Appendix D

Social Impact Assessment and Addendum Social Impact Assessment (Ethos Urban, 2022)

Social Impact Assessment

Moss Vale Plastics Recycling and Reprocessing Facility

74-76 Beaconsfield Road, Moss Vale NSW
Plasrefine Recycling Pty Ltd

Ethos Urban

Prepared by Ethos Urban
Submitted for Plasrefine Recycling Pty Ltd

14 September 2022 | 2220293

'Gura Bulga'
Liz Belanjee Cameron

'Gura Bulga' – translates to Warm Green Country. Representing New South Wales.

By using the green and blue colours to represent NSW, this painting unites the contrasting landscapes. The use of green symbolises tranquillity and health. The colour cyan, a greenish-blue, sparks feelings of calmness and reminds us of the importance of nature, while various shades of blue hues denote emotions of new beginnings and growth. The use of emerald green in this image speaks of place as a fluid moving topography of rhythmical connection, echoed by densely layered patterning and symbolic shapes which project the hypnotic vibrations of the earth, waterways and skies.

Ethos Urban acknowledges the Traditional Custodians of Country throughout Australia and recognises their continuing connection to land, waters and culture.

We acknowledge the Gadigal people, of the Eora Nation, the Traditional Custodians of the land where this document was prepared, and all peoples and nations from lands affected.

We pay our respects to their Elders past, present and emerging.

Contact	Allison Heller Director	aheller@ethosurban.com 0432 342 230

This document has been prepared by:		**This document has been reviewed by:**	
Amy-Grace Douglas / Sean Perry	14/09/2022	Allison Heller	14/09/2022

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Ethos Urban Pty Ltd | ABN 13 615 087 931 | 173 Sussex Street Sydney NSW 2000 (Gadigal Land) | +61 2 9956 6962 | ethosurban.com

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The proposed facility
The proposal relates to the construction and operation of a plastics recycling and reprocessing facility and ancillary infrastructure including:

- Two main buildings for waste receival, recycling, and reprocessing and finished product storage
- Wastewater treatment plant
- Construction of a new access road to extend from the facility to Lackey Road, via the currently unformed Braddon Road and Braddon Road 'east extension'
- Ancillary infrastructure including an office building, visitor information and education centre, research and development (R&D) laboratories, workshop, staff and visitor parking, truck parking, internal roadways, weighbridges, water management, landscaping and visual screening, fencing, signage and utility connections.
- The proposal would include facilities to enable educational activities for school groups and other interested parties to be carried out (and learn about plastic waste, plastic recycling and turning wastes into valuable resources). The centre would be open from 9am to 5pm weekdays. The facility would operate 24/7. Truck movements to the site will be limited to Monday-Friday 7am-6pm with no weekend delivery or dispatch of material.

The proposed facility would sort mixed plastics into different types, and convert the various plastics to flakes and pellets, to be manufactured into more advanced plastic products such as polyester fibres and resins. The combined outputs of both stages of the project would help fill the gap in local processing capacity for mixed plastics. The site is currently vacant.

The proposal is a State Significant Development Application (SSDA) as it is development for the purpose of a resource recovery or recycling facility that would handle more than 100,000 tonnes per year of waste, as well as development for the purpose of the manufacture or reprocessing of polymers, plastics, rubber or tyres, with a capital investment of more than $30 million. The development would normally be subject to approval by the NSW Minister for Planning under the NSW *Environmental and Planning Assessment Act 1979* (EP&A Act), however as over 50 unique public objections have been received, the application will be determined by the Independent Planning Commission (IPC) as per the EP&A Act.

An indicative illustration of the facility is provided at **Figure 13.**

Social Impact Assessment of the proposal
The SIA has been prepared in accordance with the NSW's Department of Planning and Environment (DPE) Social Impact Assessment Guideline for State Significant Projects - November 2021 ('the SIA Guideline').

The SIA provides a valuable analysis of key social considerations impacting the proposal. As per the SIA Guideline, potential impacts have been assessed against specific social factors, taking into account the findings of completed specialist technical reports for the proposal and the ease (or otherwise) of mitigating these impacts. In addition, a review of the public and stakeholder consultation undertaken by GHD has informed the SIA.

Key social impacts

Overall, the relevant social impacts, if mitigation methods are successfully adopted, will range from **low** to **high**. Social impacts may be viewed as positive or negative, dependant on the receiver. This is further discussed in **Table 7.**

A summary of key identified social impacts as a result of the proposal include:

- Temporary potential negative impacts associated with construction activity, which may affect health and wellbeing due to amenity impacts, for some members of the PSA. Construction is anticipated to take

approximately 15-17 months with construction of the new access road anticipated to take 1-3 months - after such time the potential impacts in terms of accessibility and amenity (noise) may be reduced for residents, visitors and workers - particularly to Beaconsfield Road.

- Potential permanent visual impacts, due to the scale and nature of the industrial development on a currently vacant site, may have a negative social impact on surroundings. This has the potential to impact on the area from the perspective of landowners and community members in the PSA in particular.
- Positive social impacts arising from the proposal may be experienced for some members of the PSA, SSA and TSA, as a result of improved livelihoods and way of life, with the proposal providing increased local employment opportunities, and positive cumulative impacts as part of the broader strategic transformation of the Southern Highlands Innovation Park.
- Positive social impacts to livelihoods as a result of the proposal include the potential to attract people to work and live in the LGA, make use of key enabling infrastructure upgrades, deliver on programs and education opportunities for the community, and strengthen the capabilities of the Wingecarribee Shire through generating additional revenue.

In addition to the range of mitigation measures associated with other technical disciplines, which will assist to mitigate some of the identified impacts above, the following social impact mitigation measures are recommended:

- Prepare a Communications and Engagement Strategy (CES) including a Complaints Management Procedure (CMP), which will enable a mechanism for landowners and the general community to engage with the proposal team throughout the construction phase of the proposal. The CES should be prepared alongside the Construction Traffic Management Plan (CTMP) and Construction Environmental Management Plan (CEMP) to ensure the construction process is properly informed by those impacted.
  - The CES should include regular proposal updates and provide opportunities for the community to share feedback throughout the proposal's life cycle
  - The CES should build on the engagement activities undertaken to date and take into consideration the needs and aspirations of the community that have already been explored as well as existing relationships and networks within the community.
  - Ensure the CEMP is integrated with the CES during construction stage, to provide a mechanism for landowners and the community to communicate and collaborate with the proposal team.
  - The CES should include strategies to promote community understanding and awareness of real and perceived health and wellbeing impacts. The CMP should provide a range of avenues for community members to express their concerns or ask questions – paired with ongoing engagement with nearby residents of the PSA and additional mitigation as identified.
  - Reasonable and feasible work practices with all potentially impacted residents to be consulted during construction. Ongoing engagement to identify potential health and wellbeing impacts and work out mitigation techniques if appropriate and/or required.
  - Communicate both construction and operational traffic and road network impacts to affected stakeholders and community members appropriately (as part of a CES and/or Operational Waste Management Plan)
  - The CES should communicate any opportunities in the proposal for community benefits
- Maintain close dialogue with relevant stakeholders such as Wingecarribee Shire Council to identify opportunities to encourage social interaction between workers and the local community (such as complaints management, education, traineeships, local procurement) and mitigate any issues as they arise, both during construction and operation.
- Continuation of the community consultation methods provided during the planning phase and construction phase to enable nearby residents to notify the proposal team of issues and concerns related to construction impacts
- Ensure the design of the facility, including in relation to materials, landscaping, and planting for visual screening, responds to issues raised by the community – particularly surrounding residents, and is as sensitive as possible in its design to the surrounding natural environment.
- Consider whether any additional planting is required on adjoining properties to further reduce visual impacts. This should be a collaborative process with affected residents and accompanied by further consultation with affected residents.
- Provide pre-construction and ongoing education to on-site staff (e.g. via inductions) regarding project and local community history which describes current connection to land as well as the more recent agricultural

history and community information to encourage respectful behaviours, and enable workers to recognise Aboriginal and European heritage artefacts to prevent accidental damage and promote the swift reporting of heritage discovery

- Explore strategies to promote the tourism, education and employment opportunities arising from the development in order to foster a transitioning community identity and sense of pride.
- Explore opportunities for partnership building to enhance potential positive impacts associated with job creation during the construction and operational stage. This may include partnerships with organisations such as the nearby TAFE to offer special apprenticeships and programs, or the development of a local procurement strategy or social procurement strategy for employment, to target disadvantaged groups in the employment market.

