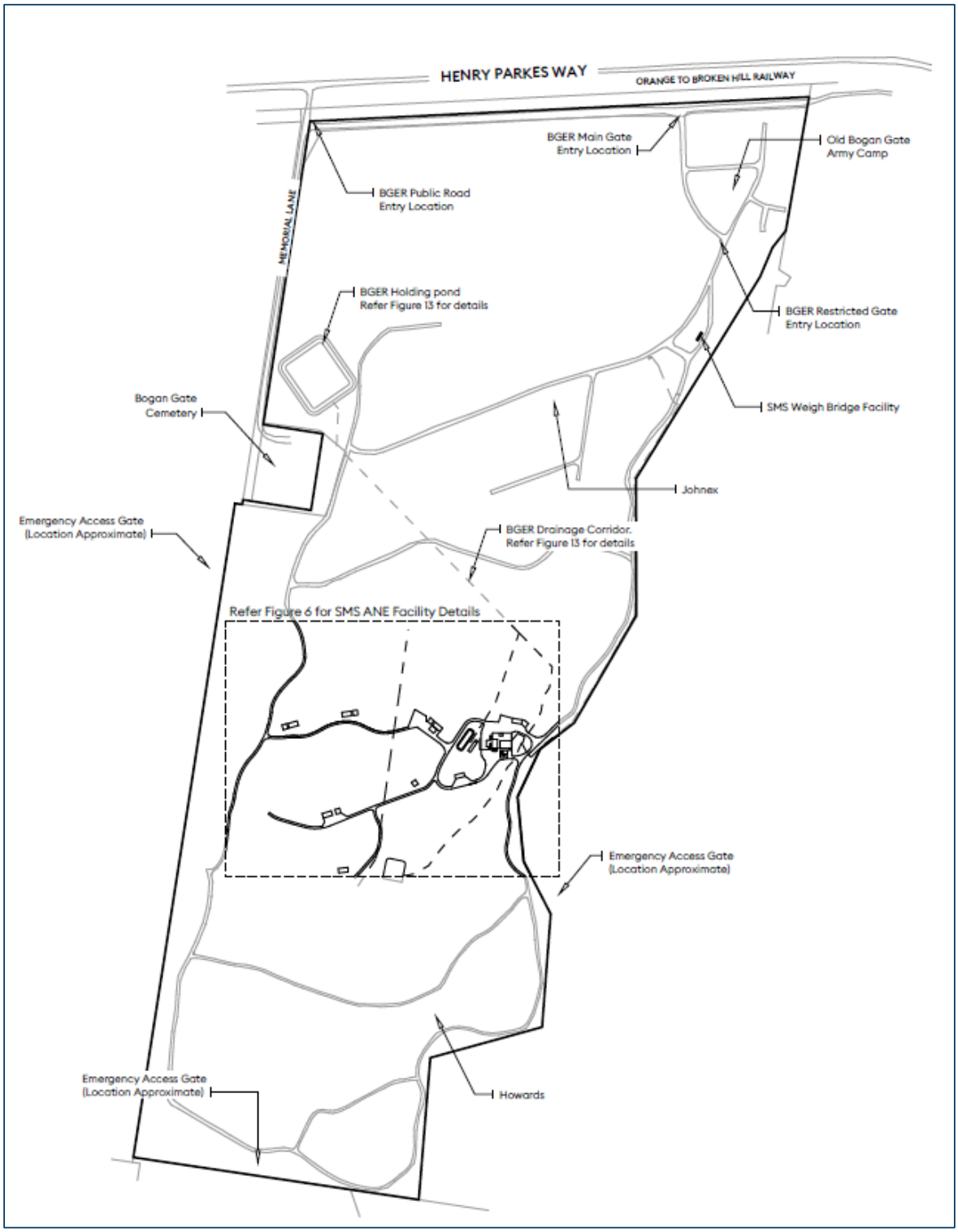


Figure 3.1 Proposed development

Source: Scoping Report prepared by Currajong

3.2 Internal road network, parking facilities and infrastructure

The proposal involves alterations and additions to the existing SMS ANE Facility at the BGER, including increased transport operations to deliver raw products, and finished ANE for delivery in trucks to various locations in NSW and potentially further afield. Access to the subject site is existing via existing internal roads, Memorial Lane and then onto the Henry Parkes Way. Truck deliveries of raw products, unloading operations and product dispatch from the existing SMS ANE Facility is undertaken via the existing internal SMS gravel access road that links to a bitumen sealed internal road at the BGER Gatehouse, and then onto Memorial Lane and Henry Parkes Way, which are bitumen sealed public roads. A weighbridge has been installed south of the BGER Gatehouse by SMS to check compliance with truck load limits and determine customer billing of ANE product. Concrete loading areas are to be established at each of the storage sheds and manufacturing plant. There are dedicated light vehicle parking stations, including at the SMS ANE plant site.

3.3 Staff, operations and vehicle movements

The details regarding staff and operations (approved and proposed) are presented in Table 3.1 below.

Table 3.1 Staff and Operation (Approved and Proposed)

Development Aspect	Approved DA	Proposed DA
Hours of Operation	– 7:00 am to 6:00 pm on weekdays – 8:00 am to 1:00 pm on Saturday – No work on Sunday and Public Holiday	The SMS ANE facility is designed to operate seven (7) days a week. A two (2) shift operation is proposed to manufacture up to 20,000 tonnes ANE per year. The hours of operation under this scenario would be as follows: **Monday to Saturday** – Shift 1 – 7:00 am to 2:00 pm – Shift 2 – 2:00 pm to 9:45 pm **Sundays or Public Holidays** – Shift 1 – 8:00 am to 2:00 pm – Shift 2 – 2:00 pm to 9:45 pm Operation of the SMS ANE manufacturing plant on a two (2) shift roster would only be required where the plant reaches consistent production rates over 12,000 tonnes of ANE per annum. Until this production threshold is met, the SMS ANE facility would operate under the following hours of operation: – **Monday to Saturday:** 7:00 am to 6:00 pm – **Sundays and Public Holidays:** 8:00 am to 6:00 pm In general, no manufacturing process changes are required to the existing SME ANE Facility to accommodate the production increases up to 20,000 tonnes per annum, other than increased storage, handling and transport of raw materials, and finished ANE product.
Staff	– Four (4) Staff	– Eight (8) staff per day in two shift operation
Heavy vehicle	– 6 trucks (in and out) day	– Indicative daily truck movements: 2 A-Doubles, 2 B-Doubles (total 8 heavy vehicle movements (in and out). – Maximum daily truck movements: 8 heavy vehicles (total 16 heavy vehicle movements in and out). *Maximum daily truck movements has formed the basis of the traffic impact assessment.*
Light vehicle	– 10 light vehicle trips (in and out) per day	– 24 light vehicle trips (in and out) per day

From Table 3.1, the development would result in a minor increase in operational staff, with a consequent minor increase in light vehicle movements to the site (10 to 24 light vehicle trips per day). Further, a minor increase in daily heavy vehicle movements is also forecast (from six to eight).

3.4 Swept path analysis

Swept path analysis was undertaken for the three intersections to identify potential issues with the use of A-Double vehicles (as the largest heavy vehicle type) accessing the site from Henry Parkes Way.

In addition to this, heavy vehicle swept path analysis was also undertaken for the intersection of Leafy Tank Road / Henry Parkes Way, where downstream u-turn movements will be required to facilitate A-Double (and B-Double) egress from the site.

Swept path analysis was also undertaken with the semi-trailers in which no issues were identified (as shown in Appendix A).

3.4.1 Henry Parkes Way/Memorial Lane

Short Stacking:

To assess the potential impact of 30 metre A-Double (as the largest heavy vehicle) access to the site, preliminary swept path analysis using the existing network and intersection geometries was assessed.

The analysis identified that A-Doubles would not be able to safely store on the level crossing (for southbound movements), without impacting through movements on Henry Parkes Way. For the reverse (northbound) movements, A-Double vehicles propped to undertake a right-turn to head east on Henry Parkes Way, would straddle the level crossing, causing a short-staking issue. A summary of the analysis for each movement is shown below in Figure 3.2.

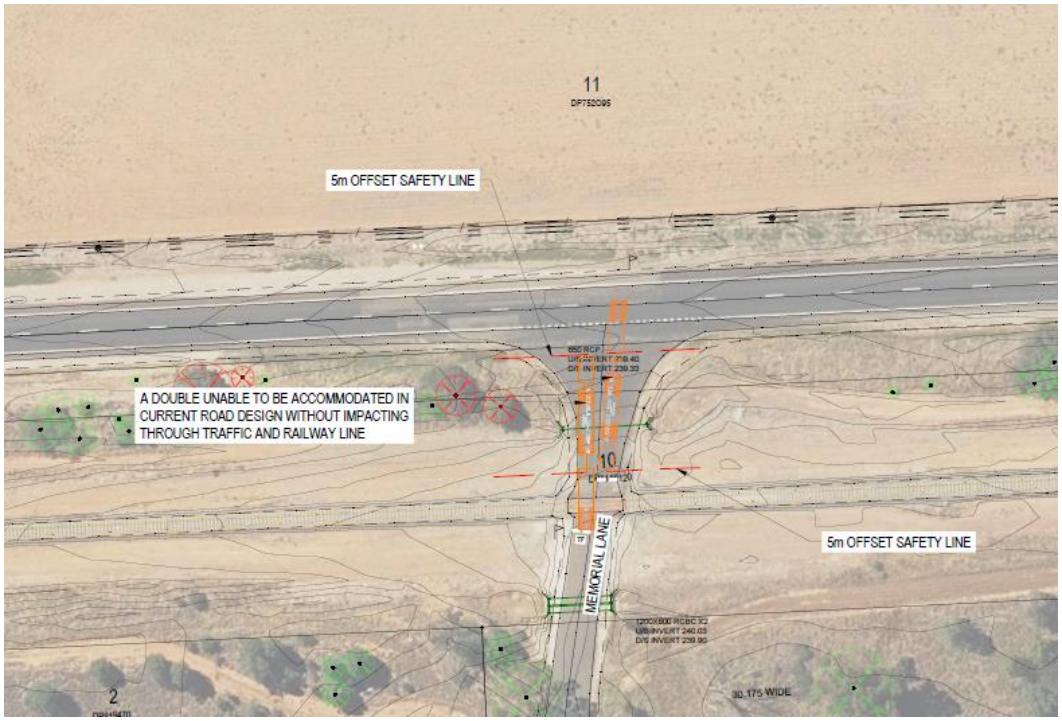


Figure 3.2 Short stacking issue with A-Doubles (existing conditions)

Source: MetroMap Modified by GHD

In order to mitigate the risk of short stacking, exiting A-Double vehicles would be required to turn left inclusive of an auxiliary left turn lane to overcome sight distance issues (discussed further in Section 3.7), before undertaking a u-turn at a designated intersection.

For A-Double vehicles accessing the site, localised widening to provide an auxiliary left turn lane would be required to ensure a left-turning A-Double could safely store at the level crossing, without impacting on through movements along Henry Parkes Way. A summary of works required to accommodate A-Double access and egress from the Memorial Lane intersection (inclusive of the level crossing) is shown below in Figure 3.3.

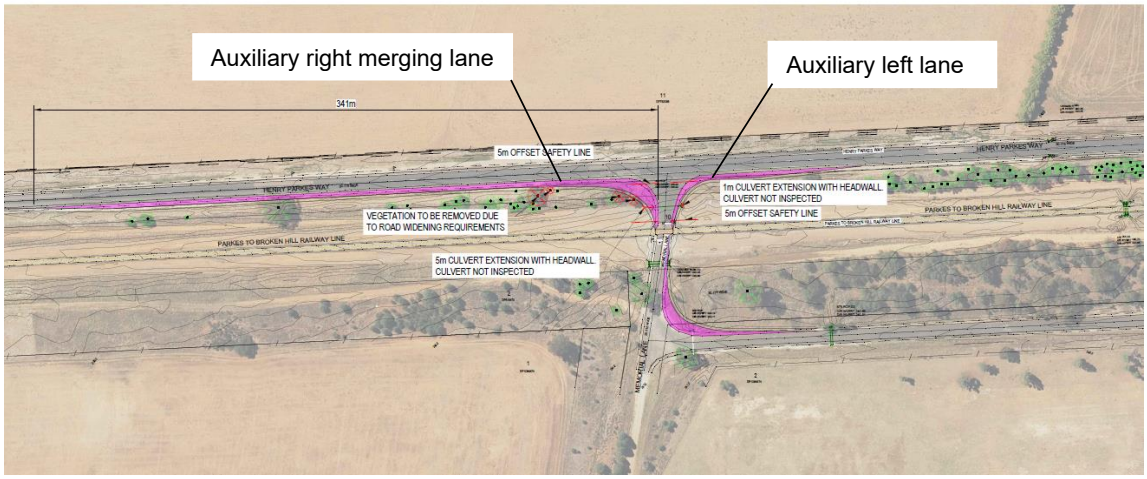


Figure 3.3 Proposed widening at the intersection of Memorial Lane and Henry Parkes Way

Source: MetroMap Modified by GHD

The proposed intersection upgrade to accommodate A-Double movements (inclusive of intersection sight distance clearing) would also provide safer access to the site for all vehicles, including the additional staff accessing the site.

Swept path plans for A-Doubles entering and exiting the site are provided in Appendix A.

3.4.2 Memorial Lane/BGER Service Road

Swept paths showing A-Doubles entering and exiting the site through the intersection of Memorial Lane/BGER Service Road is shown below in Figure 3.4.

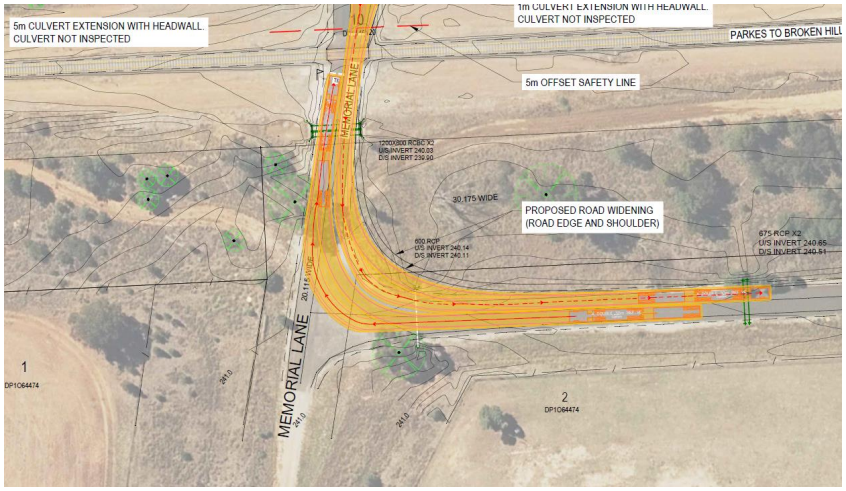


Figure 3.4 Turning paths at Memorial Lane/BGER Service Road intersection (A-double)

Source: MetroMap Modified by GHD

The existing intersection configuration does not allow for A-Doubles (noting the existing corridor is only gazetted for semi-trailer movements). A widening of the intersection would be required to accommodate A-Double movements as shown in below in Figure 3.3 above (and Appendix A).

3.4.3 BGER Service Road and Entrance

Swept paths showing A-Doubles entering and exiting the site through the access gate are shown below in Figure 3.5.



Figure 3.5 A-double entering and exiting to/from the gate

Source: MetroMap Modified by GHD

The existing layout does not allow for A-Double access. A widening of the road would be required to accommodate A-Double movements (as shown in Appendix A).

3.5 A-Double u-turn facility

Given the concerns for short-stacking for A-Double vehicles propping to turn right to head eastbound along Henry Parkes Way, A-Double access would be contingent on limiting egress from the site to left-turn exit movements only, from which a down-stream u-turn facility would need to be provided.

A review of potential intersections west of Memorial Lane was undertaken to identify potential intersections to facilitate eastbound u-turns for A-Double vehicles.

The intersection of Leafy Tank Road and Henry Parkes Way (located approximately five kilometres west of Memorial Lane) has recently been upgraded to facilitate heavy vehicle movements from a nearby grain silo located immediately south of the railway level crossing. This intersection was identified as being suitable (pending minor upgrades) to eastbound u-turns by A-Doubles, as shown below in Figure 3.6.



Figure 3.6 A-double doing U- turn

Source: MetroMap Modified by GHD

The extent of widening works (minor) at the intersection of Leafy Creek Road to accommodate eastbound A-Double u-turn movements is shown in Appendix A.

3.6 Traffic 2033

Assuming a conservative annual linear background traffic growth rate of 2.5 percent for through traffic, and including the generated traffic after the expansion of the proposed facility, future traffic for the horizon year 2033 is calculated as shown in Figure 3.7 below.

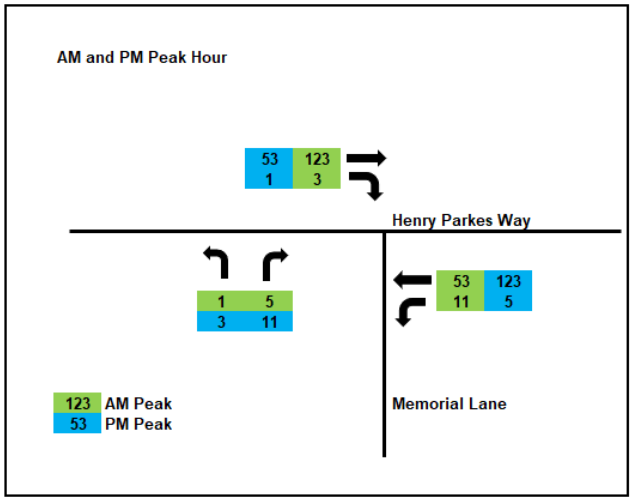
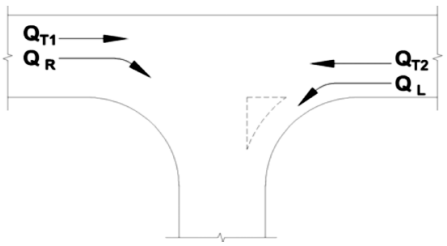


Figure 3.7 Future peak hour traffic volumes 2033

From Figure 3.7, projected turning movements to the site (including for additional staff access) is relatively low.

3.7 Intersection turn treatment

In order to determine the intersection turn treatments required for site access off Henry Parkes Way, the Austroads *Guide to Traffic Management Part 6: Intersections, Interchanges and Crossing management* was referred, which considers both the through volumes and speed limit of Henry Parkes Way (posted speed limit at 100 km/h), as well as left turning volumes from Memorial Lane. A summary of the methodology (in figures) is shown below in Figure 3.8, which identifies whether a basic left turn treatments is acceptable, or whether a channelised intersection treatments' are more appropriate.



Road type	Turn type	Splitter island	Q_M (veh/h)
Two-lane two-way	Right	No	= $Q_{T1} + Q_{T2} + Q_L$
		Yes	= $Q_{T1} + Q_{T2}$
	Left	Yes or no	= Q_{T2}
Four-lane two-way	Right	No	= 50% x $Q_{T1} + Q_{T2} + Q_L$
		Yes	= 50% x $Q_{T1} + Q_{T2}$
	Left	Yes or no	= 50% x Q_{T2}
Six-lane two-way	Right	No	= 33% x $Q_{T1} + Q_{T2} + Q_L$
		Yes	= 33% x $Q_{T1} + Q_{T2}$
	Left	Yes or no	= 33% x Q_{T2}

Source: TMR (2016a).

Figure 3.8 Warrants for the speed limit greater and equal to 100km/h, and turn calculations

The turning volumes (Q_M) with respect to left turn movements in Henry Parkes Way for both AM and PM peak is shown in Figure 3.9 and graphically against the intersection warrants' chart in Figure 3.10 below.

	AM	PM
Q_M (Left)	53	123

	AM	PM
Q_L	11	5

Figure 3.9 Calculated Q_M (turning volumes) for horizon year 2033

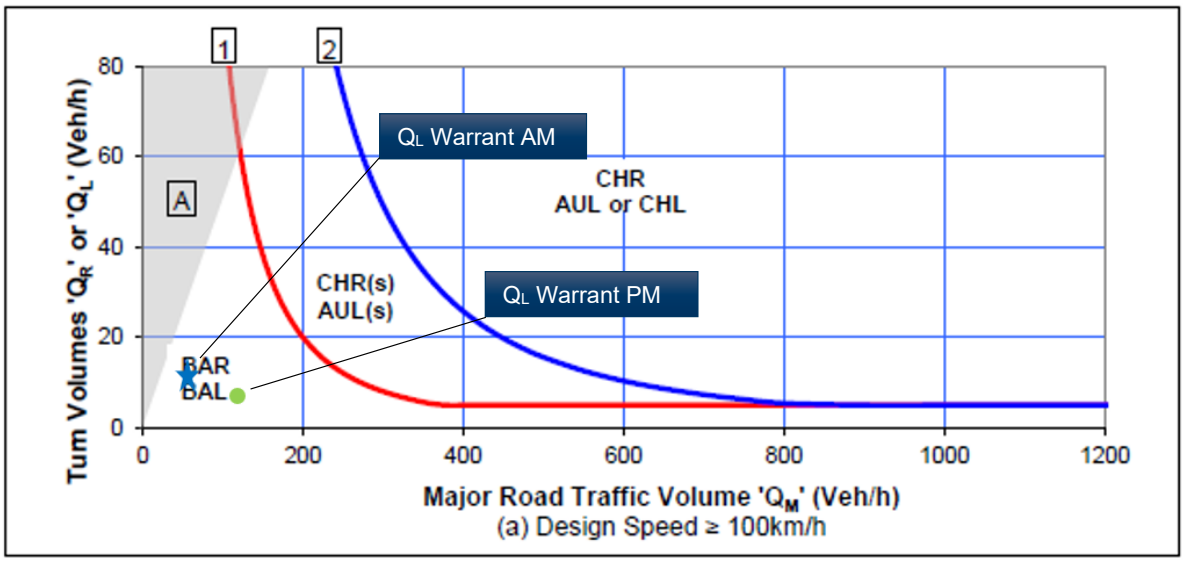


Figure 3.10 Turning Lane Warrants

From Figure 3.10, the intersection warrants' suggests a Basic Left (BAL) treatment is required on Henry Parkes Way at the intersection of Memorial Lane, reflecting the low through and turning volumes at the intersection.

3.8 Control for transport and use of any dangerous goods

The SMS ANE Facility involves the transport of dangerous goods into and out of the BGER via Memorial Lane and Henry Parkes Way. To meet the transport Chain of Responsibility (CoR) requirements, SMS has installed a weighbridge that weighs the ANE tankers prior to the haulage of ANE from the site. This is to ensure compliance requirements for vehicle weights. Due to Security Sensitive Ammonium Nitrate (SSAN) and Australian Dangerous Goods (ADG) Transport Codes, all heavy vehicle transportation to the site will be in accordance with NSW and Federal Dangerous Goods transportation codes and requirements.

3.9 Driver Code of Conduct

Pending approval of B-Double and A-Double access to the site, the driver Code of Conduct would be updated (a draft has already been prepared and provided as Appendix C) to reflect particular requirements access for high productivity vehicles, including the requirement for all A-Double and B-Double vehicles to undertake a left-turn at the intersection of Memorial Lane/Henry Parkes Way (for site egress), and that all eastbound u-turn movements be undertaken at the intersection of Leafy Tank Road and Henry Parkes Way.

The updated Driver Code of Conduct would form part of an operational plan for A-Double and B-Double operators to the site.

The light vehicle and heavy vehicle procedures from the existing Transport Code of Conduct (refer further in Appendix C) is summarised below:

Light Vehicle Transport Procedure

All drivers of light vehicles associated with transportation of materials to and from the SMS Facility are to abide by the following:

- Will be appropriately licensed to operate the vehicle.
- Will be fit for work and fit for task (drug and alcohol free and fatigue appropriately managed).
- Will ensure that the vehicle is fully roadworthy and maintained.
- Will obey all road traffic regulations, signs, directions, and instructions and display respect for other road users at all times.
- Will ensure that loads are appropriately secured.

Heavy Vehicle Transport Procedure

All drivers of heavy vehicles associated with transportation of materials to and from the SMS Facility are to abide by the following:

- Will be appropriately licensed to operate the vehicle.
- Will be fit for work and fit for task (drug and alcohol free and fatigue appropriately managed).
- Will ensure that the vehicle is fully roadworthy and maintained.
- Will obey all road traffic regulations, signs, directions, and instructions and display respect for other road users at all times.
- Will ensure that loads are appropriately secured.
- Will comply with relevant regulations and standards with regard to the transport of dangerous goods.
- Will only travel on the nominated haulage route, as shown in Appendix E (of the Code of Conduct).
- Will familiarise themselves with travel restrictions during school bus hours and avoid travel on the relevant sections of the haulage route during these times.
- Will stagger departure to avoid creation of convoys with other BGER trucks.
- Will be familiar with and adhere to the requirements of the Noise and Vibration Assessment for the SMS ANE Facility prepared by Acoustik dated July 2023.
- Will avoid the use of engine brakes on Memorial Lane, the BGER and Bogan Gate township.

All drivers of heavy vehicles to the site will be required to undergo site induction training, and will be required to abide (and acknowledge through signing) the SMS ANE Facility Transport Code of Conduct Agreement in Appendix D, including following the required haulage routes (shown in Appendix E of the Code of Conduct).

Disciplinary action may be undertaken if drivers fail to meet the requirements set out in the Code of Conduct or if SMS receives a confirmed community complaint regarding Driver actions that are in breach of this code including on-road driving behaviour.

3.10 Construction Traffic Management Plan

A Construction Traffic Management Plan (CTMP) would be prepared by the contractor prior to the commencement of construction activities. The CTMP will aim to facilitate the safety of all workers and road users within, including access to the Project site. The primary objectives of the CTMP will be:

- To minimise the impact of the vehicle traffic (particularly heavy vehicle traffic) on the operation of the adjoining road network.
- To facilitate the continuous, safe, and efficient movement of traffic for both the general public and site personnel/ workers.

– To provide a description of the types of vehicles and estimated vehicle volumes during each stage of the construction works.
– To provide information regarding the access arrangement and a description of the proposed routes for the vehicles accessing and egressing the proposal site.

The CTMP should include the following:

– CTMP objectives (similar to the defined above).
– Vehicle approach and departure routes to the site that will minimise the impacts of heavy vehicles and equipment on the adjacent road network.
– Vehicle numbers, types and mobile equipment to be used.
– Areas of parking for site personnel, which should preferably be within site premises.
– Transport options for workers to the site that will maximise safety and maintain accessibility.
– Site access constraints such as vehicle restrictions (e.g. road network load limits/height restrictions). This must note any existing heavy vehicle restrictions to the site.
– Preparation of Traffic Guidance Schemes (TGSs).
– Methods of communicating traffic changes on the road network.
– Road network operational impacts within the vicinity of the site.
– A Driver's Code of Conduct.
– Liaison with specific stakeholders to confirm additional requirements, including with Transport for NSW (for Henry Parkes Way), Parkes Shire Council (for access to Memorial Lane) and ARTC for access across the heavy rail crossing on Memorial Lane.
– General mitigation measures.

Pending a risk assessment, construction access to the site (off Henry Parkes Way) may be limited to left-in/left-out access during construction works.

4. Summary and conclusion

GHD has been commissioned by Currajong to undertake a Traffic Impact Assessment to support the development application for the upgrading of an ANE manufacturing and storage facility.

The facility is proposed to increase the capacity to the following.

– Manufacturing of up to 20,000 tonnes of Ammonium Nitrate Emulsion (ANE) per annum
– Storage of up to 450 tonnes of Ammonium Nitrate (AN) at any one time
– Storage of up to 100 tonnes of ANE at any one time

The facility will operate for 7:00 am to 9:45 pm on weekdays and 8:00 am to 6:00 pm on Saturday and Sunday (once production rates consistency exceed 12,000 tonnes per annum).

Following the expansion, the facility will generate 16 heavy vehicle movements (in and out) a day and 24 light vehicle movements (in and out) a day, an increase from six truck and 10 light vehicle movements.

The facility expansion will also increase the number of on-site staff from four to eight, with a consequent minor increase in light vehicle access to the site, with most staff expected to be commuting from Parkes (east of the site).

Analysis of projected turning movements by 2033 (10 years post opening) at the intersection of Memorial Lane/Henry Parkes Way identified that a Basic Left (BAL) lane would be required due to the low volume of through and turning traffic.

To ensure safe access and egress of A-Doubles to/from the site, the following works and operational requirements would be required:

– A-Doubles would be restricted to left in/left out at the intersection of Memorial Lane and Henry Parkes Way (inclusive of upgraded signage).
– An upgrade of the intersection of Memorial Lane/Henry Parkes Way would be required to ensure A-Doubles could be safely accommodated at the intersection (inclusive of swept paths), clear of both the adjacent railway level crossing and Henry Parkes Way (due to the risk of short-stacking).
– Irrespective of A-Double access, vegetation clearing at the intersection of Henry Parkes Way/Memorial Lane is recommended to provide safe intersection sight distance.
– Upgrades to the intersection of Memorial Lane/BGER Service Road, and the BGER Service Road/Site Access would be required to accommodate A-Double swept paths.
– An upgrade of the intersection of Henry Parkes Way/Leafy Tank Road is required to accommodate eastbound u-turn A-Double movements.
– Updates to the existing Driver Code of Conduct would be undertaken outlining the revised heavy vehicle access/egress to the site.

This traffic assessment has identified that the minor increase in traffic movements (including A-Double access) associated with the upgrade of the ANE manufacturing and storage facility by Solar Mining Services, could be safely accommodated subject to the proposed intersection upgrades at Memorial Lane/Henry Parkes Way, Memorial Lane/BGER Service Road, BGER Service Road/Site Access and Henry Parkes Way/Leafy Tank Road.

Further, the proposed upgrades are also expected to provide a generally safer road environment for all vehicles accessing the site and travelling along Henry Parkes Way.

With respect to construction traffic management, a construction traffic management plan (CTMP) would be required to be developed by the construction contractor, of which consultation would be required with Transport for NSW, Parkes Shire Council and ARTC. The CTMP would confirm construction traffic volumes, access and any controls required to minimise construction staff and road user risks.

Noting that Memorial Lane is a local government road, a permit would subsequently be sought from Parkes Shire Council to request A-Double access (noting A-Double access is already permitted along Henry Parkes Way).The aforementioned works at the intersection Memorial Lane/Henry Parkes Way, and Memorial Lane/BGER Service Road has been designed to accommodate projected A-Double movements along Memorial Lane.

Noting the limit of ground survey to the to the immediate intersections of Memorial Lane/Henry Parkes Way, and Memorial Lane/BGER Service Road, follow up survey would be needed to confirm upgrade requirements at the intersections of Henry Parkes Way/Leafy Tank Road, BGER Service Road/Site Access, inclusive of approach signage.

Appendices

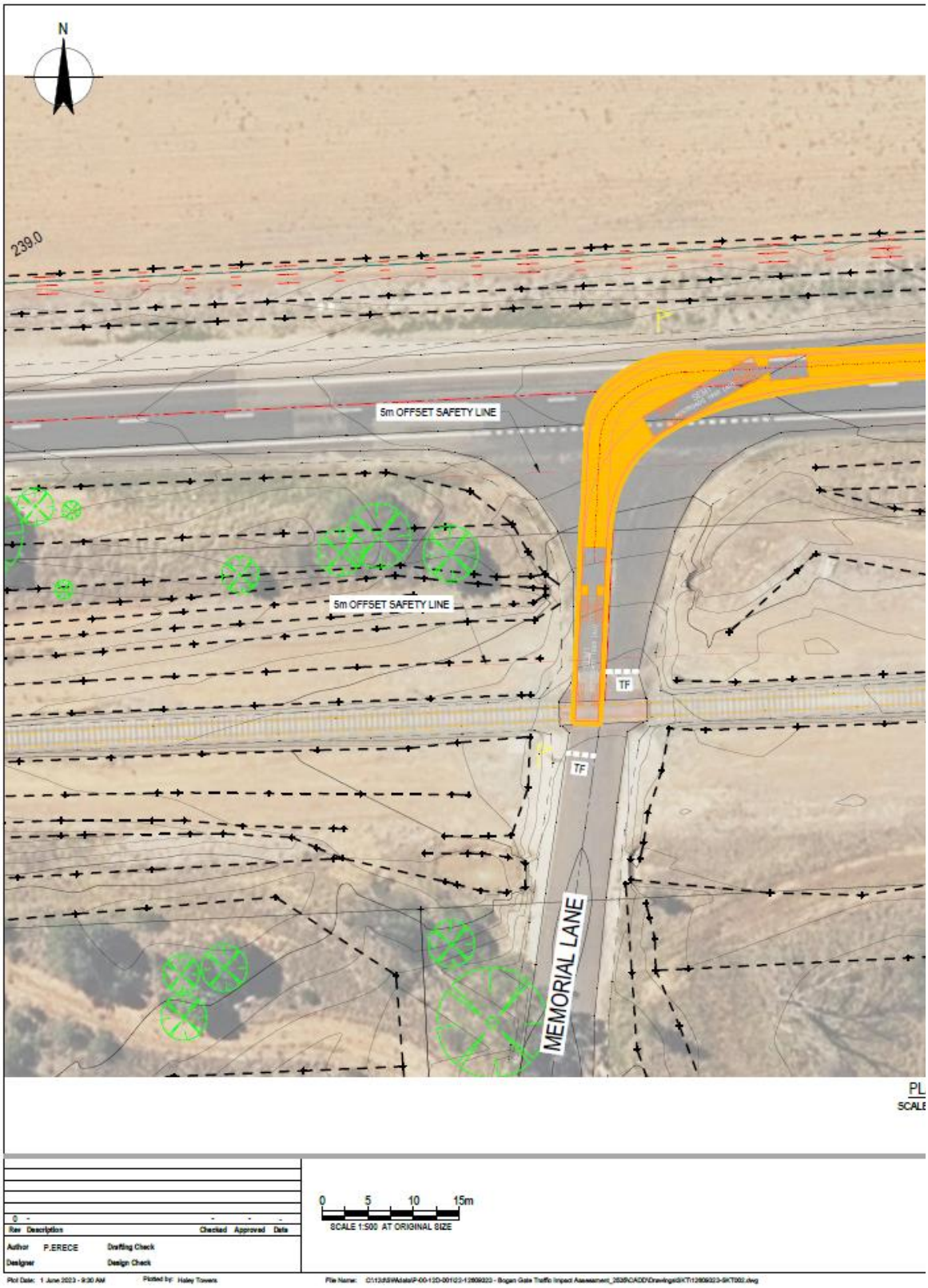
Appendix A

Swept Path Analysis and Intersection Upgrade Requirements

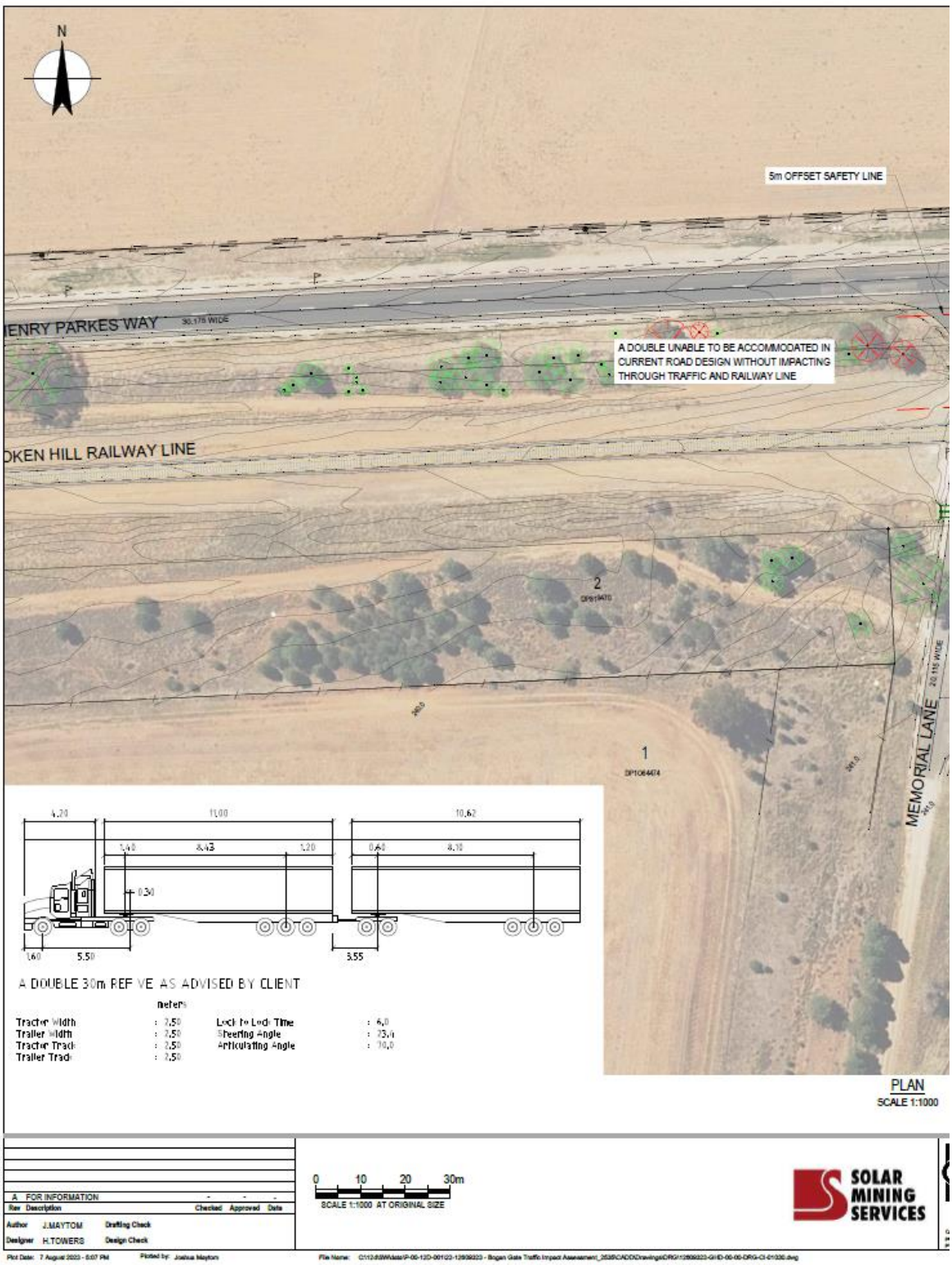
Semi Trailer Left Turn In and Stacking



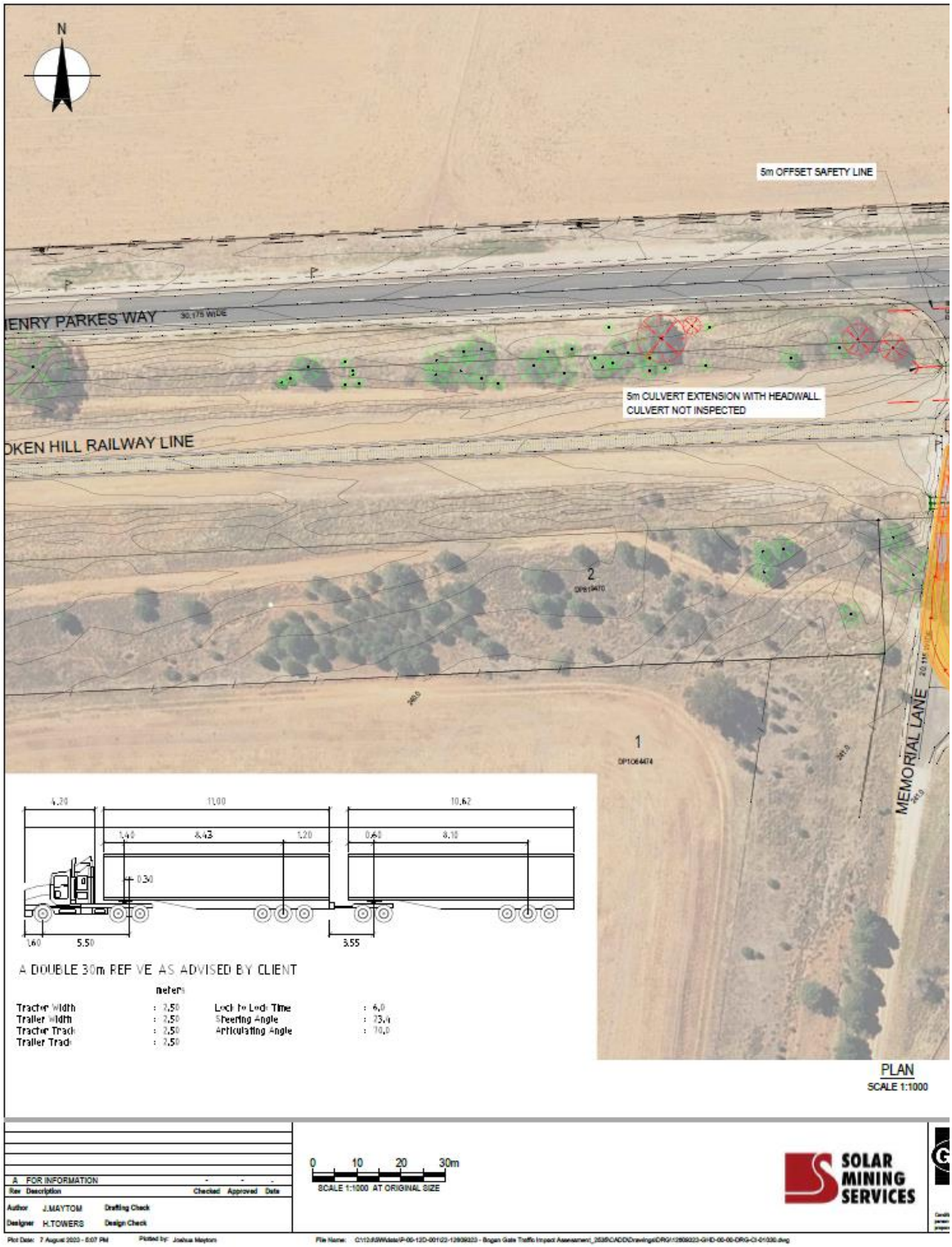
Semi Trailer Right Turn Out



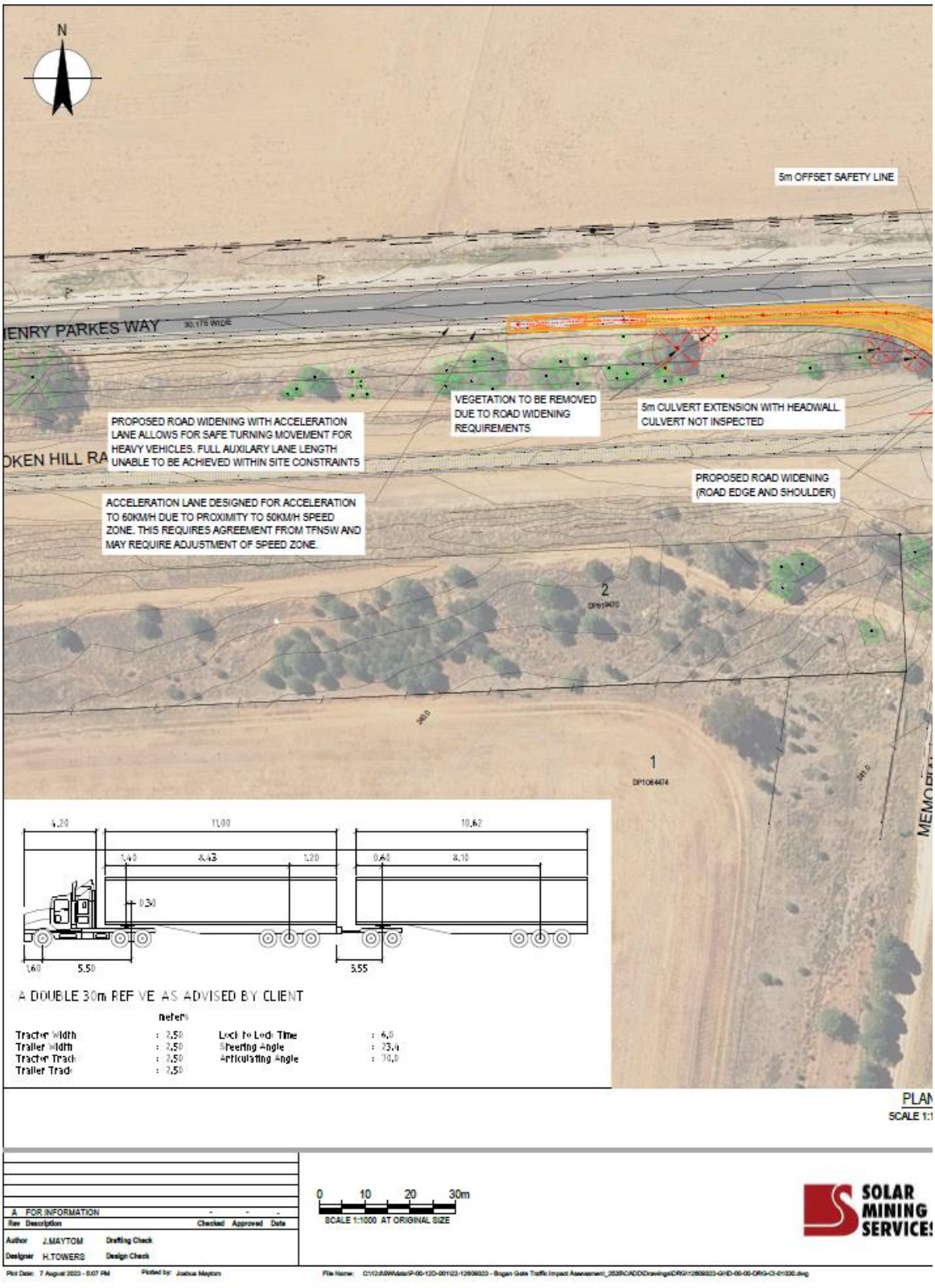
A-double Short Stacking (With present configuration)