Subject to effective implementation of such mitigation measures, the proposal can achieve some positive social outcomes for the residents, workers, and community in the Wingecarribee LGA and beyond. Potential negative impacts can be mitigated through implementation of various technical management plans and recommendations, to be further developed through detailed design phase, and ongoing consultation with the local community and relevant stakeholders throughout all stages of the development, including post-construction and into the operational phase.

1.0 Introduction

1.1 Overview

This Social Impact Assessment (SIA) has been prepared in relation to the State Significant Development Application (SSDA 9409987) for the proposed plastics recycling and reprocessing facility (the 'proposal') at 74-76 Beaconsfield Road, Moss Vale NSW. The applicant is Plasrefine Recycling Pty Ltd (Plasrefine Recycling).

The SIA has been prepared in accordance with the NSW's Department of Planning and Environment (DPE) Social Impact Assessment Guideline for State Significant Projects - November 2021 ('the SIA Guideline').

The preparation of this SIA follows a DPE Request for Information (RFI) issued on 14 April 2022, following lodgement of the SSDA and Environmental Impact Statement (EIS) for the proposal in January 2022. A SIA was not lodged with the SSDA at that time. The Secretary's Environmental Assessment Requirements (SEARs) were issued to the applicant on 15 October 2020, and the requirement for a SIA was not outlined in the SEARs due to the fact that the DPE SIA Guideline had not been published at the time of the SEARs being issued.

The EIS (GHD, January 2022) did, however, contain an analysis of socio-economic matters at Section 18 (Other Issues – Section 18.2) including an assessment of the existing environment, impact assessment during construction, and operation and mitigation measures.

This SIA draws on the analysis of the current and forecast social conditions of the defined study area/s, along with details of the proposed development, to assess its likely social impacts. The report has regard to relevant federal, state and local policy frameworks and strategic drivers, in particular the SIA Guideline. It also draws on the outcomes of community consultation that has been undertaken to date.

The purpose of this report is to analyse the potential social impacts that may arise from the development, during construction and operational phases. It subsequently recommends appropriate social mitigation and benefits optimisation measures.

1.2 The proposed development

Plasrefine Recycling is a privately-owned Australian company, established to meet the need for local processing of mixed plastics, which have historically been exported to China and other countries, or landfilled with other wastes.

The proposal – a State Significant Development Application (SSDA) – relates to the construction and operation of a plastics recycling and reprocessing facility and ancillary infrastructure including:

- Two main buildings for waste receival, recycling, and reprocessing and finished product storage
- Wastewater treatment plant
- Ancillary infrastructure including an office building, visitor information and education centre, research and development (R&D) laboratories, workshop, staff and visitor parking, truck parking, internal roadways, weighbridges, water management, landscaping and visual screening, fencing, signage and utility connections.
- The proposal would include facilities to enable educational activities for school groups and other interested parties to be carried out (and learn about plastic waste, plastic recycling and turning wastes into valuable resources). The centre would be open from 9am to 5pm weekdays.
- Proposed operational hours for the facility are 24/7. Truck movements to the site will be limited to Monday-Friday 7am-6pm with no weekend delivery or dispatch of material.

The proposed facility will sort mixed plastics from waste, sort the plastics into different types, and convert the various plastics to flakes and pellets, to be manufactured into more advanced plastic products such as polyester fibres and resins. The combined outputs of both stages of the project would help fill the gap in local processing capacity for mixed plastics.

The proposal is a SSDA as it is development for the purpose of a resource recovery or recycling facility that would handle more than 100,000 tonnes per year of waste, as well as development for the purpose of the manufacture or

reprocessing of polymers, plastics, rubber or tyres, with a capital investment of more than $30 million. The development would normally be subject to approval by the NSW Minister for Planning under the NSW *Environmental and Planning Assessment Act 1979* (EP&A Act), however as over 50 unique public objections have been received, the application will be determined by the Independent Planning Commission (IPC) as per the EP&A Act.

1.3 Requirement for a SIA

DPE issued SEARs to the applicant on 15 October 2020 for the preparation of an Environmental Impact Statement (EIS) for the proposed development.

The SEARs did not require a SIA (as is now required for all SSDAs), given the SIA Guideline had not yet been published at that time. The requirement for a SIA to be submitted with a SSDA became effective as of 1 November 2021.

A SIA was subsequently requested through the DPE RFI letter dated 14 April 2022, Attachment 1.

> *"The Department received over 300 submissions during exhibition of the EIS for the development. Many of these submissions raised concern about the social impacts of the development. Please provide a more detailed Social Impact Assessment to address community concerns".*

It is noted that Wingecarribee Shire Council had advocated to NSW DPE for a SIA to be prepared in its submission on the EIS (dated 7 April 2022), in Item 37 and 38.

> *"The proposed development has generated a high level of opposition from the community. Council has received a lot of feedback from the community on their perceptions of the proposal. Prior to the submission of the EIS, Council advocated to the proponent for the inclusion of a social impact assessment with the EIS. This has not been included".*

Wingecarribee Shire Council also emphasised the requirement for a SIA in their Council meeting on 17 August 2022, stating:

"As part of the Response to Submissions, the applicant is required to prepare a Social Impact Assessment (SIA). A SIA provides an opportunity to identify and understand the social impacts of the proposed development and should help to inform responses/changes to the proposal that aim to avoid, mitigate or reduce negative impacts and enhance positive impacts.

It is Council's expectation that the SIA will be informed by detailed consultation with the local community, to assist in identifying, predicting and evaluating the likely social impacts arising from the proposal and propose responses/changes to those predicted impacts.

The outcomes of the SIA may lead to significant changes to the current proposal, to mitigate any social impacts associated with the proposed development".

The SIA addresses the requirement for a SIA set out in DPE's RFI letter and complies with the SIA Guideline.

1.4 Purpose and structure of this report

The purpose of this report is to assess the social impacts (both positive and negative) that may arise from the development within its social context.

The report has been prepared in accordance with the SIA Guideline, which specifies the following components:

- Describe the existing environment (i.e., social baseline)
- Assess the potential social impacts (both positive and negative)
- Assess cumulative impacts

- Identify measures to mitigate, manage and enhance the identified potential impacts (both positive and negative)

This report is structured as follows:

- Proposal summary and site context
- Baseline analysis of the designated area of social influence of the development, including current and forecast population profile, population health profile, and existing social infrastructure networks
- Strategic policy context, including relevant state and local government drivers
- Social issues and trends relevant to the proposed development
- Community perspectives of relevance to the proposed development
- Predicted social impacts of the proposed development at this location, along with recommended mitigation and enhancement measures.

A suggested social impact monitoring and measurement plan has also been provided – as per the SIA Guideline.

2.0 Objectives and scope of assessment

2.1 Assessment objectives and approach

SIA involves the analysis of social changes and impacts on communities that are likely to occur as a result of a particular development, planning scheme, or government policy decision. The purpose of SIA is to assess the impacts of the development, both positive and negative, for all stages of the proposal's lifecycle for key stakeholders and the broader affected community.

The assessment of social impacts in this report has been prepared in accordance with the SIA Guideline published by DPE (November 2021). The SIA Guideline provides a consistent framework and approach to the assessment of social impacts associated with all state-significant projects and developments in NSW.

As outlined in the SIA Guideline, social impacts vary in their nature and can be positive or negative, tangible or intangible, physically observable, or psychological (fears and aspirations). Social impacts can be quantifiable, partly quantifiable or qualitative. They can also be experienced or perceived differently by different people and groups within a community, or over time.

The assessment involves a number of steps, including a baseline analysis of the existing socio-economic environment of a defined study area or areas; identifying list of stakeholders and considering their views; scoping of relevant issues; identification and assessment of potential impacts against the specified suite of factors set out in the SIA Guideline; determination of the significance of the impacts, and identification of measures to manage or mitigate the proposal's potential negative impacts and enhance potential benefits.

This methodology employed in preparing this SIA is designed to ensure that the social environment of communities potentially impacted by a proposal is properly accounted for and recorded, and anticipated impacts are adequately considered and assessed.

2.2 Social factors for assessment

The SIA Guideline classifies social impacts as a suite of factors, which forms the core basis of this assessment:

- ***Way of life:*** *how people live, get around, work, play and interact with one another each day*
- ***Community:*** *its composition, cohesion, character, how it functions, resilience, and people's sense of place*
- ***Accessibility:*** *how people access and use infrastructure, services and facilities (private, public, or not-for-profit)*
- ***Culture:*** *both Aboriginal and non-Aboriginal - people's shared beliefs, customs, practices, obligations, values and stories, and connections to Country, land, waterways, places and buildings*
- ***Health and wellbeing:*** *people's physical, mental, social and spiritual wellbeing – especially for people vulnerable to social exclusion or substantial change, psychological stress (from financial or other pressures), access to open space and effects on public health*
- ***Surroundings:*** *access to and use of natural and built environment, including ecosystem services (shade, pollution control, erosion control), public safety and security, as well as aesthetic value and amenity*
- ***Livelihoods:*** *including people's capacity to sustain themselves through employment or business*
- ***Decision-making systems:*** *the extent to which people can have a say in decisions that affect their lives, and have access to complaint, remedy and grievance mechanisms.*

Impacts (both positive and negative) are assessed across each of these factors on the basis of both tangible observable impacts, and community perspective – i.e., with regard to the expressed fears and aspirations of impacted communities.

2.3 Assessment stages and structure

Stages in the preparation of the SIA are as follows:

- Baseline analysis of the existing socio-economic environment, involving:
  - Study area definition, including primary and secondary geographic areas likely to be impacted (see **Section 5.2** of this report)
  - Demographic analysis, including socio-economic characteristics of current communities and population forecast (see **Section 5.3**)
  - Review of relevant background information, along with relevant local and state policy frameworks (see **Section 4.0**)
- Stakeholder and community engagement:
  - Analysis of findings of stakeholder and community consultation undertaken by GHD to identify community and stakeholder values, concerns and aspirations (see **Section 6.0**)
  - A separate interview with Wingecarribee Shire Council was undertaken by Ethos Urban to inform the SIA (see **Section 6.6**)
- Scoping of social impacts (both positive and negative):
  - Analysis of potential impacts during and post-construction, with each of the directly affected communities and other stakeholders identified in relation to the way they may be affected. Reference to technical studies submitted with the EIS, and responses to the DPE RFI has also informed this analysis, as well as a comprehensive literature review. **Both positive and negative potential issues are identified.** A SIA Scoping Checklist has been prepared at the outset of this assessment, in line with the specifications of the SIA Guideline and provided to the proponent. The scoping process has underpinned the social impact assessment in **Section 7.0.**
- Identification of impacts (both positive and negative) as per the SIA Guideline parameters. The social impact assessment ultimately appraises the significance of each identified impact based on its duration, extent and sensitivity of impact "receivers." This results in a social significance rating for impacts and benefits, as per the social impact significance matrix shown in **Section 7.0.**
- Identification of mitigation strategies to manage impacts and enhance benefits of the development (**Section 8.0**).

2.4 Information sources and assumptions

Following are the key data sources and policy documents used to prepare this SIA (ordered by title):

Technical reports prepared for the SSDA

- *Appendix G - Engagement Outcomes Report (Rev 1)* (GHD, 22 December 2021)
- *Moss Vale Plastics Recycling and Reprocessing Facility EIS* (GHD, January 2022)
- *Moss Vale Plastics Recycling and Reprocessing Facility EIS Volume 1 and Appendices* (GHD, January 2022)
- *Moss Vale Plastics Recycling and Reprocessing Facility – Confidential – Work in Progress - Submissions Report Rev A ('Submissions Report') (GHD 13 September 2022)*
- *Response to Submissions Air Quality Letter* (GHD, 3 August 2022)
- *Technical Report 1 - Biodiversity Development Assessment Report ('BDAR')* (GHD, 1 November 2021)
- *Technical Report 2 - Noise and Vibration Assessment ('NVA') (*GHD, 24 January 2022)
- *Technical Report 3 - Air Quality and Odour Assessment ('AQOA')* (GHD, 25 January 2022)
- *Technical Report 6 – Traffic and Transport ('TTA')* (GHD, 27 January 2022)
- *Technical Report 7 - Landscape and Visual('LVIA')* (GHD, 2 November 2021)
- *Technical Report 8 - Aboriginal Cultural Heritage Assessment Report ('ACHAR')* (OzArk, October 2021)
- *WSC 2017 - Community Strategic Plan 2031*
- *WSC 2022 – Council meeting agenda 17 August 2022*

Strategic policies and other government documents

- *ABS Census of Population and Housing 2021 (Australian Bureau of Statistics, 2021)*
- *Moss Vale Enterprise Corridor Development Control Plan 2008* (WSC, 2012)
- *National Waste Policy (Australian Government, 2018)*
- *National Waste Policy Action Plan* (Australian Government, 2019)
- *NSW Waste and Sustainable Materials Strategy 2041* (NSW Government, 2021)
- *NSW Plastics Action Plan* (NSW Government, 2021)
- *NSW Circular Economy Policy Statement* (NSW Government, 2019)
- *NSW 2021 – Waste and Sustainable Materials Strategy 2041*
- *South East and Tablelands Regional Plan 2036* (NSW Government, 2017)
- *Social Impact Assessment Guideline for State Significant Projects* (NSW DPE, 2021)
- *Southern Highlands Destination Strategy 2020-2030* (WSC, 2020)
- *Southern Highlands Destination Strategy Background Report 2020-2030* (WSC, 2020)
- *Wingecarribee Community Strategic Plan 2031* (WSC, 2017)
- *Wingecarribee Local Strategic Planning Statement 2040* (WSC, 2020)

Other documents

- *A circular economy roadmap for plastics, tyres, glass and paper in Australia* (CSIRO, 2020)
- *Supplementary Agenda – Ordinary Meeting of Wingecarribee Shire Council - 17 August 2022* (WSC, 2022)

Assumptions applied to complete this SIA include:

- The key findings of the background studies and technical reports are accurate.
- Socio-economic data for each study area accurately reflects the community demographic profile.
- Outcomes of the community consultation and engagement undertaken to date accurately reflect community views.
- All potential social impacts to the local community and special interest groups that can reasonably be identified have been included in this report.

A note on COVID-19: *COVID-19 is an unprecedented global health crisis and economic event that is rapidly evolving. At the current time, the research and analysis of economic and population data – such as forecasts of population or employment growth and so on – reflects a return to "business as usual" scenario, while also noting the potential impacts that may be associated with the COVID-19 virus, travel and border restrictions impacting on migration numbers, and the anticipated return to growth in economic or population indicators.*

2.5 Qualifications of report authors

The *SIA Guideline requires* authors to hold appropriate qualifications. The subject SIA author's expertise and qualifications are set out below.