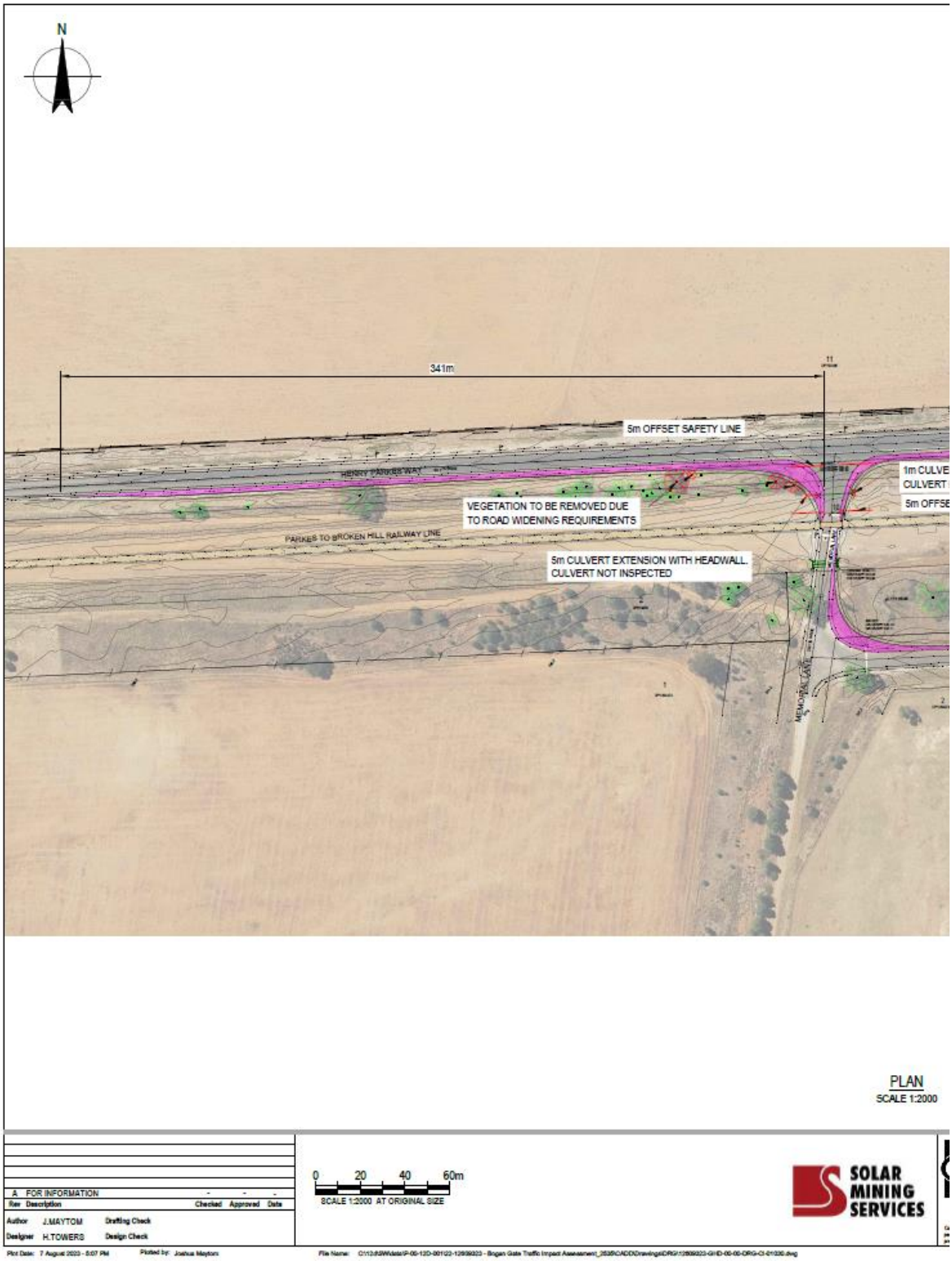
A-double


N
5m OFFSET SAFETY LINE
ENRY PARKES WAY
30.175 WIDE
5m CULVERT EXTENSION WITH HEADWALL.
CULVERT NOT INSPECTED
OKEN HILL RAILWAY LINE
2
DP1064474
1
DP1064474
MEMORIAL LANE
4.20
11.00
10.62
1.40
8.43
1.20
0.60
8.10
0.30
1.60
5.50
3.55
A DOUBLE 30m REF VE AS ADVISED BY CLIENT
Metres
Tractor Width : 2.50
Trailer Width : 2.50
Tractor Track : 2.50
Trailer Track : 2.50
Lock to Lock Time : 6.0
Steering Angle : 73.4
Articulating Angle : 70.0
PLAN
SCALE 1:1000
A FOR INFORMATION - - -
Rev Description Checked Approved Date
Author J.MAYTOM Drafting Check
Designer H.TOWERS Design Check
0 10 20 30m
SCALE 1:1000 AT ORIGINAL SIZE
SOLAR MINING SERVICES

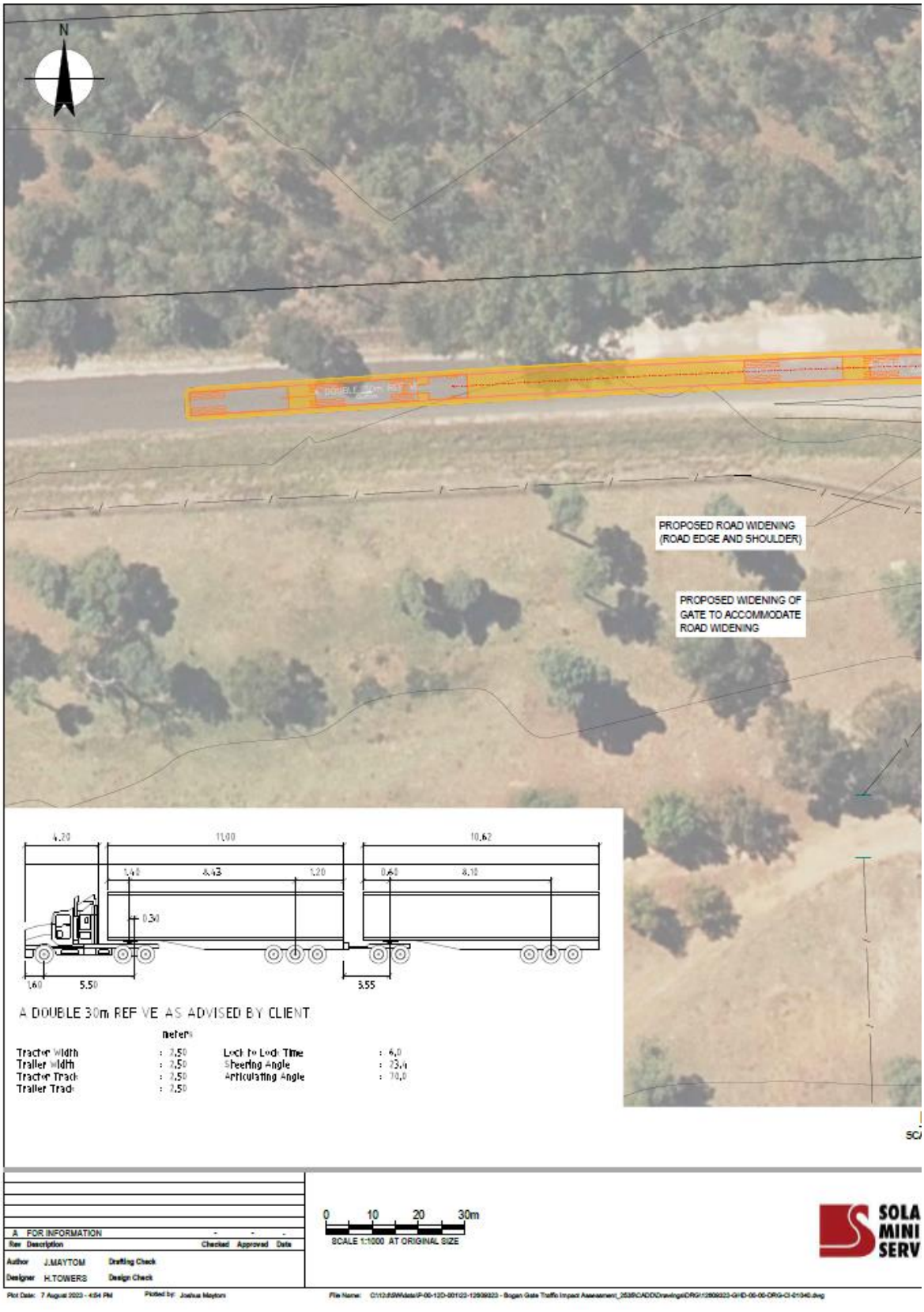
A-double


N
5m OFFSET SAFETY LINE
ENRY PARKES WAY
30.175 WIDE
VEGETATION TO BE REMOVED DUE TO ROAD WIDENING REQUIREMENTS
5m CULVERT EXTENSION WITH HEADWALL. CULVERT NOT INSPECTED
PROPOSED ROAD WIDENING WITH ACCELERATION LANE ALLOWS FOR SAFE TURNING MOVEMENT FOR HEAVY VEHICLES. FULL AUXILARY LANE LENGTH UNABLE TO BE ACHIEVED WITHIN SITE CONSTRAINTS
OKEN HILL RA
PROPOSED ROAD WIDENING (ROAD EDGE AND SHOULDER)
ACCELERATION LANE DESIGNED FOR ACCELERATION TO 60KM/H DUE TO PROXIMITY TO 50KM/H SPEED ZONE. THIS REQUIRES AGREEMENT FROM TFNSW AND MAY REQUIRE ADJUSTMENT OF SPEED ZONE.
2
DP819470
1
DP1064474
4.20
11.00
10.62
1.40
6.43
1.20
0.40
8.10
0.30
1.60
5.50
3.55
A DOUBLE 30m REF VE AS ADVISED BY CLIENT
Refer
Tractor Width : 2.50
Trailer Width : 2.50
Tractor Track : 2.50
Trailer Track : 2.50
Lock to Lock Time : 6.0
Steering Angle : 73.4
Articulating Angle : 10.0
PLAN
SCALE 1:1
A FOR INFORMATION - - -
Rev Description Checked Approved Date
Author J.MAYTOM Drafting Check
Designer H.TOWERS Design Check
0 10 20 30m
SCALE 1:1000 AT ORIGINAL SIZE
SOLAR MINING SERVICES

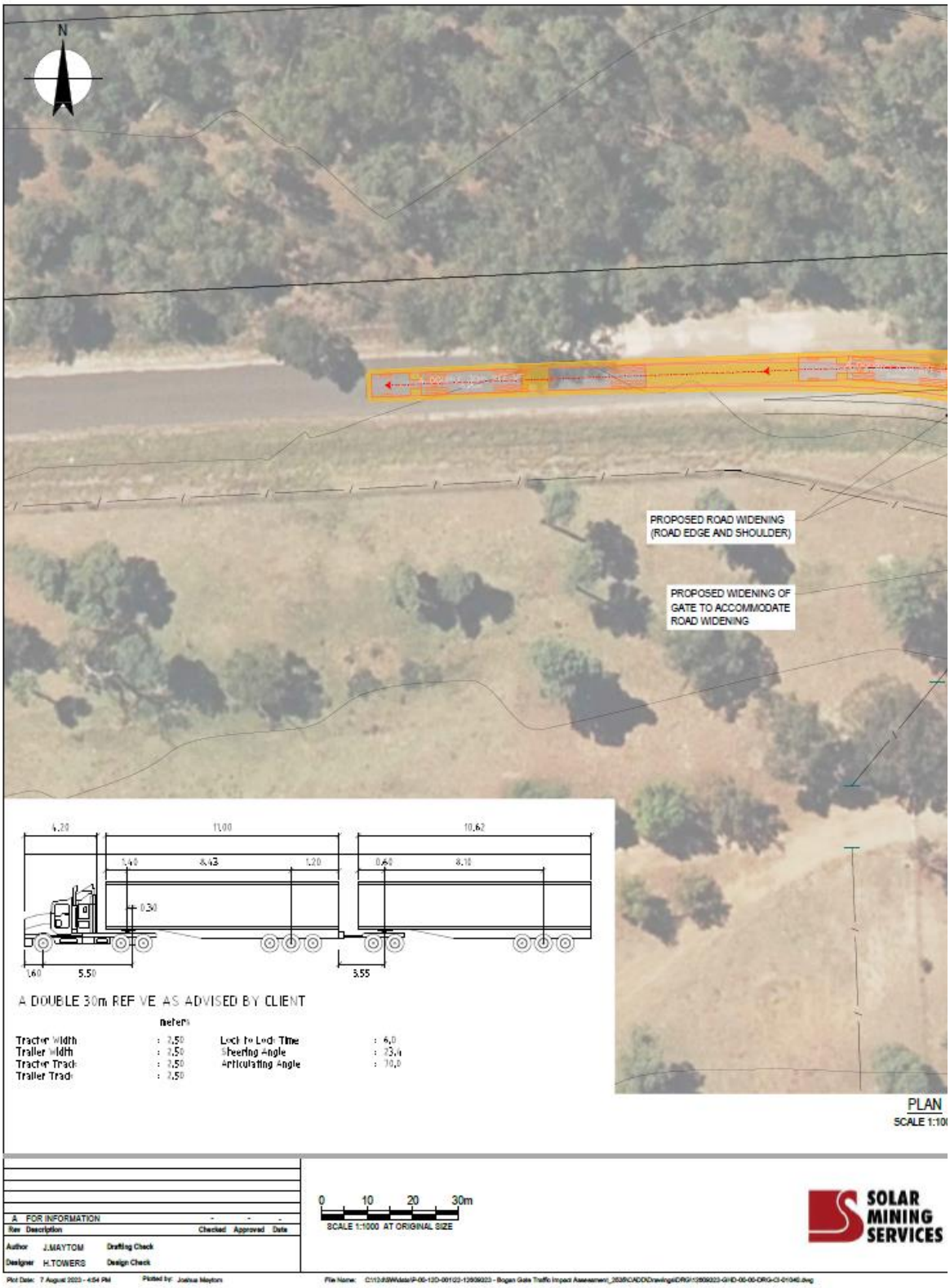
Proposed Road Widening at Henry Parkes Way, Memorial Lane and Private Road



A-double entering site through Gate



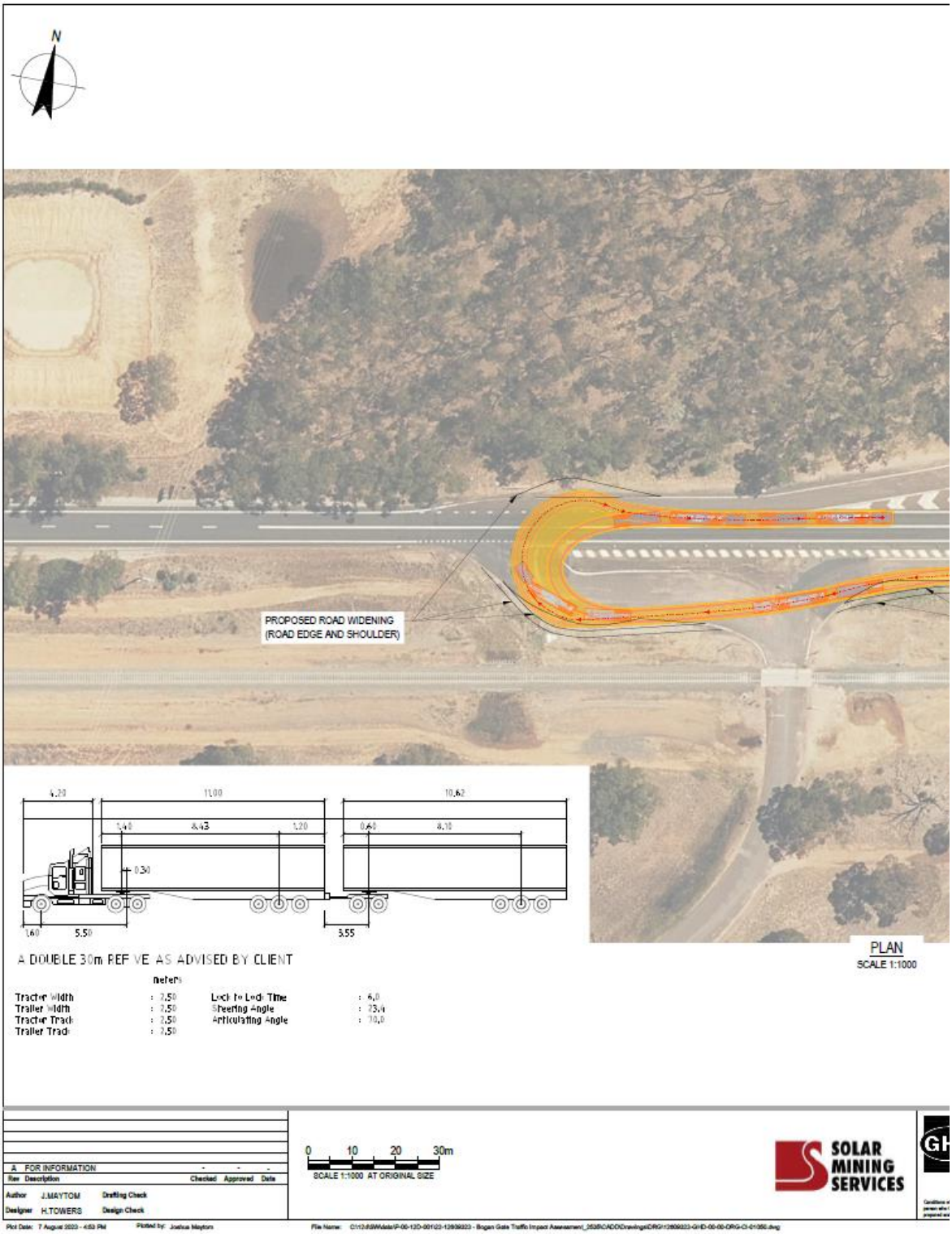
A-double exiting site through Gate



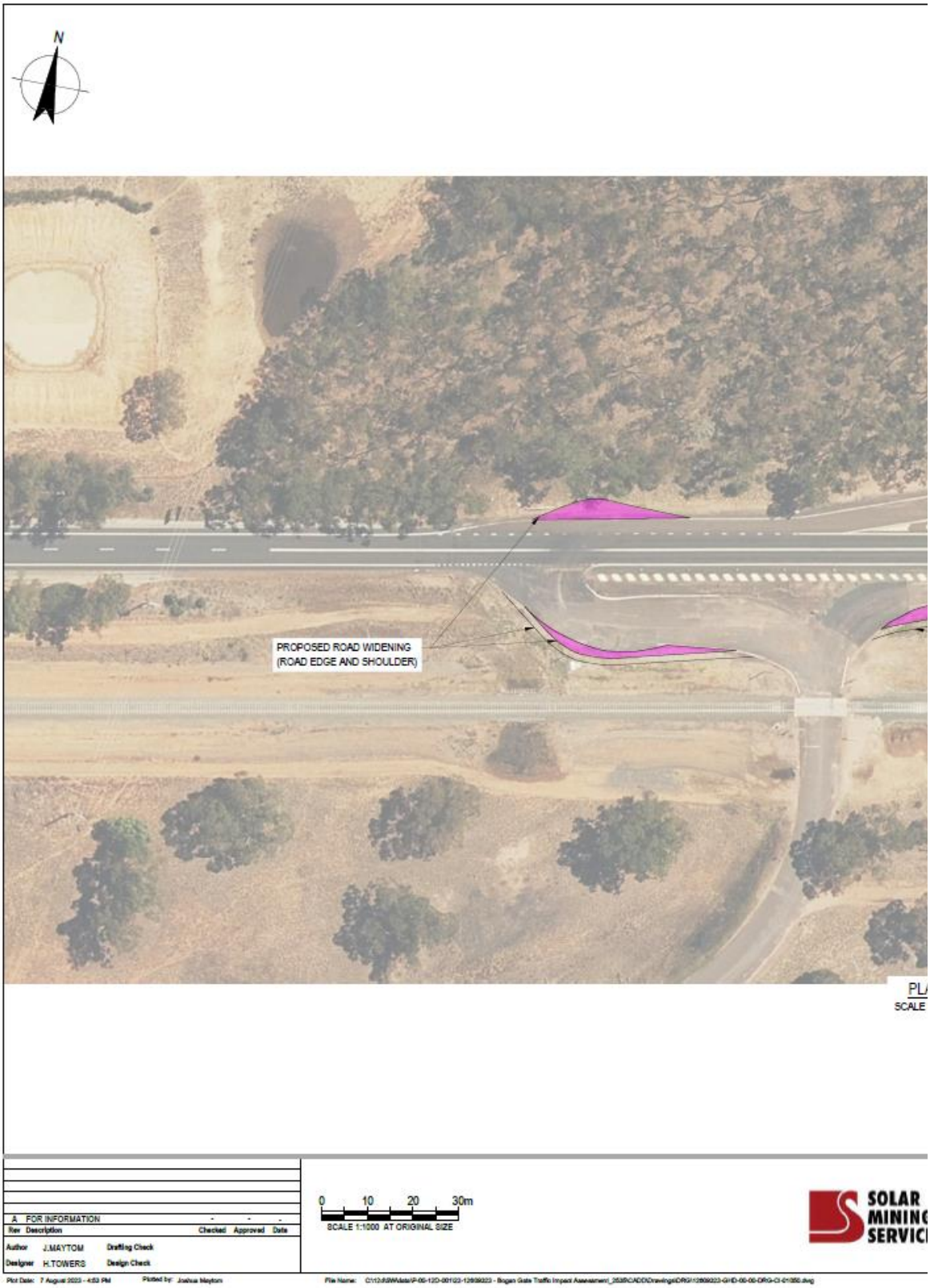
Proposed Road Widening at Gate



A-double doing U turn from Leafy Tank Road and Henry Parkes Way intersection



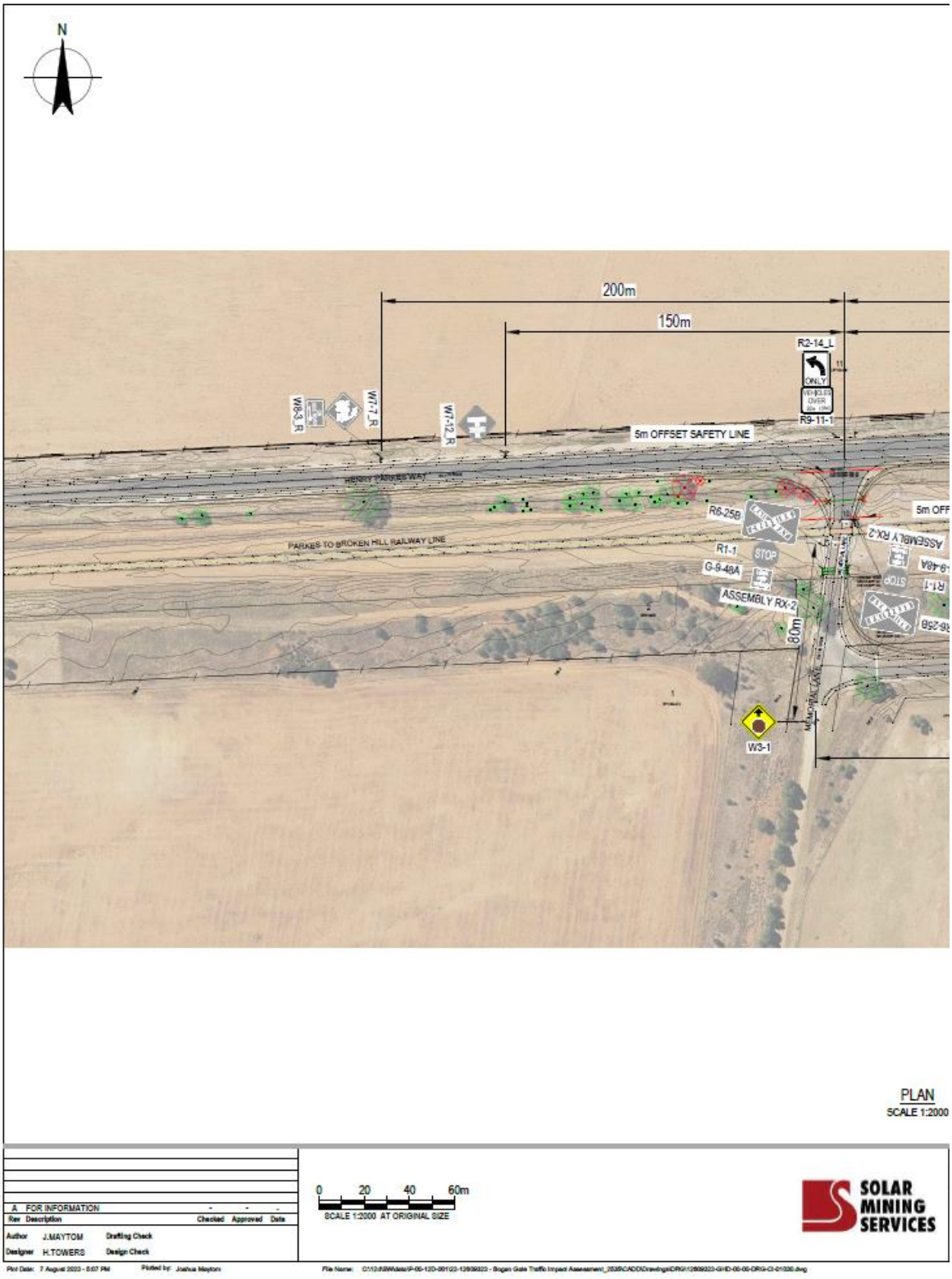
Proposed Road Widening at Leafy Tank Road and Henry Parkes Way intersection



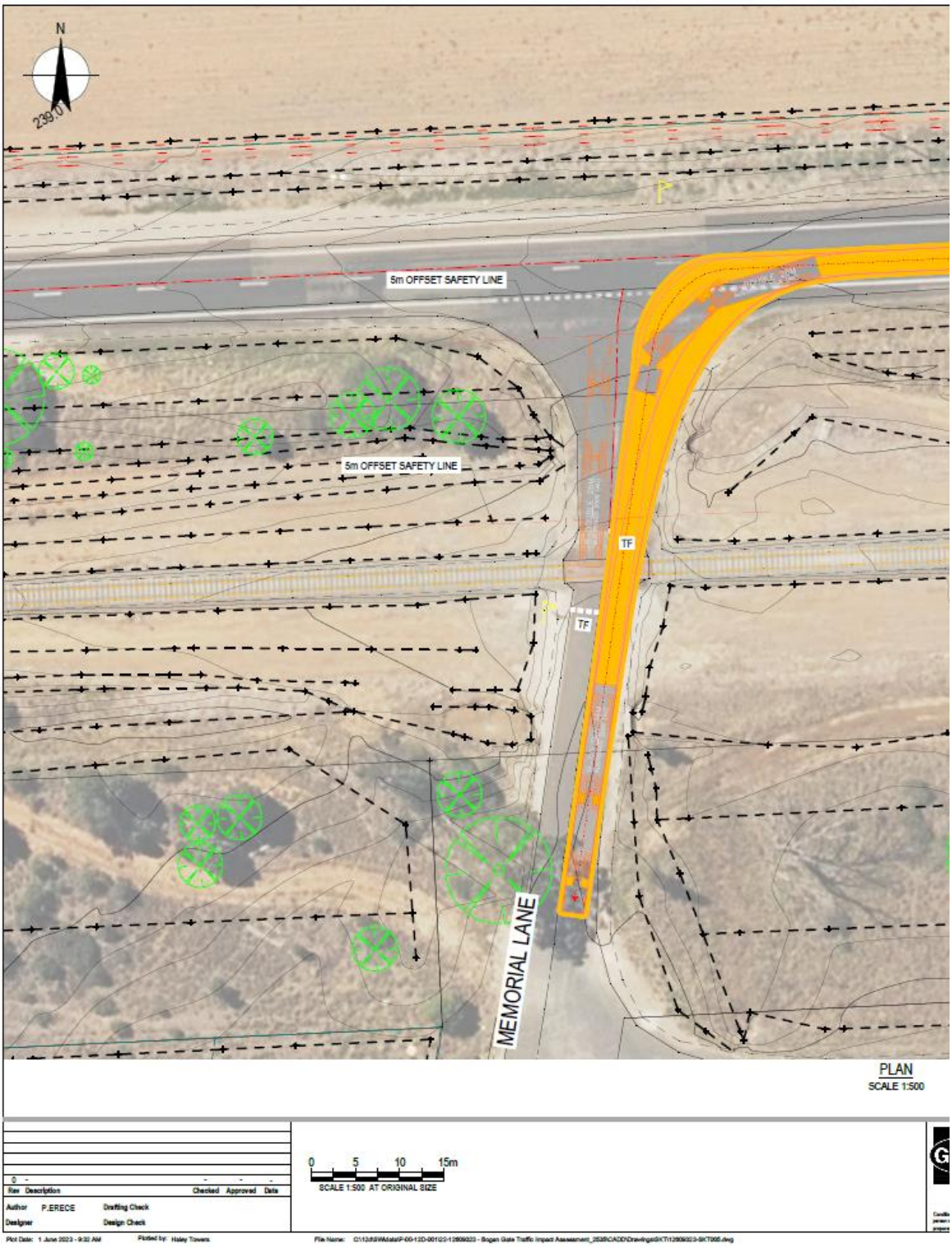
Sight Distance Check



Existing Signage Check (Immediate Area to Henry Parkes Way and Memorial Lane inters



B- Double Left In and Stacking



B- Double Right Out



Appendix B

TfNSW TIA Requirements

Transport for NSW

Attachment A: Traffic Impact Assessment (TIA)

The TIA is to address the impact of traffic generation on the public road network and measures employed to ensure traffic efficiency and road safety during construction, operation and decommissioning of the project.

The TIA is to be tailored to the scope of the proposed development and include, but not limited to, the following:

- Project schedule:
  - Hours and days of work, number of shifts and start and end times,
  - Phases and stages of the project, including construction and operation.
- Traffic volumes including:
  - Existing background traffic,
  - Project-related traffic for each phase or stage of the project,
  - Projected cumulative traffic at commencement of operation, and a 10-year horizon post-commencement.
- Traffic characteristics including:
  - Number and ratio of heavy vehicles to light vehicles,
  - Peak times for existing traffic,
  - Peak times for project-related traffic including commuter periods,
  - Interactions between existing and project-related traffic.
  - Source(s) for input materials and quantification of traffic generation associated with the haulage of the source materials.
- Road safety assessment of key haulage route/s.
- Controls for transport and use of any dangerous goods in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*, the *Australian Dangerous Goods Code* and *AS4452 Storage and Handling of Toxic Substances*.
- Identify the necessary road network infrastructure upgrades that are required to cater for and mitigate the impact of project related traffic on both the local and classified road network for the development (for instance, road widening and/or intersection treatments). In this regard, preliminary concept drawings need to be submitted with the EIS application for any identified road infrastructure upgrades. It should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of TfNSW and Council.
- Proposed road facilities, access and intersection treatments are to be identified and be in accordance with Austroads Guide to Road Design including provision of Safe Intersection Sight Distance (SISD).
- Consideration of the local climate conditions that may affect road safety during the life of the project (e.g. fog, wet and dry weather).
- The layout of the internal road network, parking facilities and infrastructure.
- Impact on rail corridors and level crossings detailing any proposed interface treatments. Note, the rail manager for rail corridors in the vicinity of the site is ARTC.
- Propose a Driver Code of Conduct for haulage operations which could include, but not be limited to:
  - Safety initiatives for haulage through residential areas and/or school zones.
  - An induction process for vehicle operators and regular toolbox meetings.

  A public complaint resolution and disciplinary procedure.

Appendix C

Driver Code of Conduct

Environmental Management Plan

Transport Code of Conduct

Document Number: SMS-HSQ-O00.X11
Status: Draft - working
Version: 05 (04 April 2023)
Owner: Manager Compliance
Review: 3 years

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Table of Contents

1 Introduction 2

2 Scope 2

3 Purpose of this Plan 2

4 Site Description 2

5 Road Network Description 3

Access Roads 3

Intersection design and operation 3

6 Transport Code of Conduct 3

Light Vehicle Transport Procedure 3

Heavy Vehicle Transport Procedure 3

7 Management System 4

Site Manager 4

Site Employees and Contractors 4

Manager Compliance 4

8 Document Information 5

Terms and Definitions 5

Related Documents 5

Reference Information 5

Change Information 6

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1 Introduction

1-1 This Transport Code of Conduct identifies the minimum requirements for Solar Mining Services (SMS) personnel and contractors to access the SMS ANE Facility via the public road network.

1-2 This follows the requirements of the SMS Integrated Management System (IMS), particularly ***SMS-IMS-B00.L10 Environment Policy*** and supports ***SMS-HSQ-000.X01 - HSEQS Management Plan*** to identify and control hazards that may arise at SMS workplaces.

1-3 The objective of this plan is to outline the standards of behaviour expected of staff and contactors in the transport of goods and services to and from the SMS ANE Facility at the Bogan Gate Explosives Reserve (BGER).

1-4 The SMS ANE Facility Transport Code of Conduct has been developed in accordance with the Australian Road Rules and the guidance from GHD in their Traffic Impact Assessment, dated July 2023.

1-5 TfNSW and Parkes Shire Council have been consulted as part of the preparation of the SMS ANE Facility Transport Code of Conduct.

2 Scope

2-1 This plan is applicable to all SMS personnel and contractors conducting transport activities in and around the SMS ANE Facility, BGER and wider Bogan Gate area.

3 Purpose of this Plan

3-1 The purpose of this Transport Code of Conduct is to minimise the potential for traffic accidents or road asset impacts from SMS operations at the BGER through the design and operation of the SMS ANE Facility transport operations in accordance with the relevant standards.

4 Site Description

4-1 The SMS ANE Facility is located at Bogan Gate Explosives Reserve, Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate NSW.

4-2 SMS lease buildings towards the southern portion of Lot 2 DP 1064474 from Lexa Enterprises Pty Ltd for the operation of their SMS ANE Facility. Also leasing space on Lot 2 DP 1064474 is JONNEX (for explosives manufacturing and storage) and Howards (for fireworks storage) as well as several residential tenancies in existing dwellings located at the army camp complex.

4-3 The SMS ANE Facility at the BGER is fully operational in accordance with Development Consent No. DA2020/0073 granted by Parkes Shire Council on dated 18 November 2020 and an Explosives Manufacturing and Storage Licence granted by SafeWork NSW in January 2023.

4-4 The SMS ANE Facility involves transport of dangerous goods in and out of the BGER.

4-5 Road access to the SMS ANE Facility is already provided, utilising existing BGER internal roads that link to Memorial Lane and the Henry Parkes Way.

4-6 A plan of the SMS ANE Facility in relation to the BGERand town of Bogan Gate is shown in Appendix A.

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5 Road Network Description

Access Roads

5-1 The SMS ANE Facility has access via an internal road through the BGER that connects to the Henry Parkes Way (MR 61) via Memorial Lane.

5-2 All trucks transporting dangerous goods to and from the SMS ANE Facility are required to enter and leave via internal BGER roads and then onto Memorial Lane and the Henry Parkes Way.

5-3 A road network map is included in Appendix B.

5-4 The Orange to Broken Hill Railway forms part of the transcontinental railway connecting the eastern parts of Australia to SA and WA.

5-5 Information about road crash data, road conditions and other data is included in the GHD Traffic Impact Assessment dated July 2023, included in Appendix C.

Intersection design and operation

5-6 The GHD Traffic Impact Assessment dated July 2 provides details of design treatment at the intersection of Memorial Lane and the Henry Parkes Way (see Appendix C).

6 Transport Code of Conduct

6-1 This Transport Code of Conduct must be read in conjunction with the GHD Traffic Impact Assessment dated July 2023 (see Appendix C).

Light Vehicle Transport Procedure

6-2 All drivers of light vehicles associated with transportation of materials to and from the SMS Facility are to abide by the following:

a) Will be appropriately licensed to operate the vehicle.

b) Will be fit for work and fit for task (drug and alcohol free and fatigue appropriately managed).

c) Will ensure that the vehicle is fully roadworthy and maintained.

d) Will obey all road traffic regulations, signs, directions, and instructions and display respect for other road users at all times.

e) Will ensure that loads are appropriately secured.

Heavy Vehicle Transport Procedure

6-3 All drivers of heavy vehicles associated with transportation of materials to and from the SMS Facility are to abide by the following:

a) Will be appropriately licensed to operate the vehicle.

b) Will be fit for work and fit for task (drug and alcohol free and fatigue appropriately managed).

c) Will ensure that the vehicle is fully roadworthy and maintained.

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d) Will obey all road traffic regulations, signs, directions, and instructions and display respect for other road users at all times.

e) Will ensure that loads are appropriately secured.

f) Will comply with relevant regulations and standards with regard to the transport of dangerous goods.

g) Will only travel on the nominated haulage route, as shown in Appendix D.

h) Will familiarise themselves with travel restrictions during school bus hours and avoid travel on the relevant sections of the haulage route during these times.

i) Will stagger departure to avoid creation of convoys with other BGER trucks.

j) Will be familiar with and adhere to the requirements of the Noise and Vibration Assessment for the SMS ANE Facility prepared by Acoustik dated July 2023.

k) Will avoid the use of engine brakes on Memorial Lane, the BGER and Bogan Gate township.

6-4 Disciplinary action may be undertaken if drivers fail to meet the requirements set out in the Code of Conduct or SMS receives a confirmed community complaint regarding Driver actions that are in breach of this code including on-road driving behaviour.

6-5 All drivers of heavy vehicles must sign the SMS ANE Facility Transport Code of Conduct Agreement in Appendix D and follow the transport haulage map in Appendix E.