Author	Expertise/Qualifications
Allison Heller Director, Social Strategy	Bachelor of Town Planning (Hons.1) Post Graduate Diploma History of Architecture and Art MPIA Practicing urban and social planning/policy across the private and public sectors since 2000
Amy-Grace Douglas Principal, Social Strategy	Bachelor of Science (Urban and Regional Planning) Social Planning and Community Development – Professional Short Course (UTS)

Sean Perry Senior Urbanist, Social Strategy	Bachelor of Arts (Social Sciences) Cert.II (Outdoor Recreation)
Chloe Brownson Urbanist, Social Strategy	Bachelor of Communications (Social and Political Sciences)
Alysson Lucas Junior Urbanist, Social Strategy	Bachelor of Economics Master of Sustainability

3.0 Site context and the proposed development

3.1 Subject site

The site is located at 74-76 Beaconsfield Road, Moss Vale, NSW, approximately 140km southwest of Sydney CBD and approximately 2.8km north-west from the Moss Vale town centre.

The site is legally known as Lot 11 DP 1084421. The proposed access road would pass through Lot 10 DP 1084421 and Lot 11 DP1084421.

The site itself has an area of 7.7ha and is situated within the Wingecarribee Local Government Area (LGA), south-west of Sydney - a largely rural area including the main townships of Bowral, Mittagong and Moss Vale, NSW.

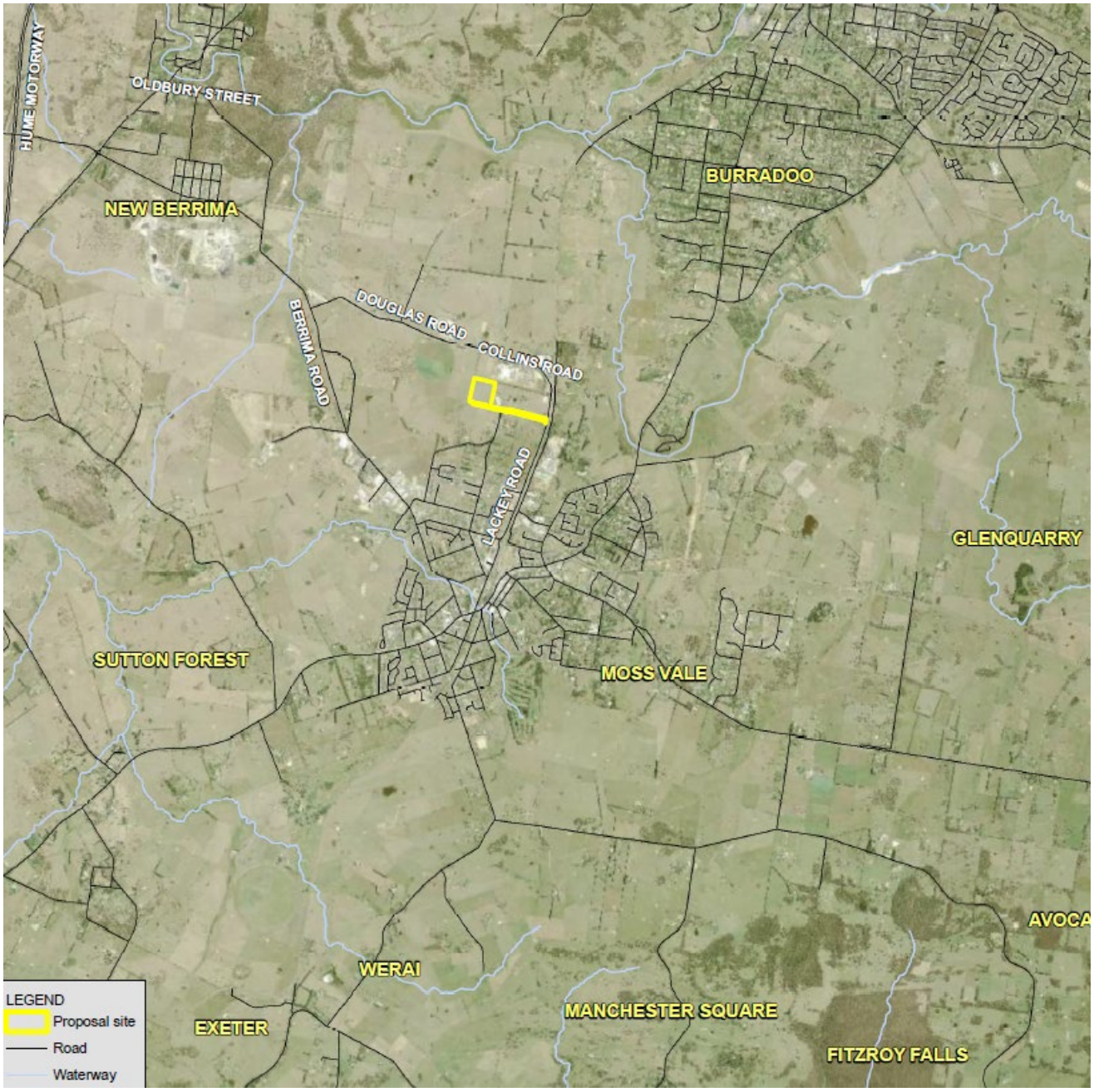


Figure 1 Site location

Source: Traffic and Transport Report (GHD, 27 January 2022)

Both lots affected by the proposal are within the Moss Vale Enterprise Corridor (MVEC) which is within the Southern Highlands Innovation Park (SHIP), a significant area of industrially zoned land located between Moss Vale and New Berrima. The site is currently undeveloped grazing land. The MVEC was established in 2008, zoning 1000ha of land for industrial and employment-generating purposes.

The SHIP presents an 'opportunity to capitalise on the growth of Western Sydney and the LGA by attracting specialised industries in manufacturing and technology' (Draft South East and Tablelands Regional Plan 2041, NSW Government 2022).

3.2 Surrounding context

Surrounding land uses are a mix of vacant land, industrial, warehouse, manufacturing, and rural residential.

The site and surrounding land immediately to the north and west is currently vacant.

The site is adjoined by the following:

- **North-east of the site:** Dux Hot Water (consisting of multiple industrial buildings/warehouses and about 5.8 hectares of vacant land directly north of the plastics recycling and reprocessing facility site.
- **East:** Australian BioResources (consisting of four large buildings, internal roads and car parking, a residence and currently vacant land which the access road would be located on.
- **South:** The southern boundary is closest to sensitive receivers, as there are dwellings located within 200 metres to the south east.
- The future road corridor for Braddon Road, and vacant land owned by Plasrefine Recycling (southern parcel of land in Lot 11 of DP 1084421) currently used for cattle grazing
- Private property and land used by Moss Vale Hay Sales (consisting of a number of small sheds).

The site is also near to the following industrial development:

- Fast Skips Recycling (waste management service) - 450m North East of the site
- Omya Australia (mineral processing plant) - 660m North East of the site
- A&I Coatings (polyurethane and fluoropolymers manufacturing – 640m east of the site.

There are seven (7) rural residential properties located within 250 metres of the proposed site, and a further 146 within 1.2 kilometres. Photos of the site and surrounds are below:

Figure 2 Surrounding context – Beaconsfield Road, facing south

Source: Ethos Urban

Figure 3 View of subject site in the foreground with the Dux facility to the north-west in the middle background

Source: GHD

Figure 4 View of subject site in the foreground with the Australian Bioresources facility in the background

Source: GHD

3.3 Proposed development

The proposed development is a plastics recycling and reprocessing facility and ancillary infrastructure, to be located on the northern parcel of land in Lot 11 DP 1084421, at street address 74-76 Beaconsfield Rd, Moss Vale. A new access road is proposed, to extend from the facility to Lackey Road, via the currently unformed Braddon Road and the Braddon Road 'east extension' (legally known as Lot 10 of DP 1084421).

The area would be occupied by the proposed permanent operational infrastructure and the new access road (1.8ha). The buildings would occupy a combined area of approximately 3.2ha.

The proposal is defined as the construction and operation of a plastics recycling and reprocessing facility with capacity to receive up to 120,000 tonnes per year of mixed plastics, and includes the following works:

- Construction of two main buildings (Building 1 and Building 2) for waste receival, recycling and reprocessing, and finished product storage;
- Wastewater treatment plan;
- Ancillary infrastructure including:
  - Administration, visitor information and education centre
  - Staff amenities including lounges, café and gym
  - Workshop/ R&D Laboratories
  - Truck parking
  - Staff and visitor parking including bike parking
  - Internal roadways
  - Weighbridges
  - Water management
  - Fire management
  - Landscaping
  - Fencing
  - Business identification signage
  - Utility connection
  - Onsite car parking (70 bays proposed) which would accommodate 60 staff parking and approximately 10 during peak staff changeovers.

To construct a new access road as part of the SSDA, 'Council has requested that Plasrefine Recycling negotiate with the landowner of Lot 10 DP 1084421 and build the new access road as part of the development. The public road would then be dedicated to Council (EIS, Section 19.2.1).

A proposed site plan showing the access road is in **Figure 5**.

Existing viewpoints and photomontages of the proposed development are shown in **Figure 6** to **Figure 11.**

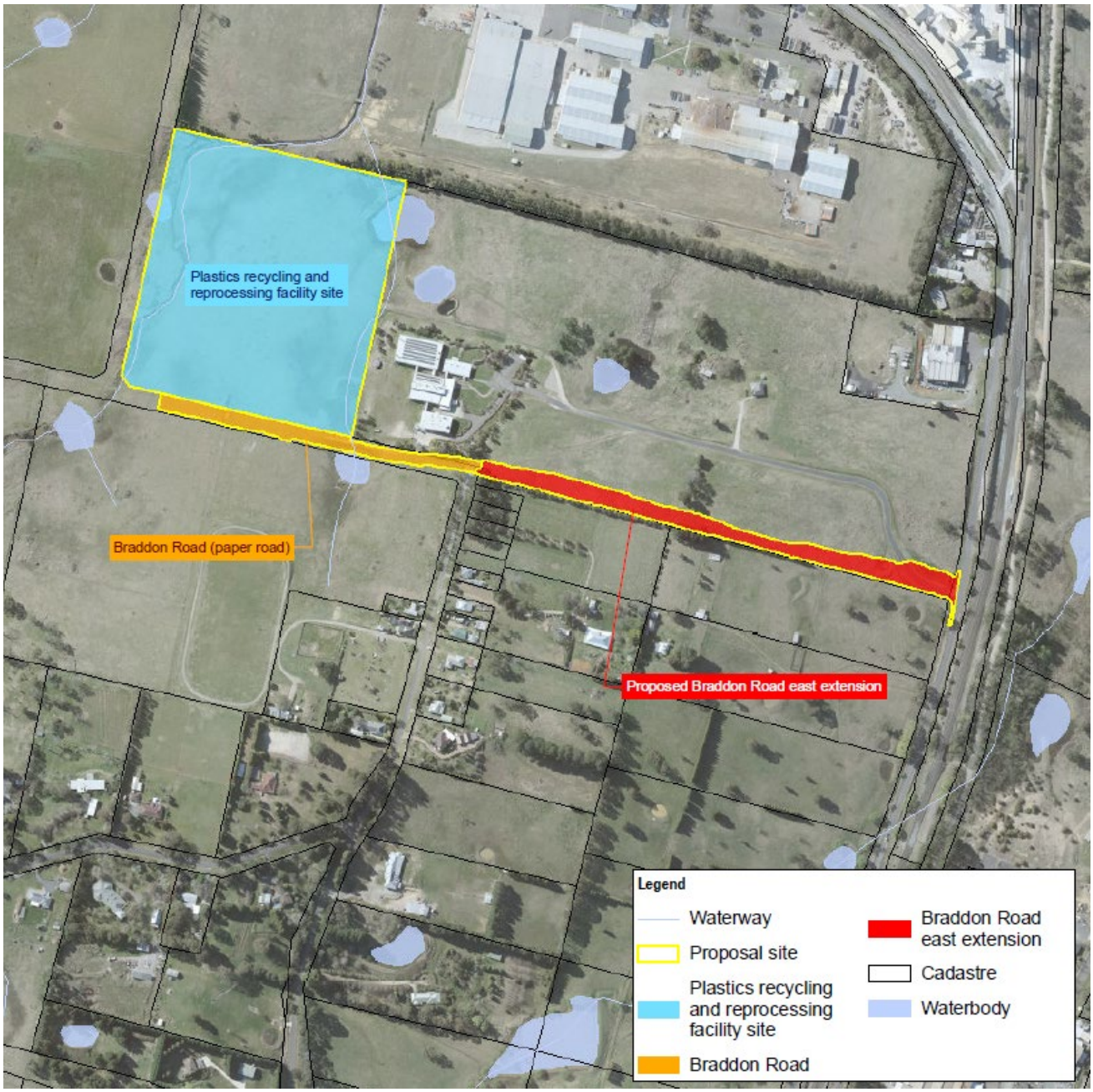


Figure 5 Proposed site plan

Source: GHD 4/8/2022

Figure 6 Existing view from Beaconsfield Road, looking north-west (top) and photomontage from Beaconsfield Road looking north-west, without mitigation measures

Source: GHD Viewpoint 01 (15 August 2022)

Figure 7 Photomontage from Beaconsfield Road looking north-west, with mitigation measures at 10 years

Source: GHD Viewpoint 01 (15 August 2022)

Figure 8 Existing view from north of Bulwer Road looking north-east (top) and photomontage from north of Bulwer Road looking north-east, without mitigation measures

Source: GHD Viewpoint 02 (15 August 2022)

Figure 9 Photomontage from north of Bulwer Road looking north-east with mitigation measures at 10 years

Source: GHD Viewpoint 02 (15 August 2022)

Figure 10 Existing view from Collins Road looking south (top) and photomontage from Collins Road looking south, without mitigation measures (bottom)

Source: GHD Viewpoint 05 (15 August 2022)

Figure 11 Photomontage from Collins Road looking south, with mitigation measures at 10 years

Source: GHD Viewpoint 05 (15 August 2022)

It is noted that proposed operational hours for the site are 24/7. Truck movements to the site are however limited to Monday-Friday 7am-6pm with no weekend delivery or dispatch of material. Proposed selected drawings are shown below.