7 Management System

Site Manager

7-1 The Site Manager is responsible for:

a) Identification of hazards likely to cause environmental harm on the site.

b) Provision of resources to maintain control of hazards likely to cause environmental harm on the project and maintain risk to workers and the environment to acceptable levels.

c) Seek support to assess materials, tasks or equipment to be used on the site, likely to cause environmental harm.

d) Implement this Transport Code of Conduct.

e) Monitor site activities to ensure conformance to this Transport Code of Conduct.

Site Employees and Contractors

7-2 Any SMS employee or contractor on site is responsible for:

a) Following the requirements of this Transport Code of Conduct.

b) Ensuring any risk from transport operations is reported as soon as practical to the Site Manager.

Manager Compliance

7-3 The Manager Compliance is responsible to:

a) Identify the legislative requirements relevant to the SMS ANE Facility.

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b) Assist the Site Manager to identify suitable specialist personnel to provide inspection and audit processes.

c) Provide an audit schedule and adequate resources to conduct audits and inspections for timely rectification of non-conformances to this Transport Code of Conduct.

8 Document Information

8-1 Relevant legislation, standards and codes are regularly reviewed and monitored for updates and are included in the ***SMS-IMS-B00.R01 – National Legislation Register*** for tracking and management. Related documents and reference information in this section provides the linkage and source to develop and maintain the site compliance register and document management system.

Terms and Definitions

8-2 Terms and definitions are listed in a single definitions document, refer to the ***SMS-IMS-000.G01 - Glossary of terms and definitions*** on SharePoint.

Related Documents

8-3 Related documents, listed in ***Table 8-3*** are internal documents directly related to or referenced from this document.

Number	Document Type	Title
SMS-IMS-B00.L10	Policy	Environment Policy
SMS-IMS-B00.R01	Register	National Legislation Register
SMS-ENV-A00.R02	Register	Transport Code of Conduct
SMS-MAN-A01.R03	Register	Operational aspects & impacts register
SMS-IMS-000.G01	Guideline	Glossary of terms and definitions
SMS-HSQ-000.X01	Management Plan	HSEQS Management Plan

Table 8-3 – Related documents

Reference Information

8-4 Reference information, listed in ***Table 8-4*** is information that is directly related to the development of this document or referenced from within this document.

Reference	Title
ARR	Australian Road Rules
AG	Austroads Guide
RF Act	NSW Rail Safety (Adoption of National Law) Act 2012
PFBFP	GHD Traffic Impact Assessment, July 2023
WHSA	Passenger Transport Act 1990 (NSW)
WHS	NSW Work Health and Safety Act 2011
WHSR	Work Health and Safety Regulations 2017 NSW

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Reference	Title
ER	Explosives Regulations 2012 NSW

Table 8-4 – Reference information

Change Information

8-5 Full details of the document history are recorded in the document control register, by version. A summary of the current change is provided in ***Table 8-5***.

Version	Date	Change Summary

Table 8-5 – Change information

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Appendix A – SMS ANE Facility Location Map



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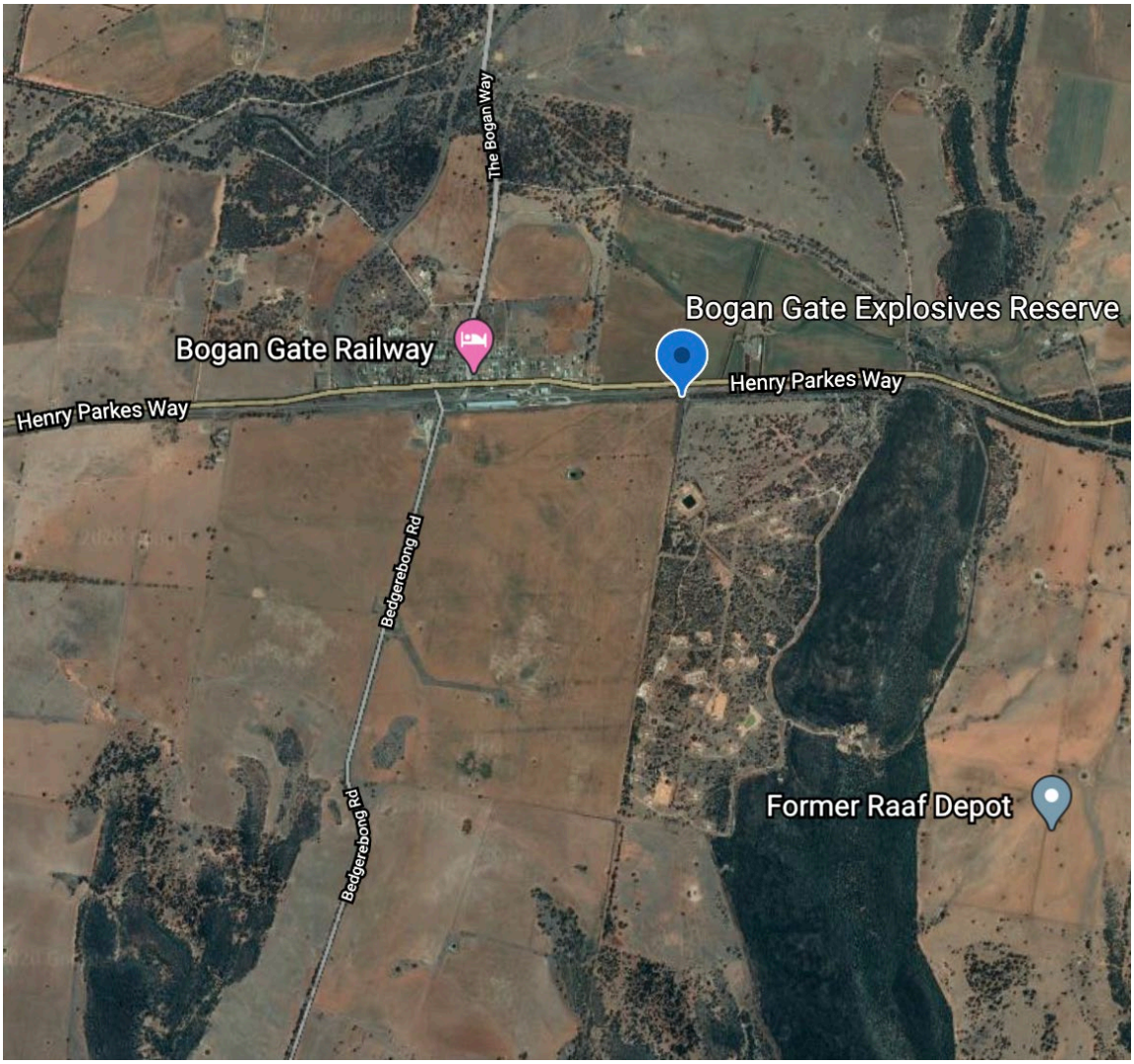

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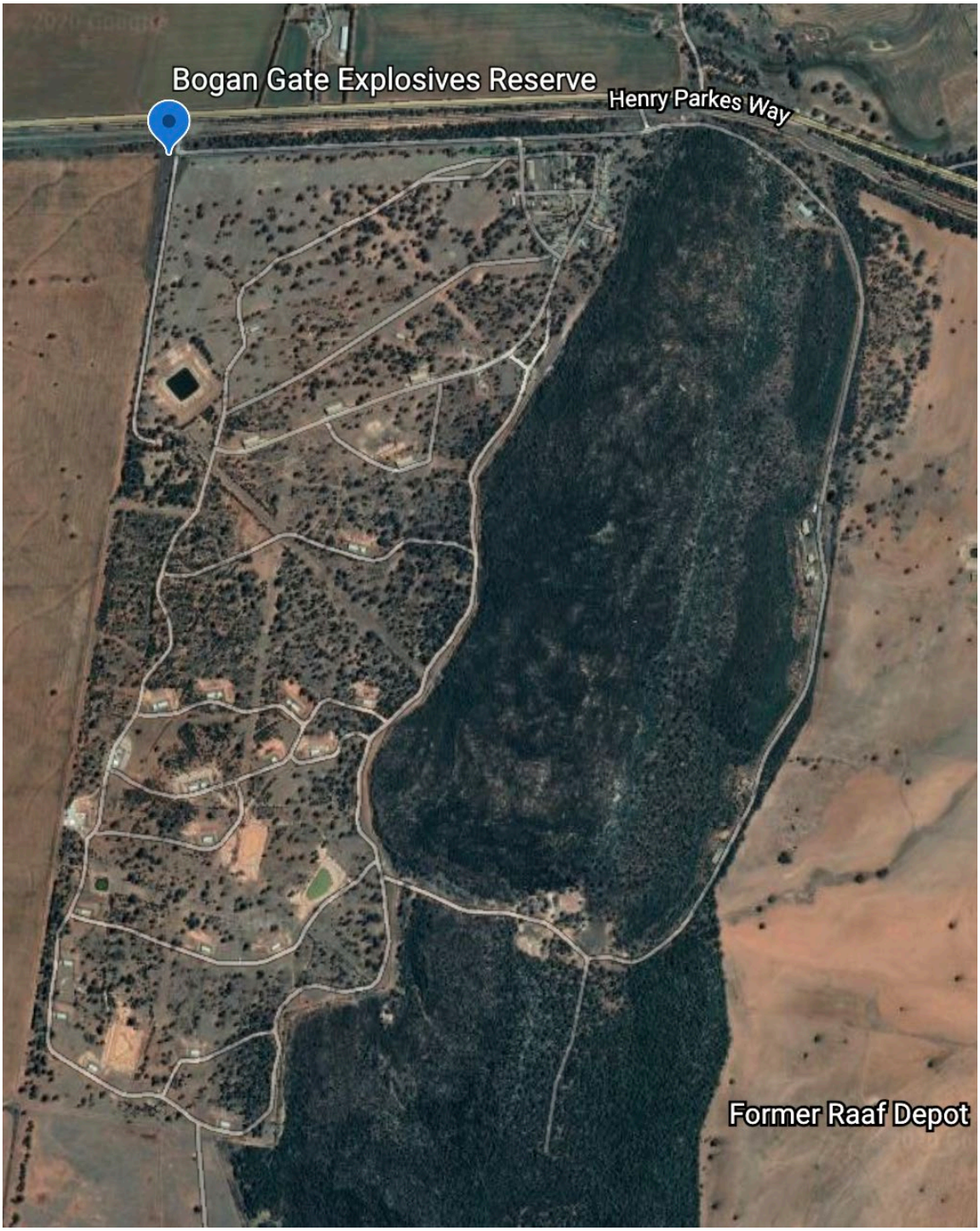

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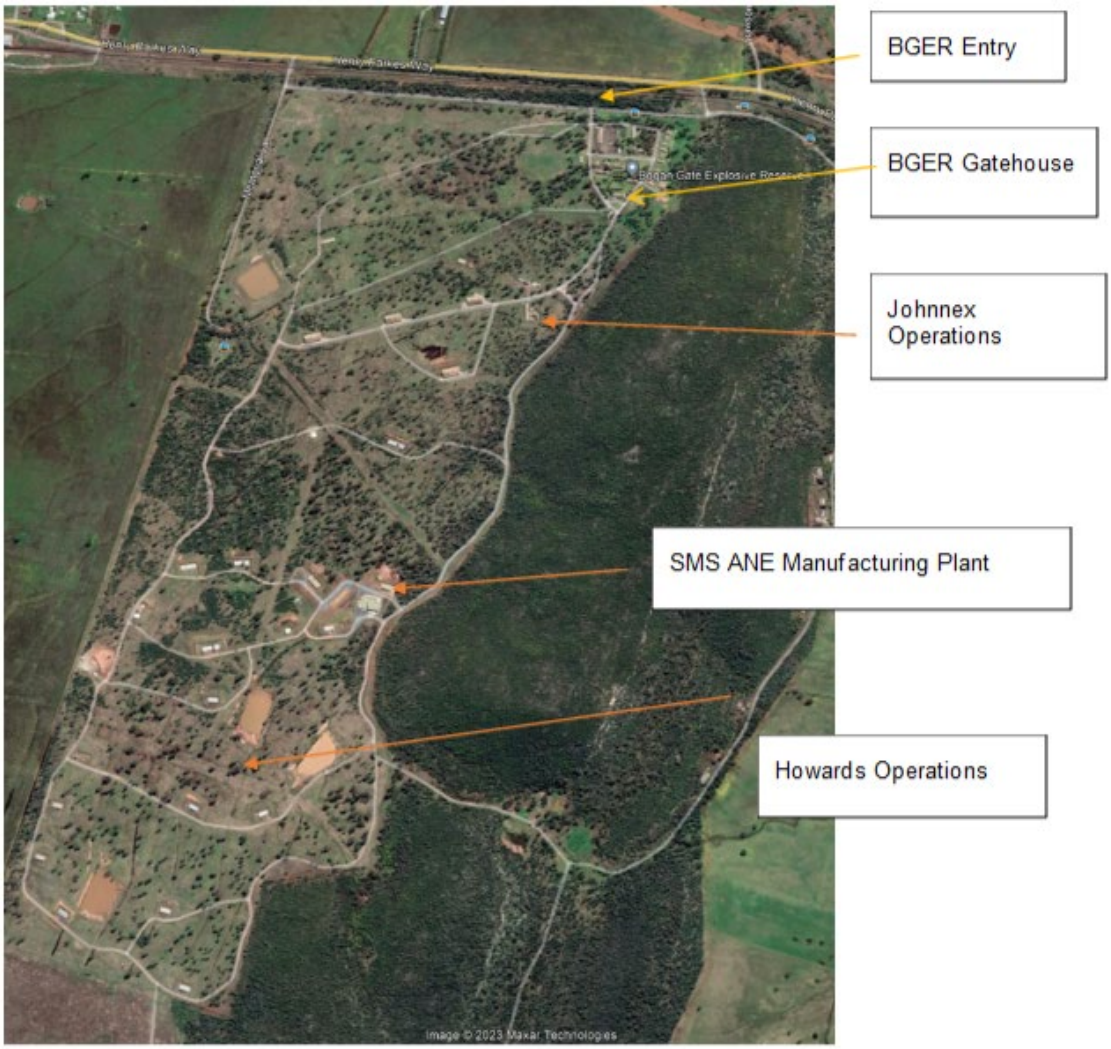
Appendix B – BGER Road Network Map



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Appendix C – GHD Traffic Impact Assessment

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Appendix D –Transport Code of Conduct Agreement

All drivers of heavy vehicles associated with transportation of materials to and from the SMS Facility are to abide by the following:

a) Will be appropriately licensed to operate the vehicle.

b) Will comply with relevant regulations and standards with regard to the transport of dangerous goods.

c) Will be fit for work and fit for task (drug and alcohol free and fatigue appropriately managed).

d) Will ensure that the vehicle is fully roadworthy and maintained.

e) Will obey all road traffic regulations, signs, directions, and instructions and display respect for other road users at all times.

f) Will ensure that loads are appropriately secured.

g) Will only travel on the nominated haulage route, as shown on the SMS ANE Facility Haulage Route Map.

h) Will familiarise themselves with travel restrictions during school bus hours and avoid travel on the relevant sections of the haulage route during these times.

i) Will stagger departure to avoid creation of convoys with other BGER trucks.

j) Will be familiar with and adhere to the requirements of the Noise and Vibration Assessment prepared by Acoustik dated July 2023.

k) Will avoid the use of engine brakes on Memorial Lane, the BGER and Bogan Gate township.

Disciplinary action may be undertaken if drivers fail to meet the requirements set out in the Code of Conduct or SMS receives a confirmed community complaint regarding Driver actions that are in breach of this code including on-road driving behaviour.

By signing below, you certify that you have read and understand the requirements of the SMS BGER ANE Facility Driver Code of Conduct.

SMS Requirements	Driver Details
Driver's name (please print)	
Driver's Signature	
Date	

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Appendix E – SMS ANE Facility Haulage Route Map





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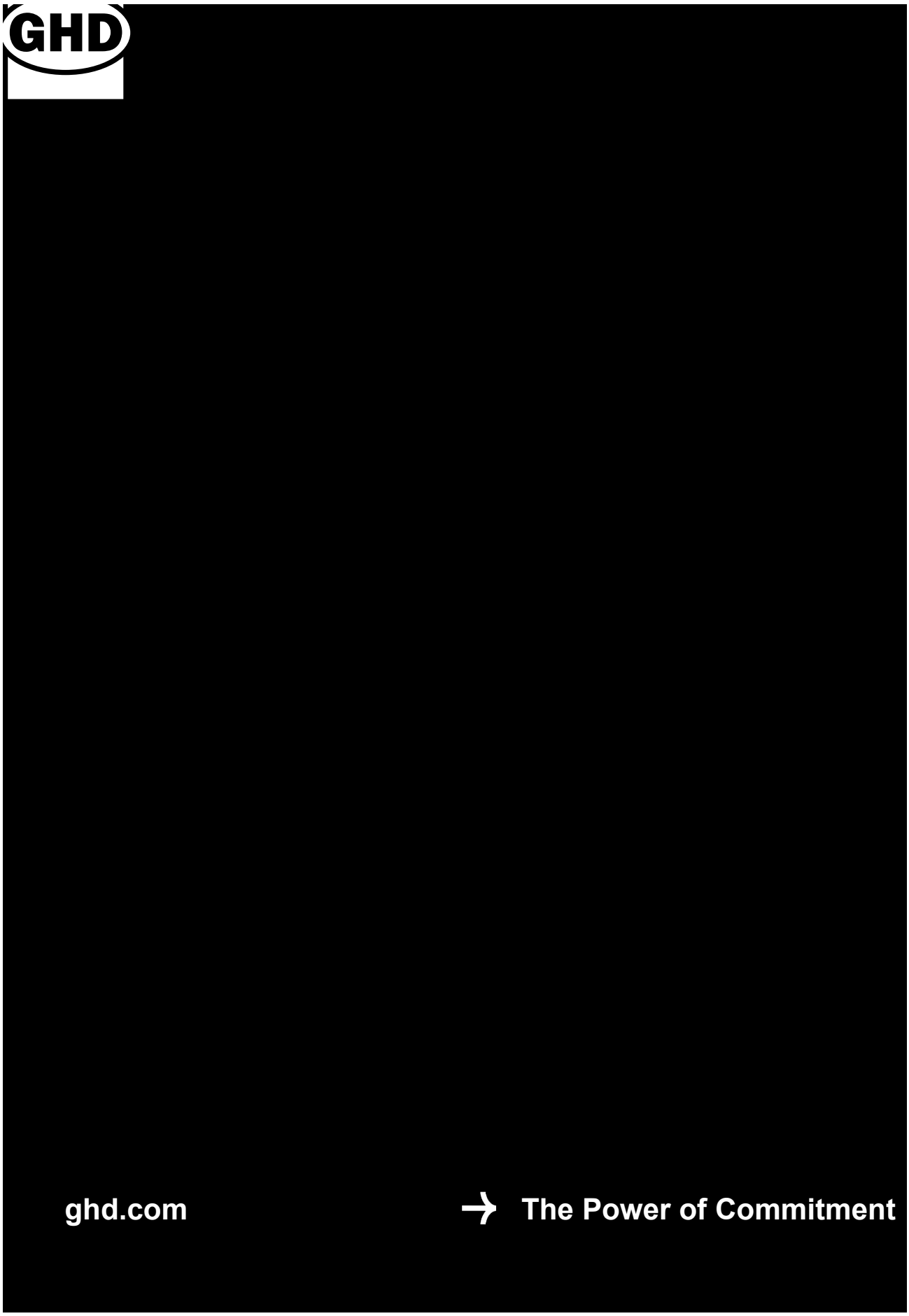
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Appendix J. Currajong Preliminary Biodiversity Assessment and Scoping Report

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

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CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

Preliminary Biodiversity Assessment and Scoping Report

Alterations and additions to Solar Mining Services Ammonium Nitrate Emulsion Facility, 3577 Henry Parkes Way, Bogan Gate

DOCUMENT CONTROL

Project Report Details

Document Title	Alterations and additions to the Solar Mining Services Ammonium Nitrate Emulsion (ANE) Facility, 3577 Henry Parkes Way, Bogan Gate
Principal Author	Michael Carter, Director Currajong Pty Ltd
Client	Solar Mining Services
Document Reference	Currajong Preliminary Biodiversity Assessment and Scoping Report – SMS ANE Facility, Bogan Gate, February 2023

Document Status

Issue	Description	Date	Author
A	Final	24 February 2023	Michael Carter

Distribution Record

Recipient	Distribution method
Vetkav Ramesh	1 x electronic

Currajong acknowledge Traditional Owners of the area on which this assessment took place and pay respect to their beliefs, cultural heritage, and continuing connection with the land. We also acknowledge and pay respect to the post-contact experiences of Aboriginal people with attachment to the area and to the elders, past and present, as the next generation of role models and vessels for memories, traditions, culture and hopes of local Aboriginal people.

Currajong has prepared this Preliminary Biodiversity Assessment and Scoping Report on behalf of Solar Mining Services to assist with the lodgement of an application for a Development Application for proposed alterations and additions to the SMS ANE Facility located on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate. The information, commentary and recommendations (together the "Information") contained in this report have been prepared by Currajong generally in accordance with the NSW Government Biodiversity Assessment Method 2020 Operational Manual – Stage 1, 2022.

Currajong has not sought any independent confirmation of the reliability, accuracy or completeness of this information from an accredited assessor at this stage. Currajong has not carried out a formal Biodiversity Assessment Report (BAR) or Biodiversity Development Assessment Report (BDAR) for this proposal. This Preliminary Biodiversity Assessment and Scoping Report is to determine whether a BAR or BDAR is specifically required.

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EXECUTIVE SUMMARY

Project Overview

Currajong has prepared this Preliminary Biodiversity Assessment and Scoping Report (PBASR) on behalf of Solar Mining Services Pty Ltd (SMS) to determine whether proposed alterations and additions to their ANE manufacturing facility at Bogan Gate will trigger the requirement for the preparation of a Biodiversity Assessment Report (BAR) or Biodiversity Development Assessment Report (BDAR) by an accredited assessor.

The preliminary biodiversity assessment of the proposal has been carried out in accordance with the Biodiversity Assessment Method 2020 Operational Manual – Stage 1, including:

1. Desktop searches and review of ecological databases and information to identify threatened species, populations or ecological communities listed in the NSW Biodiversity Conservation Act 2016 (BC Act 2016), Fisheries Management Act 1994 (FM Act 1994) or the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act 1999) that have the potential to occur in the study area.
2. Site inspection of the subject site to collate species list of predicted threatened species and ecological communities.
3. Assessment of the impacts of the proposal on native vegetation and threatened species, populations and ecological communities.

Clearing of white cypress pine (Callitris glaucophylla) is proposed by SMS to establish Asset Protection Zones (APZs) west of proposed new storage sheds.

Inspection of historic maps and aerial photography as well as site inspection confirms the white cypress pines required to be cleared are regrowth vegetation that does not fit the definition of 'native vegetation' as defined under Local Land Services Act 2013 (LLS Act 2013) as the area was cleared of native vegetation as of 1 January 1990. The extent of vegetation clearing at approximately 1,500m^2 is also well below the threshold for 'native vegetation clearing' requiring entry into the Biodiversity Offset Scheme (BOS) for the purposes of Part 7 of the BC Act 2016 and as quantified under clause 7.2 of the BC Regulation 2017.

The tests of significance completed for the site conclude the proposed clearing is not 'likely to significantly affect threatened species' as the habitat vale in and directly around the SMS ANE Facility is assessed as low. Biodiversity values are identified along the Gunningbland Creek (1.3km north of site) and the forested areas of the Gunning Ridge directly east of the site. No aspects of the SMS ANE Facility proposal are assessed to affect these natural ecosystems, including threatened species.

The findings of the preliminary biodiversity assessment are that entry into the BOS is not required, nor is it a requirement to prepare a BAR or BDAR for the SMS proposal.

TABLE OF CONTENTS

1. INTRODUCTION 7
2. PROPOSED DEVELOPMENT 9
3. BIODIVERSITY ASSESSMENT METHODOLOGY 11
   - 3.1. Background Research 11
   - 3.2. Site Inspection 11
   - 3.3. Habitat Suitability Assessment 12
   - 3.4. Likelihood Assessment 12
   - 3.5. Significance Assessment 12
4. SITE CONTEXT 13
   - 4.1. Regional Context 13
   - 4.2. Site Context 14
5. STATUTORY AND PLANNING ASSESSMENT 15
   - 5.1. Commonwealth Framework 15
     - 5.1.1. Environment Protection & Biodiversity Conservation Act 1999 15
   - 5.2. NSW framework 15
     - 5.2.1. Environmental Planning and Assessment Act 1979 15
     - 5.2.2. Biodiversity Conservation Act 2016 16
     - 5.2.3. Local Land Services Act 2013 17
     - 5.2.4. Fisheries Management Act 1994 18
     - 5.2.5. National Parks and Wildlife Act 1974 18
     - 5.2.6. State Environmental Planning Policy (Biodiversity and Conservation) 2021 18
     - 5.2.7. State Environmental Planning Policy (Biodiversity and Conservation) 2021 18
6. BIODIVERSITY ASSESSMENT 19
   - 6.1. Plant Community Assessment 19
   - 6.2. Threatened Species Assessment 19
   - 6.3. Habitat Assessment 23
   - 6.4. MNES Assessment 24
   - 6.5. Likelihood Assessment 25
   - 6.6. Biodiversity Conservation Act Significance Assessment 34
7. Management and Mitigation 35
   - 7.1. Management and Mitigation 35
8. CONCLUSION 36

ABBREVIATIONS, REFERENCES & DRAWINGS

The following abbreviations are regularly used in the PBASR:

AHIMS	Aboriginal Heritage Information Management System
AHIP	Aboriginal Heritage Impact Permit
BAR	Biodiversity Assessment Report
BDAR	Biodiversity Development Assessment Report
BC Act	Biodiversity Conservation Act 2016
CEMP	Construction Environmental Management Plan
CEEC	Critically Endangered Ecological Community
DA	Development Application
DEE	Department of Environment and Energy
DPI	Department of Primary Industries
EEC	Endangered Ecological Community
EIS	Environmental Impact Statement
EP&A Act	Environmental Planning and Assessment Act 1979
EPA	Environment Protection Authority
EPL	Environment Protection Licence
FM Act	Fisheries Management Act 1994
KTP	Key Threatening Process
LGA	Local Government Area
MNES	Matters of National Environmental Significance
POEO Act	Protection of the Environment Operations Act 1997
PSC	Parkes Shire Council
REF	Review of Environmental Factors
WoNS	Weed of National Significance

The main project details are summarised below:

Project name	Alterations and additions to the SMS ANE Facility, 3577 Henry Parkes Way, Bogan Gate
Proponent	Solar Mining Services Pty Ltd
Activity proposal	Industry
Determining authority	Parkes Shire Council
Land ownership	Lexa Enterprises Pty Ltd
Project area	Lot 2 DP 1064474, Bogan Gate
Study area	Rural land uses with an historic explosives manufacturing and storage and army camp occupation
Zoning	Zone RU1 – Primary Production under the Parkes Local Environmental Plan 2012

This report has been prepared as a single document of several sections as follows:

Section 1	Introduces the proposal and key project drivers
Section 2	Outlines the proposed alterations and additions to the SMS ANE Facility
Section 3	Outlines the methodology for assessment of potential biodiversity impacts
Section 4	Describes the site context
Section 5	Reviews the activity proposal against the relevant legislative requirements
Section 6	Assesses biodiversity values (native vegetation, threatened ecological communities and vegetation integrity) as well as the potential impacts of the proposal, including EPBC Act MNES assessment, BC Act significance assessment and the assessment of threatening processes
Section 7	Documents the mitigation and management strategies proposed to minimise environmental impacts
Section 8	Provides the conclusion for the preliminary biodiversity assessment and scoping report

1. INTRODUCTION

Currajong has been engaged by SMS to undertake a preliminary assessment of biodiversity values, issues and potential impacts relating to their plans to undertake alterations and additions to their existing SMS ANE Facility located on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate.

The SMS ANE Facility is located on Lot 2 DP 1064474, approximately 1.5km east of Bogan Gate and 35km west of Parkes via the Henry Parkes Way. Lot 2 DP 1064474 is currently managed by Bogan Gate Explosives Reserve who lease to Johnex for explosives manufacturing and storage operations, Howards for explosives storage and more recently to SMS for their ANE Facility.

A map showing the location of Lot 2 DP 1064474 in relation to surrounding roads, rural holdings, native vegetation and other features is provided in Figure 1.

Figure 1 - Site Location Map



Source: Six Maps

The SMS ANE Facility operates in the context of a larger explosives reserve known as the Bogan Gate Explosives Reserve (BGER) which has been used for manufacturing, storage and testing of explosives since World War II. The site is largely influenced by historic use of the BGER for explosives manufacturing and storage and army camp activities.

Land-use surrounding the BGER is rural land supporting grazing and cropping activities. The Bogan Gate Cemetery is located on the western edge of the BGER adjoining Memorial Lane. Vegetation in the area has been modified to support rural and peri-urban land-use activities, with remnant vegetation mostly along road and rail corridors, ridgelines and creek lines. Isolated paddock trees with a grassy / weedy / cropped groundcover predominate the farming lands on the flatter topography. The Gunning Ridge to the east of the site holds the largest remnant of native vegetation in the locality.

The SMS ANE Facility is located on the lower slope of the western side of the Gunning Ridge which has an elevation of RL 360, some 120 metres higher than the surrounding landscape around Bogan Gate. The SMS ANE Facility is located on RL 270 and has a slight fall (average 2%) to the north-west. There are no named watercourses that traverse Lot 2 DP 1064474. The nearest watercourse is the Gunningbland Creek located approximately 1.2km north of the SMS ANE Facility.

This preliminary biodiversity assessment and scoping report has been undertaken to determine whether proposed alterations and additions at the SMS ANE Facility, including clearing of vegetation, would lead to significant impacts on threatened species, or whether the thresholds for entry into the BOS would be triggered by the proposed subdivision, which are as follows:

- If the amount of native vegetation proposed to be cleared exceeds the threshold area.
- When the development is located on land identified in the Biodiversity Value Map (https://www.lmbc.nsw.gov.au/Maps/), as defined by Clause 7.3 of the BC Regulation.
- If, in the absence of the above thresholds, the proposal is likely to be a significant impact to threatened species, ecological communities or their habitat.

2. PROPOSED DEVELOPMENT

The proposed development involves alterations and additions to the SMS ANE Facility located on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate to increase the processing capacity of ANE manufactured at the facility. The following works are proposed to cater for the increased manufacturing, storage and transport operations:

- Demolition of existing Shed 78 structure.
- Construction of three (3) new AN storage sheds (Sheds 70B and 70C and new Shed 78) and associated concrete loading areas.
- Installation of two (2) new 25 tonne capacity ANE metal storage tanks.
- Clearing of approximately 1,500m^2 of regrowth white cypress pine (Callitris glaucophylla).

The vegetation proposed to be cleared is shown in Figure 2.

Figure 2 – SMS Proposed Land Clearing



Source: Six maps

A photograph of the vegetation proposed to be cleared is provided in Photo 1 overleaf.

Photo 1 – White Cypress Pine Clearing (view from new shed site)



3. BIODIVERSITY ASSESSMENT METHODOLOGY

This PBASR has been carried out as follows:

3.1. Background Research

Preliminary assessment drew on local experience, previous reporting and information held on government databases and archives. Results of database searches were used to assist in identifying distributions, suitable habitats and known records of threatened species to increase the effectiveness of field investigations. Information sources reviewed included the following:

- NSW Government online aerial imagery at https://maps.six.nsw.gov.au/
- Critical habitat register, available on the DPIE website at: https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/programs-legislation-and-framework/registers
- NSW Government Biodiversity Values Map which identifies land with high biodiversity value, as defined by the Biodiversity Conservation Regulation 2017 (https://www.lmbc.nsw.gov.au/)
- Flora and fauna records and profiles contained in the NSW Threatened Species Database, EPBC Protected Matters Search Tool and DPI threatened fish distribution maps.
- NSW Government Native Vegetation Regulatory Map at: https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/programs-legislation-and-framework/registers
- BioNet (www.bionet.nsw.gov.au) Wildlife Atlas and Plant Community Type (VIS) databases.
- Flora of NSW (Harden 1991-2002) and Flora of NSW Online at: https://plantnet.rbgsyd.nsw.gov.au/
- State Vegetation Type Map C1.1.M1 (DPE 2022) at: https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map
- Gateway to the Bogan, First Edition, 1997
- Through the Years – A History of the Army Camp at Bogan Gate

3.2. Site Inspection

In addition to the desktop data searches, a site inspection was undertaken. The objectives of the field work are to:

- Identify native species and vegetation communities present.
- Describe the quality and value of the vegetation and the flora and fauna habitat at the development site.
- Determine the extent of the proposed impact to these communities.
- Determine if species, populations, or ecological communities listed as threatened under the BC Act 2016 or EPBC Act 1999 are / may be present.

Vegetation was assessed using the online NSW Master Plant Community Type Classification 2018 and the BioNet Vegetation Classification database. The site was traversed on foot to confirm the nature and extent of

the vegetation (i.e. native or non-native). Considering the scope of works proposed and the environmental conditions at the BGER, no targeted surveys were carried out and no aquatic surveys were undertaken.

3.3. Habitat Suitability Assessment

The results of the desktop review and site inspection were collated to determine the extent and integrity of native vegetation on the site.

The SMS ANE Facility comprises a number of fixed buildings, roads and drainage improvements within a cleared area sown down to exotic grasses, surrounded by patches of native and regrowth vegetation. The habitat value on and around the immediate area of the SMS site are assessed as low.

Higher value habitat is found to the east of the SMS site, known as the Gunning Ridge. A long strip of dry sclerophyll forest comprises this ridgeline which runs in a north-south direction. The Gunningbland Creek is located to the north of the SMS site, which also has sections of higher value riparian native vegetation.

3.4. Likelihood Assessment

A review of species considered to have a moderate to high likelihood of occurring at the site was undertaken and detailed in this report.

3.5. Significance Assessment

A test of significance is recorded in this report, which provides a list of ecological flora communities found at the site and the fauna species likely to inhabit or visit the site. These assessments have been undertaken in accordance with the BC Act 2016 and the EPBC Act 1999 to determine the extent of impacts on threatened species identified as likely occurring at the site.

4. SITE CONTEXT

4.1. Regional Context

The proposal site lies in the NSW South Western Slopes Bioregion – Lower Slopes subregion of the Parkes Shire. The subject site is zoned RU1 Primary Production under the Parkes Local Environmental Plan 2012. A range of rural and supporting land-use activities are permitted in the RU1 Primary Production zone. Table 1 provides wider context.

Table 1 – Environmental Context Summary

Attributes	Description
LGA	Parkes
Zoning	RU1 Primary Production Zone
Catchment	Lachlan
IBRA Bioregion	NSW South Western Slopes
IBRA Subregion	Lower Slopes
Mitchell Landscape	Jemalong Range and Slopes - Prominent strike ridges of upper Devonian quartz sandstone. Oriented north south with welldefined water gaps. General elevation 250 to 400m, local relief 120 to 150m, and prominent asymmetry with steeper eastern faces of stepped cliffs and narrow benches. Lower colluvial slopes of coalescing alluvial fans on small streams. Thin very stony soils on ridges with abundant currawang (Acacia doratoxylon), red stringybark (Eucalyptus macrorhyncha), red ironbark (Eucalyptus sideroxylon), Dwyer's red gum (Eucalyptus dwyeri) and black cypress pine (Callitris endlicheri). Deeper stony soils on lower slopes with grey box (Eucalyptus microcarpa), red ironbark, bimble box (Eucalyptus populnea), white cypress pine (Callitris glaucophylla) and some white box (Eucalyptus albens)
Nearest Waterway	Gunningbland Creek, located approximately 1.3 kilometres north and north-west of the SMS ANE Facility
Nearest NPWS Park	Goobang National Park, located approximately 55 kilometres east of the SMS ANE Facility
Connectivity	The site adjoins the Gunning Ridge that comprises a large / long corridor of native vegetation
Soils	Ordovician slates and phyllite
Biodiversity Values Map	Nearest identified area is the Gunningbland Creek north the site
Other Mapping	Nil

The Bureau of Meteorology Atlas of Groundwater Dependant Ecosystems (GDE) mapping 2018 shows only areas of low potential for terrestrial GDE. No Areas of Outstanding Biodiversity Value are recorded to occur within the site, as per the criteria under the BC Regulation 2017.

4.2. Site Context

The site of the SMS ANE Facility is wholly within Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate.

Lot 2 DP 1064474 sits within the context of a larger explosives reserve known today as the Bogan Gate Explosives Reserve (BGER). The explosives reserve was originally used by the Australian Military as an explosive storage and testing area established during World War II. The BGER included an army camp that accommodated communal army barracks, free-standing dwellings, multiple storage sheds, mess hall and other administration / community style facilities. The site was utilised by the Australian Military to store ammunitions with an activation process where explosives missiles were tested. Historically, the BGER is understood to have functioned with other land parcels to the east, south and west of Lot 2 DP 1064474.

Lot 2 DP 1064474 today is currently managed by Bogan Gate Explosives Reserve who lease to Johnex for explosives manufacturing and storage operations, Howards and Sons for explosives storage and more recently SMS for their ANE Facility.

The State Vegetation Map (SVM) 'Central West Lachlan v1 4468' spatial layer shows the following Plant Community Types (PCT) could be present within the Bioregion:

- PCT70: White Cypress Pine woodland on sandy loams in central NSW wheatbelt
- PCT76: Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions
- PCT185: Dwyer's Red Gum - White Cypress Pine - Currawang shrubby woodland mainly in the NSW South Western Slopes Bioregion
- PCT217: Mugga Ironbark - Western Grey Box - cypress pine tall woodland on foot slopes of low hills in the NSW South Western Slopes Bioregion

Site inspection confirms predominant plant types in and around the site as PCT70: White Cypress Pine woodland on sandy loams in central NSW wheatbelt and PCT76: Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions. These plant community types are associated with the Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia, listed as Endangered under the EPBC Act 1999.

5. STATUTORY AND PLANNING ASSESSMENT

5.1. Commonwealth Framework

5.1.1. Environment Protection & Biodiversity Conservation Act 1999

The Commonwealth EPBC Act 1999 provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and other matters which are defined as matters of national environmental significance (MNES) under the Act.

Under the EPBC Act 1999, referral is required to the Australian Government for proposed actions that have the potential to significantly impact on Matters of National Environmental Significance (MNES) or the environment of Commonwealth land.

Under the EPBC Act 1999, an action that may potentially have a significant impact on a MNES or Commonwealth land must be referred to the Commonwealth Department of Agriculture, Water and the Environment (DAWE) for determination as to whether or not it is a 'controlled action', requiring assessment and approval by the Commonwealth Minister for the Environment, including:

- Wetlands of international importance (listed under the Ramsar Convention).
- Listed threatened species and ecological communities.
- Listed migratory species protected under international agreements.

Birds listed in the following international agreements are classified as migratory birds under the EPBC Act:

- Japan-Australia Migratory Bird Agreement (JAMBA),
- China-Australia Migratory Bird Agreement (CAMBA),
- Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA).

The MNES Significant Impact Guidelines 2013 provides the criteria to be assessed. Matters which fall under this legislation and guidelines are addressed in later sections of this report. However, it is assessed the proposal is unlikely to be of significant impact on relevant MNES or on Commonwealth land and does not warrant referral under the EPBC Act 1999.

5.2. NSW framework

5.2.1. Environmental Planning and Assessment Act 1979

The Environmental Planning and Assessment Act 1979 (EP&A Act 1979) forms the legal framework for environmental assessment and approvals process in NSW. The objects of the EP&A Act are:

a. to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources,

b. to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment,

c. to promote the orderly and economic use and development of land,

d. to promote the delivery and maintenance of affordable housing,

e. to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats,

f. to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage),

g. to promote good design and amenity of the built environment,

h. to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants,

i. to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State,

j. to provide increased opportunity for community participation in environmental planning and assessment.

SMS intend to lodge a Development Application (DA) for alterations and additions to their facility to increase production of ammonium nitrate emulsion. The proposal involves the construction of additional sheds, which requires clearing of a section of vegetation to ensure suitable APZs for bushfire protection purposes.

The DA would be assessed under Part 4 of the EP&A Act 1979 dealing with development on land zoned RU1 Primary Production. As such a Development Consent from Parkes Shire Council will be required to be granted prior to alterations and additions commencing on the site.

5.2.2. Biodiversity Conservation Act 2016

The BC Act 2016 provides the legal framework for the management of flora and fauna on lands within NSW, using ecologically sustainable development principles to achieve the conservation and protection of biodiversity values. The BC Act 2016 compliments the EP&A Act 1979 by incorporating the concepts of development, development consent, consent authority and activity. The EP&A Act 1979 has effect subject to the provisions of Part 7 of the BC Act 2016 (refer s1.7 EP&A Act).

Pursuant to Section 7.7(2) of the BC Act 2016, an application for development consent that is 'likely to significantly affect threatened species' must be accompanied by a biodiversity development assessment report (BDAR). A proposed development is likely to significantly affect threatened species if any of the criteria in section 7.2(1) of the BC Act 2016 are triggered; with those criteria being:

- The test in section 7.3 of the BC Act 2016, or
- The development exceeds the biodiversity offsets scheme threshold (BOST) if the biodiversity offsets scheme (BOS) applies to the impacts of the development on biodiversity values, or
- The development is carried out in a declared area of outstanding biodiversity value.

'Threatened species' is defined in Section 1.6(1) of the BC Act 2016 as 'a critically endangered species, an endangered species or a vulnerable species listed in Schedule 1 [of the BC Act]'. The circumstances in which a proposed development exceeds the BOST for the purposes of Part 7 of the BC Act 2016 are prescribed in Clause 7.1 of the BC Regulation 2017. Those circumstances are if the proposed development involves:

- The clearing of native vegetation of an area declared by Clause 7.2 of the BC Regulation 2017 as exceeding the threshold, or
- The clearing of native vegetation, or other action prescribed by Clause 6.1 of the BC Regulation 2017, on land included on the Biodiversity Values Map published under Clause 7.3 of the Regulation.

Native vegetation and clearing native vegetation under the BC Act 2016 have the same meanings as in Section 60B(1) and 60C of the Local Land Services Act 2013 (LLS Act 2013), namely:

'Native vegetation means any of the following types of plants native to New South Wales:

(a) trees (including any sapling or shrub or any scrub),

(b) understorey plants,

(c) groundcover (being any type of herbaceous vegetation),

(d) plants occurring in a wetland.'

The threshold in Clause 7.1 of the BC Regulation 2017 is triggered regardless of whether the native vegetation on the land contains threatened species. The BOS operates by reference to the expression "native vegetation" as defined in Section 60B(1) of the LSS Act 2013, which is a much broader concept than threatened species. Threatened species is a subset of native vegetation. Not all native vegetation is a threatened species.

Clearing of native vegetation is prescribed by Clause 7.2 of the BC Regulation 2016 to exceed the BOS by reference to the minimum lot size applicable to the land under an environmental planning instrument, or if no such minimum lot size exists, the actual size of the development site. If the proposed development results in clearing of an area greater than the prescribed area in Clause 7.2 of the BC Regulation 2017, the development is deemed likely to significantly affect threatened species, regardless of whether any threatened species exist on the site.

In the case of the proposal, the area of clearing proposed is approximately 1,500m^2 of regrowth cypress pines which is well below the 1-hectare threshold specified in the BC Regulation 2017 when the total area of Lot 2 DP 1064474 is taken into account.

5.2.3. Local Land Services Act 2013

The objectives of the LLS Act 2013 include ensuring *'the proper management of natural resources in the social, economic and environmental interests of the State, consistently with the principles of ecologically sustainable development.'*

60D the LLS Act 2013 defines *'areas of the State to which Part 5A [of the LLS Act] applies as category 1-exempt land on the native vegetation regulatory map'*. In order to be classed as category 1-exempt land, the land must be both (a) within an area of the State to which Part 5A of the LLS Act 2013 applies and (b) be designated as category 1-exempt land on the native vegetation regulatory map.

Land zoned RU1 Primary Production is not listed under Clause 2.3(1)(b) of State Environmental Planning Policy (Biodiversity and Conservation) 2021, which allows land to be identified as category 1-exempt land. Section 60H provides the criteria for category 1-exempt land, if the land:

- was cleared of native vegetation on 1 January 1990, or
- was lawfully cleared of native vegetation between 1 January 1990 and the commencement of Part 5A, or
- contains low conservation value grasslands or native vegetation that was identified as regrowth in a property vegetation plan referred to in Section 9(2)(b) of the Native Vegetation Act 2003, or
- is of a kind prescribed by the regulations as category 1-exempt land.

In the case of the proposal, the area of clearing proposed is approximately 1,500m^2 of cypress pine. All evidence suggests these species are regrowth trees post 1990 and are therefore not native vegetation as defined under the LLS Act 2013.

5.2.4. Fisheries Management Act 1994

Part 7A of the Fisheries Management Act 1994 (FM Act 1994) and schedules within the FM Act 1994 list threatened aquatic and marine species, populations and ecological communities and key threatening processes which must be considered as part of obligations under Section 5.5 of the EP&A Act 1979.

Section 201 of the FM Act 1994 states that a person (other than a public or local government authority) must not carry out dredging work or reclamation work except under the authority of a permit issued by the Minister. Dredging work means any work that involves excavating water land. Reclamation work means any work that involves depositing any material on water land.

Dredging work means any work that involves excavating water land. Reclamation work means any work that involves depositing any material on water land. No specific FM Act 1994 permits are required to be obtained for the proposal.

5.2.5. National Parks and Wildlife Act 1974

The National Parks and Wildlife Act 1974 (NPW Act 1974) is administered by the Office of Environment and Heritage and provides the basis for the legal protection of flora and fauna in NSW. Under the NPW Act 1974, it is an offence to harm any animal that is protected or is a threatened species, population or ecological community. It is also an offence to pick any plant that is protected or is a threatened species, population or ecological community. In addition, a person must not, by act or omission, damage any critical habitat.

The NPW Act 1974 also provides the basis for the legal protection and management of Aboriginal sites within NSW, including protection of any physical / material evidence of Aboriginal occupation of NSW and places of cultural significance to the Aboriginal community. Aboriginal cultural heritage impacts are not assessed in this report, which is limited to the assessment of biodiversity impacts only.

The site is assessed to comprise 'disturbed land', as defined under NPW Regulation.

5.2.6. State Environmental Planning Policy (Biodiversity and Conservation) 2021

The State Environmental Planning Policy (Biodiversity and Conservation) 2021 consolidates, transfers and repeals provisions of 11 SEPPs. These individual SEPPs are no longer current; however, their provisions are incorporated into the BC SEPP 2021.

In the case of the SMS proposal, the area of clearing proposed is approximately 1,500m^2 comprising regrowth cypress pines.

5.2.7. State Environmental Planning Policy (Biodiversity and Conservation) 2021

The State Environmental Planning Policy (Biodiversity and Conservation) 2021 consolidates, transfers and repeals provisions of 11 SEPPs. These individual SEPPs are no longer current; however, their provisions are incorporated into the BC SEPP 2021.

The BC SEPP 2021 does not list land zoned RU1 Primary Production as applying to Clause 2.3(1)(b), which means Part 5A of the LLS Act 2013 applies and the land is not to be identified as category 1-exempt land under the LLS Act 2013. Accordingly, no further assessment under Chapter 2 of the SEPP is required.

6. BIODIVERSITY ASSESSMENT

6.1. Plant Community Assessment

Desktop review of Plant Community Types (PCT) was completed using the NSW Government map layer Central West Lachlan State Vegetation Map v1 4468. Several PCTs are mapped within close proximity of the BGER, as follows:

- PCT0: Not classified.
- PCT70: White Cypress Pine woodland on sandy loams in central NSW wheatbelt
- PCT76: Western Grey Box tall grassy woodland on alluvial loam and clay soils in the NSW South Western Slopes and Riverina Bioregions
- PCT185: Dwyer's Red Gum - White Cypress Pine - Currawang shrubby woodland mainly in the NSW South Western Slopes Bioregion
- PCT217: Mugga Ironbark - Western Grey Box - cypress pine tall woodland on foot slopes of low hills in the NSW South Western Slopes Bioregion

Site inspection confirms predominant plant types in and around the site as PCT70: White Cypress Pine woodland on sandy loams in central NSW wheatbelt. This plant community type is associated with the Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia, listed as Endangered under the EPBC Act 1999.

Other predicted TECs were confirmed not to be present in the study area.

6.2. Threatened Species Assessment

Section 7.3 of the BC Act 2016 provides the criteria to test whether a development is likely to significantly affect threatened species or ecological communities, or their habitats.

The NSW Government BioNet species database was reviewed to arrive at a species populations and communities list, as shown in Table 2.

Table 2 – BioNet Species Records NSW Lower Slopes Subregion

Scientific name	Common name	NSW status	Commonwealth status
Amphibians			
Crinia sloanei	Sloane's Froglet	Vulnerable	Endangered
Birds			
Anthochaera phrygia	Regent Honeyeater	Critically Endangered	Critically Endangered
Artamus cyanopterus	Dusky Woodswallow	Vulnerable	
Burhinus grallarius	Bush Stone-curlew	Endangered	
Callocephalon fimbriatum	Gang-gang Cockatoo	Vulnerable	Endangered
Calyptorhynchus lathami	Glossy Black-Cockatoo	Vulnerable	
Certhionyx variegatus	Pied Honeyeater	Vulnerable	
Chthonicola sagittata	Speckled Warbler	Vulnerable	
Circus assimilis	Spotted Harrier	Vulnerable	
Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	Vulnerable	
Daphoenositta chrysoptera	Varied Sittella	Vulnerable	
Falco hypoleucos	Grey Falcon	Endangered	
Falco subniger	Black Falcon	Vulnerable	
Glossopsitta porphyrocephala	Purple-crowned Lorikeet	Vulnerable	
Glossopsitta pusilla	Little Lorikeet	Vulnerable	
Grantiella picta	Painted Honeyeater	Vulnerable	Vulnerable
Grus rubicunda	Brolga	Vulnerable	
Haliaeetus leucogaster	White-bellied Sea-Eagle	Vulnerable	
Hamirostra melanosternon	Black-breasted Buzzard	Vulnerable	
Hieraaetus morphnoides	Little Eagle	Vulnerable	
Hirundapus caudacutus	White-throated Needletail	Not listed	Vulnerable
Lathamus discolor	Swift Parrot	Endangered	Critically Endangered
Lophochroa leadbeateri	Major Mitchell's Cockatoo	Vulnerable	

Scientific name	Common name	NSW status	Commonwealth status
Lophoictinia isura	Square-tailed Kite	Vulnerable	
Melanodryas cucullata	Hooded Robin (south-eastern form)	Vulnerable	
Melithreptus gularis	Black-chinned Honeyeater (eastern subspecies)	Vulnerable	
Neophema pulchella	Turquoise Parrot	Vulnerable	
Ninox connivens	Barking Owl	Vulnerable	
Pachycephala inornata	Gilbert's Whistler	Vulnerable	
Petroica boodang	Scarlet Robin	Vulnerable	
Petroica phoenicea	Flame Robin	Vulnerable	
Polytelis swainsonii	Superb Parrot	Vulnerable	Vulnerable
Pomatostomus temporalis	Grey-crowned Babbler (eastern subspecies)	Vulnerable	
Stagonopleura guttata	Diamond Firetail	Vulnerable	
Tyto novaehollandiae	Masked Owl	Vulnerable	
Threatened Ecological Communities			
Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia		Not listed	Endangered
Inland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions		Endangered Ecological Community	
Mallee and Mallee-Broombush dominated woodland and shrubland, lacking Triodia, in the NSW South Western Slopes Bioregion		Critically Endangered Ecological Community	
White Box - Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions		Critically Endangered Ecological Community	Critically Endangered
Mammals			
Cercartetus nanus	Eastern Pygmy-possum	Vulnerable	
Chalinolobus dwyeri	Large-eared Pied Bat	Vulnerable	Vulnerable

Scientific name	Common name	NSW status	Commonwealth status
Chalinolobus picatus	Little Pied Bat	Vulnerable	
Dasyurus maculatus	Spotted-tailed Quoll	Vulnerable	Endangered
Myotis macropus	Southern Myotis	Vulnerable	
Nyctophilus corbeni	Corben's Long-eared Bat	Vulnerable	Vulnerable
Petaurus norfolcensis	Squirrel Glider	Vulnerable	
Phascolarctos cinereus	Koala	Vulnerable	Endangered
Pteropus poliocephalus	Grey-headed Flying-fox	Vulnerable	Vulnerable
Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Vulnerable	
Sminthopsis macroura	Stripe-faced Dunnart	Vulnerable	
Plants			
Austrostipa metatoris	A spear-grass	Vulnerable	Vulnerable
Austrostipa wakoolica	A spear-grass	Endangered	Endangered
Brachyscome papillosa	Mossgiel Daisy	Vulnerable	Vulnerable
Caladenia arenaria	Sand-hill Spider Orchid	Endangered	Endangered
Cullen parvum	Small Scurf-pea	Endangered	
Diuris sp. (Oaklands, D.L. Jones 5380)	Oaklands Diuris	Endangered	
Diuris tricolor	Pine Donkey Orchid	Vulnerable	
Eleocharis obicis	Spike-Rush	Vulnerable	Vulnerable
Goodenia macbarronii	Narrow Goodenia	Not listed	
Lepidium aschersonii	Spiny Peppercress	Vulnerable	Vulnerable
Lepidium monoplocoides	Winged Peppercress	Endangered	Endangered
Leptorhynchos orientalis	Lanky Buttons	Endangered	
Pilularia novae-hollandiae	Austral Pillwort	Endangered	
Swainsona murrayana	Slender Darling Pea	Vulnerable	Vulnerable
Swainsona recta	Small Purple-pea	Endangered	Endangered
Swainsona sericea	Silky Swainson-pea	Vulnerable	
Tylophora linearis	Tylophora linearis	Vulnerable	Endangered
Populations			

Scientific name	Common name	NSW status	Commonwealth status
Calyptorhynchus lathami - endangered population	Glossy Black-Cockatoo, Riverina population	Endangered Population	
Climacteris affinis - endangered population	White-browed Treecreeper population in Carrathool local government area south of the Lachlan River and Griffith local government area	Endangered Population	
Petaurus norfolcensis - endangered population	Squirrel Glider in the Wagga Wagga Local Government Area	Endangered Population	

6.3. Habitat Assessment

The results of the desktop review, field assessment, PCT assessment and species populations and communities list assessment were reviewed to provide a broad assessment of the habitat value on the site and around the study area. The findings of the habitat assessment are summarised in the Table 3.

Table 3 – Habitat Values Assessment

Factor	Impact
Land identified on the Biodiversity Values Map under the NSW *BC Act 2016*?	No
Area of Outstanding Biodiversity Value (AOBV) under the NSW *BC Act 2016*?	No
Critical habitat nationally?	No
An area reserved or dedicated under the *National Parks and Wildlife Act 1974*?	No
Is the proposal located within land reserved or dedicated within the meaning of the *Crown Lands Act 1989* for preservation of other environmental protection purposes?	No
A World Heritage Area?	No
Environmental Protection Zones in environmental planning instruments?	No
Lands protected under *SEPP (Biodiversity and Conservation) 2021?*	No
Land identified as wilderness under the *Wilderness Act 1987* or declared as wilderness under the *National Parks and Wildlife Act 1974*?	No
Aquatic reserves dedicated under the *Fisheries Management Act 1994*?	No
Aquatic Threatened Ecological Community?	No
Wetland areas dedicated under the Ramsar Wetlands Convention?	No
Land subject to a conservation agreement under the *National Parks and Wildlife Act 1974*?	No

Factor	Impact
Land identified as State Forest under the *Forestry Act 1916*?	No
Acid sulphate area?	No
Protected riparian habitat?	No
Mapped Key Fish Habitat?	No
Hollow bearing trees were recorded within the subject site.	No

6.4. MNES Assessment

The MNES: Significant Impact Guidelines 2013 provide guidance on determining whether an action is likely to have a significant impact on a matter protected under the Environment Protection and Biodiversity Conservation Act 1999. In determining the nature and magnitude of impacts, the following were considered:

- The EPBC Act protected matters search tool: www.environment.gov.au/erin/ert/epbc/index.html
- Lists of threatened species and ecological communities: www.environment.gov.au/epbc/protect/species-communities.html
- List of migratory species: www.environment.gov.au/epbc/protect/migratory.html
- List of Australia's Ramsar Wetlands map: www.environment.gov.au/epbc/protect/wetlands.html
- Commonwealth marine environment information: www.environment.gov.au/epbc/protect/marine.html
- World Heritage properties map: www.environment.gov.au/epbc/protect/heritage.html
- National Heritage places map: www.environment.gov.au/epbc/protect/heritage.html
- Great Barrier Reef Marine Park information: www.gbrmpa.gov.au
- Water resource mapping: www.environment.gov.au/epbc/about/water-trigger.html

An assessment of whether the proposal is likely to impact MNES is provided in Table 4.

Table 4 – MNES Assessment

Factor	Impact
Any impact on a World Heritage property?	No
Any impact on a National Heritage place?	No
Any impact on a wetland of international importance?	No
Great Barrier Reef Marine Park	No
Commonwealth Marine Area	No
Any impact on a listed threatened species or communities?	No
Any impacts on listed migratory species?	No

Factor	Impact
Any impact on a Commonwealth marine area?	No
Does the proposal involve a nuclear action (including uranium mining)?	No
Additionally, any impact (direct or indirect) on Commonwealth land?	No
Any impact on a water resource, in relation to coal seam gas development and large coal mining development?	No

No entities listed under the EPBC Act are likely to be significantly impacted by this proposal.

6.5. Likelihood Assessment

In determining the nature and magnitude of impacts on threatened species, the following were considered:

- Pre-construction, construction and occupation / maintenance phases.
- All on-site and off-site impacts, including location, installation, operation and maintenance of auxiliary infrastructure and fire management zones.
- All direct and indirect impacts.
- The frequency and duration of each known or likely impact / action.
- The total impact which can be attributed to that action over the entire geographic area affected, and over time.
- The sensitivity of the receiving environment.
- The degree of confidence with which the impacts of the action are known and understood.

Table 5 documents the assessment findings of the likelihood assessment.

Table 5 – Species and Populations Likelihood Assessment

Scientific Name	Common Name	Likely to occur in the development footprint	Likely to be impacted	Test of significance required
Crinia sloanei	Sloane's Froglet	Species is predicted to occur in periodically inundated areas in grassland, woodland and disturbed habitats which may occur in the development footprint	Unlikely	No
Anthochaera phrygia	Regent Honeyeater	Preferred food species are not present in the development footprint. There is no important habitat within 100km	Unlikely	No
Artamus cyanopterus	Dusky Woodswallow	Suitable woodland habitat is present, with an understorey or eucalypt saplings which is desirable	Unlikely	No
Botaurus poiciloptilus	Australasian Bittern	Suitable wetland pools and associated vegetation are not present in the study area	N/A	No
Burhinus grallarius	Bush Stone-curlew	Historic clearing, removal of woody debris and a landscape with a partial ground cover mean there is little suitable habitat for this species	N/A	No
Calidris ferruginea	Curlew Sandpiper	Suitable wetland / mudflat habitat is not present in the study area	N/A	No
Callocephalon fimbriatum	Gang-gang Cockatoo	Minimal foraging habitat exists in the study area	Unlikely	No
Calyptorhynchus lathami	Glossy Black-Cockatoo	Minimal foraging habitat exists in the study area	Unlikely	No

Scientific Name	Common Name	Likely to occur in the development footprint	Likely to be impacted	Test of significance required
Certhionyx variegatus	Pied Honeyeater	Suitable food species such as *Eremophilla longifolia* and grevillea are not present in the study area	N/A	No
Chthonicola sagittata	Speckled Warbler	This species requires relatively large undisturbed remnant woodlands which are not present in the study area	N/A	No
Circus assimilis	Spotted Harrier	Minimal foraging habitat exists in the study area	Unlikely	No
Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	Preferred food species are not present in the development footprint. Hollows for nesting not identified	Unlikely	No
Daphoenositta chrysoptera	Varied Sittella	Preferred food species are not present in the development footprint	Unlikely	No
Falco hypoleucos	Grey Falcon	Minimal foraging habitat exists in the study area	Unlikely	No
Falco subniger	Black Falcon	Minimal foraging habitat exists in the study area	Unlikely	No
Glossopsitta porphyrocephala	Purple-crowned Lorikeet	Landscape does not support suitable habitat. Minimal foraging habitat exists in the study area	Unlikely	No
Glossopsitta pusilla	Little Lorikeet	Landscape does not support suitable habitat. Minimal foraging habitat exists in the study area	Unlikely	No

Scientific Name	Common Name	Likely to occur in the development footprint	Likely to be impacted	Test of significance required
Grantiella picta	Painted Honeyeater	Preferred species including Myall and Brigalow are not present in the study area, further, presence of Mistletoe is unlikely to be at a desirable density for this species	N/A	No
Grus rubicunda	Brolga	Landscape does not support suitable habitat	N/A	No
Haliaeetus leucogaster	White-bellied Sea-Eagle	The study area is more than 1km from a major waterway meaning the species in unlikely to target this habitat for breeding or foraging	N/A	No
Hamirostra melanosternon	Black-breasted Buzzard	Landscape does not support suitable habitat. Minimal foraging habitat exists in the study area	N/A	No
Hieraaetus morphnoides	Little Eagle	Minimal foraging habitat exists in the study area	Unlikely	No
Hirundapus caudacutus	White-throated Needletail	Species rarely comes to ground, and otherwise feeds high above the canopy. Minimal foraging habitat exists in the study area	N/A	No
Lathamus discolor	Swift Parrot	Minimal foraging habitat exists in the study area	Unlikely	No
Leipoa ocellata	Malleefowl	No mallee vegetation present in the study area	N/A	No
Lophochroa leadbeateri	Major Mitchell's Cockatoo	Minimal foraging habitat exists in the study area	Unlikely	No
Lophoictinia isura	Square-tailed Kite	Minimal foraging habitat exists in the study area	Unlikely	No

Scientific Name	Common Name	Likely to occur in the development footprint	Likely to be impacted	Test of significance required
Melanodryas cucullata	Hooded Robin (south-eastern form)	Unlikely: It is unlikely the woodland remnant areas are suitable structurally diverse for this species, notable the absence of small native shrubs	Unlikely	No
Melithreptus gularis	Black-chinned Honeyeater (eastern subspecies)	Minimal foraging habitat exists in the study area	Unlikely	No
Neophema pulchella	Turquoise Parrot	Landscape does not support suitable habitat. Minimal foraging habitat exists in the study area	Unlikely	No
Ninox connivens	Barking Owl	Minimal foraging habitat exists in the study area	Unlikely	No
Numenius madagascariensis	Eastern Curlew	Suitable wetland/ mudflat habitat is not present in the study area	N/A	No
Pachycephala inornata	Gilbert's Whistler	Landscape does not support suitable habitat. Minimal foraging habitat exists in the study area	Unlikely	No
Petroica boodang	Scarlet Robin	This species requires abundant fallen logs which are not present in the study area	N/A	No
Petroica phoenicea	Flame Robin	Landscape does not support suitable habitat. Minimal foraging habitat exists in the study area	Unlikely	No

Scientific Name	Common Name	Likely to occur in the development footprint	Likely to be impacted	Test of significance required
Polytelis swainsonii	Superb Parrot	Landscape does not support suitable habitat. Minimal foraging habitat exists in the study area	Unlikely	No
Pomatostomus temporalis	Grey-crowned Babbler (eastern subspecies)	Minimal foraging habitat exists in the study area	Unlikely	No
Rostratula australis	Australian Painted Snipe	Suitable wetland / mudflat habitat is not present in the study area	N/A	No
Stagonopleura guttata	Diamond Firetail	Landscape does not support suitable habitat. Minimal foraging habitat exists in the study area	Unlikely	No
Tyto novaehollandiae	Masked Owl	Minimal foraging habitat exists in the study area	N/A	No
Cercartetus nanus	Eastern Pygmy-possum	This species occurs in woodlands with a rich shrub understorey	N/A	No
Chalinolobus dwyeri	Large-eared Pied Bat	Species roosts in caves which are not known from within or in reasonable proximity to the study area	N/A	No
Chalinolobus picatus	Little Pied Bat	Minimal foraging habitat exists in the study area	Unlikely	No
Dasyurus maculatus	Spotted-tailed Quoll	Minimal foraging habitat exists in the study area	Unlikely	No
Miniopterus orianae oceanensis	Large Bent-winged Bat	Minimal foraging habitat exists in the study area	Unlikely	No
Myotis macropus	Southern Myotis	Rarely recorded more than 100km inland. The study area is over 400km inland	N/A	No

Scientific Name	Common Name	Likely to occur in the development footprint	Likely to be impacted	Test of significance required
Nyctophilus corbeni	Corben's Long-eared Bat	Known to roost in tree hollows in box woodlands	Unlikely	No
Petaurus norfolcensis	Squirrel Glider	Prefers stands of woodland / forests with a missed Acacia mid-storey which is not present in the study area or surrounding landscape	N/A	No
Petrogale penicillata	Brush-tailed Rock-wallaby	Landscape does not support suitable rocky habitat	N/A	No
Phascolarctos cinereus	Koala	Landscape does not support suitable habitat	Unlikely	No
Pteropus poliocephalus	Grey-headed Flying-fox	Records of this species within Lachlan area. No camp recorded during the field assessment	Unlikely	No
Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	Landscape does not support suitable habitat	Unlikely	No
Sminthopsis macroura	Stripe-faced Dunnart	Prefers ungrazed habitat with healthier understory vegetation	N/A	No
Maccullochella peelii	Murray Cod	There are no water bodies in study area	N/A	No
Macquaria australasica	Macquarie Perch	There are no water bodies in study area	N/A	No
Aprasia parapulchella	Pink-tailed Legless Lizard	Suitable surface rock is not present in the study area	N/A	No
Calyptorhynchus lathami - endangered population	Glossy Black-Cockatoo, Riverina population	The study area is not in the Riverina	N/A	No

Scientific Name	Common Name	Likely to occur in the development footprint	Likely to be impacted	Test of significance required
Climacteris affinis - endangered population	White-browed Treecreeper population in Carrathool local government area south of the Lachlan River and Griffith local government area	Unlikely: The study area is not in the Carrathool LGA	N/A	No
Petaurus norfolcensis - endangered population	Squirrel Glider in the Wagga Wagga Local Government Area	The study area is not in the Wagga Wagga LGA	N/A	No
Acacia meiantha	Barradam-bang Wattle	Conspicuous species not recorded during the field assessment	N/A	No
Ammobium craspedioides	Yass Daisy	Associated upper stratum species are not present in the study area	N/A	No
Eucalyptus aggregata	Black Gum	Conspicuous species not recorded during the field assessment	N/A	No
Eucalyptus canobolensis	Silver-Leaf Candlebark	Not known from the Lachlan area. Not recorded during the field assessment	N/A	No
Eucalyptus pulverulenta	Silver-leaved Mountain Gum	Not known from the Lachlan area. Not recorded during the field assessment	N/A	No

Scientific Name	Common Name	Likely to occur in the development footprint	Likely to be impacted	Test of significance required
Eucalyptus robertsonii subsp. hemisphaerica	Robertson's Peppermint	Not recorded / known to exist in the Lachlan area	N/A	No
Eucalyptus saxicola	Mt Canobolas Box	Not known from the Lachlan area	N/A	No
Euphrasia arguta	Euphrasia arguta	Study area is not within the known distribution for this species. Also, would be threatened by the dominating grass layer in areas of the study area	N/A	No
Lepidium aschersonii	Spiny Pepper-cress	Particular habitat details such as gilgai clays are not present in the study area	N/A	No
Lepidium hyssopifolium	Basalt Pepper-cress	Not recorded / known to exist in the Lachlan area	N/A	No
Leucochrysum albicans var. tricolor	Hoary Sunray	More common in the south of the state and is not able to thrive in areas where grass is strongly dominant as is the case in the study area	N/A	No
Prostanthera gilesii	Prostanthera gilesii	Not known from the Lachlan area. Not recorded during the field assessment	N/A	No
Swainsona recta	Small Purple-pea	Not known to occur in Inland Grey Box communities	N/A	No
Swainsona sericea	Silky Swainson-pea	Not recorded during the field assessment	Unlikely	No
Thesium australe	Austral Toadflax	Not recorded during the field assessment	Unlikely	No

6.6. Biodiversity Conservation Act Significance Assessment

Section 7.3 of the BC Act 2016 provides the criteria to test whether a development is likely to significantly affect threatened species or ecological communities, or their habitats. Table 6 documents the relevant assessment under the BC Act 2016. In summary the test of significance indicates that a significant effect is unlikely on any threatened species or ecological communities listed under the BC Act 2016.

Table 6 – BC Significance Assessment

BC Test	Assessment
Section 7.3(1)(a) - likely adverse affect on the life cycle of threatened species	The site is located in the Parkes LGA near Bogan Gate. The land in and directly around the SMS ANE Facility has been largely cleared in the past of woodland native vegetation. The BGER largely comprises cleared managed grassland with isolated paddock trees and stands of trees and larger pockets of vegetation, including remnant native vegetation. The SMS ANE Facility sits in a cleared area. The proposed alterations and additions to the SMS ANE Facility involves clearing a section of regrowth cypress pines to the west of the manufacturing plant. The clearing proposed is unlikely to have an adverse effect on the life cycle of native species such that a viable local population of the species is likely to be placed at risk of extinction. Breeding for species is more likely to occur in the established forested areas along Gunningbland Creek to the north and Gunning Ridge to the east, with limited potential for occasional foraging occurring within the site. SMS staff advise that native fauna species found on the site are generally visiting bird species
Section 7.3(1)(b) - likely adverse effect on the extent or composition of an endangered ecological community	The removal of the regrowth cypress pines will not likely adversely affect native vegetation woodland in the area, as the stand of pines are quite immature, and the area is already highly disturbed
Section 7.3(1)(c) - likely adverse affects on habitat of threatened species or ecological community	Foraging for food resources may be impacted by this proposal during construction works. SMS fences may also restrict some movement across the landscape. The extent of impacts would be low, given the highly disturbed nature of the site, existing roadways and infrastructure limiting connection and separation of the vegetation from larger foraging areas
Section 7.3(1)(d) - likely adverse affect on declared area of outstanding biodiversity value	No Areas of Outstanding Biodiversity Value are recorded to occur on or around the site, as defined under the BC Regulation 2017. The proposal will not have an adverse effect on any declared area of outstanding biodiversity value
Section 7.3(1)(e) - potential for the development to be part of a key threatening / impact process	The proposal would not significantly increase the prevalence or risk of key threatening process. The potential for foraging over the site will likely be reduced, however foraging over this area is already severely limited

7. Management and Mitigation

While flora and fauna impacts are assessed as low, as demonstrated in the BC Act 2016 test of significance and the EPBC Act 1999 assessments of significance and assessment under the MNES: Significant Impact Guidelines 2013, a number of measures are proposed to be incorporated into the SMS design to minimise impacts on the receiving environment.

7.1. Management and Mitigation

SMS has a document management system that lists a number of plans and procedures to manage and minimise potential environmental impacts, including safeguards for erosion, sediment, flora and fauna habitat management and weed control. Table 7 provides a summary of the SMS flora environmental management control measures that have been applied to the site.

Table 7 – SMS Management and Mitigation Measures

Impact	Management Measures
Pre-construction	
General	Procedures will be implemented for unexpected threatened species finds and fauna handling as well as protocols to manage weeds and pathogens
Soil erosion and sediment	Procedures will be implemented to control soil erosion and sediments
Invasion and spread of pathogens and disease	Pathogen control protocols shall be developed and implemented in accordance with the requirements of the Biosecurity Act 2015
Invasion and spread of weeds	Weed control protocols shall be developed and implemented
During construction / operation	
Fauna protection	No trees on adjoining sites are to be removed
Threatened species protection	If threatened fauna or flora species are discovered, works which may disturb the species would cease until any potential impacts are reviewed and assessed by a suitably qualified ecologist
Disturbance to fallen timber and dead wood	Any woody debris will be re-used at the site of the proposed road reserve / extension (western side of site) for habitat improvement. Woody debris would be lifted and placed appropriately outside the road footprint in an adjacent area of the site to enhance habitat
Pest animal monitoring / control	Pest animals such as rodents, foxes, rabbits, wild dogs and feral cats are to be controlled on the site

8. CONCLUSION

This Preliminary Biodiversity Assessment and Scoping Report has been prepared by Currajong Pty Ltd to determine whether there is a requirement to prepare a Biodiversity Assessment Report or Biodiversity Development Assessment Report to support the proposed alterations and additions to the SMS ANE Facility located on Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate.

Assessment of the proposal includes background research and analysis of readily available data, reports and studies. The assessment also includes the results of a site inspection, plant species assessment, habitat and plant species assessment, MNES assessment and the relevant tests of significance required under Environmental Planning and Assessment Act 1979 and the Environment Protection and Biodiversity Conservation Act Matters of National Environmental Significance – Significant Impact Criteria Guideline 2013.

The assessment concludes the proposal is unlikely to have a significant impact on threatened species as defined under the Biodiversity Conservation Act 2016. Nor will the proposal impact on nationally listed biodiversity matters under the Environment Protection and Biodiversity Conservation Act 1999. Entry into the BOS is not triggered by the proposal, as less than 1,500m^2 of regrowth native species (not assessed to be native vegetation) is proposed to be cleared / disturbed.

It is the findings of this report that neither a Biodiversity Assessment Report nor a Biodiversity Development Assessment Report are required to support the lodgement of a Development Application.

All work will be completed in accordance with the SMS environment management plans in place at the SMS ANE Facility, including plans that aim to manage and / or minimise of potential environmental impacts from works, including safeguards for erosion and sediment control, flora and fauna habitat management and weed control.

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Appendix K. Acoustik Noise and Vibration Impact Assessment

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11 August 2023

Noise and Vibration Impact Assessment

3577 Henry Parkes Way

Currajong

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2	Final Issue – 10 August 2023
3	Corrections to Operating hours duration – 11 August 2023
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Mr Harper is a full member of the Australian Acoustical Society (Member since 2002). Working as an acoustic consultant since graduating from the University of NSW in 1998 both domestically and internationally in Singapore and South East Asian countries.

Acoustik was established in August 2013 and provides a full range of professional acoustic consulting services.

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Table of Contents

1 Introduction 3
1.1 References 4
1.2 Glossary 4
2 Noise Measurements 5
2.1 Environmental Noise 5
2.2 Existing Traffic Levels 5
2.3 Instrumentation 5
3 Project Criteria 6
3.1 Environmental Noise Triggers 6
3.2 Noise Criteria – Road Traffic 6
3.3 Weather Induced Noise-Enhancement 7
4 Predicted Noise Levels 8
4.1 SMS – ANE Manufacturing Operations 8
4.2 Traffic Noise Generation 9
4.2.1 Henry Parkes Way 9
4.2.2 Site Traffic Noise Generation 9
4.3 Assessment 10
5 Conclusion 11
A. Appendix A – Traffic Noise Logging Results – HPW 12
B. Appendix B – Site Map and Surrounds 16
C. Appendix C – Noise Contour Plots 17

1 Introduction

Acoustik was engaged by Currajong to provide an acoustic report to support the increased processing capacity at the existing Solar Mining Services Ammonium Nitrate Emulsion (ANE) Manufacturing and Storage Facility at Lot 2 DP 1064474, Bogan Gate NSW 2876.

The facility is located within the Bogan Gate Explosives Reserve (BGER). Solar Mining Services (SMS) is one of the lease holders with authority to manufacture and store ANE on the site. The proposed increase in manufacturing capacity by SMS is noted in the Table 1 below.

The expansion of manufacturing capacity is not expected to increase noise emissions from the existing manufacturing processes. But will lead to increases in transportation volumes, and increases in loading and unloading activity at the manufacturing site.

Table 1: Planned expansion of manufacturing and Storage – Solar Mining Services

Approved	Proposed
Manufacturing of 960 tonnes of ANE per annum	Manufacturing of 20,000 tonnes of ANE per annum
Storage of 200 tonnes of AN at any one time	Storage of 450 tonnes of AN at any one time
Storage of 50 tonnes of ANE at any one time	Storage of 100 tonnes of ANE at any one time
Delivery in and out by semi-trailer tanker	Delivery in and out by A-Double tanker

The following noise sources expected to require noise assessment:

- *the manoeuvring of heavy vehicles transporting raw goods and finished products,*
- *the operation of loading vehicles (i.e., reverse beepers, air brake releases)*
- *plant operations, noting all operational plant will be located within the building,*
- *alarm sounds associated with early warning systems in the event of plant or operations failures.*

The SMS site location within the BGER is shown in Appendix B. A detailed view of the manufacturing building and storage areas is included in Figure 1 below.

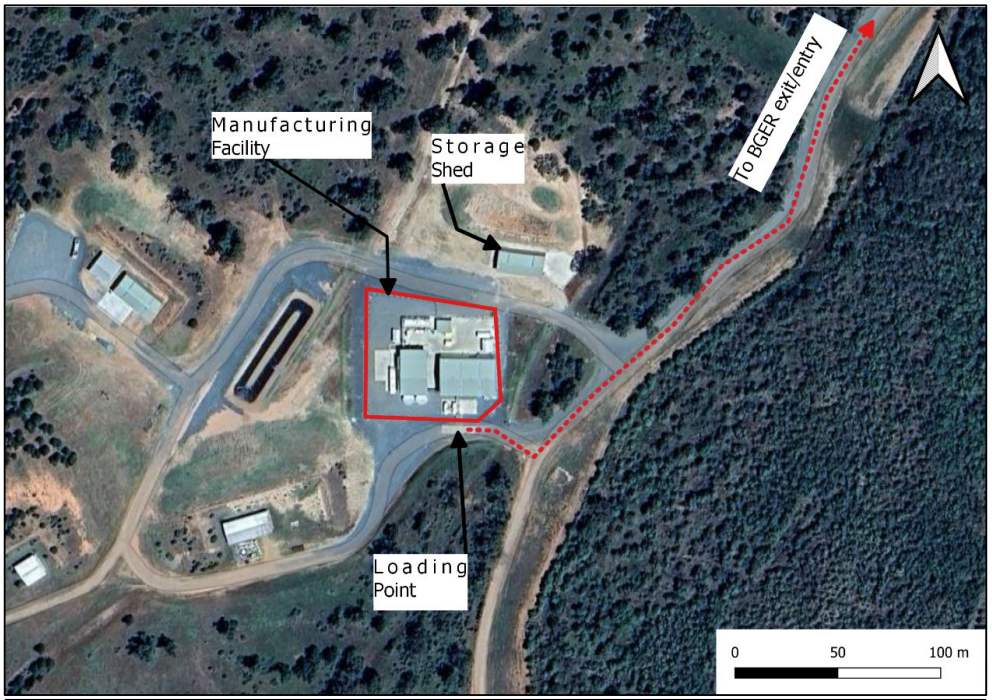


Figure 1: SMS Site within BGER

The manufacturing facility includes an emergency power generator, pumps, boiler, alarms storages and the plant building that is located towards the middle portion of Lot 2 DP 1064474. Existing and proposed new storage sheds are located to the north, west and south of the manufacturing facility.

A “Liftsmart LS-RT25-35 Rough Terrain Forklift” is used on the site to transport materials from the storage sheds to the manufacturing facility.

Approved hours of operation are currently from 7.00am to 6.00pm. The increases to manufacturing capacity requires hours of operation from 7.00am to 9.45pm. Note that on Sundays and public holidays the day/evening period is 8 am to 10 pm. Operational hours on Sundays and Public Holidays will not start until 8 am.

A list of residences surrounding the proposed site is included in Table 2 below. The overview of the BGER and surrounding areas is included in Appendix A.

Table 2: Summary of noise receiver locations relative to site

Type	Location	Notes
Res 1	3327B Henry Parkes Way Bogan Gate	Residence to East
Res 2	3544 Henry Parkes Way Bogan Gate	Residence to the North – Closest to HPW traffic
Res 3	3332 Henry Parkes Way Bogan Gate	Residence to the North East
BG Town	1-3 Station Street Bogan Gate	The location of the closest residence within the Bogan Gate Town

1.1 References

The following reference material was consulted while preparing this report:

- NSW Environmental Protection Authority (EPA) Noise Policy for Industry (NPI)
- NSW EPA Noise Guide for Local Government 2013
- NSW Road Noise Policy

1.2 Glossary

A short list of acoustic terms is included below:

L_{Aeq}: is the Sound Pressure Level (SPL) in decibels (dB), equivalent to the total sound energy over a measurement period (or the energy average). The A signifies that an A-Weighting applied to the spectrum to simulate human hearing response.

L_{Amax}: is the maximum Sound Pressure Level (SPL) in decibels (dB) that occurs during a measurement.

L_{A90}: is the noise level exceeded for 90% of the measurement period, calculated by Statistical Analysis, it is considered to represent the background noise level or the noise that is present for most of the time.

L_{A01}: is the noise level exceeded for 1% of the measurement period, calculated by Statistical Analysis, it is considered to represent close to the maximum noise level.

L_{Ceq}, dBC or C-weighting: C-weighting is an adjustment made to sound-level measurements which takes account of low-frequency components of noise within the audibility range.

Intrusive noise: is noticeably louder than the background noise and considered likely to disturb or interfere with those who can hear it. Depending on the nature of the noise source it is defined as:

a) (RBL or L_{A90}) + 5 dB for noise sources that are continuous in nature for extended periods or all day and night typical of industrial or residential sources that are a permanent fixture.

b) (RBL or L_{A90}) + 10 dB for noise sources that are temporary in nature like construction where the activity is limited to day time operation some elements of the noise may be continuous.

2 Noise Measurements

2.1 Environmental Noise

Traffic noise levels were measured using an unattended noise logger located 7 metres from the Southern near side kerb of the Henry Parkes Way (HPW). The location is noted on the map in Appendix A.

The primary purpose of the noise logging was to establish the existing traffic on HPW. HPW is an arterial road connecting Parkes to rural areas to the West and primarily the town of Condobolin.

This assessment is based on the NSW EPA Noise Policy for Industry (NPI). Acoustik nominate that the RBL will be assumed to be set at the minimum RBL levels nominated in the NPI. The day and evening time RBLs are relevant. The ANE facility is proposed to operate during the day and up to 9.45pm in the evening.

The acoustic environment in the area is rural and dominated mostly by natural noises, although traffic noise along HPW is significant. The Orange -Broken Hill railway line parallels HPW for the section of the road relevant to this project.

The railway carries two passenger services (Sydney-Broken Hill Explorer and the Indian Pacific) that operate a once weekly return service and freight traffic. The frequency of rail traffic is insignificant relative to the HPW traffic. HPW is and arterial road and carries local and thru traffic between Parkes and Condobolin.

The assumed RBL levels are listed in Table 3 below. Amenity values will not control the overall trigger levels nominated by the NPI.

Table 3: Assumed Minimum Environmental Noise Levels – Day and Evening

	Day 7am – 6pm		**Evening 6|m – 10pm**	
	RBL/L_{A90}	**L_{Aeq}**	**RBL/L_{A90}**	**L_{Aeq}**
RBL/Ambient	**35**	**N/A**	**30**	**N/A**

2.2 Existing Traffic Levels

Acoustik placed a noise logger, 7 m from the southern kerb of Henry Parkes Way (Location -33.107484, 147.823295) approximately 280 m east of the driveway to Resident 2 noted in this assessment. The logger was placed on Thursday, 16 March 2023 at 7:00 pm until Tuesday 28 March 2023 at 12:00 pm.