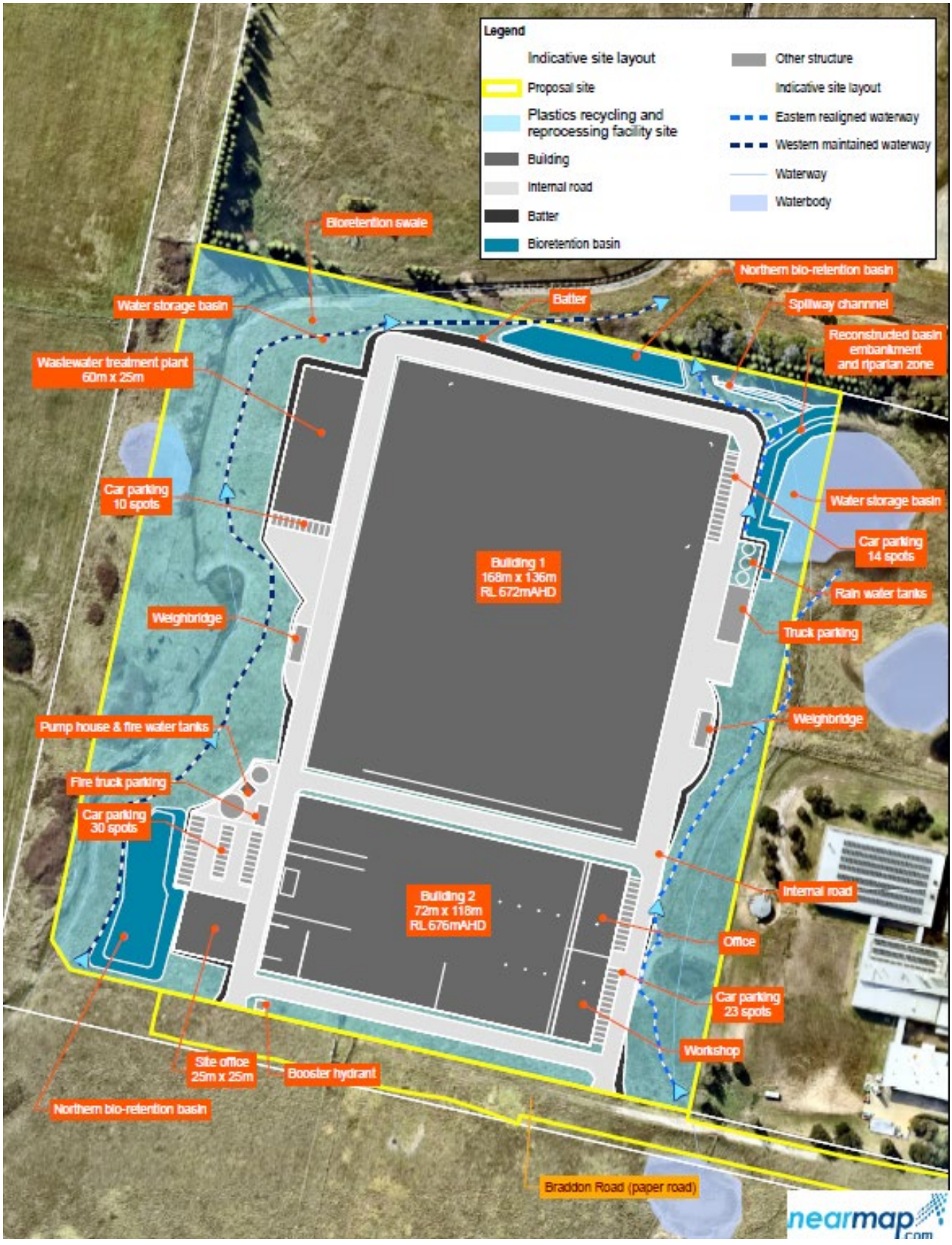


Figure 12 Concept plastics recycling and reprocessing facility layout

Source: GHD Response to Submissions Report (19 August 2022)

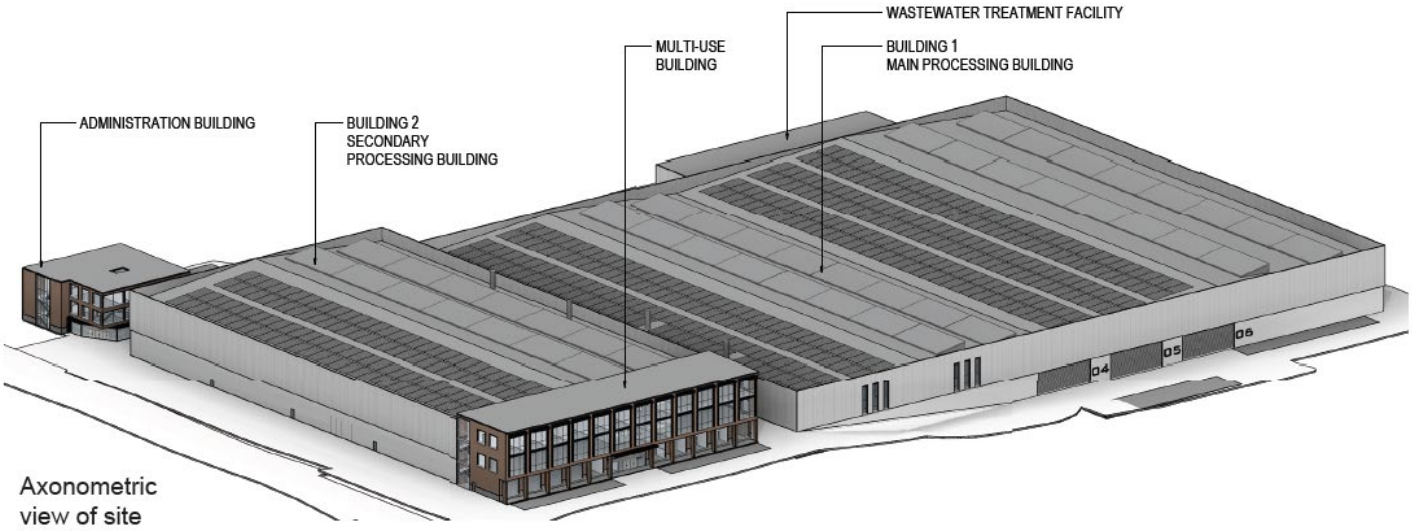


Figure 13 Proposed axonometric view of the site

Source: GHD

3.4 Development objectives

As outlined in the EIS (Section 1.3), the key objectives of the development are to:

- Construct and operate a plastics recycling and reprocessing facility that will recover and sort plastics into different types and convert them into valuable products, reducing the amount of plastics in landfill
- Increase the capacity and resilience of the recycling network in Australia
- Provide necessary waste management infrastructure to meet Sydney's future waste management requirements
- Contribute to NSW achieving its resource recovery targets under the NSW Waste and Sustainable Materials Strategy 2041, and NSW Plastics Action Plan through the recovery and recycling of plastics
- Manage potential impacts associated with the construction and operation of the facility in an environmentally and socially responsible manner (EIS, GHD January 2022).

3.5 Construction staging

In the EIS (Section 7.7), the construction process was estimated at 15 months, however the Submissions Report (GHD, 13 September 2022) provides for a possible increase in the early works period for up to three months, extending the overall construction period to up to 17 months. Three key stages are identified in the EIS and RTS:

- Early works and site establishment (one to three months)
  - Construction of site access road
  - Utilities connection
  - Establishment of construction compound including construction staff amenities
  - Installation of temporary fencing
- Main site works (11 months)
  - Clearance of vegetation within the construction footprint, stripping and stockpiling of topsoil for re-use
  - Bulk earthworks for site shaping and surface water drainage and the bioretention ponds
  - Pouring concrete foundation slabs, footings, hardstand and slabs for the buildings
  - Construction of pavement areas for the truck and car park, internal roads and the site entrance/egress points
  - Installation of steel truss framework for structures
  - Erection of pre-cast concrete panels for external and internal partition walls and metal roof sheets for site buildings
  - Installation of processing equipment

- Building finishing works including fit-out
- Installation of firewater and other tanks
- Installation of weighbridges
- Installation of permanent fencing and signage
- Restoration works including removal of temporary construction compound, general site clean up and landscaping following construction.

- Testing and commissioning (3 months)

Detailed construction planning, including programming, work methodologies and work sequencing would be undertaken once construction contractors have been engaged (EIS, GHD January 2022).

4.0 Strategic policy and planning context

The following section identifies the key social drivers for this site, based on a review of the key federal, state and local policies and strategies. The following key documents have been reviewed:

- *Circular economy roadmap for plastics, glass, paper and tyres* (Commonwealth Scientific and Industrial Research Organisation, 2020)
- *National Waste Policy* (Australian Government, 2018)
- *National Waste Policy Action Plan* (Australian Government, 2019)
- *NSW Waste and Sustainable Materials Strategy 2041* (NSW Government, 2021)
- *NSW Plastics Action Plan* (NSW Government, 2021)
- *NSW Circular Economy Policy Statement* (NSW Government, 2019)
- *South East and Tablelands Regional Plan 2036* (NSW Government, 2017)
- *Southern Highlands Destination Strategy 2020-2030* (Wingecarribee Shire Council, 2020)
- *Wingecarribee Community Strategic Plan 2031* (Wingecarribee Shire Council, 2017)
- *Wingecarribee Local Strategic Planning Statement 2040* (Wingecarribee Shire Council 2020).

A summary of the key themes of these documents are identified in **Table 1** below.