Acoustik have reviewed the measured $L_{Aeq\ 15hr}$ (7 am to 10 pm) traffic noise results for the 12 days of logged data. Excluding the data (refer to Appendix A) that is affected by rain and wind, The calculation of $L_{Aeq,\ 15\ hr}$ results are presented in Table 4 below.

Table 4: Calculation of $L_{Aeq,\ 15hr}$ results – Logarithmic Average at Logger

Parameter\Date	17/3	20/3	21/3	24/3	27/3	Avg
$L_{Aeq\ 15hr}$	60.6	58.9	61.0	59.9	60.3	60.2

2.3 Instrumentation

Instrumentation listed below was used during this acoustic study.

Instrument	**Make and model**	**Serial Number**	**Instrument Type**
Sound Level Meter	Larson Davis 813	0003983	Class 1
Field Calibrator	Larson Davis CAL250	5542	Class 1
Noise Logger	SVAN 958A	59161	Class 1

Instrumentation was field calibrated before and after measurements; no significant calibration drift was noted.

3 Project Criteria

Parkes Shire Council has requested that an acoustic noise impact assessment report is submitted to with the Development Application (DA). Noise levels due to traffic noise generation on HPW is also requested.

3.1 Environmental Noise Triggers

In the NPI, trigger levels are not intended to be treated as a mandatory requirement; if noise levels exceed the trigger a noise management response is required that includes all reasonable and feasible mitigation measures and an assessment of the impact of any residual noise that continue to exceed trigger levels. The final level of acceptable noise is determined by the regulatory authority balancing the noise impact against other social and economic benefits.

The NPI employs two measures to control noise so that residential acoustic amenity is protected. The first is the intrusive noise trigger (L_{A90} background + 5dB) and the second is the amenity level based on the type of area.

The noise receivers are in a Rural Residential zone as defined in the NPI. Vehicles using Henry Parks Way are the dominate noise source in the area.

The amenity level is designed to halt the increase of background levels due to continuing development and to control noise emissions affecting a community from the total industrial noise. The Project Amenity noise level limits the noise emissions from any one site and is equal to the Recommended Amenity Noise Level (re Table 2.2 of NPI) minus 5 dB to allow for other developments and plus 3 dB to convert the amenity limits to 15 minute assessment periods.

The project noise trigger levels are detailed in Table 5 below, in this case, the project noise triggers will be controlled by the intrusive trigger levels. Night-time assessment is not required.

Table 5: Proposed Noise Trigger Levels – Rural Residential

Area	Intrusive Level L_{A90} + 5 dB	Project Amenity Noise Rural Residential	**Noise Trigger dBA**
Day 0700 – 1800	40	48	**40**
Evening 1800 – 2200	35	43	**35**

3.2 Noise Criteria – Road Traffic

The NSW Road Noise Policy (RNP) provides assessment criteria for increased road noise due to the development. The traffic noise criteria for overall residential noise receivers are listed in Table 6 below.

Table 6: Road Traffic Assessment for residential land users (Table 3 from NSW RNP)

Road Category	**Type of Project/Land Use**	**Assessment criteria – dBA**	
		Day (7 am-10pm)	**Night (10 pm-7 am)**
Freeway/Arterial/ sub-arterial roads	1. Existing residences affected by noise from **new** freeway/arterial/sub-arterial road corridors	$L_{Aeq,\ 15\ hour}$ 55 external	$L_{Aeq,\ 9\ hour}$ 50 external
Freeway/Arterial/ sub-arterial roads **(Point 3 is the applicable noise criteria for this project)**	2. Existing residences affected by noise from **redevelopment** of existing freeway/arterial/sub-arterial roads 3. Existing residences affected by **additional traffic** on existing freeways/arterial/sub-arterial roads generated by land use developments	$L_{Aeq,\ 15\ hour}$ 60 external	$L_{Aeq,\ 9\ hour}$ 55 external
Local roads	4. Existing residences affected by noise from **new** local road corridors 5. Existing residences affected by noise from **redevelopment** of existing local roads 6. Existing residences affected by **additional traffic** on existing local roads generated by land use developments	$L_{Aeq,\ 1\ hour}$ 55 external	$L_{Aeq,\ 1\ hour}$ 50 external

In addition to overall noise levels Section 3.4.1 “Process for applying the criteria” of NSW RNP includes advice based on a 4-step process specifically for increases traffic noise on existing roads generated by land use developments in Step 4 of the process. The following is stated:

> Step 4
>
> For each assessment location in the study area, if it is not possible for the total traffic noise to meet the traffic noise criteria in Table 6 above, justification should be provided that all feasible and reasonable mitigation has been applied.
>
> For existing residences and other sensitive land uses affected by additional traffic on existing roads generated by land use developments, **any increase in the total traffic noise level should be limited to 2 dB above that of the corresponding ‘no build option’.**

3.3 Weather Induced Noise-Enhancement

To make the assessment all assessment periods will have source-to-receiver wind vectors for all receivers and F class temperature inversions with wind speeds up to 2 m/s at night. This assumes the default worse conditions for noise enhancement noting that the assumption will have a minimal effect on the results. The Predictor Noise model includes the Noise-enhancing meteorological conditions requirements.

4 Predicted Noise Levels

The Predictor model assumes a ground factor of 0.8 as the ground in the area is rural without significant areas of hard paving. All predictions assume a normal environmental measurement location of 1.5 m above ground level within the residential areas. In rural settings the residential area extends 30 m from the residential façade of the affected residence or to the property boundary where that is less than 30 m.

4.1 SMS – ANE Manufacturing Operations

Predictor noise levels from the operation of the ANE manufacturing facility used the following source data to calculate noise levels at the affected residents.

Table 7 below lists the sound power levels used in the predictor model. We note that the noise source data for a site Alarm was selected to achieve a noise level of 85 dBA at ground level on the site so that the alarm signal could be heard above any other processes at the site.

Table 7: Sound Power and Sound Pressure Levels used in Predictor Noise Model

	Octave Band Frequencies									
Noise Source	**63**	**125**	**250**	**500**	**1k**	**2k**	**4k**	**8k**	**dBA**	**dB**
Factory Internal SPL*	84	81	83	76	72	71	69	63	**89**	**74**
Cooling Tower – Typical	79	75	72	71	71	67	65	61	**73**	**82**
Gear Pump – for ANE transfer	107	99	92	92	95	91	85	82	**96**	**109**
Forklift Operations	96	100	95	94	93	89	86	81	**95**	**104**
Trucks at 20 km/hour	106	105	104	101	100	100	96	90	**104**	**111**
Cars at 20 km/hour	104	95	92	87	84	84	83	77	**89**	**105**
Alarms at site	76	86	79	79	81	93	113	106	**115**	**114**
Emergency Generator	103	104	105	97	93	90	83	76	**96**	**109**
HPW Traffic data	108	100	99	102	102	104	100	93	**107**	**112**
Trucks at 100 km/hour	108	101	98	100	100	102	97	91	**105**	**111**
Trucks at 80 km/hour	109	102	95	97	97	98	94	88	**102**	**111**
Trucks at 50 km/hour	101	94	95	93	94	101	99	91	**104**	**107**
Cars at 100 km/hour	102	94	92	91	92	98	95	88	**101**	**105**
Cars at 80 km/hour	102	95	88	87	89	93	90	83	**96**	**104**
Cars at 50 km/hour	79	75	72	71	71	67	65	61	**73**	**82**

Note*: The factory internal noise level is based on Acoustik's database of typical factory noise levels where process equipment is being used and would be representative of the noise levels in this instance. The factory internal noise level is predicted with the roller shutter doors open.

Table 8 lists the $L_{Aeq,\ 15\ min}$ predictions for all affected residences detailed noise contour maps in Appendix B. The results are predicted for normal Day operations and include weather noise-enhancement corrections. The operation of emergency equipment is not included as it not part of normal operations. The audibility of alarm systems is a priority safety concern and is generally a short-term activation.

Table 8:Predictor $L_{Aeq,15min}$ Noise Levels

Description	**Day**	**Evening**	**Notes**
L_{Aeq} Predictions	**40**	**35**	**Intrusive Noise Trigger**
Res 1 - 3327B Henry Parkes Way Bogan Gate	< 20	< 20	Complies
Res 2 - 3544 Henry Parkes Way Bogan Gate	29	<20	Complies
Res 3 - 3332 Henry Parkes Way Bogan Gate	< 20	< 20	Complies
BG Town - 1-3 Station Street Bogan Gate	< 20	< 20	Complies

Note: The combined operation of the emergency generator and a warning alarm at the ANE manufacturing site is predicted to generate a noise level of 31 dBA at residence 2, and 28 dBA at 1 Station Street, and < 20 dBA at the other residences. The emergency warning and generator noise levels are below the noise triggers and not part of normal operations.

.

4.2 Traffic Noise Generation

The operation of the Solar Mining Services ANE manufacturing facility will generate vehicle traffic for employees and commercial vehicle traffic.

The number of vehicles visits expected to service the upgraded site operations is detailed by the Currajong EIS. Table 2 in the EIS lists that the "Proposed Operations and Storage" will require:

- Heavy vehicle transport – 8 Truck trips (in and out) per day
- Light Vehicle transport – 24 light vehicle trips (in and out) per day
- Staffing – Eight (8) staff per day in 2 shifts

4.2.1 Henry Parkes Way

Existing traffic noise levels along HPW were measured with a noise logger located 7 m from the kerb side of the road. The measured average $L_{Aeq,\ 15\ hour}$ noise level of 60.2 dBA at the noise logger was used to calibrate the predictor noise model. Allowing for 10% of traffic to be heavy vehicles Acoustik calculated that ADT volumes for the 15-hour day period (7 am to 10 pm) the flow of bi-directional traffic is predicted at 1300 cars and 130 heavy vehicles.

We have assumed that the rail traffic is infrequent and does not significantly add to the overall traffic noise levels.

The predictor model was used to calculate the 15-hour traffic noise level at the affected residences. The daily vehicle trip numbers quoted in Section 4.2 above were used to predict the $L_{Aeq,\ 15\ hour}$ noise levels from the internal site traffic on HPW.

Refer Table 9 below for existing and expected changes in traffic noise levels.

Table 9: Predicted L_{Aeq} levels (incl. façade correction calculated in Predictor) at residences close to HPW

Location	Existing Traffic* 15hr	Site Traffic 15hr	Total traffic 15hr
Res 1 - 3327B Henry Parkes Way	30	15	30
Res 2 - 3544 Henry Parkes Way	43	21	43
Res 3 - 3332 Henry Parkes Way	36	22	36
BG Town - 1-3 Station Street	45	33	45

Note[*]: The existing traffic noise predicted is based traffic flows calibrated a noise logger 7 m from kerb of HPW and includes façade reflection.

Note[#]: The total traffic level does not increase over existing traffic noise and the total traffic level is well below the NSW RNP criteria of $L_{Aeq,\ 15\ hour}$ 60 dBA.

4.2.2 Site Traffic Noise Generation

Based on the daily vehicle trip numbers quoted in Section 4.2 above Acoustik have determined that the loudest $L_{Aeq,\ 1\ hour}$ traffic noise would be at the 2 pm shift change. Four staff would arrive and 4 staff depart. Due to the general lack of public transport in the area, we consider that all staff would arrive and leave within the hour which is the worst case because staff could car pool.

Sticking to a worst case scenario we could allow that two light vehicle deliveries were made, and heavy vehicle pickup/delivery was made. Leading to:

- 12 total light vehicle trips (8 staff vehicle trips and 2 light vehicle deliveries)
- 2 trips for the heavy vehicle (a single visit of heavy vehicle/truck)

During the evening after 6 pm deliveries would be minimal with the highest activity occurring in the last hour with the 4 staff leaving the site.

The calculated $L_{Aeq,\ 1\ hour}$ traffic noise will be included in the noise emissions from the site for assessment at the residences. Refer Table 8 above.

4.3 Assessment

From the above predictions the normal operations of the SMS facility will not exceed 29 dBA at the most affected residence (Residence 2) and there is no expected increase in the total traffic noise levels along HPW.

The SMS facility is operational during the day and evening periods, no night time sleep arousal assessment is required.

5 Conclusion

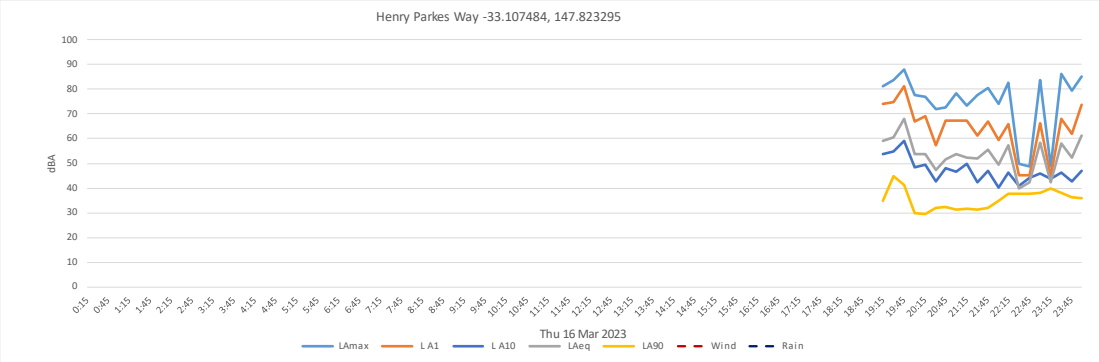
Acoustik was engaged by the Currajong to provide a noise impact report for the increase in the capacity of the operation of the Solar Mining Services facility at the Bogan Gate Explosives Reserve (BGER) located near to the town of Bogan Gate NSW. The facility manufactures Ammonium Nitrate Emulsion (ANE)

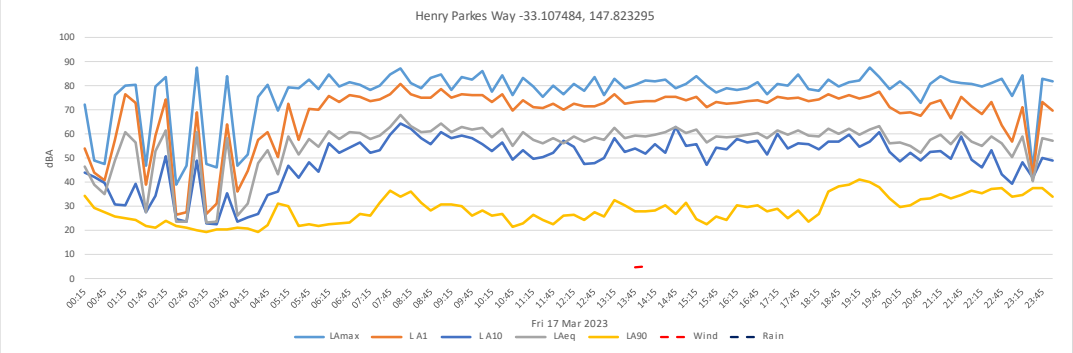
Acoustik have predicted noise level emissions due to increasing the manufacturing capacity from 960 tonnes of ANE to 20,000 tonnes of ANE and generally a doubling of the existing storage for ANE and AN at the site.

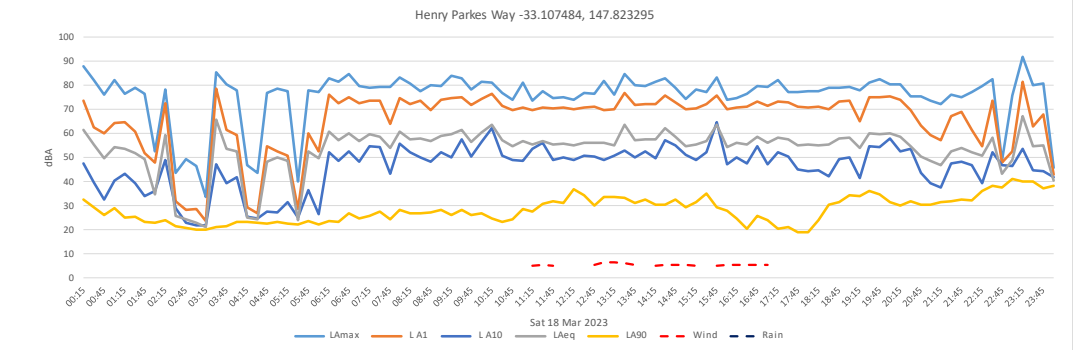
Noise levels generated at the site and from vehicle traffic on the site does not exceed any noise trigger levels set in the NSW Noise Policy for Industry and the total traffic noise along Henry Parkes Way is not increased.

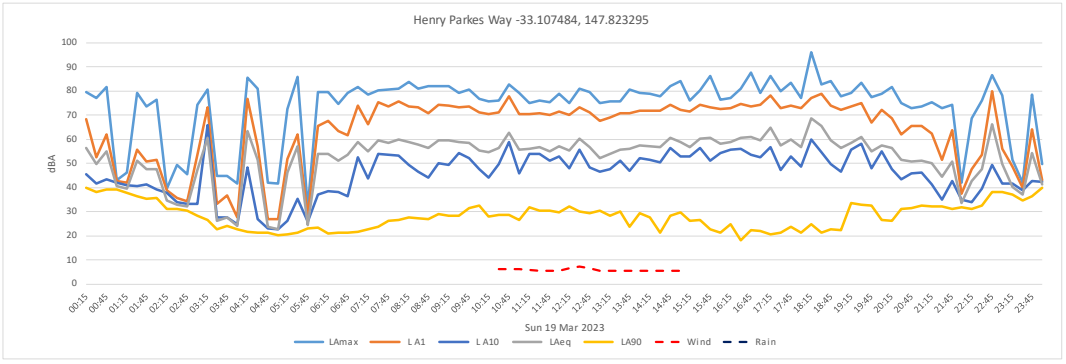
A. Appendix A – Traffic Noise Logging Results – HPW

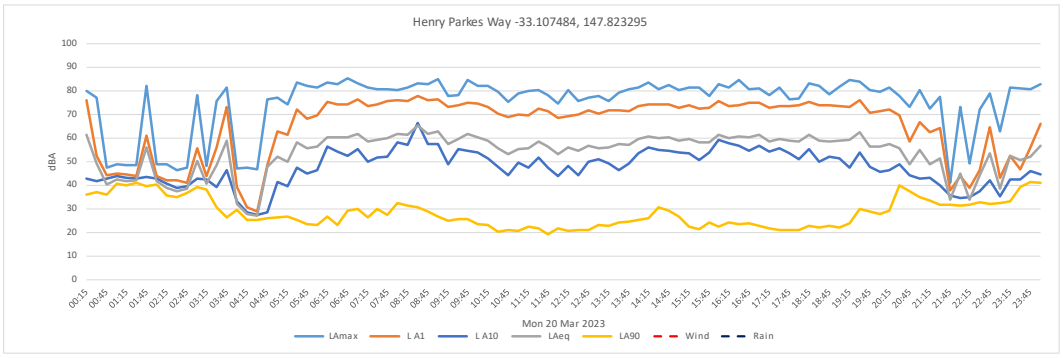
Noise logging along Henry Parkes Way








Henry Parkes Way -33.107484, 147.823295
dBA
Sun 19 Mar 2023
LAmax
L A1
L A10
LAeq
LA90
Wind
Rain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dBA
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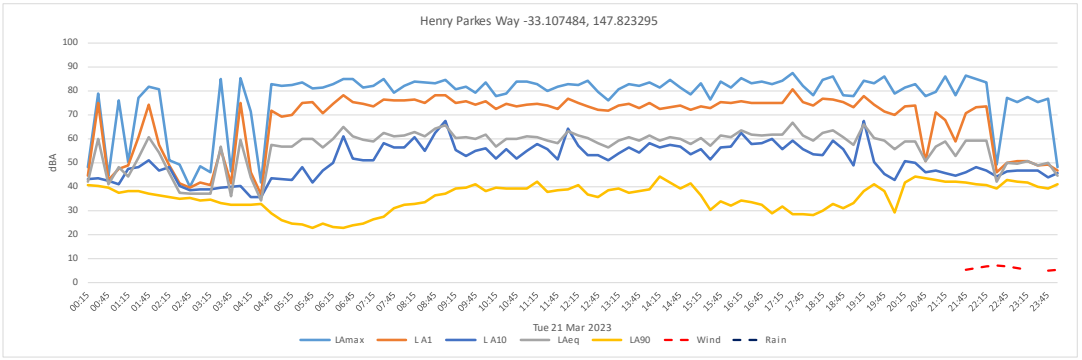
LAmax
L A1
L A10
LAeq
LA90
Wind
Rain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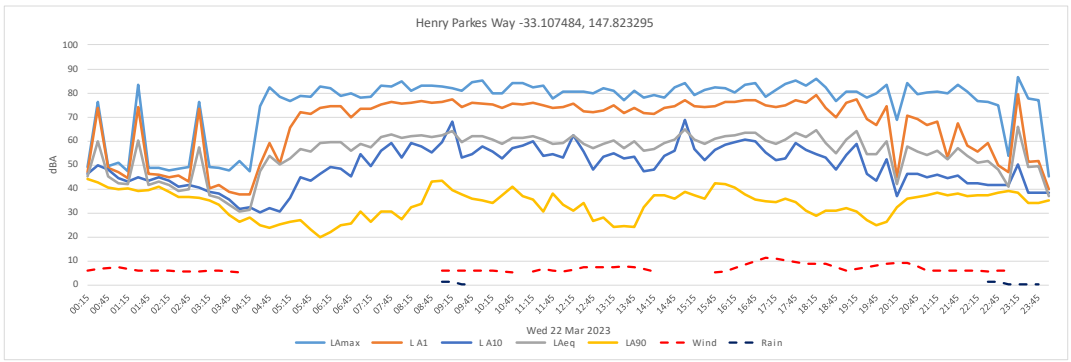
dBA
Tue 21 Mar 2023
LAmax
L A1
L A10
LAeq
LA90
Wind
Rain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dBA
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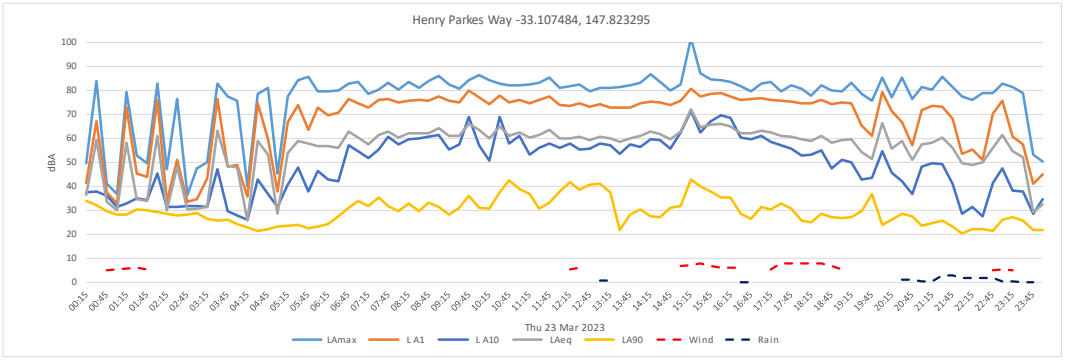
LAmax
L A1
L A10
LAeq
LA90
Wind
Rain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dBA
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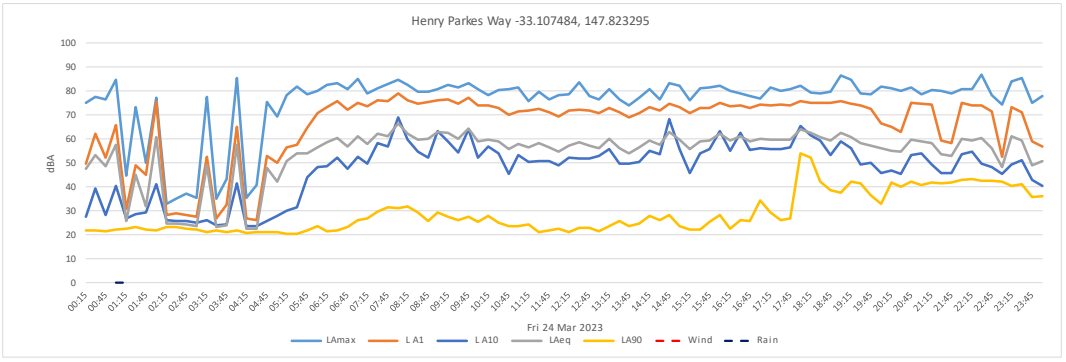
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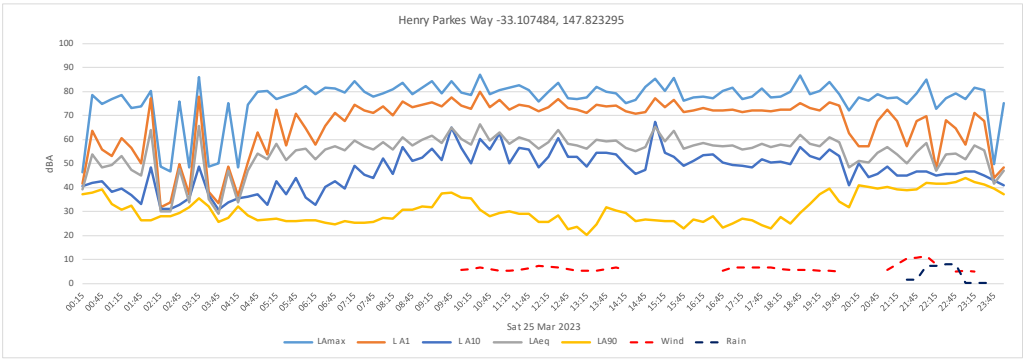
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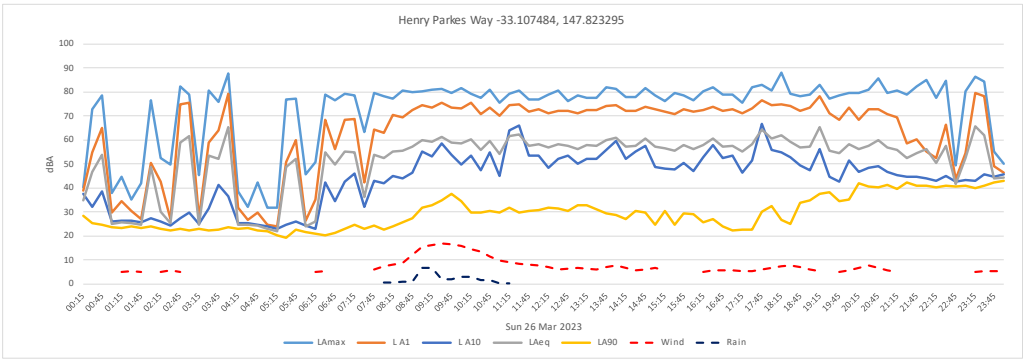
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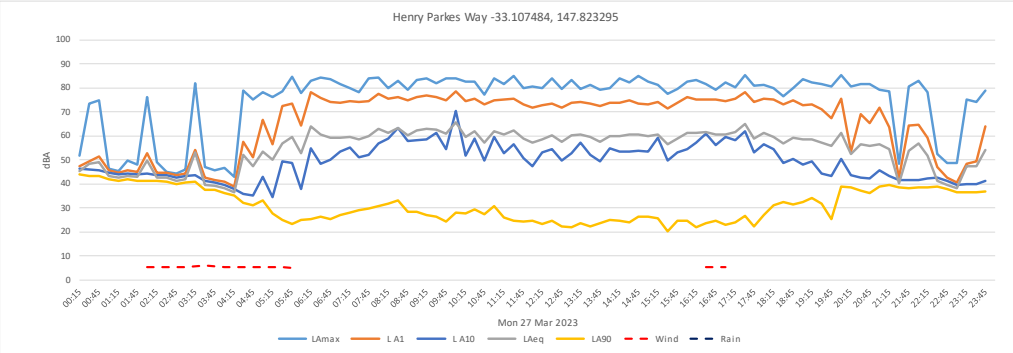
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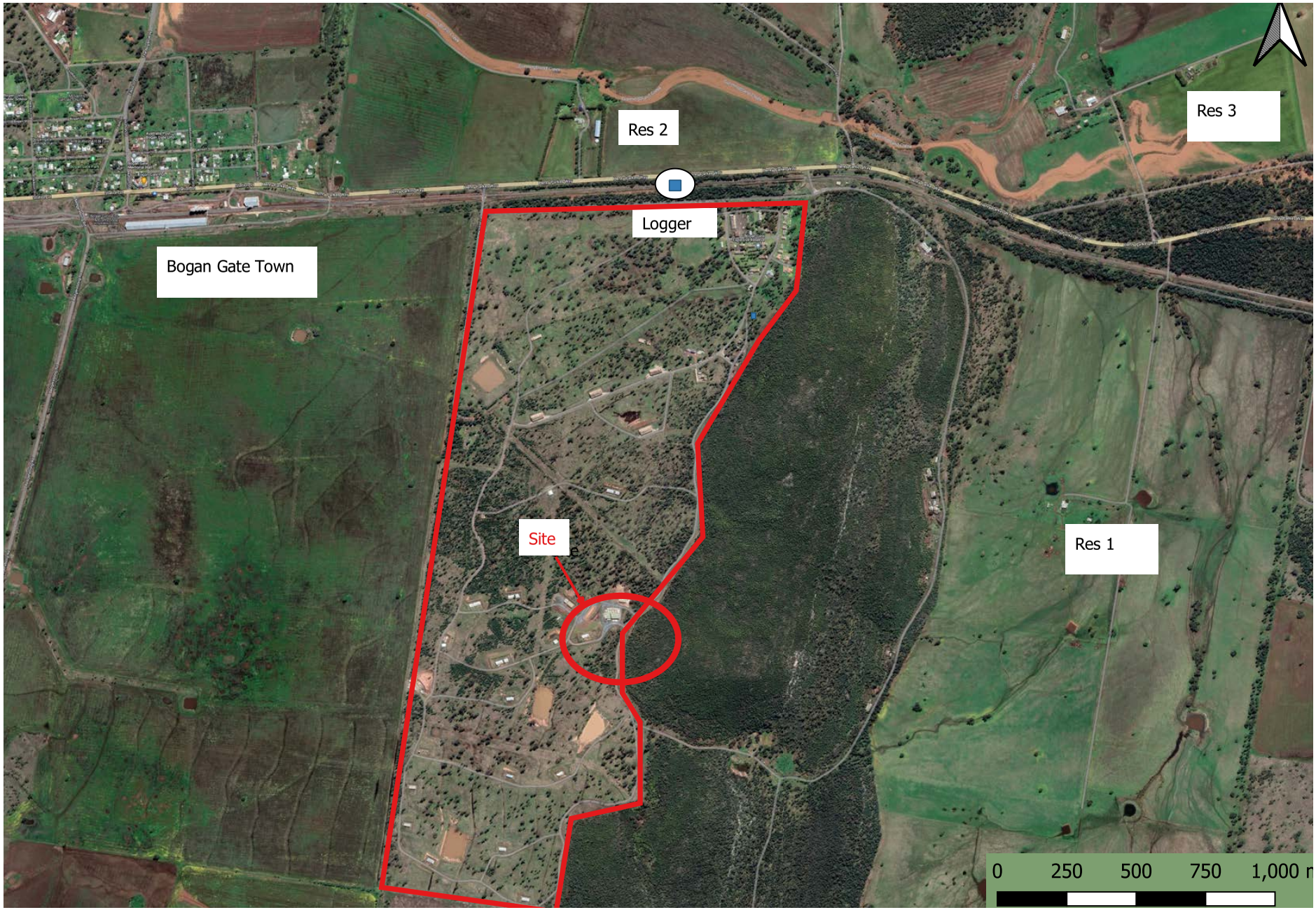
dBA
Mon 27 Mar 2023
LAmax
L A1
L A10
LAeq
LA90
Wind
Rain

B. Appendix B – Site Map and Surrounds

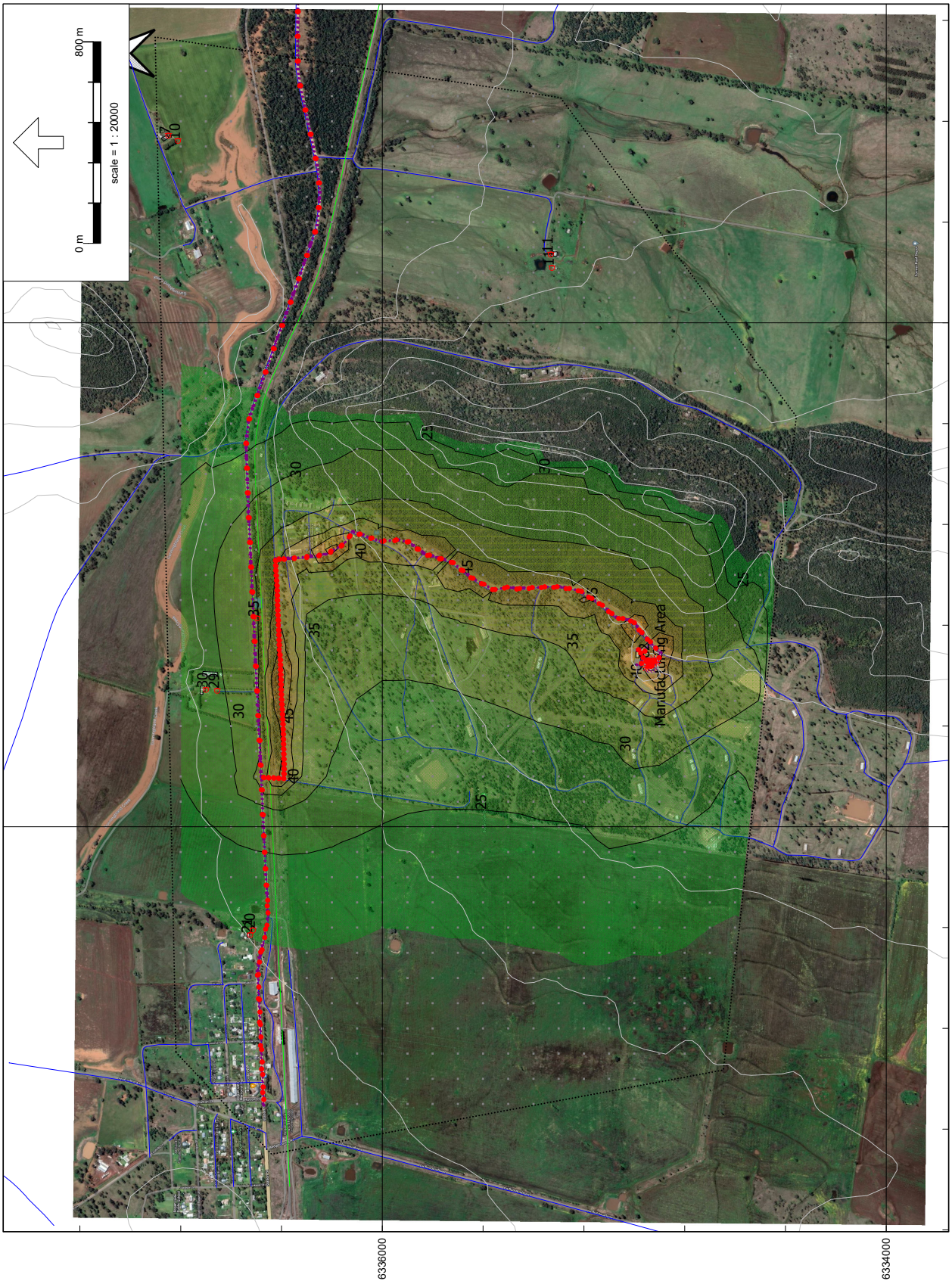
Map of Solar Mining Site and Surrounds


Res 2
Res 3
Logger
Bogan Gate Town
Site
Res 1
0
250
500
750
1,000 m

C. Appendix C – Noise Contour Plots

Noise Contours

- Day Operations – ANE Facility normal daytime operations
- Traffic noise generation – HPW existing traffic and Generated Traffic from Development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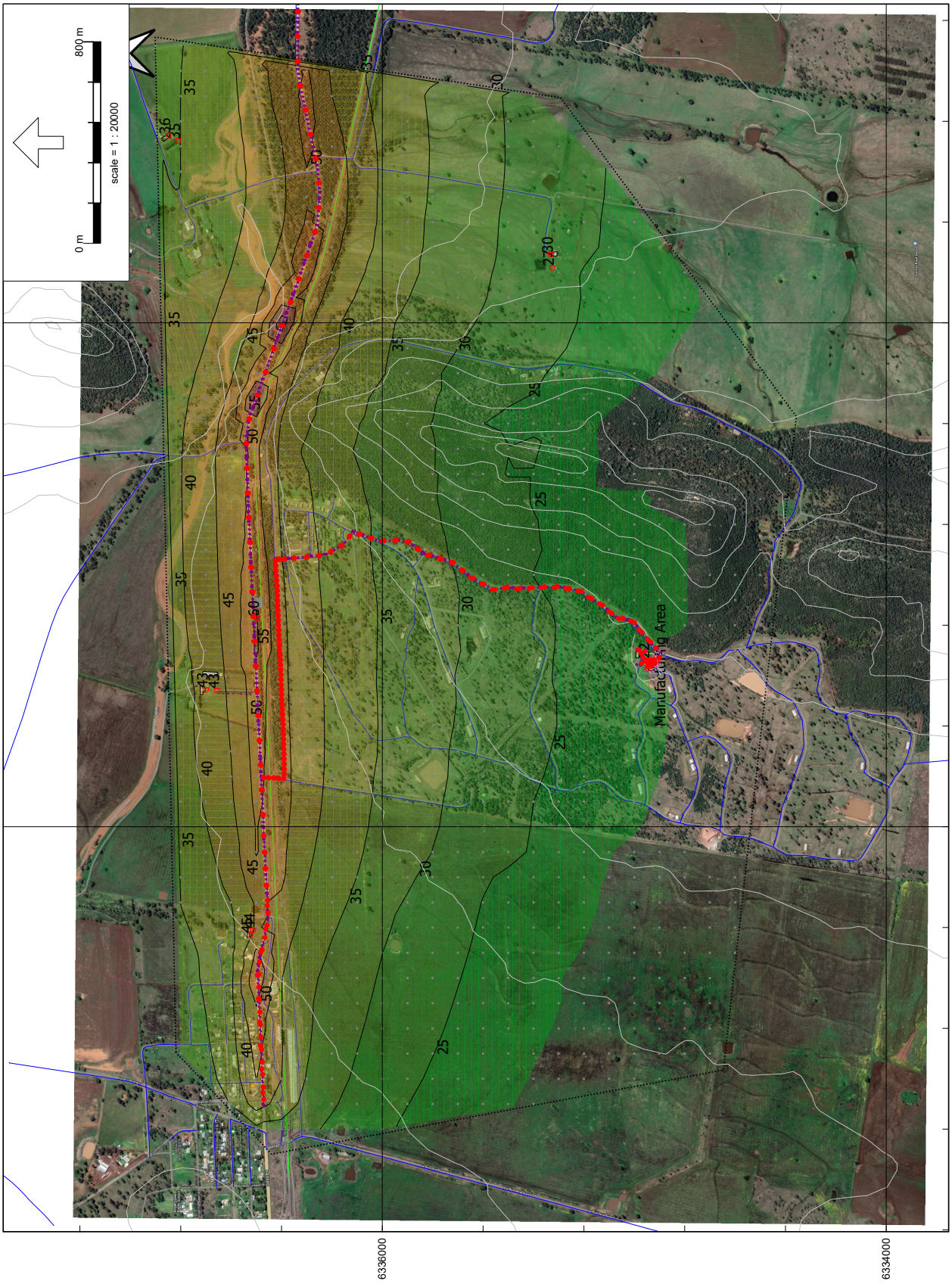
0 m
578000
576000
6336000
6334000
Manuka Oval Area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Manufacturing Area
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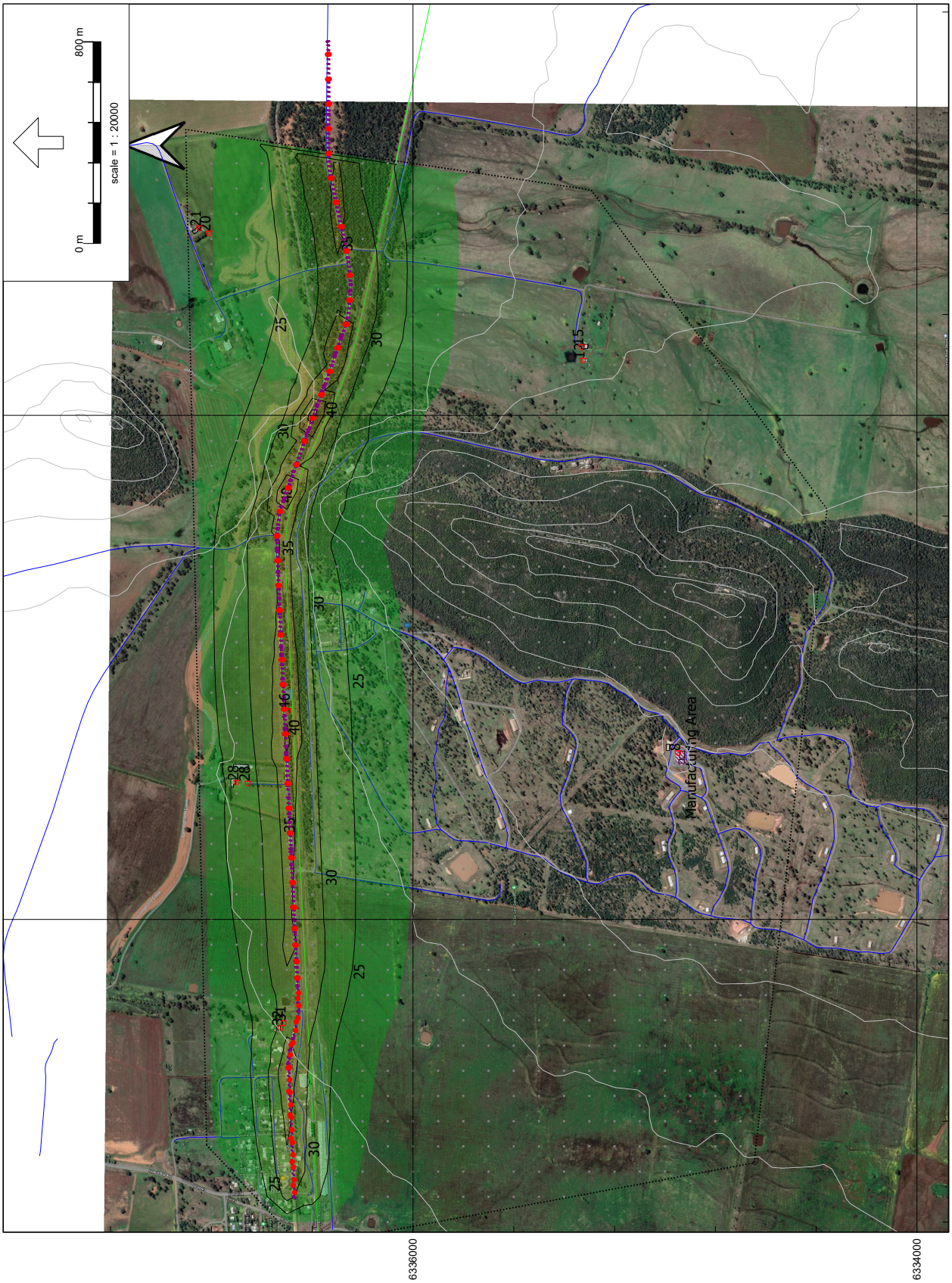
6336000
6334000


800 m
scale = 1 : 20000
0 m
Manufacturing Area
578000
576000
6336000
6334000

Appendix L. SMS Bushfire Management Plan, prepared by SMS

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

Environmental Management Plan

Bushfire Assessment and Management Plan

Document Number: SMS-HSQ-O00.X11
Status: Working
Version: 05 (04 April 2023)
Owner: Manager Compliance
Review: 3 years

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Table of Contents

1 Introduction 3

2 Scope 3

3 Purpose of this Plan 3

4 Site Description 4

5 Current Land-uses 4

6 Proposed Land-uses 4

7 Bushfire Condition Assessment 5

Climate and Bushfire Season 5
History of Bushfires at BGER 5
Bushfire Prone Land Mapping 5
Vegetation and Slope Assessment 6
Bushfire Hazard Assessment 6
Broad Brush Risk Assessment 7

8 Bushfire Protection Measures 7

Asset Protection Zones 8
Access 8
Construction, Siting and Design 10
Landscaping 10
Services 11
Water Supply and Storage 11
Bushfire Management Procedure 11
Evacuation Procedure 12
First Aid Station 12

9 Management System 12

Site Manager 12
Site Employees and Contractors 12
Manager Compliance 13

10 Document Information 13

Terms and Definitions 13
Related Documents 13

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Reference Information 14
Change Information 14

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1 Introduction

1-1 This bushfire assessment and management Plan identifies the minimum requirements for Solar Mining Services (SMS) personnel to implement and to adequately manage risk from fires relating to the SMS controlled workplaces within Bogan Gate Explosives Reserve (BGER).

1-2 The objective of this plan is to minimise the potential risk of uncontrolled fires from SMS operations at the BGER as well as the response to bushfire and other fire threats at the facility.

1-3 The plan has been developed in accordance with the RFS Guideline, Planning for Bushfire Protection 2019.

1-4 The NSW Rural Fire Service Bogan Gate Brigade and Fire and Rescue NSW have been consulted as part of the preparation of the Bushfire Management Plan.

1-5 This follows the requirements of the SMS Integrated Management System (IMS), particularly ***SMS-IMS-B00.L10 Environment Policy*** and supports ***SMS-HSQ-000.X01 - HSEQS Management Plan*** to identify and control hazards that may arise at SMS workplaces.

2 Scope

2-1 This bushfire assessment and management plan has been carried out on the basis of relevant standards and guidelines, including:

a) Section 100B of the Rural Fires Act 1997.

b) Clause 47 of the Rural Fires Regulation 2022.

c) Planning for Bush Fire Protection 2019 (PBP).

2-2 This plan is applicable to all SMS personnel and contractors conducting activities on the SMS lease area within the BGER.

2-3 This plan is to be used for all circumstances where operational activities occur within SMS BGER work area, including:

a) Manufacture, re-work, or storage of emulsion.

b) Storage and handling of raw materials.

c) Transfer of products or raw materials.

d) Maintenance operations.

e) Response to bushfire emergency situations.

3 Purpose of this Plan

3-1 The purpose of this bushfire assessment and management plan is to minimise the potential risk of uncontrolled fires impacting on SMS operations at the BGER through the design and operation of the SMS ANE Facility in accordance with the relevant guidelines, including the RFS Guideline, Planning for Bushfire Protection 2019.

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4 Site Description

4-1 The site of the SMS ANE Facility is wholly within Lot 2 DP 1064474, 3577 Henry Parkes Way, Bogan Gate.

4-2 The SMS ANE Facility is located 1.5km east of Bogan Gate and approximately 35km west of Parkes, via the Henry Parkes Way.

4-3 Access to Lot 2 DP 1064474 is from Henry Parkes Way and Memorial Lane which are bitumen sealed public roads.

4-4 An internal private road from Memorial Lane to the SMS ANE Facility is the primary access used for all SMS transport operations. The first 1,300m of this road from Memorial Lane to the BGER Control Room is constructed to a minimum 6m wide bitumen sealed standard with 1m gravel shoulders. From the BGER Control Room to the SMS ANE Facility (approximately 1,200m distance) the internal road is constructed to a minimum 6m wide all-weather gravel road standard.

4-5 A location plan is provided in Appendix A.

5 Current Land-uses

5-1 Lot 2 DP 1064474 is currently owned by Lexa Enterprises Pty Ltd who have granted various leases for existing land-use activities on the site, including a lease to Johnex for explosives manufacturing and storage operations, Howards and Sons for fireworks storage and more recently the SMS ANE Facility.

5-2 The operations on Lot 2 DP 1064474 are known as the Bogan Gate Explosives Reserve (BGER).

5-3 The BGER is generally surrounded by rural land comprising broadacre farming paddocks, native vegetation and regrowth vegetation. The Henry Parkes Way and railway line, to the north, directly adjoins the BGER.

5-4 A plan showing the layout of existing land-uses at the BGER is provided in Appendix B.

6 Proposed Land-uses

6-1 SMS propose to manufacture up to 20,000 tonnes of ANE per annum within the existing manufacturing plant, served by five (5) outlying chemical storage sheds that will feed the plant with the raw product required to make ANE.

6-2 Three (3) of the storage sheds are proposed new sheds to be constructed for AN storage.

6-3 Two (2) new horizontal tanks are also required for ANE storage.

6-4 Existing internal roads are to be used to link the SMS ANE Facility at the BGER to Memorial Lane and the Henry Parkes Way.

6-5 Limited clearing of vegetation is required to achieve adequate Asset Protection Zones at chemical storage sheds.

6-6 A plan showing the layout of the SMS ANE Facility (including additional sheds) is provided in Appendix C.

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7 Bushfire Condition Assessment

7-1 The site assessment methodology from Appendix 1 of PBP has been applied in this assessment to determine the Asset Protection Zone (APZ) requirements.

Climate and Bushfire Season

7-2 Climatic conditions influence the environmental impacts and management of SMS operations, particularly regarding noise, water, and air quality related matters.

7-3 Part of Lot 2 DP 1064474 is shown as 'Bushfire Prone Area' on the NSW RFS Bushfire Prone Land Map for Parkes Shire.

7-4 Bogan Gate is within the Australian Climate Zone 4 which is described as having hot dry summers and cool winters.

7-5 The mean rainfall for Bogan Gate is 365mm per year.

7-6 The bush fire season generally runs from October to March.

7-7 The warmest month in Bogan Gate is January, with an average high-temperature of 32.6°C and an average low-temperature of 20.4°C. January is also the least humid month, with an average relative humidity of 45%.

7-8 July is the coldest month, with an average high-temperature of 12.7°C and an average low-temperature of 4.2°C.

7-9 Wind rose data for summer, autumn, winter and spring 2022 is included in Appendix D.

History of Bushfires at BGER

7-10 Bushfires on a large scale are an irregular occurrence in the Bogan Gate area. Such events usually only occur after a prolonged period of below average rainfall, with fires originating from electrical storms, roadsides, railways, farming or industrial activities during hot windy conditions.

7-11 Information on fire history is lacking in detail at the BGER, with the last known fire occurring in the 2014 as a result of a fireworks explosion leading to a grass fire in the Bogan Gate area.

Bushfire Prone Land Mapping

7-12 The Rural Fires Act (RF Act) 1997 requires the preparation of bushfire prone land mapping for Local Government Areas in NSW.

7-13 Land along the eastern boundary of Lot 2 DP 1064474 is identified as Bushfire Prone Land – Vegetation Buffer and Vegetation Category 1.

7-14 A map showing the bushfire prone land in and around the SMS ANE Facility is provided in Appendix E.

7-15 Consultation with NSW Rural Fire Service and Fire and Rescue NSW has been undertaken by SMS in the preparation of the SMS ANE Facility Bushfire Management Plan.

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Vegetation and Slope Assessment

7-16 The SMS site has been majorly cleared of native vegetation.

7-17 The predominant vegetation has been assessed for a distance of 140 metres from the SMS ANE Facility.

7-18 The slope that would most significantly influence fire behaviour was determined over a distance of 100 metres from the SMS ANE Facility. The effective slope has been determined by the contours shown on detail surveys.

7-19 The site has a slope from north-west to south-east ascending.

7-20 The western and southern sides are a mix of grassland with isolated box eucalypts and pines to form small patches of regrowth woodland.

7-21 The northern side comprises grassland and drainage corridor, with patches of woodland.

7-22 The eastern side comprises grassland, roads and drainage corridor, with Dry Sclerophyll Forest further afield.

7-23 The effective slope under the bushfire hazard to the east falls under PBP slope category of 'all upslopes and flat land'. The slope to the north, south and west fits within the '>0-5 degrees downslope'.

Bushfire Hazard Assessment

7-24 The site assessment methodology from Appendix 1 of PBP has been applied in this assessment to determine the Asset Protection Zone (APZ) requirements.

7-25 ***Table 7-25*** provides an evaluation of APZ criteria, as follows:

Transect	Slope	Vegetation Formation	Required APZ	Proposed APZ	BAL
North	>0° to 5° downslope	Grassland and small patches of woodland	42m	42m	N/A
East	'all upslopes and flat land'	Grassland and Dry Sclerophyll Forest	67m	67m	N/A
South	>0° to 5° downslope	Grassland	36m	36m	N/A
West	>0° to 5° downslope	Grassland and small patches of regrowth woodland	40m	40m	N/A

Table 7-25 – Asset Protection Zones

7-26 SMS are mindful not to unnecessarily clear vegetation where practical.

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Broad Brush Risk Assessment

7-27 SMS have carried out a risk assessment at the BGER to:

a) Identify process risks at the SMS ANE Facility.

b) Identify the fire risks, including the sources of ignition, sources of fuel and the source of oxygen.

c) Identify people at risk, including the people occupying land in and around the SME ANE Facility.

d) Evaluate the risk of fires in accordance with the RFS Guidelines Planning for Bushfire Protection 2019, AEISG, AS2187 and the SMS broad brush risk assessment process, to provide the basis for listing appropriate responses to the various fire scenarios.

e) Provide guidance on the design of facilities and their clearances from other buildings, fuel source features and bushfire prone land.

f) Provide guidance on the design of essential services and facilities necessary to deal with fires at the SMS ANE Facility and wider BGER, including fire extinguishers at buildings, first aid, water supplies for firefighting purposes and access for firefighters and / or emergency evacuation.

8 Bushfire Protection Measures

8-1 The proposed development has been defined as other development under Section 8 of PBP, requiring fire protection through Bushfire Protection Measures (BPM's).

8-2 Section 8.3.10 commercial and industrial development of the PBP states:

"where no residential component is included, commercial and industrial development is addressed through the aim and objectives of PBP. A suitable package of BPMs should be proposed commensurate with the assessed level of risk to the development. The scale of the development and numbers of people likely to be occupying the building will be directly relevant to the BPMs proposed. The provisions within Chapter 7 of this document should be used as a base for the development of a package of measures."

8-3 There is no residential component associated with the SMS ANE Facility.

8-4 BPM's have been considered against the baseline criteria in PBP and detailed in the following sections.

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Asset Protection Zones

8-5 ***Table 8-5*** demonstrates compliance of the proposed development against the performance criteria and acceptable solutions for APZ's, as follows:

Performance criteria	Acceptable solutions	Comment
APZs are provided commensurate with the construction of the building and a defendable space is provided.	APZs are provided in accordance with Table A1.12.2 or A1.12.3 in Appendix 1.	Appropriate APZs are established around existing SMS buildings to meet the requirements of Table A1.12.3. Some clearing of regrowth pines west of new sheds is required to meet APZ criteria.
APZs are managed and maintained to prevent the spread of a fire to the building.	APZs are managed in accordance with the requirements of Appendix 4 of PBP.	APZs will be maintained in perpetuity at the SMS ANE Facility, or until the use ceases.
the APZ is provided in perpetuity. APZ maintenance is practical, soil stability is not compromised and the potential for crown fires is minimised.	APZs are wholly within the boundaries of the development site. APZs are located on lands with a slope less than 18 degrees.	The SMS ANE Facility is located centrally upon the allotment and the APZ will be fitting within the subject land. The land has less than 5% slope (<18 degrees).

Table 8-5 – Asset Protection Zones

8-6 A small amount of clearing of regrowth pines is required at the western boundary to achieve AZP for proposed new storage sheds.

Access

8-7 ***Table 8-7*** demonstrates compliance of the proposed development against the performance criteria and acceptable solutions for access, as follows:

Performance criteria	Acceptable solutions	Comment
Firefighting vehicles are provided with safe, all-weather access to structures and hazard vegetation.	Property access roads are two-wheel drive, all-weather roads.	The existing access is constructed to a minimum 6m wide bitumen sealed standard to the BGER Control Room, with the access road to the SMS manufacturing plant constructed to a minimum 6m wide compacted gravel standard to provide all-weather access for heavy vehicles.
The capacity of access roads is adequate for firefighting vehicles.	The capacity of road surfaces and any bridges/ causeways is sufficient to carry fully loaded firefighting vehicles (up to 23 tonnes), bridges	The existing internal road network is capable of handling up to 36 tonne trucks and therefore has sufficient capacity.

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	and causeways are to clearly indicate load rating.	
There is appropriate access to water supply.	There is suitable access for a Category 1 fire appliance to within 4m of the static water supply where no reticulated supply is available.	Fire hose reels are available in accordance with the relevant clauses of AS 2419.1:2005. Water tanks with firewater reserves and Stortz fittings are located near the SMS manufacturing plant. Two large water holding ponds are located at the BGER.
Firefighting vehicles can access the dwelling and exit the property safely.	Minimum 4m carriageway width and vertical clearance of 4m to any overhanging obstructions, including tree branches. Property access must provide a suitable turning area in accordance with Appendix 3. Curves to have a minimum inner radius of 6m and are minimal in number to allow for rapid access and egress. The minimum distance between inner and outer curves is 6m; the crossfall is not more than 10 degrees. Maximum grades for sealed roads do not exceed 15 degrees and not more than 10 degrees for unsealed roads.	The existing internal road network is compliant with a width exceeding 4 metres, vertical clearance of more than 4 metres and suitable turning area for B-double trucks to circulate. The land is relatively level and the internal service roads do not exceed the maximum prescribed slope.

Table 8-7 – BPM Emergency Vehicle Access

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Construction, Siting and Design

8-8 ***Table 8-8*** demonstrates compliance of the proposed development against the performance criteria and acceptable solutions in relation to the construction, siting and design of the SMS facilities, as follows:

Performance criteria	Acceptable solutions	Comment
The proposed building can withstand bush fire attack in the form of embers, radiant heat and flame contact.	BAL is determined in accordance with Tables A1.12.5 to A1.12.7; and construction provided in accordance with the NCC and as modified by section 7.5 (please see advice on construction in the flame zone).	The SMS manufacturing plant and sheds are compliance with the BCA and are typical metal clad shed structures on concrete slabs. There are no specific construction standards in the NCC or Australian Standard AS3959 for the SMS buildings and structures. In the event of bushfire, the site would be evacuated.
Proposed fences and gates are designed to minimise the spread of bush fire.	Fencing and gates are constructed in accordance with section 7.6.	Fencing is galvanised steel mesh in accordance with AS1725.

Table 8-8 – BPM Performance Criteria

Landscaping

8-9 ***Table 8-9*** demonstrates compliance of the proposed development against the performance criteria and acceptable solutions for landscaping, as follows:

Performance criteria	Acceptable solutions	Comment
Landscaping is designed and managed to minimise flame contact and radiant heat to buildings, and the potential for wind-driven embers to cause ignitions.	Compliance with the NSW RFS 'Asset protection zone standards' (see Appendix 4). A clear area of low-cut lawn or pavement is maintained adjacent to the house. Fencing is constructed in accordance with section 7.6. Trees and shrubs are located so as not to impact buildings. Windbreaks are not located where fires are likely to approach.	The SMS ANE Facility is majorly cleared of vegetation. There are no vegetation windbreaks at the facility. There is no continuous canopy of trees or individual trees that overhang buildings. The boundary of the site is currently fenced with a secure access point.

Table 8-9 – Landscaping

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Services

8-10 ***Table 8-10*** demonstrates compliance of the proposed development against the performance criteria and acceptable solutions in relation to utility services, as follows:

Performance criteria	Acceptable solutions	Comment
An adequate water supply is provided for firefighting purposes.	A static water supply is provided where no reticulated water is available.	Reticulated water supply is available at the SMS ANE Facility, as well as onsite water tanks for firefighting purposes. Large water holding ponds are also located at the BGER.
Location of electricity services limits the possibility of ignition of surrounding bush land or the fabric of buildings.	Where overhead, electrical transmission lines are proposed as follows: Lines are installed with short pole spacing (30m), unless crossing gullies, gorges, or riparian areas; and No part of a tree is closer to a power line than the distance set out in accordance with the specifications in ISSC3 Guideline for Managing Vegetation Near Power Lines.	The SMS ANE Facility draws its power from generators and there are no new powerlines proposed. Existing powerlines at the BGER appear to be maintained with cleared areas by Essential Energy.

Table 8-10 – BPM Services

Water Supply and Storage

8-11 The SMS ANE Facility is serviced by a 40mm diameter water service from the Parkes Shire Council B-Section Pipeline.

8-12 The SMS ANE Facility currently has a total of 100,000 litres of tank water storage, located directly south of the manufacturing plant, with one tank (50,000 litres) reserved for firefighting purposes.

8-13 Appropriate specification Stortz fittings are installed at the fire reserve tank for use by emergency services.

Bushfire Management Procedure

8-14 In the event of bushfire or other sources of fire at the SMS ANE Facility, the Site Manager or other member of staff is to dial 000 as well as contact the BGER Manager to report the fire.

8-15 Where safe to do so by the Site Manager, SMS staff shall take action to fight the fire using appropriate firefighting equipment available at the SMS ANE Facility.

8-16 In the event of a large fire or bushfire, the Site Manager is to ensure that all processing equipment is turn off and all staff, contractors and visitors evacuate the site in accordance with the BGER and SMS Emergency Evacuation Plans.

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Evacuation Procedure

8-17 In the event of a large fire or bushfire, the Site Manager is to ensure that all processing equipment is turn off and all staff, contractors and visitors evacuate the site in accordance with the BGER and SMS Emergency Evacuation Plans.

8-18 Once the evacuation procedure is completed, the Site Manager and all staff are not to enter the SMS ANE Facility until it is deemed safe to do so by the BGER Manager and authorised emergency services.

First Aid Station

8-19 Safety showers and eyewash station are provided at or near dangerous goods and hazardous substances where the risk of injury to a worker is likely through the worker storing, handling or using the substance.

8-20 The safety shower or eyewash station is located such that a worker has unobstructed access, must be more than 2 meters and no more than 15 m from the storage, handling or use point. Safety showers and eyewash stations are located in accordance with relevant standards.

8-21 The water delivered to the safety shower or eyewash station is clean potable water, having a continuous flow and at a temperature no greater than 40 degrees Celsius at any time.

8-22 Safety showers and eyewash stations have been designed, constructed and continue to be operated in accordance with the Australian Standard 4775:2007 *Emergency eyewash and shower equipment* (AS4775).

9 Management System

Site Manager

9-1 The Site Manager is responsible for:

a) Identification of hazards likely to cause environmental harm on the site.

b) Provision of resources to maintain control of hazards likely to cause environmental harm on the project and maintain risk to workers and the environment to acceptable levels.

c) Seek support to assess materials, tasks or equipment to be used on the site, likely to cause environmental harm.

d) Implement this plan.

e) Monitor site activities to ensure conformance to this plan.

Site Employees and Contractors

9-2 Any SMS employee or contractor on site is responsible for:

a) Following the requirements of this bushfire management plan.

b) Ensuring any risk of fire is reported as soon as practical to the Site Manager.

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c) Respond to fires as soon as practicable, in accordance with SMS site procedures.

d) Manage fires and emergency evacuation procedures in accordance with the SMS site procedures for fire management, including this Bushfire Management Plan.

Manager Compliance

9-3 The Manager Compliance is responsible to:

a) Identify the legislative requirements relevant to the facility.

b) Assist the Site Manager to identify suitable specialist personnel to provide inspection and audit processes.

9-4 Provide an audit schedule and adequate resources to conduct audits and inspections for timely rectification of non-conformances to this plan.

10 Document Information

10-1 Relevant legislation, standards and codes are regularly reviewed and monitored for updates and are included in the ***SMS-IMS-B00.R01 – National Legislation Register*** for tracking and management. Related documents and reference information in this section provides the linkage and source to develop and maintain the site compliance register and document management system.

Terms and Definitions

10-2 Terms and definitions are listed in a single definitions document, refer to the ***SMS-IMS-000.G01 - Glossary of terms and definitions*** on SharePoint.

Related Documents

10-3 Related documents, listed in ***Table 13-13***, are internal documents directly related to or referenced from this document.

Number	Document Type	Title
SMS-IMS-B00.L10	Policy	Environment Policy
SMS-IMS-B00.R01	Register	National Legislation Register
SMS-ENV-A00.R02	Register	Bushfire Assessment and Management Plan
SMS-MAN-A01.R03	Register	Operational aspects & impacts register
SMS-IMS-000.G01	Guideline	Glossary of terms and definitions
SMS-HSQ-000.X01	Management Plan	HSEQS Management Plan

Table 13-1 – Related documents

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Reference Information

10-4 Reference information, listed in ***Table 10-***, is information that is directly related to the development of this document or referenced from within this document.

Reference	Title
BCA	NSW Building Code of Australia
RF Act	NSW Rural Fires Act 1997
PFBFP	NSW RFS Planning for Bushfire Protection 2019
WHSA	Work Health and Safety Act 2011 NSW
WHSR	Work Health and Safety Regulations 2017 NSW
EA	Explosives Act 2003 NSW
ER	Explosives Regulations 2012 NSW

Table 10-4 – Reference information

Change Information

10-5 Full details of the document history are recorded in the document control register, by version. A summary of the current change is provided in ***Table 10-5***.

Version	Date	Change Summary

Table 10-5 – Change information

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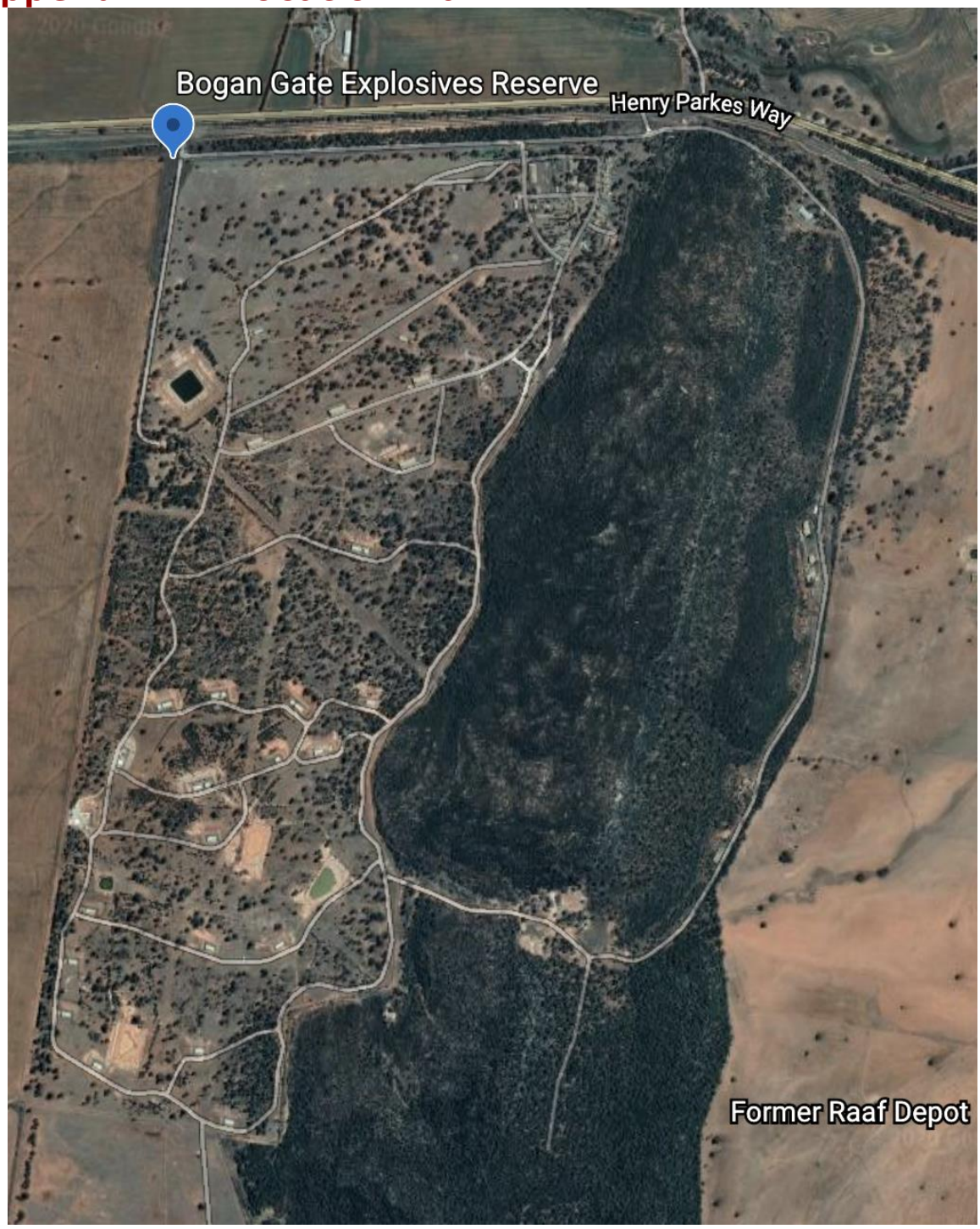
Appendix A - Location Plan



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Appendix B - Existing Land-use Plan



BGER Evacuation Point

BGER Main Gate Entry

BGER Control Room

Johnex

SMS

Howards

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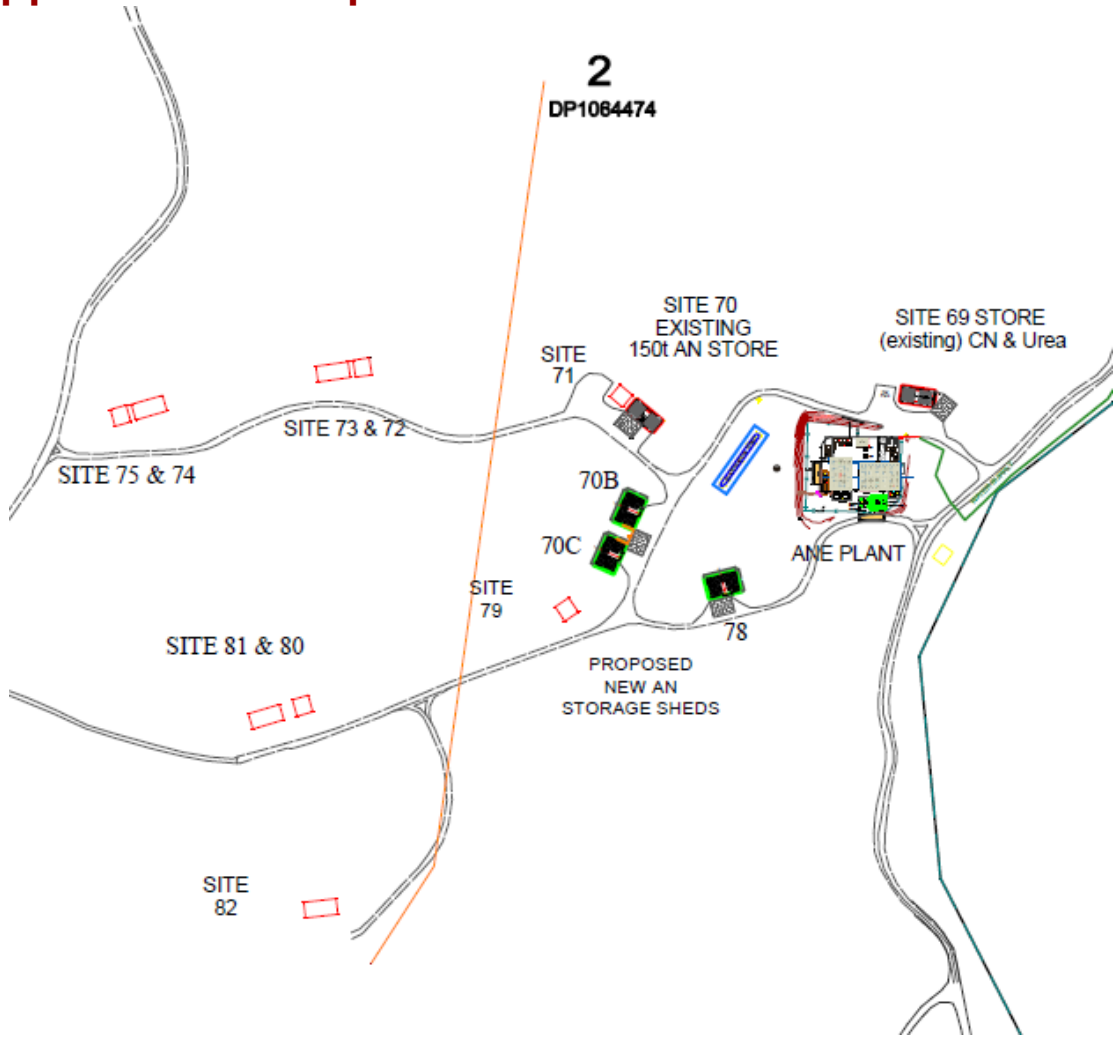
Appendix C - Proposed SMS Additions



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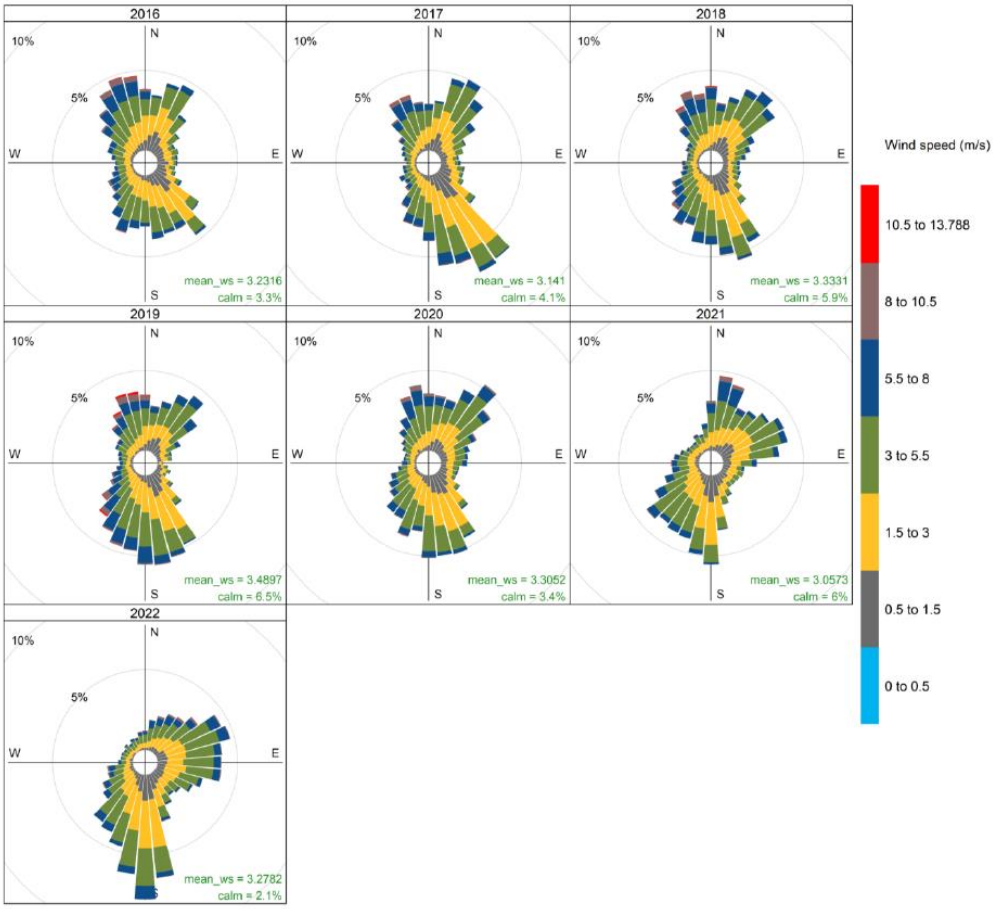
Appendix D - Wind Rose Data



Source: – Northparkes meteorological monitoring station

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Appendix E – RFS Bushire Prone Land Map



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Appendix M. Envirowest Preliminary Contamination Investigation

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

Preliminary contamination investigation

Part 3577 Henry Parkes Way, Bogan Gate NSW



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0	R12771c	4 February 2021	Tiffany Skinner BNatRes (Hons) Environmental scientist	Greg Madafiglio CEnvP Senior environmental scientist	

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Summary report

Background
A general industry development is proposed for a parcel of land located within Lot 2 DP1064474, 3577 Henry Parkes Way, Bogan Gate NSW. The development will include a new explosives emulsion plant and the redevelopment of three existing sheds. The development is located on a former explosives reserve. The former land-uses are potential sources of contamination. A preliminary contamination investigation is required for the site to determine suitability for the proposed land-use.

Objectives of investigation
The objective of the investigation was to determine suitability of the site for the proposed land-use.

Scope
The scope was to identify past potentially contaminating activities, identify potential types of contamination, discuss the site condition, provide a preliminary assessment of site contamination and assess the need for further investigation to determine suitability for commercial land use. The scope of works included site inspection, soil sampling and analysis of the soil samples for contaminants of concern.

Summary
An assessment of the site was made on 18 January 2021 consisting of a site walkover, desktop study and limited soil sampling.

The preliminary contamination assessment comprised a soil sampling and laboratory analysis program. Four soil samples were collected from the investigation area and analysed for contaminants of concern.

The site has a land-use history as part of an explosive storage facility. No evidence of mines, sheep dips or mixing sheds were identified on the site from the review of site history and site walkover. The site consisted of native grasses, herbs and weeds. Medium sized cypress pines had been cleared from the site.

The levels of all metals and explosives screen of potential contaminants assessed in the soil sampling program were below the commercial land-use thresholds (NEPC 1999).

Recommendations
The investigation area is suitable for the proposed commercial land-use.

Contents

page

Summary report 3
1. Introduction....5
2. Objectives....5
3. Scope of work....5
4. Site identification 5
5. Site history....6
6. Site condition and surrounding environment 8
7. Conceptual site model....9
8. Data quality objectives (DQO) 11
9. Sampling analysis plan and sampling methodology 11
10. Quality assurance and quality control....12
11. Assessment criteria 13
12. Results and discussion....14
13. Site characterisation....14
14. Conclusions and recommendations....15
15. Report limitations and intellectual property....16
16. References....17
Figures 18
Figure 1. Locality map
Figure 2. Site plan and sampling locations
Figure 3. Photographs of the site
Appendices 22
Appendix 1. Sample analysis, quality assurance and quality control (QAQC) report
Appendix 2. Field sampling log
Appendix 3. Soil analysis results – ALS report number ES2101610 and chain of custody form
Appendix 4. Soil sampling protocol

1. Introduction

A general industry development is proposed for a parcel of land located within Lot 2 DP1064474, 3577 Henry Parkes Way, Bogan Gate NSW. The development will include a new explosives emulsion plant and the redevelopment of three existing sheds. The development is located on a former explosives reserve. The former land-uses are potential sources of contamination. A preliminary contamination investigation is required for the site to determine suitability for the proposed land-use.

2. Objectives

The objective of the investigation was to determine suitability of the site for the proposed land-use.

3. Scope of work

Envirowest Consulting Pty Ltd was commissioned by Solar Mining Services to undertake a preliminary contamination investigation, in accordance with the contaminated land management planning guidelines, from the *Contaminated Land Management Act 1997* and the *State Environmental Policy No. 55 (SEPP 55)*, for a parcel of land located within Lot 2 DP1064474 Henry Parkes Way, Bogan Gate NSW. The objective was to identify past potentially contaminating activities, identify potential contamination types, discuss the site condition, provide a preliminary assessment of site contamination and assess the need for further investigation. The scope of works included site inspection, soil sampling and analysis of the soil samples for contaminants of concern.

4. Site identification

Address	3577 Henry Parkes Way Bogan Gate NSW
Deposited plans	Total Lot 2, 3, 4, 5 DP1064474 (whole reserve) Investigation area part Lot 2 DP 1064474
Latitude and longitude	-33.07^{o} 147.49^{o}
Geographic coordinates	55H E576598m N6334946m
Client	Solar Mining Services
Owner	Yallawadgera Investments Pty Ltd
Current occupier	Solar Mining Services
Area	Total approximately 690 hectares Investigation area 100m by 100m
Local government area	Parkes Shire Council
Current zoning	RU1 – Primary Production (Parkes LEP 2012)
Trigger for investigation	Redevelopment
Locality map	Figure 1

5. Site history

5.1 Land-uses

The historical land-use of the site is part of an explosives reserve. The reserve was used to store explosives.

5.2 Summary of council records

Lot 4, lot 5 and the central section of lot 3 is mapped in a biodiversity area, terrestrial biodiversity map (Parkes LEP 2012).

A request for information was sent to Parkes Shire Council however, to date no response has been received.

5.3 EPA contaminated sites list

The investigation area is not listed on the NSW EPA register of contaminated sites (accessed 20 January 2021) or sites notified to the EPA (14 December 2020).

5.4 Sources of information

Site inspection 18 January 2021 by Greg Madafiglio of Envirowest Consulting
NSW EPA records of public notices under the CLM Act 1997
Soil and geological maps
Historical aerial photographs
Parkes Local Environmental Plan 2012 (LEP 2012)
Department of Defence GEMS Environmental Factor Management Contaminated Site Records

5.5 Review of historic aerial photographs, maps and plans

The site contains numerous bunded storage sheds located sparsely across the site. An abandoned residential village is evident in the north eastern corner.

Aerial photographs indicate that no significant changes are evident on the site since the 1960's.

5.6 Chronological list of site uses

Historically the site was owned and operated in some capacity as an explosive's storage facility by the Department of Defence. Explosives are expected to have been stored in numerous bunded sheds located on the site from 1940 until 1980. No explosives were tested or manufactured in the assessment area.

The site was decommissioned by the Department of Defence in 1995. The site was sold in 2004 and purchased by Timber Creek Holdings Pty Ltd.

The investigation area is currently leased by Solar Mining Services.

A historical local knowledge suggest that a rifle range may have been located at the south of the site. This area is outside the investigation area.

No horticultural activities, mines, sheep dips, underground storage tanks (UST) are known to have been located on or within the investigation area from the site inspection and site history.

5.7 Buildings and infrastructure

Numerous bunded sheds, used for the storage of explosives are located sparsely over the site. An abandoned residential village is located in the north east of the site. Earth mounds have been constructed as safety mitigation measures at the location of storage sheds.

The investigation area incorporates three existing corrugated iron sheds with concrete floors. The existing sheds will be painted white. The new emulsion plant area is vacant.

Shipping containers located in the investigation area are used for interim storage prior to plant construction.

An existing on site dam located approximately 400m south will be utilised as a wastewater storage pond for the new emulsion plant.

5.8 Spills, losses or discharges

No records for spills or losses on the site were available. No records for discharges to land, water or air were available.

A sludge sample collected for the proposed wastewater storage pond provides a baseline for environmental background levels of heavy metals at the sampling location.

5.9 Relevant complaint history

None known.

5.10 Previous investigations

No previous investigations are known to have been undertaken on the site.

A request for information was sent to the Department of Defence however, to date no response has been received.

A request for information was sent to Parkes Shire Council however, to date no response has been received.

5.11 Historical neighbouring land-use

North – Explosive reserve
South – Explosive reserve
East – Explosive reserve
West – Explosive reserve

Historical neighbouring land-uses may have impacted on the site.

5.12 Contaminant sources

It is unlikely but possible that explosives were used and residue exists on the site. Explosives were storges on the site and some spillage of materials may have occurred over time.

5.13 Contaminants of concern

Based on historical activities and site inspection, potential contaminants have been identified as;

- Heavy metals (arsenic, cadmium, chromium, copper, nickel, lead, zinc, mercury)
- Explosives

5.14 Integrity assessment

The site history was obtained from a site inspection and history review. The information is consistent with the current site condition and to the best of the assessor's knowledge is accurate.