Table 1 Strategic policy review

Policy themes	Implications for Social Impact Assessment	Relevant documents
Adopting Circular Economy and plastics recycling	• Waste is responsible for 2% of Australia's emissions. The Australian Government has set the National Waste Policy in 2018 to serve as a framework for action by governments, private sector and communities to achieve sustainable waste management and transition away from take-make-waste economy towards circular economy. • Strategy 7 of the National Waste Policy is to increase industry capacity including identifying and addressing opportunities for recycling and energy recovery to promote landfill diversion and improve resource recovery. • Historically, Australia has exported recyclable waste, particularly to China. Target 1 of the National Waste Policy Action Plan is to ban waste export with building industry capacity and infrastructure to collect, separate, recycle and remanufacture recycled materials as key strategy. • The Action Plan also identified as a priority to "increase access to resource recovery and waste management infrastructure for regional, remote and Indigenous communities in every state and territory" (National Waste Policy Action Plan, p. 15). • Lack of plastics recycling infrastructure is a key challenge towards circular economy. The Circular economy roadmap for plastics, glass, paper and tyres has identified as an actionable strategy to "build capacity for reprocessing and manufacturing of recycled products nationally aimed at increasing the ability to create wealth from waste domestically" (p. 11). CSIRO projects that "local processing capacity must increase by at least 150% to ensure previously exported plastic waste does not end up in landfill" (p. 12).	• National Waste Policy (Australian Government, 2018) • National Waste Policy Action Plan (Australian Government, 2019) • Circular economy roadmap for plastics, glass, paper and tyres (Commonwealth Scientific and Industrial Research Organisation, 2020) • NSW Waste and Sustainable Materials Strategy 2041 (NSW Government, 2021) • NSW Plastics Action Plan (NSW Government (NSW Government, 2021) • NSW Circular Economy Policy Statement (NSW Government, 2019) • Wingecarribee Local Strategic Planning Statement 2040 (Wingecarribee Shire Council)

	• NSW has set a goal to triple plastics recycling rate by 2030, indicating that recovery and recycling infrastructure must keep pace with demand, where potential additional investment in new or upgraded facilities are required through 2030 to prevent shortfall. • It is a local priority to increase energy, water and waste efficiencies within the Shire through reduction in volume of waste to landfill and waste transport requirements and maximisation of recovery or resource from waste, re-use and recycling to shift towards circular economy. The Council has also identified as a strategic action to extend collaboration with private industry in investing in innovative and sustainable waste/recycling processing options. Planning Priority 1.1 of the LSP is to 'reduce carbon emissions and increase energy, water and waste efficiencies' and 'maximise re-use and recycling to support a circular economy' (Action XIV). • Planning Priority 3.1 notes a key goal to support businesses' and attract people to work, live and visit, through broadening and promoting the range of business and industry sectors (Action III).	
Fostering healthy, liveable and connected communities	• The Wingecarribee Community Strategic Plan envisions a community that is healthy and productive community, learning and living in harmony, and proud of its heritage and nurturing its environment. • It is a priority of the Council as identified by Wingecarribee's local strategic planning statement to enhance the liveability of its towns and villages through provision of facilities and services that support a healthy, culturally rich and socially connected Wingacarribee local community. • It is a vision of the Council and the Wingecarribee community to strengthen the sense of place within the Shire, where people feel connected and safe. As part of this vision, it is a Council strategy to improve and revitalise town and village centres, to create welcoming and accessible community facilities that promote opportunities for social interaction, and to provide an accessible, efficient and interconnected public transport system within and out of the Shire.	• South East and Tablelands Regional Plan 2036 (NSW Government, 2017) • Southern Highlands Destination Strategy 2020-2030 (Wingecarribee Shire Council, 2020) • Wingecarribee Community Strategic Plan 2031 (Wingecarribee Shire Council, 2017) • Wingecarribee Local Strategic Planning Statement 2040 (Wingecarribee Shire Council)
Respecting heritage and preserving rural character	• It is a priority of the Council to maintain and enhance the community's connection with the local area's unique rural landscape. The Shire is predominantly rural in nature with agricultural landscapes that serve as natural borders that separate its dispersed towns and villages. The community has intrinsic connection to and highly values its rural landscapes, not only for their productive capacity, but also for their visual amenities that make up the distinct rural character of the area. • The Shire has a rich history and is recognised for its heritage, forming an integral part of the Southern Highlands identity. With over 400 heritage items, 16 heritage conservation areas and 9 archaeological sites, Southern Highlands is recognised for its significant cultural landscapes, buildings and streetscapes. • As part of its community strategic plan, it is a Council strategy to maintain inter-urban breaks (ie the green	• South East and Tablelands Regional Plan 2036 (NSW Government, 2017) • Southern Highlands Destination Strategy 2020-2030 (Wingecarribee Shire Council, 2020) • Wingecarribee Community Strategic Plan 2031 (Wingecarribee Shire Council, 2017) • Wingecarribee Local Strategic Planning Statement 2040 (Wingecarribee Shire Council)

	between) and rural landscape between towns and villages, protect their unique characteristics and places of significant cultural heritage, and retain a sense of place. • It is important to balance urban growth and the community's values - maintaining, or enhancing when opportunities occur, the rural landscapes between towns and villages and preserving the area's rural character and respecting its heritage.	
Protecting the natural environment, biodiversity and ecosystem services	• It is the Council's priority to ensure that the natural environment and ecosystem services are protected and to minimise the impact of land use practices and planning on these corridors such as fragmentation and habitat loss. The Shire is a national biodiversity hotspot, home to over 300 native animal species, including threatened species and a large areas of intact koala habitat. Maintaining a functional biodiversity corridor is essential to support biodiversity within the region. • The Sydney Drinking Water Catchment falls within the Wingecarribee LGA boundaries and it is a priority to protect such as identified in the South East Tablelands Regional Plan.	• South East and Tablelands Regional Plan 2036 (NSW Government, 2017) • Southern Highlands Destination Strategy 2020-2030 (Wingecarribee Shire Council, 2020) • Wingecarribee Community Strategic Plan 2031 (Wingecarribee Shire Council, 2017) • Wingecarribee Local Strategic Planning Statement 2040 (Wingecarribee Shire Council)
Promoting rural and regional economic development	• It is a regional priority to capitalise on Moss Vale's proximity to Sydney and the land availability in the Moss Vale Enterprise Corridor, maximising local competitive advantage and potential for large-scale industrial development within the Southern Highlands Innovation Park. • It is a local priority to broaden the Shire's economic base and increase provision of and training for local jobs. Some 98% of all businesses within the Shire are 'small businesses' and it is important to support these local businesses to grow through connected communities and innovation to build a sustainable local economy. • The South East and Tablelands Regional Plan seeks to promote the Shire as a destination. As a result, the Southern Highlands Destination Strategy has identified key priority actions including encouraging local training and workforce development outcomes, creating new jobs through promotion of the area for new and expanding businesses, and attracting and support new residents. • Tourism is a key economic driver in the Shire but is vulnerable to seasonal variations. It is a local priority to strengthen the visitor economy but also balance its benefits and impact on the community and environment.	• South East and Tablelands Regional Plan 2036 (NSW Government, 2017) • Southern Highlands Destination Strategy 2020-2030 (Wingecarribee Shire Council, 2020) • Wingecarribee Community Strategic Plan 2031 (Wingecarribee Shire Council, 2017) • Wingecarribee Local Strategic Planning Statement 2040 (Wingecarribee Shire Council)

5.0 Social baseline study – existing social context

5.1 Introduction

This section provides an overview of the subject site and its current social context, in relation to a defined Primary Study Area (PSA), Secondary Study Area (SSA) and Tertiary Study Area (TSA) or 'area/s of social influence,' reflecting geographies of primary and secondary social impact (refer to **Figures 10 and 11** over page). The baseline analysis assesses the existing social characteristics of the community within the identified study area/s to better understand the potential community characteristics and specific communities that may experience impacts as a result of construction and operation of the proposal.