6. Site condition and surrounding environment

6.1 Site inspection

The site was inspected by Greg Madafiglio of Envirowest Consulting Pty Ltd on 18 January 2021.

6.2 Land-use

The site was vacant. The site is part of a larger lot which has been used as an explosives reserve for the storage of explosives.

6.3 Current neighbouring land-use

North – Vacant
South – Vacant
East – Vacant
West – Vacant

6.4 Surface cover and vegetation

The site consisted of native grasses, herbs and weeds. Medium sized cypress pines were cleared from the site in July 2020.

6.5 Evidence of visible contamination

The existing sheds were used for storage. Product spills and losses are unlikely to have occurred at the site of the new emulsion plant.

Small bare areas were identified on the site due to recent vegetation removal activities and poor pasture regrowth following the prolonged dry period.

No signs of visible contamination such as discolouration, staining or odour was identified on the surface of the investigation area.

6.6 Topography

The site is predominantly located on a lower slope. Aspect is predominantly west and slopes are gently inclined at approximately 4%. Elevation is 277 metres above sea level. The lowest elevation occurs to the west.

6.7 Soils and geology

The site is located within The Mount Soil Landscape (King 1998). Soil in The Mount landscape consists of leached sands, yellow podzolic and yellow solodic soils. On-site geology is colluvial- derived deposits of sands from the Hervey Group which form the Jemalong Range.

Soils on the site comprised of red sands and clayey sands. Subsurface soils are known to be dispersive and erodible.

6.8 Water

6.8.1 Surface water

The aspect is west and surface water flows are expected to generally flow to the west. No drainage lines are located nearby.

Wastewater generated by the new emulsion plant will be stored in a dam located approximately 400m south.

6.8.2 Groundwater

No registered water abstraction bores were identified within a 500m radius of the investigation area on the NSW Government Water NSW website (2020). One bore was identified on the site.

No.	Date drilled	Location	SWL (m)	Use	Status
GW003818	1942	1km NNE	34.70	Not known	-

6.9 Evidence of possible naturally occurring contaminants

No natural sources of PAH were identified.

The site is not mapped as an acid sulphate soil risk (eSPADE accessed January 2021).

The site is not mapped as a geological unit with asbestos potential (NSW SEED Portal accessed February 2021).

6.10 Environmentally sensitive features or habitats

No environmentally sensitive features or habitats were identified on the site. Bushland is located to the east and south is mapped in a biodiversity area, terrestrial biodiversity map (Parkes LEP 2012).

6.11 Integrity assessment

The site history was obtained from a site inspection and history review. The information is consistent with the current site condition and to the best of the assessor's knowledge is accurate.

7. Conceptual site model

7.1 Contaminant sources

Potential exists for contaminating activities to have been undertaken on site which may impact on the suitability for the proposed land-use. The historical land-use may have resulted in application of contaminants.

7.2 Contaminants of concern

Based on historical activities and site inspection the contaminants of concern across the site are:

- Heavy metals (arsenic, cadmium, chromium, copper, nickel, lead, zinc and mercury)
- Explosives

7.3 Potential receptors

The proposed land-use of the site is commercial. The site has historically been used as an explosive's storage facility.

Human receptors include:

- Visitors (adults)
- Staff (adults)
- Site workers
- Construction workers
- Intrusive maintenance workers

Ecological receptors include:

- Flora and fauna on the site and adjacent to the site
- Aquatic flora and fauna receptors off-site

7.4 Exposure pathways

Pathways for exposure to contaminants are:

- Dermal contact following soil disturbance
- Ingestion and inhalation after soil disturbance
- Surface water and sediment runoff into waterways
- Leaching of contaminants into the groundwater
- Direct contact of flora and fauna with the soil

7.5 Source receptor linkages

Potential source pathway receptor linkages are identified to enable evaluation of any adverse impact on human health or ecology.

The site is part of an existing explosives reserve storage area. The ongoing land-use of the site is commercial. Human receptors to the investigation area are limited. Proposed users of the site may have a risk of exposure if contaminants are present and the soil is disturbed. Construction workers, visitors, staff and intrusive maintenance workers to the site may potentially be receptors to soil contaminants through direct contact to soil which includes ingestion and dermal contact.

The contaminants of concern are non-volatile and inhalation of soil material is not considered a pathway for exposure. Inhalation may occur as a result of vaporisation, soil disturbance and dust production. Major soil disturbance before and after the development of the site is considered unlikely. Soil disturbance during construction and development of the site is expected to be accompanied by erosion control measures which will reduce the incidence of dust production.

Vegetation surrounding the site may be potential receptors to soil contamination through direct uptake of contaminants. All water flows form the stie will be diverted to nearby dams.

The source receptor linkage to aquatic organisms and ecosystems is considered incomplete as the site is well vegetated and movement of sediments from the site is unlikely. During construction work it is expected that erosion control measures will be implemented and movement of sediment off site will be unlikely. Following development of the site it is expected that vegetation will be re-established or hard surfaces constructed which will control sediment movement from the site. The nearest waterway to the site is Gunningbland Creek which is located approximately 2km north and it is not expected that contaminants from the site will be transported to aquatic receptors within Gunningbland Creek.

Groundwater is not identified as a potential receptor to contamination. Groundwater bores are located greater than 500m from the site. Contaminants are expected to originate from the soil surface and groundwater levels in the area are at depths greater than 3m below the soil surface.

Source/contaminant	Transport	Potential exposure pathways	Receptors
☒Storage of explosives ☒ Heavy metals	☐Wind ☐Sedimentation ☐Groundwater	☒Direct contact (ingestion and absorption) (human and environment) ☐Inhalation ☐Runoff ☐Leaching	☒Construction workers ☒Workers ☒Visitors ☒Intrusive maintenance workers ☒Vegetation ☐Aquatic receptors

☒Potential, ☐unknown/unlikely

8. Data quality objectives (DQO)

8.1 State the problem

A new explosives emulsion plant is proposed for the site. Land-use will remain unchanged and commercial. The property has historically been used as an explosives reserve for the storage of explosives which may have resulted in contaminating activities. The site requires investigation to ensure suitability for the proposed land-use and provide a baseline for future comparision.

8.2 Identify the decision

The land-use proposed is commercial and the levels of contaminants should be less than the thresholds listed in Section 11. The decision problem is, do the levels of potential contaminants exceed the assessment criteria listed in Section 11.

8.3 Identify the inputs decision

Investigations of the site is required to identify any potential contaminants from historical land-use.

8.4 Define the boundaries of the study

The investigation area is a parcel of land located within Lot 2 DP1064474, 3577 Henry Parkes Way, Bogan Gate NSW.

8.5 Develop a decision rule

The decision rule for suitability for commercial land-use is based on the thresholds listed in Schedule B1 of the NEPM (1999) *Guideline on Investigation Levels for Soil and Groundwater*.

8.6 Specify acceptable limits on the decision errors.

The 95% upper confidence limit of average levels of samples collected is less than the threshold levels and the results are less than 250% of relevant thresholds.

8.7 Optimize the design for obtaining data

Soil samples were collected from the site on judgemental pattern from areas where the potential for contamination was identified.

Analytes included heavy metals and explosives residue.

9. Sampling analysis plan and sampling methodology

9.1. Sampling design

A judgmental sampling pattern was adopted to provide a preliminary assessment of the contamination status of the site.

9.1.1 Sampling locations

Four discrete soil samples were collected from across the site (Figure 2). The sampling locations in the proposed facility and around sheds were in lower slope areas expected to have received flows from upslope sources. Sludge from the proposed water discharge dam was undertaken to determine historical baseline levels. A visual inspection was undertaken over the site for evidence of contamination.

9.1.2 Sampling density

The sampling density will enable a preliminary assessment of contamination in the investigation area.

9.1.3 Sampling depth

Sampling depth was 0 to 100mm below the surface.

9.2 Analytes

The discrete soil samples were evaluated for arsenic, cadmium, chromium, copper, lead, nickel, zinc, mercury and explosive residue as these were identified as the contaminants of concern possibly present as a result of previous activities (Table 1).

Table 1. Schedule of samples and analyses

Sample ID	Location	Source	Analysis undertaken
BG 1	Plant area north west	Soil	Arsenic (As), cadmium (Cd), chromium (Cr), copper (Cu), lead (Pb), nickel (Ni), zinc (Zn), mercury (Hg), explosives screen
BG 2	South western section	Soil	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, explosives screen
BG 3	South western section	Soil	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, explosives screen
BG 4	Central section	Sludge	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, explosives screen

9.3 Sampling methods

Soil samples were taken using a stainless-steel hand shovel. Soil was taken at each individual sampling location below the vegetated and detrital layer. The soil was transferred to a solvent rinsed glass jar with a Teflon lid using clean latex gloves.

Tools were decontaminated between sampling locations to prevent cross contamination by brushing to remove and rinsing with clean tap water and drying with clean towel. Sampling protocols are presented in Appendix 5.

10. Quality assurance and quality control

10.1 Sampling design

The sampling program is intended to provide preliminary data as to the presence and levels of contaminants.

Discrete soil samples were collected on a judgemental pattern across the site. The sampling density is considered sufficient to provide a preliminary assessment of contamination.

10.2 Field

The collection of samples was undertaken in accordance with industry accepted standard protocols (NEPC 1999). The details of the samples collected are presented in Table 1. Discrete samples were collected and analysed.

Sampling equipment was decontaminated between each sampling event. Samples were stored and transported under refrigeration and in insulated containers. Appropriate storage duration was observed. A chain of custody form tracked the samples to the laboratory (Appendix 4).

A single sampler was used to collect the samples using standard methods. Soil collected was a fresh sample from the hand shovel. After collection the samples were immediately placed in new glass sampling jars and placed in a cooler. Sample jars were filled to minimise headspace and maintain sample integrity.

One intra laboratory duplicate sample was analysed to evaluate sample integrity and data comparability. The frequency of field duplicates is greater than the NEPM (1999) recommendation of 5%. Samples from all batches did not contain contaminants which confirm the absence of cross contamination during transport and storage. A field sampling log is presented in Appendix 3.

10.3 Laboratory

Chemical analysis was conducted by ALS, Sydney, which is NATA accredited for the tests undertaken. The laboratories have quality assurance and quality control programs in place, which include internal replication and analysis of spike samples and recoveries.

Method blanks, matrix duplicates and laboratory control samples were within acceptance criteria. The quality assurance and quality control report is presented together with the laboratory report as Appendix 4.

10.4 Data evaluation

The laboratory quality control report indicates the data variability is within acceptable industry limits. The data is considered representative and usable for the purposes of the investigation. Data quality indicators are presented in Appendix 4.

11. Assessment criteria

The proposed land-use of the site is general industry development which will include a explosives emulsion plant. The proposed land-use is considered to be commercial.

The assessment criteria for the soil data in recreational and commercial sites is described in Table 1A(1) of *Guideline on Investigation Levels for Soil and Groundwater* (NEPC 1999). The criteria lists health investigation levels (HIL) for a range of land-uses. Assessment criteria for commercial sites (HIL D) has considered appropriate for the site.

Ecological investigation levels (EIL) have been developed for the protection of terrestrial ecosystems for selected metals and organic substances in the soil in the guideline (NEPC 1999). EILs vary with land-use and apply to contaminants up to 2m depth below the surface. The EIL for arsenic and lead is not dependant on soil type. The EILs were determined using the ASC NEPM Toolbox EIL calculation sheet (accessed January 2021). The EILs for commercial land-use are listed in Tables 2 and 3.

Typical CEC values for soils in the locality are 10cmol(+)/kg. pH values of between 5 to 5.5, organic carbon of 1 to 1.5% and clay content of 15 to 20% (Espade 2016). The contaminants have been identified in the soil for at least two years and are considered aged.

Chromium is analysed as total chromium which is the sum of chromium (III) and chromium (VI). Chromium (VI) is a potential contaminant from industrial processes including ferrochrome production, electroplating, pigment production and tanning (WHO 1998). Chromium (VI) is reduced to chromium (III) when it comes into contact with organic matter in biota, soil and water. Chromium in the environment is present in the trivalent state (WHO 1998).

No thresholds are available for explosives residues and the initial comparison criteria was the level of detection.

Table 2. EIL Calculation sheet, commercial land-use

Analyte	Rationale	ACL (mg/kg) Commercial	ABC (mg/kg)	EIL (mg/kg) Commercial
Arsenic	Aged	160	-	160
Chromium (III)	Clay content 15-20%, aged	840	-	840
Copper	pH 5.5	210	-	210
Lead	Generic	1,800	-	1,800
Nickel	CEC 10cmol/kg	290	-	290
Zinc	CEC 10cmol/kg, pH 5.5	500	-	500

Table 3. Assessment criteria for soil (mg/kg) (NEPC 1999)

Analyte	HIL Commercial /industrial	EIL Commercial and industrial
Arsenic	3,000	160
Cadmium	900	-
Chromium	3,600[1]	840[2]
Copper	240,000	210
Lead	1,500	1,800
Nickel	6,000	290
Zinc	400,000	500
Mercury	730	-

[1] Threshold for Chromium (VI), [2] Threshold for Chromium (III), HIL – health investigation level, EIL – ecological investigation level

12. Results and discussion

The site consisted of native grasses, herbs and weeds. Medium sized cypress pines had been cleared from the site prior to the inspection.

Very low levels of chromium were detected in all soil samples. Low levels of lead, nickel and zinc were detected in the soil samples collected from between building 71 and 72 and sludge from the dam. The levels of chromium, lead, nickel and zinc in soil samples collected was less than the adapted assessment criteria (Table 4).

The levels of heavy metals all other soil samples collected were less than detection limits and less than the adapted assessment criteria (Table 3).

Explosive residue was not detected in the soil or sludge samples analysed.

Table 5. Soil analysis results for metals and PAH (mg/kg)

Sample ID	Location (Figure 2)	Arsenic	Cadmium	Chromium	Copper	Lead	Nickel	Zinc	Mercury	Explosives compounds/ metabolides
BG 1	Plant area north west	ND	ND	4	ND	ND	ND	ND	ND	ND
BG 2	Plant area south west	ND	ND	5	ND	ND	ND	ND	ND	ND
BG 3	Between building 71 and 72	ND	ND	8	ND	55	2	110	ND	ND
BG 4	Sludge from dam	ND	ND	7	ND	13	3	20	ND	ND
Commercial/industrial land-use thresholds (NEPC 1999)										
HIL		*3,000*	*900*	*3,600[1]*	*240,000*	*1,500*	*6,000*	*400,000*	*730*	*-*
EIL		*160*	*-*	*840[2]*	*210*	*1,800*	*290*	*500*	*-*	*-*

[1] Threshold for Chromium (VI), [2] Threshold for Chromium (III), [3] Chromium (III), HIL – Health investigation levels, EIL – Ecological investigation levels

13. Site characterisation

13.1 Environmental contamination

No soil contamination was identified in the samples collected in the proposed facility, around he shed or in the sludge from the dam.

13.2 Chemical degradation production
Not applicable as no contamination was identified.

13.3 Exposed population
Not applicable as no contamination was identified.

14. Conclusions and recommendations
14.1 Summary
An assessment of the site was made on 18 January 2021 consisting of a site walkover, desktop study and limited soil sampling.

The preliminary contamination assessment comprised a soil sampling and laboratory analysis program. Four soil samples were collected from the investigation area to provide an indicator of potential contamination.

The site has a land-use history as part of an explosive storage facility. No evidence of mines, sheep dips or mixing sheds were identified on the site from the review of site history and site walkover. The site consisted of native grasses, herbs and weeds. Medium sized cypress pines had been cleared from the site.

The levels of all potential contaminants assessed in the soil sampling program were below the commercial land-use thresholds (NEPC 1999).

14.2 Assumptions in reaching the conclusions
It is assumed the sampling sites are representative of the site.

14.3 Extent of uncertainties
The analytical data relate only to the locations sampled. Soil conditions can vary both laterally and vertically and it cannot be excluded that unidentified contaminants may be present.

14.4 Suitability for proposed use of the site
The investigation area is suitable for commercial land-use.

14.5 Limitations and constraints on the use of the site
Nil

14.6 Recommendation for further work
Nil

15. Report limitations and intellectual property

This report has been prepared for the use of the client to achieve the objectives given the clients requirements. The level of confidence of the conclusion reached is governed by the scope of the investigation and the availability and quality of existing data. Where limitations or uncertainties are known, they are identified in the report. No liability can be accepted for failure to identify conditions or issues which arise in the future and which could not reasonably have been predicted using the scope of the investigation and the information obtained.

The investigation identifies the actual subsurface conditions only at those points where samples are taken, when they are taken. Data derived through sampling and subsequent laboratory testing is interpreted by geologists, engineers or scientists who then render an opinion about overall subsurface conditions, the nature and extent of the contamination, its likely impact on the proposed development and appropriate remediation measures. Actual conditions may differ from those inferred to exist, because no professional, no matter how well qualified, and no sub-surface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock or time. The actual interface between materials may be far more gradual or abrupt than a report indicates. Actual conditions in areas not sampled may differ from predictions. It is thus important to understand the limitations of the investigation and recognise that we are not responsible for these limitations.

This report, including data contained and its findings and conclusions, remains the intellectual property of Envirowest Consulting Pty Ltd. A licence to use the report for the specific purpose identified is granted for the persons identified in that section after full payment for the services involved in preparation of the report. This report should not be used by persons or for purposes other than those stated and should not be reproduced without the permission of Envirowest Consulting Pty Ltd.

16. References

Environment Protection Authority (1995) *Contaminated sites: Sampling Design Guidelines* (NSW Environment Protection Authority, Chatswood)

Environment Protection Authority (2020) *Consultants reporting on contaminated land* (NSW Environment Protection Authority, Chatswood)

Environment.nsw.gov.au, 'eSPADE | NSW Environment & Heritage' Version 2. N.p., 2019. Web. 15 May 2020.

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Figures

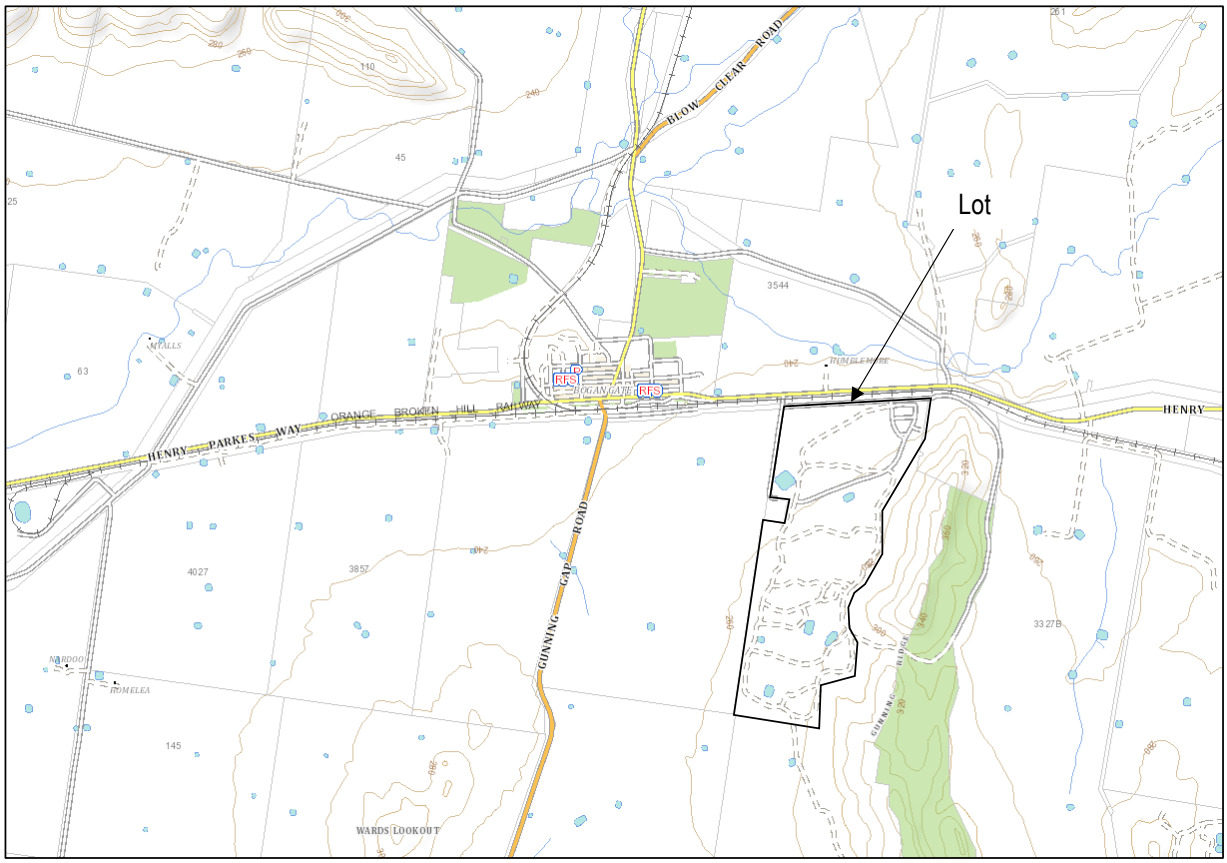

Figure 1. Site locality		
Part 3577 Henry Parkes Way, Bogan Gate NSW		
	Envirowest Consulting Pty Ltd	
Job: R12771c	Drawn by: TS	Date: 25/01/2021



Legend

Investigation area

⊗ Sampling location

Approximate Scale 1: 2,800

0 28 56 112m

Figure 2. Site plan and sampling locations		
Part 3577 Henry Parkes Way, Bogan Gate NSW		
	Envirowest Consulting Pty Ltd	
Job: R12771c	Drawn by: TS	Date: 25/01/2021

Figure 3. Photographs of the site



Appendices

Appendix 1. Sample analysis, quality assurance and quality control (QAQC) report

1. Data quality indicators (DQI) requirements

1.1 Completeness

A measure of the amount of usable data for a data collection activity. Greater than 95% of the data must be reliable based on the quality objectives. Where greater than two quality objectives have less reliability than the acceptance criterion the data may be considered with uncertainty.

1.1.1 Field

Consideration	Requirement
Locations and depths to be sampled	Described in the sampling plan. The acceptance criterion is 95% data retrieved compared with proposed. Acceptance criterion is 100% in crucial areas.
SOP appropriate and compiled	Described in the sampling plan.
Experienced sampler	Sampler or supervisor
Documentation correct	Sampling log and chain of custody completed

1.1.2 Laboratory

Consideration	Requirement
Samples analysed	Number according to sampling and quality plan
Analytes	Number according to sampling and quality plan
Methods	EPA or other recognised methods with suitable PQL
Sample documentation	Complete including chain of custody and sample description
Sample holding times	Metals 6 months, OCP, PAH, TPH, PCB 14 days

1.2 Comparability

The confidence that data may be considered to be equivalent for each sampling and analytical event. The data must show little or no inconsistencies with results and field observations.

1.2.1 Field

Consideration	Requirement
SOP	Same sampling procedures to be used
Experienced sampler	Sampler or supervisor
Climatic conditions	Described as may influence results
Samples collected	Sample medium, size, preparation, storage, transport

1.2.2 Laboratory

Consideration	Requirement
Analytical methods	Same methods, approved methods
PQL	Same
Same laboratory	Justify if different
Same units	Justify if different

1.3 Representativeness

The confidence (expressed qualitatively) that data are representative of each media present on the site.

1.3.1 Field

Consideration	Requirement
Appropriate media sampled	Sampled according to sampling and quality plan or in accordance with the EPA (1995) sampling guidelines.
All media identified	Sampling media identified in the sampling and quality plan. Where surface water bodies on the site sampled.

1.3.2 Laboratory

Consideration	Requirement
Samples analysed	Blanks

1.4 Precision

A quantitative measure of the variability (or reproduced of the data). Is measured by standard deviation or relative percent difference (RPD). A RPD analysis is calculated and compared to the practical quantitation limit (PQL) or absolute difference AD.

- Levels greater than 10 times the PQL the RPD is 50%
- Levels between 5 and 10 times the PQL the RPD is 75%
- Levels between 2 and 5 times the PQL the RPD is 100%
- Levels less than 2 times the PQL, the AD is less than 2.5 times the PQL

Data not conforming to the acceptance criterion will be examined for determination of suitability for the purpose of site characterisation.

1.4.1 Field

Consideration	Requirement
Field duplicates	Frequency of 5%, results to be within RPD or discussion required indicate the appropriateness of SOP

1.4.2 Laboratory

Consideration	Requirement
Laboratory and inter lab duplicates	Frequency of 5%, results to be within RPD or discussion required. Inter laboratory duplicates will be one sample per batch.
Field duplicates	Frequency of 5%, results to be within RPD or discussion required
Laboratory prepared volatile trip spikes	One per sampling batch, results to be within RPD or discussion required

1.5 Accuracy

A quantitative measure of the closeness of the reported data to the true value.

1.5.1 Field

Consideration	Requirement
SOP	Complied
Inter laboratory duplicates	Frequency of 5%. Analysis criterion 60% RPD for levels greater than 10 times the PQL 85% RPD for levels between 5 to 10 times the PQL 100% RPD at levels between 2 to 5 times the PQL Absolute difference, 3.5 times the PQL where levels are, 2 times PQL

1.5.2 Laboratory

Recovery data (surrogates, laboratory control samples and matrix spikes) data subject to the following control limits:

- 60 to 140% acceptable data
- 20-60% discussion required, may be considered acceptable
- 10-20% data should considered as estimates
- 10% data should be rejected

Consideration	Requirement
Field blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Rinsate blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Method blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Matrix spikes	Frequency of 5%, results to be within +/-40% or discussion required
Matrix duplicates	Sample injected with a known concentration of contaminants with tested. Frequency of 5%, results to be within +/-40% or discussion required
Surrogate spikes	QC monitoring spikes to be added to samples at the extraction process in the laboratory where applicable. Surrogates are closely related to the organic target analyte and not normally found in the natural environment. Frequency of 5%, results to be within +/-40% or discussion required
Laboratory control samples	Externally prepared reference material containing representative analytes under investigation. These will be undertaken at one per batch. It is to be within +/-40% or discussion required
Laboratory prepared spikes	Frequency of 5%, results to be within +/-40% or discussion required

2. Laboratory analysis summary

One analysis batch was undertaken over the preliminary investigation program. Samples were collected on 18 January 2021. A total of four samples were submitted for analytical testing. The samples were collected in the field by an environmental scientist from Envirowest Consulting Pty Ltd, placed into laboratory prepared receptacles as recommended in NEPM (1999). The samples preservation and storage was undertaken using standard industry practices (NEPC 1999). A chain of custody form accompanied transport of the samples to the laboratory.

The samples were analysed at the laboratories of ALS Laboratories, Smithfield NSW which is National Association of Testing Authorities (NATA) accredited for the tests undertaken. The analyses undertaken, number of samples tested and methods are presented in the following tables:

Laboratory analysis schedule

Sample id. (sampling location)	Number of samples	Duplicate	Analyses	Date collected	Substrate	Laboratory report
BG1, BG2, BG3, BG4	4	1	As, Cd, Cr, Cu, Pb, Ni, Zn, Hg, explosives	18/01/2021	Soil	ES2101610

Analytical methods

Analyte	Extraction	Laboratory methods
Metals	USEPA 200.2 Mod	APHA USEPA SW846-6010
Chromium (III)	-	APHA 3500 CR-A&B & 3120 and USEPA SW846-3060A
Chromium (VI)	USEPA SW846-3060A	USEPA SW846-3060A
Mercury	USEPA 200.2 Mod	APHA 3112
Explosives	Tumbler extraction of explosives	USEPA8330

3. Field quality assurance and quality control

One intra laboratory duplicate sample was collected for the investigation. The frequency was greater than the recommended frequency of 5%. Table A5.1 outlines the samples collected and differences in replicate analyses. Relative differences were deemed to pass if they were within the acceptance limits of +/- 40% for replicate analyses or less than 5 times the detection limit.

Field duplicate frequency

Sample id.	Number of samples	Duplicate	Frequency (%)	Date collected	Substrate	Laboratory report
BG1, BG2, BG3, BG4	4	1	25	18/01/2021	Soil	ES2101610

Table A5.1. Relative differences for intra laboratory duplicates

	BG1 and DA	
	Relative difference (%)	Pass/Fail
Arsenic	NA	Pass
Cadmium	NA	Pass
Chromium	22	Pass
Copper	NA	Pass
Lead	NA	Pass
Nickel	NA	Pass
Zinc	NA	Pass
Mercury	NA	Pass

NA – relative difference unable to be calculated as results are less than laboratory detection limit, *Results less than 5 times laboratory detection limits, ^Variation expected to be due to non-homogenised sample. Does not impact results

No trip blanks or spikes were submitted for analysis. This is not considered to create significant uncertainty in the analysis results because of the following rationale:

- The fieldwork was completed within a short time period and consistent methods were used for soil sampling.
- Soil samples were placed in insulated cooled containers after sampling to ensure preservation during transport and storage.
- The samples were placed in single use jars using clean sampling tools and disposable gloves from material not in contact with other samples. This reduces the likelihood of cross contamination.
- Samples in the analysis batch contain analytes below the level of detection. It is considered unlikely that contamination has occurred as a result of transport and handling.

4. Laboratory quality assurance and quality control

Sample holding times are recommended in NEPC (1999). The time between collection and extraction for all samples was less than the criteria listed below:

Analyte	Maximum holding time
Metals, cyanide	6 months
OCP, TRH, PCB, BTEX, PAH	14 days

The laboratory interpretative reports are presented with individual laboratory report. Assessment is made of holding time, frequency of control samples and quality control samples. No significant outliers exist for the sampling batches. The laboratory report also contains a detailed description of preparation methods and analytical methods.
The results, quality report, interpretative report and chain of custody are presented in the attached appendices. The quality report contains the laboratory duplicates, spikes, laboratory control samples, blanks and where appropriate matrix spike recovery (surrogate).

5. Data quality indicators (DQI) analysis

5.1 Completeness

A measure of the amount of usable data for a data collection activity (total to be greater than 95%).
The data set was found to be complete based on the scope of work. No critical areas of contamination were omitted from the data set.

5.1.1 Field

Consideration	Accepted	Comment
Locations to be sampled	Yes	In accordance with sampling methodology, described in the report. Sampling locations described in figures.
Depth to be sampled	Yes	In accordance with sampling methodology
SOP appropriate and compiled	Yes	In accordance with sampling methodology Sampled with stainless steel spade into lab prepared containers, decontamination between samples, latex gloves worn by sampler
Experienced sampler	Yes	Same soil sampler, environmental scientist
Documentation correct	Yes	Sampling log completed Chain of custody completed

5.1.2 Laboratory

Consideration	Accepted	Comment
Samples analysed	Yes	All critical samples analysed in accordance with chain of custody and analysis plan
Analytes	Yes	All analytes in accordance with chain of custody and analysis plan
Methods	Yes	Analysed in NATA accredited laboratory with recognised methods and suitable PQL
Sample documentation	Yes	Completed including chain of custody and sample results and quality results report for each batch
Sample holding times	Yes	Metals less than 6 months. OCP, TPH, PCB, BTEX less than 14 days

5.2 Comparability

The confidence that data may be considered to be equivalent for each sampling and analytical event.

The data sets were found to be acceptable.

5.2.1 Field

Consideration	Accepted	Comment
SOP	Yes	Same sampling procedures used and sampled on one date
Experienced sampler	Yes	Experienced scientist
Climatic conditions	Yes	Described in field sampling log
Samples collected	Yes	Suitable size, storage and transport

5.2.2 Laboratory

Consideration	Accepted	Comment
Analytical methods	Yes	Same methods all samples, in accordance with NEPC (1999) or USEPA
PQL	Yes	Suitable for analytes
Same laboratory	Yes	SGS is NATA accredited for the test
Same units	Yes	-

5.3 Representativeness

The confidence (expressed qualitatively) that data are representative of each media present on the site.

The data sets were found to be acceptable.

5.3.1 Field

Consideration	Accepted	Comment
Appropriate media sampled	Yes	Sampled according to sampling and quality plan
All media identified	Yes	Soil Sampling media identified in the sampling and quality plan

5.3.2 Laboratory

Consideration	Accepted	Comment
Samples analysed	Yes	Undertaken in NATA accredited laboratory. No blanks analysed. Samples in the analysis batch contain analytes below the level of detection. It is considered unlikely that contamination has occurred as a result of transport and handling.

5.4 Precision

A quantitative measure of the variability (or reproduced of the data).The data sets were found to be acceptable.

5.4.1 Field

Consideration	Accepted	Comment
SOP	Yes	Complied
Field duplicates	Yes	Collected

5.4.2 Laboratory

Consideration	Accepted	Comment
Laboratory and inter lab duplicates	Yes	Frequency of 5%, results to be within +/-40% or discussion required
Field duplicates	Yes	Frequency of 5%, results to be within +/-40% or discussion required
Laboratory prepared volatile trip spikes	NA	Not analysed due to preliminary nature of investigation

5.5 Accuracy

A quantitative measure of the closeness of the reported data to the true value.

The data sets were found to be acceptable.

5.5.1 Field

Consideration	Accepted	Comment
SOP	Yes	Complied
Field blanks	NA	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Rinsate blanks	NA	Frequency of 5%, <5 times the PQL, PQL may be adjusted

5.5.2 Laboratory

Consideration	Accepted	Comment
Method blanks	Yes	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Matrix spikes	Yes	Frequency of 5%, results to be within +/-40% or discussion required.
Matrix duplicates	Yes	Frequency of 5%, results to be within +/-40% or discussion required.
Surrogate spikes	Yes	Frequency of 5%, results to be within +/-40% or discussion required.

Laboratory control samples	Yes	Frequency of 5%, results to be within +/-40% or discussion required
Laboratory prepared spikes	Yes	Frequency of 5%, results to be within +/-40% or discussion required

No trip blanks, field spikes or sample rinsates were submitted for analysis. This is not considered to create significant uncertainty in the analysis results because of the following rationale:

- The fieldwork methods used for soil sampling were consistent throughout the project with all in situ samples collected from material which had not been subject to exposure.

- The fieldwork was completed within a short time period and consistent methods were used for soil sampling.

- Soil samples were placed in insulated cooled containers as quickly as possible, with the containers filled to minimize headspace. The sample containers were sealed immediately after the sample was collected and chilled in an esky containing ice.

- The samples were stored in a refrigerator and transported with ice bricks to ensure preservation during transport and storage.
- The samples were placed in single use jars using clean sampling tools and disposable gloves from material not in contact with other samples. This reduces the likelihood of cross contamination.

- Samples in the analysis batches contained analytes below the level of detection. It is considered unlikely that contamination has occurred as a result of transport and handling.

6. Conclusion

All media appropriate to the objectives of this investigation have been adequately analysed and no area of significant uncertainty exist. It is concluded the data is usable for the purposes of the investigation.

Appendix 2. Field sampling log

Client	Solar Mining Services
Contact	Alistair Burch
Job number	R12771c
Location	Bogan Gate Explosives Reserve, Bogan Gate NSW
Date	18 January 2021
Investigator(s)	Greg Madafiglio
Weather conditions	Sunny

Sample id	Matrix	Date	Analysis required	Observations/comment
BG1	Soil	19/05/2020	Arsenic (As), cadmium (Ca), chromium (Cr), copper (Cu), lead (Pb), nickel (Ni), zinc (Zn), mercury (Hg), explosives scan	Plant area north west
BG2	Soil	19/05/2020	As, Ca, Cr, Cu, Pb, Ni, Zn, Hg, explosives scan	Plant area south west
BG3	Soil	19/05/2020	As, Ca, Cr, Cu, Pb, Ni, Zn, Hg, explosives scan	Between building 71 and 72
BG4	Soil	19/05/2020	As, Ca, Cr, Cu, Pb, Ni, Zn, Hg, explosives scan	Sludge from dam
DA	Soil	18/01/2021	As, Ca, Cr, Cu, Pb, Ni, Zn, Hg	Duplicate of BG1

Appendix 3. Soil analysis results – ALS report number ES2101610 and chain of custody form

Appendix 4. Soil sampling protocols

1. Sampling

The samples will be collected from the auger tip, mattock, hand auger or excavator bucket immediately on withdrawal.

The time between retrieval of the sample and sealing of the sample container will be kept to a minimum.

The material will be collected using single use disposal gloves or a stainless-steel spade which represented material which has not been exposed to the atmosphere prior to sampling.

All sampling jars will be filled as close to the top as possible to minimise the available airspace within the jar.

2. Handling, containment and transport

Daily sampling activities will be recorded including sampling locations, numbers, observations, measurements, sampler, date and time and weather condition.

The sampling jars will be new sterile glass jars fitted with plastic lid and airtight Teflon seals, supplied by the laboratories for the purpose of collecting soil samples for analysis. Sample containers will be marked indelibly with the sample ID code to waterproof labels affixed to the body of the container.

All samples will be removed from direct sunlight as soon as possible after sampling and placed in insulated containers. Samples will be stored in a refrigerator at 4°C prior to transportation to the laboratory in insulated containers with ice bricks in accordance with AS4482.1.

Handling and transportation to the laboratory will be accompanied with a chain of custody form to demonstrate the specimens are properly received, documents, processed and stored.

Maximum holding time for extraction (AS4482.1) are:

Analyte	Maximum holding time
Metals	6 months
Mercury	28 days
Sulfate	7 days
Organic carbon	7 days
OCP, OPP, PCB	14 days
TRH, BTEX, PAH, phenols	14 days

3. Decontamination of sampling equipment

Sampling tools will be decontaminated between sampling locations by

- Removing soil adhering to the sampling equipment by scraping, brushing or wiping
- Washing with a phosphate-free detergent
- Rinsing thoroughly with clean water
- Repeating if necessary
- Collect rinsate per sampling time and preserve according to AS 2031.1
- Dry equipment with disposable towels or air

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES2101610**	Page	: 1 of 4
Client	: **ENVIROWEST CONSULTING**	Laboratory	: Environmental Division Sydney
Contact	: MR GREG MADAFIGLIO	Contact	: Customer Services ES
Address	: 9 CAMERON PLACE PO BOX 8158 ORANGE NSW, AUSTRALIA 2800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 63614954	Telephone	: +61-2-8784 8555
Project	: 12771	Date Samples Received	: 19-Jan-2021 08:20
Order number	: 12771	Date Analysis Commenced	: 20-Jan-2021
C-O-C number	: 12771	Issue Date	: 29-Jan-2021 11:54
Sampler	: ----		
Site	: 12771		
Quote number	: EN/222		
No. of samples received	: 5		
No. of samples analysed	: 5		

Accreditation No. 825
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

'he analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures ire fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing urposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Sample ID	R1 Received as BG1	R2 Received as BG2	R3 Received as BG3	R4 Received as BG4	DA
			Sampling date / time	18-Jan-2021 00:00	18-Jan-2021 00:00	18-Jan-2021 00:00	18-Jan-2021 00:00	18-Jan-2021 00:00
Compound	CAS Number	LOR	Unit	ES2101610-001	ES2101610-002	ES2101610-003	ES2101610-004	ES2101610-005
				Result	Result	Result	Result	Result
EA055: Moisture Content (Dried @ 105-110°C)								
Moisture Content	----	1.0	%	<1.0	<1.0	1.2	22.7	<1.0
EG005(ED093)T: Total Metals by ICP-AES								
Arsenic	7440-38-2	5	mg/kg	<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg	<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg	4	5	8	7	5
Copper	7440-50-8	5	mg/kg	<5	<5	<5	<5	<5
Lead	7439-92-1	5	mg/kg	<5	<5	55	13	<5
Nickel	7440-02-0	2	mg/kg	<2	<2	2	3	<2
Zinc	7440-66-6	5	mg/kg	<5	<5	110	20	<5
EG035T: Total Recoverable Mercury by FIMS								
Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
EP203A: Explosives								
HMX	2691-41-0	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
RDX	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
1.3.5-Trinitrobenzene	99-35-4	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
1.3-Dinitrobenzene	99-65-0	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
Tetryl	479-45-8	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
2.4.6-TNT	118-96-7	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
4-Amino.2.6-DNT	19406-51-0	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
2-Amino-4.6-DNT	35572-78-2	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
^ 4-& 2-AM-DNT(Isomeric Mixture)	----	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
2.4-Dinitrotoluene	121-14-2	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
2.6-Dinitrotoluene	606-20-2	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
^ 2.4-& 2.6-DNT(Isomeric Mixture)	121-14-2/606-20-2	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
Nitrobenzene	98-95-3	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
2-Nitrotoluene	88-72-2	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
3-Nitrotoluene	99-08-1	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
4-Nitrotoluene	99-99-0	0.1	mg/kg	<0.1	<0.1	<0.1	<0.1	----
Nitroglycerine	55-63-0	1	mg/kg	<1	<1	<1	<1	----
PETN	78-11-5	1	mg/kg	<1	<1	<1	<1	----
EP203S: Explosives Surrogate								
o-Dinitrobenzene	528-29-0	0.1	%	108	104	108	109	----

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP203S: Explosives Surrogate			
o-Dinitrobenzene	528-29-0	50	144

Chain of Custody Form – Ref 12771

Sheet 1 of 1

Ref:	12771		**Sample matrix**			**Sample preservation**			**Analysis**				
Investigator:	Envirowest Consulting 9 Cameron Place PO Box 8158 ORANGE NSW 2800								**ALS Method Code**				
Telephone:	(02) 6361 4954								**S-2**	**EP203**			
Email:	greg@envirowest.net.au												
Contact Person:	Greg Madafiglio												
Invoice:	accounts@envirowest.net.au												
Laboratory:	Australian Laboratory Services 277 Woodpark Road SMITHFIELD NSW 2164		Water	Soil	Sludge	Cool	HNO3/HCl	Unpre-served	8 Metals	Explosives			
Quotation #:	SYBQ/214/15												
Courier/CN:													
Sample ID	**Container***	**Sampling Date/Time**											
(1) R1 Received as	B61 A	18/1/2021		X		X		X	X	X			
(2) R2	B62 A	18/1/2021		X		X		X	X	X			
(3) R3	B63 A	18/1/2021		X		X		X	X	X			
(4) R4	B64 A	18/1/2021		X		X		X	X	X			
(5) DA	A	18/1/2021		X		X		X	X	No			

Environmental Division Sydney
Work Order Reference
ES2101610

Telephone : +61-2-8784 8555

Investigator: I attest that the proper field sampling procedures were used during the collection of these samples.	Sampler name: Greg Madafiglio Date : 18/1/21 Time:10:00
Relinquished by: (print and signature) Greg Madafiglio GM Date 18/1/21 Time 16:00	Received by: (print and signature) HJ Date 19.1.21 Time 8:20 am

Please return completed form to Envirowest Consulting, *A = Solvent rinsed glass jar with Teflon lined lid and green label, B= Plastic with green label, C= Amber with green label, D= Vial with white label, E= Plastic with red label

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES2101610**	Page	: 1 of 5
Client	: **ENVIROWEST CONSULTING**	Laboratory	: Environmental Division Sydney
Contact	: MR GREG MADAFIGLIO	Contact	: Customer Services ES
Address	: 9 CAMERON PLACE PO BOX 8158 ORANGE NSW, AUSTRALIA 2800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
Telephone	: +61 63614954	Telephone	: +61-2-8784 8555
Project	: 12771	Date Samples Received	: 19-Jan-2021
Order number	: 12771	Date Analysis Commenced	: 20-Jan-2021
C-O-C number	: 12771	Issue Date	: 29-Jan-2021
Sampler	: ----		
Site	: 12771		
Quote number	: EN/222		
No. of samples received	: 5		
No. of samples analysed	: 5		

ilac-MRA NATA
Accreditation No. 825
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Edwandy Fadjar	Organic Coordinator	Sydney Inorganics, Smithfield, NSW
Franco Lentini	LCMS Coordinator	Sydney Organics, Smithfield, NSW
Ivan Taylor	Analyst	Sydney Inorganics, Smithfield, NSW

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis. Where the LOR of a reported result differs from standard LOR, this may be due to high

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EG005(ED093)T: Total Metals by ICP-AES (QC Lot: 3471500)									
ES2101614-009	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	7	6	0.00	No Limit
ES2101610-001	R1 Received as BG1	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.00	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	4	4	0.00	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	<2	<2	0.00	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	<5	<5	0.00	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	<5	<5	0.00	No Limit
EA055: Moisture Content (Dried @ 105-110°C) (QC Lot: 3471503)									
ES2101610-003	R3 Received as BG3	EA055: Moisture Content	----	0.1	%	1.2	1.1	10.3	No Limit
ES2101614-013	Anonymous	EA055: Moisture Content	----	0.1	%	4.1	3.9	4.88	No Limit
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3471501)									
ES2101610-001	R1 Received as BG1	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
EP203A: Explosives (QC Lot: 3469652)									
ES2101610-001	R1 Received as BG1	EP203: HMX	2691-41-0	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: RDX	----	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 1.3.5-Trinitrobenzene	99-35-4	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 1.3-Dinitrobenzene	99-65-0	0.1	mg/kg	<0.1	<0.1	0.00	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP203A: Explosives (QC Lot: 3469652) - continued									
ES2101610-001	R1 Received as BG1	EP203: Tetryl	479-45-8	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 2.4.6-TNT	118-96-7	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 4-Amino.2.6-DNT	19406-51-0	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 2-Amino-4.6-DNT	35572-78-2	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 4-& 2-AM-DNT(Isomeric Mixture)	----	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 2.4-Dinitrotoluene	121-14-2	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 2.6-Dinitrotoluene	606-20-2	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 2.4-& 2.6-DNT(Isomeric Mixture)	121-14-2/606-20-2	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: Nitrobenzene	98-95-3	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 2-Nitrotoluene	88-72-2	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 3-Nitrotoluene	99-08-1	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: 4-Nitrotoluene	99-99-0	0.1	mg/kg	<0.1	<0.1	0.00	No Limit
		EP203: Nitroglycerine	55-63-0	1	mg/kg	<1	<1	0.00	No Limit
		EP203: PETN	78-11-5	1	mg/kg	<1	<1	0.00	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3471500)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	121.1 mg/kg	89.1	88.0	113
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	0.74 mg/kg	108	70.0	130
EG005T: Chromium	7440-47-3	2	mg/kg	<2	20.2 mg/kg	94.5	68.0	132
EG005T: Copper	7440-50-8	5	mg/kg	<5	52.9 mg/kg	92.2	89.0	111
EG005T: Lead	7439-92-1	5	mg/kg	<5	62.1 mg/kg	92.6	82.0	119
EG005T: Nickel	7440-02-0	2	mg/kg	<2	15.4 mg/kg	89.5	80.0	120
EG005T: Zinc	7440-66-6	5	mg/kg	<5	162 mg/kg	74.2	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3471501)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.073 mg/kg	102	70.0	130
EP203A: Explosives (QCLot: 3469652)								
EP203: HMX	2691-41-0	0.1	mg/kg	<0.1	1 mg/kg	93.5	54.0	122
EP203: RDX	----	0.1	mg/kg	<0.1	----	----	----	----
EP203: 1.3.5-Trinitrobenzene	99-35-4	0.1	mg/kg	<0.1	----	----	----	----
EP203: 1.3-Dinitrobenzene	99-65-0	0.1	mg/kg	<0.1	----	----	----	----
EP203: Tetryl	479-45-8	0.1	mg/kg	<0.1	----	----	----	----
EP203: 2.4.6-TNT	118-96-7	0.1	mg/kg	<0.1	1 mg/kg	118	61.0	1220
EP203: 4-Amino.2.6-DNT	19406-51-0	0.1	mg/kg	<0.1	1 mg/kg	112	53.0	127
EP203: 2-Amino-4.6-DNT	35572-78-2	0.1	mg/kg	<0.1	----	----	----	----
EP203: 2.4-Dinitrotoluene	121-14-2	0.1	mg/kg	<0.1	1 mg/kg	103	56.0	126
EP203: 2.6-Dinitrotoluene	606-20-2	0.1	mg/kg	<0.1	----	----	----	----
EP203: Nitrobenzene	98-95-3	0.1	mg/kg	<0.1	1 mg/kg	84.8	60.0	132
EP203: 2-Nitrotoluene	88-72-2	0.1	mg/kg	<0.1	----	----	----	----
EP203: 3-Nitrotoluene	99-08-1	0.1	mg/kg	<0.1	----	----	----	----
EP203: 4-Nitrotoluene	99-99-0	0.1	mg/kg	<0.1	----	----	----	----
EP203: Nitroglycerine	55-63-0	1	mg/kg	<1	----	----	----	----
EP203: PETN	78-11-5	1	mg/kg	<1	1 mg/kg	93.7	71.0	147

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EG005(ED093)T: Total Metals by ICP-AES (QCLot: 3471500)							
ES2101610-001	R1 Received as BG1	EG005T: Arsenic	7440-38-2	50 mg/kg	90.7	70.0	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	93.4	70.0	130
		EG005T: Chromium	7440-47-3	50 mg/kg	94.1	68.0	132
		EG005T: Copper	7440-50-8	250 mg/kg	92.3	70.0	130
		EG005T: Lead	7439-92-1	250 mg/kg	95.4	70.0	130
		EG005T: Nickel	7440-02-0	50 mg/kg	91.3	70.0	130
		EG005T: Zinc	7440-66-6	250 mg/kg	92.6	66.0	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3471501)							
ES2101610-001	R1 Received as BG1	EG035T: Mercury	7439-97-6	5 mg/kg	88.8	70.0	130
EP203A: Explosives (QCLot: 3469652)							
ES2101610-001	R1 Received as BG1	EP203: HMX	2691-41-0	1 mg/kg	89.4	58.0	141
		EP203: 2.4.6-TNT	118-96-7	1 mg/kg	119	58.0	139
		EP203: 4-Amino.2.6-DNT	19406-51-0	1 mg/kg	114	56.0	140
		EP203: 2.4-Dinitrotoluene	121-14-2	1 mg/kg	103	59.0	139
		EP203: Nitrobenzene	98-95-3	1 mg/kg	84.6	60.0	132
		EP203: PETN	78-11-5	1 mg/kg	96.0	59.0	136

ALS Environmental

QA/QC Compliance Assessment to assist with Quality Review

Work Order	: **ES2101610**	Page	: 1 of 4
Client	: **ENVIROWEST CONSULTING**	Laboratory	: Environmental Division Sydney
Contact	: MR GREG MADAFIGLIO	Telephone	: +61-2-8784 8555
Project	: 12771	Date Samples Received	: 19-Jan-2021
Site	: 12771	Issue Date	: 29-Jan-2021
Sampler	: ----	No. of samples received	: 5
Order number	: 12771	No. of samples analysed	: 5

This report is automatically generated by the ALS LIMS through interpretation of the ALS Quality Control Report and several Quality Assurance parameters measured by ALS. This automated reporting highlights any non-conformances, facilitates faster and more accurate data validation and is designed to assist internal expert and external Auditor review. Many components of this report contribute to the overall DQO assessment and reporting for guideline compliance.

Brief method summaries and references are also provided to assist in traceability.

Summary of Outliers

Outliers : Quality Control Samples

This report highlights outliers flagged in the Quality Control (QC) Report.

- **NO Method Blank value outliers occur.**
- **NO Duplicate outliers occur.**
- **NO Laboratory Control outliers occur.**
- **NO Matrix Spike outliers occur.**
- **For all regular sample matrices, NO surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

- **NO Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

- **NO Quality Control Sample Frequency Outliers exist.**

Analysis Holding Time Compliance

If samples are identified below as having been analysed or extracted outside of recommended holding times, this should be taken into consideration when interpreting results.

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times (referencing USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL** Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content (Dried @ 105-110°C)							
Soil Glass Jar - Unpreserved (EA055)							
R1 - Received as BG1, R2 - Received as BG2, R3 - Received as BG3, R4 - Received as BG4, DA	**18-Jan-2021**	**----**	----	----	**20-Jan-2021**	01-Feb-2021	✓
EG005(ED093)T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
R1 - Received as BG1, R2 - Received as BG2, R3 - Received as BG3, R4 - Received as BG4, DA	**18-Jan-2021**	**20-Jan-2021**	17-Jul-2021	✓	**22-Jan-2021**	17-Jul-2021	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
R1 - Received as BG1, R2 - Received as BG2, R3 - Received as BG3, R4 - Received as BG4, DA	**18-Jan-2021**	**20-Jan-2021**	15-Feb-2021	✓	**25-Jan-2021**	15-Feb-2021	✓
EP203A: Explosives							
Soil Glass Jar - Unpreserved (EP203)							
R1 - Received as BG1, R2 - Received as BG2, R3 - Received as BG3, R4 - Received as BG4	**18-Jan-2021**	**20-Jan-2021**	01-Feb-2021	✓	**20-Jan-2021**	01-Mar-2021	✓

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(were) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Explosives	EP203	1	4	25.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Moisture Content	EA055	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	5	20.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	2	20	10.00	10.00	✓	NEPM 2013 B3 & ALS QC Standard
Laboratory Control Samples (LCS)							
Explosives	EP203	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	5	20.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Method Blanks (MB)							
Explosives	EP203	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	5	20.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Matrix Spikes (MS)							
Explosives	EP203	1	4	25.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Mercury by FIMS	EG035T	1	5	20.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard
Total Metals by ICP-AES	EG005T	1	20	5.00	5.00	✓	NEPM 2013 B3 & ALS QC Standard

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055	SOIL	In house: A gravimetric procedure based on weight loss over a 12 hour drying period at 105-110 degrees C. This method is compliant with NEPM Schedule B(3).
Total Metals by ICP-AES	EG005T	SOIL	In house: Referenced to APHA 3120; USEPA SW 846 - 6010. Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	In house: Referenced to AS 3550, APHA 3112 Hg - B (Flow-injection (SnCl2) (Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM Schedule B(3)
Explosives	EP203	SOIL	In house: Referenced to USEPA 8330 UV-DAD, LCMS (APCI in negative mode). Residues of explosives are extracted from air-dried soil samples with acetonitrile. An aliquot of the organic phase is taken and diluted with water for LC/MS determination.

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	In house: Referenced to USEPA 200.2. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM Schedule B(3).
Tumbler Extraction for Explosives.	EP203-PR	SOIL	In house: Referenced to USEPA8330. Sample extractions are performed using end over end tumbling in place of sonic bath extraction.

Appendix N. Water Quality Management Plan, prepared by SMS

CURRAJONG
PLANNING, PROPERTY + PROJECT MANAGEMENT

Water Quality Management Plan

Document Number: SMS-HSQ-EXX.X11
Status: working
Version: 05 (02 May 2023)
Owner: Manager Compliance
Review: 3 years

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Table of Contents

1 Introduction 2

2 Scope 2

3 Purpose of this Plan 2

4 Water Quality Management System 3

Materials Handling 3

Water Supply 3

Stormwater Management 4

Wastewater Management 4

5 Management system 5

Site Manager 5

Site Employees and Contractors 5

Manager Compliance 6

6 Document Information 6

Terms and Definitions 6

Related Documents 6

Reference Information 7

Change Information 7

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1 Introduction

1-1 The purpose of this document is to highlight the various water flows requiring management at the Solar Mining Services (SMS) Ammonium Nitrate Emulsion (ANE) manufacturing facility at the Bogan Gate Explosives Reserve (BGER).

1-2 The water quality management system involves management of stormwater, wastewater and roof water storage tanks to ensure operations at the SMS ANE Facility incorporates best practice standards in full compliance with Commonwealth, State and local regulations.

1-3 The water quality management plan follows the requirements of the SMS Integrated Management System (IMS), particularly ***SMS-IMS-B00.L10 Environment Policy*** and supports ***SMS-HSQ-000.X01 - HSEQS Management Plan*** to identify and control hazards that may arise at SMS workplaces.

1-4 The EPA Ammonium Nitrate – Storage and Handling Environmental Management and Controls – AESIG Code of Practice, dated February 2021 have also been referenced in the development of the water quality management plan.

2 Scope

2-1 This water quality management plan is applicable to all SMS personnel and contractors conducting activities on the SMS lease area within the BGER.

2-2 This plan is to be used for all circumstances where operational activities occur within SMS / BGER work area, including:

a) Materials handling (storage, processing, re-work, unloading and loading and dispatch).

b) Water reticulation (supply storage, plant demand and maintenance).

c) Stormwater management (from upslope / surrounds and from within the SMS plant site).

d) Wastewater management (refuelling and washdown areas and blown from the boiler and cooling towner).

e) Sewerage (domestic waste management).

3 Purpose of this Plan

3-1 The purpose of this plan is to provide the background to the various water quality management systems that are required to be managed at the SMS ANE Facility to ensure no impacts on water resources.

3-2 The NSW EPA Ammonium Nitrate – Storage and Handling Environmental Management and Controls – AEISG Code of Practice, dated February 2021 have been used as a guide to the design and operation of appropriate control measures at the SMS ANE plant.

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4 Water Quality Management System

Materials Handling

4-1 The SMS ANE Facility has an objective to not release any chemicals into the environment through the following management and controls:

a) All material deliveries being suitably contained in accordance with dangerous goods regulations.

b) All chemicals being appropriately stored in containers that are undercover within modern buildings that are secured from stormwater ingress, unauthorised access and vermin.

c) All loading and unloading of chemicals on the impervious (concrete) hardstands to be provided at each storage shed and at the manufacturing plant.

d) Any spills being immediately cleaned up in accordance with the SMS Spills Management Procedure.

e) Where practical spillages being recycled through the rework tank or suitably disposed of at a waste facility licenced to handling such chemicals / materials.

f) Processing of ANE as per the SMS PLC.

g) ANE product dispatch being suitably contained in accordance with the dangerous goods regulations.

4-2 A copy of the SMS Spills Management Procedure is included in the SMS Integrated Management System.

Water Supply

4-3 The SMS ANE Facility has an objective to be a responsible and sustainable user of available water resources, by capturing roof water for storage in tanks, adopting water wise and recycling strategies and through careful consumption of available reticulated water supply available at the BGER from the Parkes Shire Council B-Section Pipeline.

4-4 The water tank supply at the SMS ANE Facility currently consists of 100,000 litres in two metal tanks each of 50,000 litres. The water tanks supply water to the manufacturing processing lines and to storage sheds and a reserve for firewater.

4-5 All fire water storage tank is fitted with a suitable Storz fitting and RFS identification requirements.

4-6 Water supply is also provided from a 40mm pressurised water service from the BGER reticulated water supply, which is connected to the B-Section Pipeline maintained by Parkes Shire Council.

4-7 Water pipes line are to be installed to every storage shed used at the SMS ANE Facility to supply water to fire hose reels.

4-8 No water is to be extracted from groundwater resources for any activities related to the SMS ANE Facility.

4-9 No water is extracted from the holding pond for any activities related to the SMS ANE Facility.

4-10 Any increases in ANE production will require a review of water supply and demand calculations.

4-11 A Water Services Plan has been developed for the SMS ANE Facility which is available in the SMS Integrated Management System.

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Stormwater Management

4-12 The SMS ANE Facility has an objective to have Zero Liquid Discharge (ZLD) from the manufacturing plant and overall, a neutral impact on stormwater flows at the BGER and the wider Gunningbland Creek catchment.

4-13 The SMS ANE Facility sits in the context of the BGER stormwater management system which is robust and long established by the Australian defence force since WWII.

4-14 The stormwater system designed for the SMS ANE Facility serves a number of different purposes to deal with a number of different water runoff sources, as follows:

a) Stormwater from upslope areas of the BGER and surrounds.

b) Stormwater management from concrete hardstand areas in front of AN sheds.

4-15 The design principles applied to the establishment of the SMS stormwater management are as follows:

a) Diversion of upslope stormwater flows around the SMS manufacturing plant via established table drains, swale drains and culverts to the BGER storage ponds.

b) Collection of roof water from the SMS manufacturing plant into water tanks for supply of process water to the ANE manufacturing plant, and discharge of overflow to the SMS swale drain connecting to the BGER drainage corridor and holding ponds.

c) Stormwater from concrete hardstand areas at the SMS manufacturing plant that might contain traces of chemical from spills / washdown and blown water from the Boiler and Cooling Tower to be directed to the holding pond.

Note: any chemical spills onto the concrete hardstands are required to be cleaned up immediately in accordance with the SMS Spills Management Procedure.

d) Stormwater from hardstand areas at the SMS diesel fuel area that might contain traces of fuel spills to be directed to the oil plate separator and then into the holding pond.

Note: any fuel spills onto the concrete hardstands are required to be cleaned up immediately in accordance with the SMS Spills Management Procedure.

e) Discharge of roof water from storage sheds to drain overland to the BGER drainage corridor and holding ponds.

f) Overland flows from vacant areas and roads to the BGER drainage corridor and holding ponds.

g) Maintenance of vacant areas with a grass ground cover to prevent soil erosion and sedimentation. Grass is to be maintained at a manageable cover using slasher equipment and suitable chemical spray to control weeds.

h) Minimisation of soil erosion and sedimentation during construction through implementation of silt fences, hay bales and the like, and the establishment of grass ground cover as soon as possible post construction.

4-16 A Stormwater Management Plan has been developed for the SMS ANE Facility (see Appendix A).

Wastewater Management

4-17 The SMS ANE Facility has an objective to have Zero Liquid Discharge (ZLD) from the manufacturing plant and overall, a neutral impact on stormwater flows at the BGER and the wider Gunningbland Creek catchment.

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4-18 The wastewater management system designed for the SMS ANE Facility deals with two main sources of wastewater, as follows:

a) Wastewater from management from potentially chemical impacted concrete hardstand areas in and around the ANE manufacturing plant.

b) Wastewater from the diesel refuelling area and washdown area.

c) Domestic sewage from the crib room, toilets and other plumbing facilities at the ANE manufacturing plant.

4-19 Wastewater from concrete hardstand areas at the ANE manufacturing plant, plate oil separator and washdown areas all drain to the evaporation pond. The evaporation pond has been suitably designed by Barnson in accordance with industry guidelines, including EPA Ammonium Nitrate – Storage and Handling Environmental Management and Controls – AESIG Code of Practice, dated February 2021.

4-20 Wastewater from the crib room and ablution facilities is treated in the on-site septic system approved and operational at the SMS ANE Facility by Parkes Shire Council in accordance with the Local Government Act 1993. The septic system is operating satisfactorily and is designed to cope with existing / future projected staff numbers at the SMS ANE Facility.

4-21 Details of the Barnson Evaporation Pond design are provided in Appendix B.

4-22 Details of the onsite wastewater management system established at the SMS ANE Facility are provided in Appendix C.

5 Management system

5-1 The design of the SMS ANE Facility Water Quality Management Plan is supported by SMS staff who are trained to deal with the operation of the PLC system and other procedures adopted by SMS, as follows:

Site Manager

5-2 The Site Manager is responsible for:

a) Identification of hazards likely to cause environmental harm on the site.

b) Provision of resources to maintain control of hazards likely to cause environmental harm on the project and maintain risk to workers and the environment to acceptable levels.

c) Seek support to assess materials, tasks or equipment to be used on the site, likely to cause environmental harm.

d) Implement this plan.

e) Monitor site activities to ensure conformance to this plan.

Site Employees and Contractors

5-3 Any SMS employee or contractor on site is responsible for the following requirements of this plan.

a) Maintaining systems.

b) Monitoring of water supplies and any breakages, leaks or the like in water supply system.

c) Maintaining access to firefighting reserves.

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d) Monitoring waste management systems so that are functioning to their intended design specifications.

e) Responding to any spills in accordance with the SMS Spills Management Procedure.

f) Note to cause pollution of the environment.

Manager Compliance

5-4 The Manager Compliance is responsible to:

a) Identify the legislative requirements relevant to the facility.

b) Assist the Site Manager to identify suitable specialist personnel to provide inspection and audit processes.

c) Provide an audit schedule and adequate resources to conduct audits and inspections for timely rectification of non-conformances to this plan.'

6 Document Information

6-1 Relevant legislation, standards and codes are regularly reviewed and monitored for updates and are included in the ***SMS-IMS-B00.R01 – National Legislation Register*** for tracking and management. Related documents and reference information in this section provides the linkage and source to develop and maintain the site compliance register and document management system.

Terms and Definitions

6-2 Terms and definitions are listed in a single definitions document, refer to the ***SMS-IMS-000.G01 - Glossary of terms and definitions*** on SharePoint.

Related Documents

6-3 Related documents, listed in ***Table 6-***, are internal documents directly related to or referenced from this document.

Number	Document Type	Title
SMS-IMS-B00.L10	Policy	Environment Policy
SMS-IMS-B00.R01	Register	National Legislation Register
SMS-HSQ-E00.S01	Standard	Emergency Preparedness and Response
SMS-MAN-A01.R03	Register	Operational aspects & impacts register
SMS-IMS-000.G01	Guideline	Glossary of terms and definitions
SMS-HSQ-000.X01	Management Plan	HSEQS Management Plan
SMS-ENG-000.G01	Engineering	Water Services Plan
SMS-ENV-A00.P01	Environment Policy	Spill Management

Table 6-3 – Related documents

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Reference Information

6-4 Reference information, listed in ***Table 6-***, is information that is directly related to the development of this document or referenced from within this document.

Reference	Title
NSW EPA	Ammonium Nitrate – Storage and Handling Environmental Management and Controls - AEISG Code of Practice

Table 6-4 – Reference information

Change Information

6-5 Full details of the document history are recorded in the document control register, by version. A summary of the current change is provided in ***Table 6-***.

Version	Date	Change Summary

Table 6-5 – Change information

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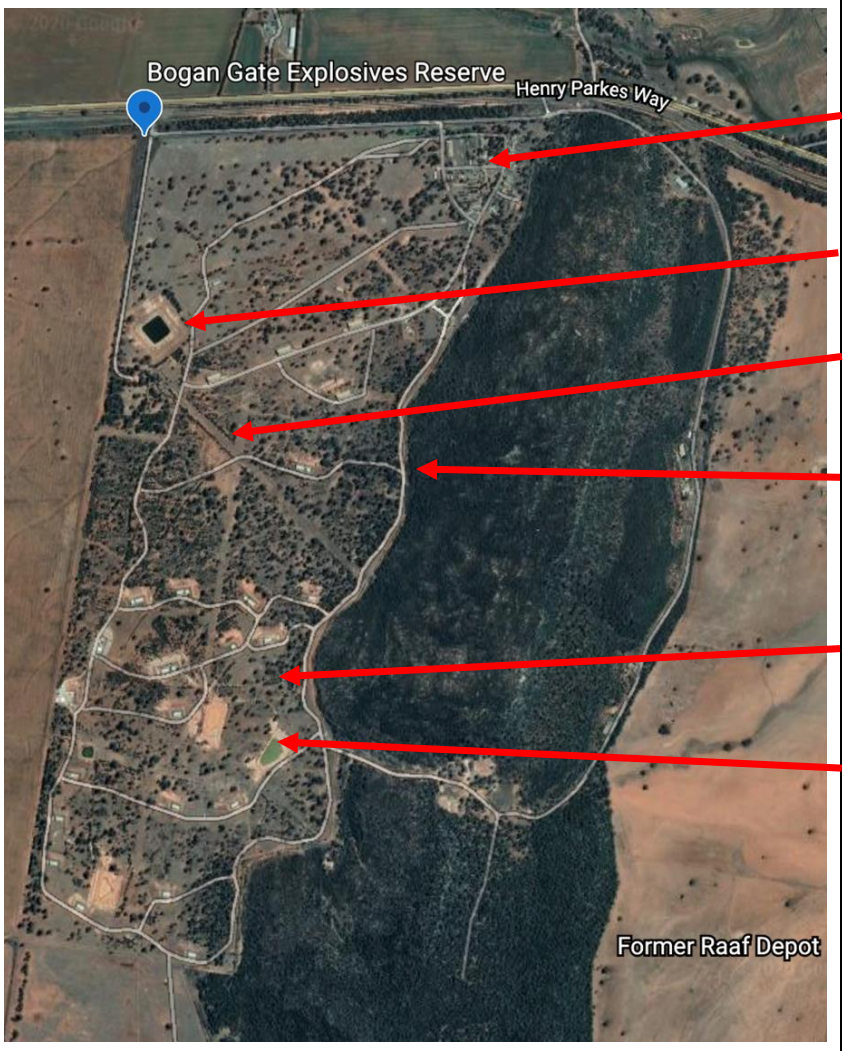
Appendix A – SMS Stormwater Management Plan Plan



No changes to BGER stormwater management system at army camp site

No changes to BGER holding pond

No changes to BGER drainage corridor

Divert upslope stormwater via table drain into BGER drainage corridors and holding ponds

SMS internal stormwater management system

No changes to BGER holding pond

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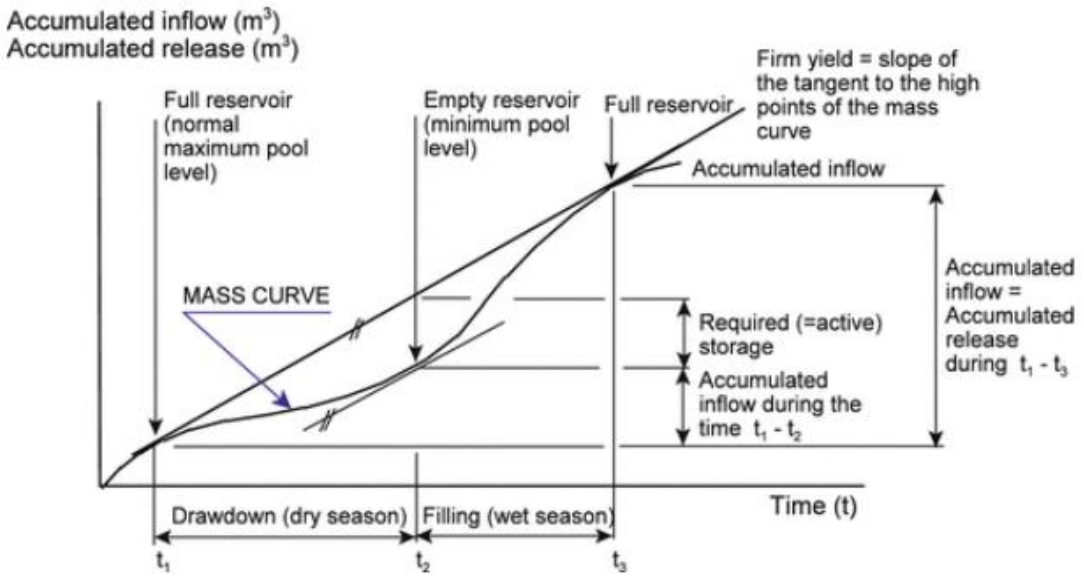
Appendix B – SMS Evaporation Pond

Evaporation ponds are a suitable means of managing treated water if no alternative method is available. Evaporation ponds refer to lined retention facilities designed to hold treated water whilst allowing evaporation to take place. Successful use of evaporation for treated water management requires that evaporation is equal to or exceeds the total water input to the system, including precipitation. The net evaporation may be defined as the difference between the evaporation and precipitation during any time period – usually an annual cycle.

Evaporation rates are largely dependent upon the characteristics of the water body. Evaporation from relatively small shallow ponds, (as covered by this guideline) is usually considered to be quite different from that of large lakes mainly due to different rates of heating and cooling because of size and depth differences. In semi-arid regions, hot dry air moving from a land surface over a water body will result in higher evaporation rates for smaller water bodies. The West Australian Water DESIGN GUIDELINE DS231 provides the calculation basis for holding ponds. This guideline recommends that designers of evaporation ponds should size the ponds for average conditions as a base case. With a base case established consideration must be given to dealing with flows from wet events (typically a 10% AEP 72-hour event) which includes rainfall on the evaporation ponds as well as upstream processes and increased flows from the sewer collection system, all of which end up in the evaporation pond. Pan evaporation data is the most common means for defining free water evaporation and is the most commonly available data to use as a basis for design. Unfortunately, the density of evaporation pan stations is much less than that of weather stations, so the designer needs to make judgement calls based on isopleths.

The Rippl diagram is an industry recognised approach to sizing of balancing storages of various types. The objective is to size a balancing storage which will reduce variations in an influent flow pattern to provide a constant outflow. Flow equalisation is achieved by storing influent flows above the average daily flow and discharging the stored volume during periods of low flow. Various methods can be employed to achieve this, but the Rippl mass flow diagram is simple to use, and eminently suitable for this requirement.



BARNSON engineers were consulted for the design of the evaporation pond. BARNSON used their internal design process for the evaporation Pond design. Calculated inputs and outputs for the Holding Pond are overleaf.

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Barnson Job No	33063	
Location :	3577 Henry Parkes Way Bogan Gate	

Design Wastewater Flow	Q	l/day	720
Design Loading Rate	R	mm/day	3

Climate Zone	Parkes Highest Rainfall	*As per Soil Landscapes of Dubbo 1:250 000* Dropbox

1 Month	2 Pan Evap E (mm)	3 Evapo Transpiration Et (ET=0.75E)mm	4 Rainfall R (mm)	5 Retained Rainfall Rr (Rr=0.75R) mm	6 DLR per Month mm	7 Disposal Rate (3-5+6) mm	8 ffluent applied per mont L	9.00 Size of Area (8/7) m²	Days in Month
Jan	229.4	172.05	251.9	188.925	93	76.125	22320	293.20	31
Feb	184.8	138.6	218.3	163.725	87	61.875	20880	337.45	29
Mar	161.2	120.9	197.7	148.275	93	65.625	22320	340.11	31
Apr	102	76.5	299	224.25	90	-57.75	21600	- 374.03	30
May	62	46.5	205	153.75	93	-14.25	22320	- 1,566.32	31
Jun	42	31.5	165.1	123.825	90	-2.325	21600	- 9,290.32	30
Jul	46.5	34.875	132.9	99.675	93	28.2	22320	791.49	31
Aug	65.1	48.825	116.2	87.15	93	54.675	22320	408.23	31
Sep	96	72	127.8	95.85	90	66.15	21600	326.53	30
Oct	142.6	106.95	191.4	143.55	93	56.4	22320	395.74	31
Nov	177	132.75	189	141.75	90	81	21600	266.67	30
Dec	244.9	183.675	212.8	159.6	93	117.075	22320	190.65	31
							Mean area	- 656.70	

Month	First Trial Area	Application Rate	Disposal Rate	mm	Increase in Depth of Stored Effluent	pth of effluent for Mon	Increase In Depth of Effluent	Computed	Reset if Et<0	Equiv Storage
Dec	58.9m²	378.9473684	117.075	261.8723684	872.91	0.00	872.91	872.91	872.90789	0.000
Jan		378.9473684	76.125	302.8223684	1009.41	0.00	1009.41	1,009.41	1009.40789	0.000
feb		354.4991511	61.875	292.6241511	975.41	0.00	975.41	975.41	975.41384	0.000
Mar		378.9473684	65.625	313.3223684	1044.41	0.00	1044.41	1,044.41	1044.40789	0.000
Apr		366.7232598	-57.75	424.4732598	1414.91	0.00	1414.91	1,414.91	1414.91087	83338.250
May		378.9473684	-14.25	393.1973684	1310.66	1414.91	2725.57	2,725.57	2725.56876	160536.000
Jun		366.7232598	-2.325	369.0482598	1230.16	2725.57	3955.73	3,955.73	3955.72963	232992.475

Barnson Job No	33063		
Location :	3577 Henry Parkes Way Bogan Gate		
Catchment Area		meters square	1100
Extra Water (Wash down water)	Q	l/month	1000
Proposed Pond Size (m x m)	30	15	450

RainFall Data (BOM)	Parkes Average Rainfall	Dropbox

1 Month	2 Pan evap E (mm)	3 Rainfall R (mm)	4 Monthly Catchment Water (Litres/Month)	5 Evaporation Rate Litres/month	6 Vater applied per mont (L)	Days In Month
Jan	229.4	57.6	63360	103230	64360	31
Feb	184.8	49.1	54010	83160	55010	29
Mar	161.2	47.4	52140	72540	53140	31
Apr	102	41.4	45540	45900	46540	30
May	62	47.2	51920	27900	52920	31
Jun	42	49.5	54450	18900	55450	30
Jul	46.5	49.1	54010	20925	55010	31
Aug	65.1	49.2	54120	29295	55120	31
Sep	96	41.8	45980	43200	46980	30
Oct	142.6	52.4	57640	64170	58640	31
Nov	177	49.5	54450	79650	55450	30
Dec	244.9	53	58300	110205	59300	31

Month	Pond Area	Application rate (Litres)	Evaporation Rate (Litres)	Litres Added to Storage	Computed	Accumulative Storage
Dec	450m²	59300	110205	-50905	0	0.000
Jan		64360	103230	-38870	0	0.000
feb		55010	83160	-28150	0	0.000
Mar		53140	72540	-19400	0	0.000
Apr		46540	45900	640	640	640.000
May		52920	27900	25020	25020	25020.000
Jun		55450	18900	36550	61570	61570.000

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Minimum Area Method Water Balance an Wet Weather Storage Calculations

Barnson Job No	53063		
Location :	3577 Henry Parkes Way Bogan Gate		
Catchment Area	m²	890	
		L/day	L/month
Additional Water (eg wash down)	Q	50	1500
Design Percolation Rate	R	mm/wk	0

Climate Zone	Parkes Decile 9 Rainfall	*As per Soil Landscapes of Dubbo 1:250 000*

Paramter	Symbol	Formula	Units	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
Days in Month	(D)	n/a	days	31	28	31	30	31	30	31	31	30	31	30	31	365
Precipitation	(P)	n/a	mm/month	137.1	109.2	107.8	86.5	97.5	93.7	86.3	87.7	78.2	97.5	118.1	111.6	831.4
Evaporation	(E)	n/a	mm/month	229.4	184.8	161.2	102	62	42	46.5	65.1	96	142.6	177	244.9	1569.5
Design Waterflow Flow (Catchment)			L/month	1220190	971880	959420	769850	867750	833930	768070	780530	695980	867750	1051090	993240	7399460
Outputs (Evaporation)		(ET +B)	mm/month	229.4	184.8	161.2	102.0	62.0	42.0	46.5	65.1	96.0	142.6	177.0	244.9	1569.5
Inputs																
Precipitation	(P)	n/a	mm/month	137.1	109.2	107.8	86.5	97.5	93.7	86.3	87.7	78.2	97.5	118.1	111.6	1211.2
Possible Water	(W)	(ET + B) -P	mm/month	92.3	75.6	53.4	15.5	-35.5	-51.7	-39.8	-22.6	17.8	45.1	58.9	133.3	358.3
Actual Water Production	(I)	H/12	mm/month	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9	29.9
Inputs		(P +I)	mm/month	167.0	139.1	137.7	116.4	127.4	123.6	116.2	117.6	108.1	127.4	148.0	141.5	1241.1
Storage	(S)	(P+I) - (ET+B)	mm/month	-62.4	-45.7	-23.5	14.4	65.4	81.6	69.7	52.5	12.1	-15.2	-29.0	-103.4	
Cumulative Storage	(M)	n/a	mm	0.0	0.0	0.0	14.4	79.7	161.3	230.9	283.4	**295.5**	280.2	251.2	147.7	

Note - H = sum of W

Irrigation Area	(L)	365 x Q/H	m²	50.9
Storage	(v)	Largest M	mm	295.5
		(V xL)/1000	m³	15.0

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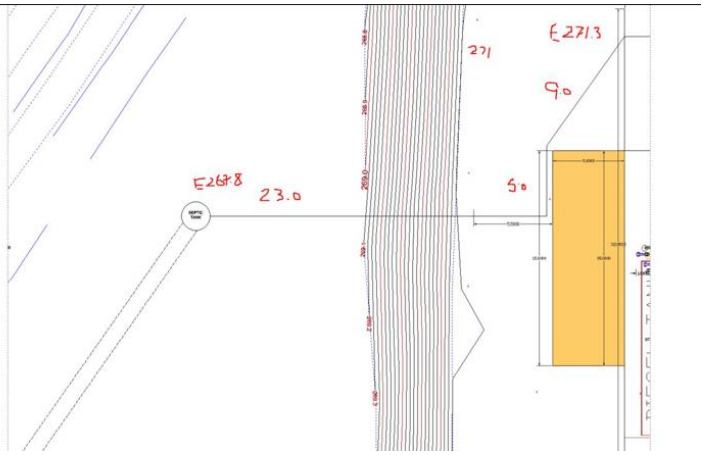
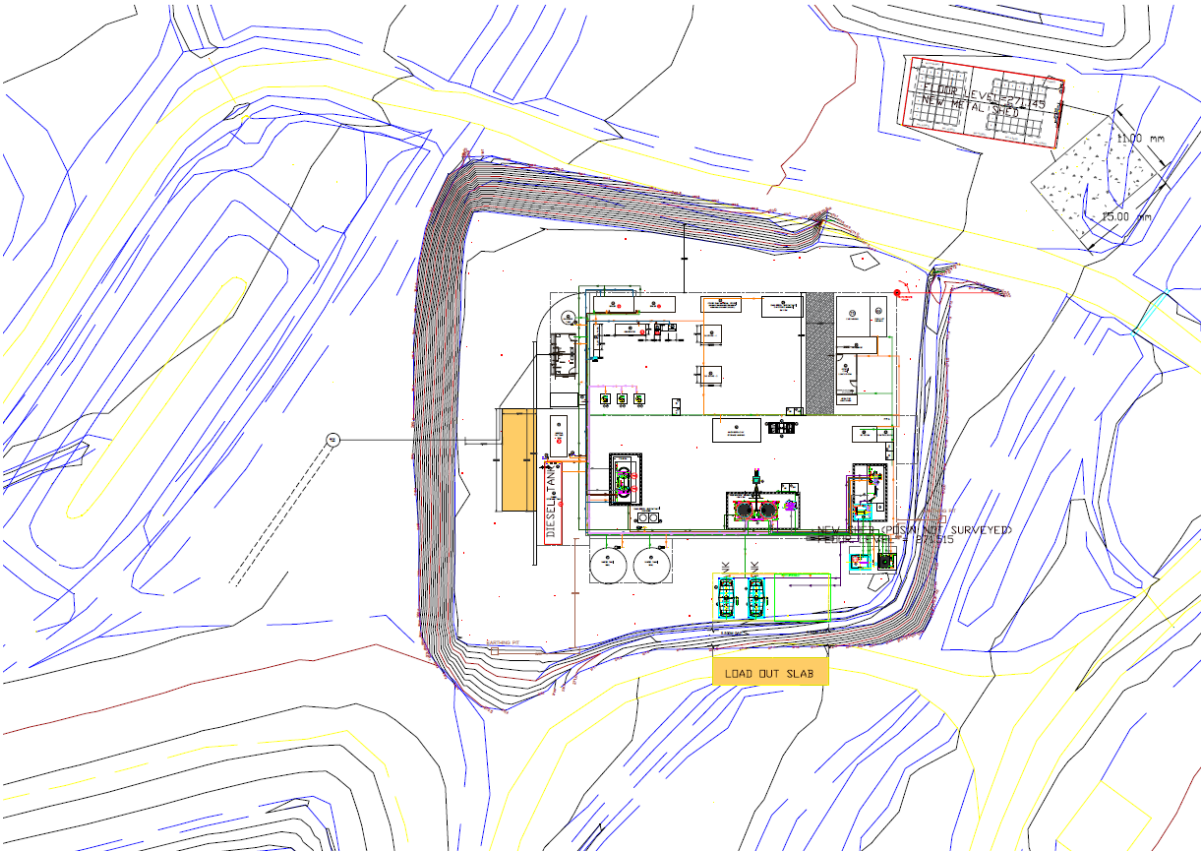
Appendix C – SMS Septic System

Overhead photograph of the site with a basic layout.







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