It describes the following:

- Community profiles – key demographic characteristics including age, income, employment, cultural and linguistic diversity, household structure, relative levels of advantage and disadvantage, and transport and access, including journey to work travel patterns. Note: Due to the significance of Moss Vale as an employment centre, both resident and worker population have been provided.
- Community assets – both tangible (social infrastructure) and intangible (human and social capital, community cohesion, community values and connection to place).
- Community and stakeholder perspectives – including the outcomes of community and stakeholder engagement undertaken by GHD to date which is relevant to this assessment have been discussed in **Section 6**. Broader community values and aspirations, based on a review of Community Strategic Plans and outcomes of related research projects have also been provided.

5.2 Study area definition: area/s of social influence

For the purposes of the SIA, study areas have been chosen taking into consideration the need to factor in both local social impacts and those likely to occur on a broader scale. The areas of social influence have been determined for the proposal based on the consideration of:

- The construction activities and operational uses of the proposal.
- The likely scale and extent of potential direct and indirect impacts and benefits of the proposal on the social factors identified in the SIA Guideline. This includes indirect impacts that are generally less tangible and more commonly relate to matters such as community values, identity and sense of connection to place.
- Cumulative impacts that may impact affected communities as a result of other transport, construction and major urban renewal processes underway within or proximate to the corridor or localities.
- The potentially affected built or natural features that have social value or importance located on or near the construction sites, and the social characteristics of the areas likely to be affected by the proposal, as informed by the social baseline study and other technical assessments that inform the EIS.
- The community and stakeholder groups that would be most likely affected by the direct and indirect impacts, based on stakeholder and community engagement activities, and other available information sources.
- Based on the above, this assessment has considered the following 'areas of social influence'.

The study areas have been defined using ABS Statistical Area boundaries (SA1 or LGA boundaries) that best reflect the identified geographical areas, presented in below.

Primary Study Area (PSA)

For this assessment, a Primary Study Area (PSA) has been defined to represent the local community within the immediate area of the site. Whilst we typically consider the residents within 400m of the subject site for the purposes of the PSA analysis, for this assessment the residents living within 800m of the subject site have been included due to the rural nature of the area and the farther geographical spread of likely primary impacts. A map illustrating the approximate area is shown at **Figure 11** over page.

Key features of the PSA are outlined below:

- The site is surrounded by large lots to the north, east and west - with rural residential living and low density residential to the south closer to the Moss Vale town centre.
- Directly adjoining the site is the Dux Hot Water industrial development, Australian BioResources research facility, the future road corridor for Braddon Road and private property and land used by Moss Vale Hay Sales.
- There are 71 residences in the PSA overall, with the majority (more than 50%) south of the Bulwer Road and Beaconsfield Road ridgeline towards Moss Vale.
- The closest residence is less than 200m away.

There are likely to be localised social impacts relating to the immediate surrounds of the site, for example impacts associated with the construction of the new buildings (i.e. amenity values, access, noise, air quality etc). Longer term impacts such as potential noise, traffic and/or increased activity in the area are also anticipated to occur within the close proximity to the proposed development, as well as likely changes to perceptions of safety or community sense of place.

Secondary Study Area (SSA)

A Secondary Study Area (SSA) has also been considered necessary for the purposes of this study due to the broader impacts and benefits that the proposed development will likely have on the surrounding community. This has been defined as residents living within 5km of the subject site to align with ABS SA1 boundaries. This broadly corresponds to Moss Vale, as well as parts of Burradoo and New Berrima.

There are 146 residential properties within 1.2km of the site (GHD EIS January 2022). Southern Highlands Early Childhood Learning Centre is located 935 metres south of the proposal site on Beaconsfield Road.

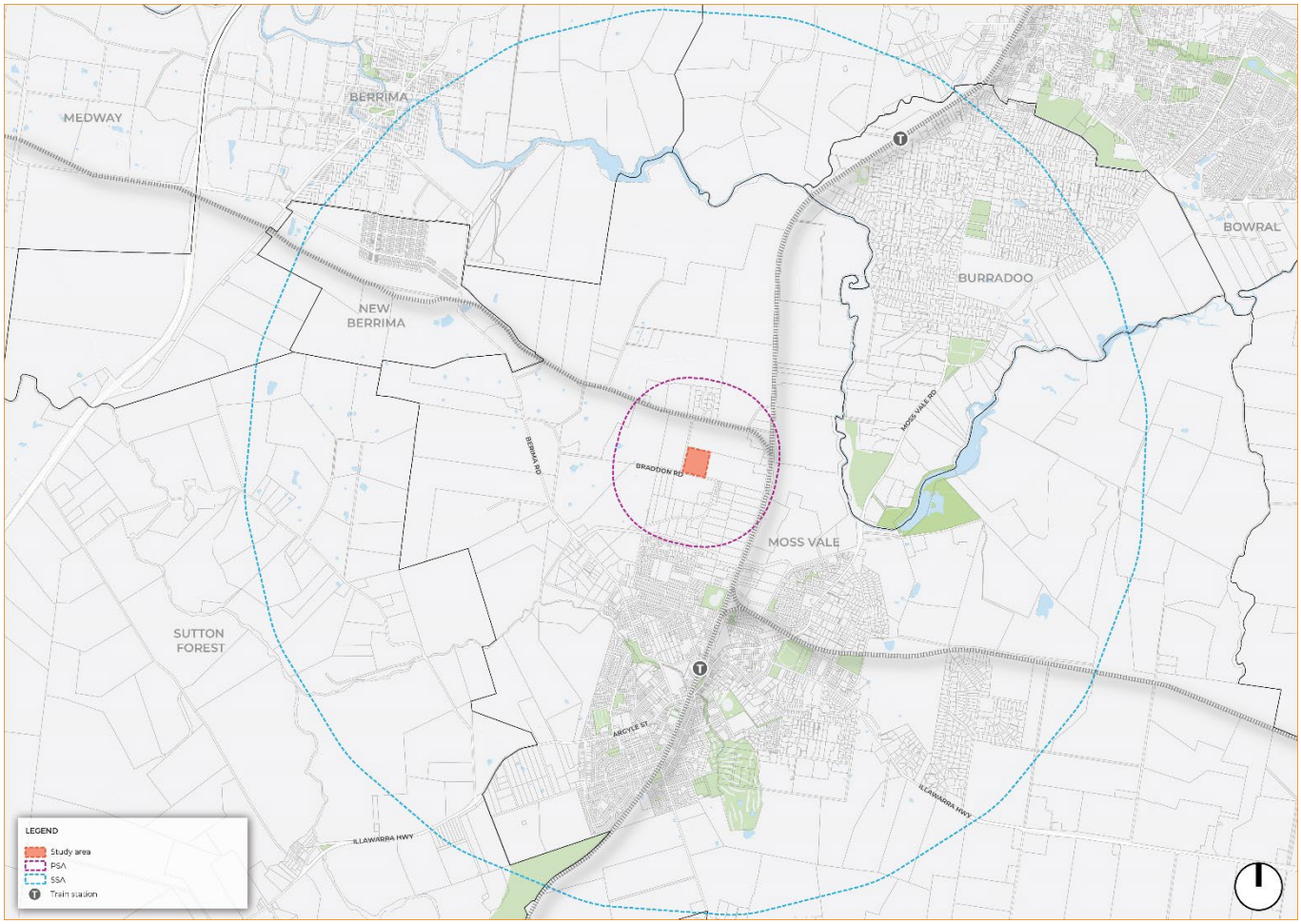


Figure 14 Primary and secondary study areas

Source: Ethos Urban

Tertiary Study Area (TSA)

A broader Tertiary Study Area (TSA) has also formed part of the assessment, given the potential for widespread impacts (both positive and/or negative). The broader TSA is the Wingecarribee LGA area shown in **Figure 11** below.

Wingecarribee LGA is located about 140 kilometres from the Sydney CBD. It is predominantly rural in character with agricultural land separating the town and villages characterised by unique landscape and aesthetic appeal (Wingecarribee Shire Council 2021).

Wingecarribee LGA comprises of four main towns: Bowral, Moss Vale, Mittagong and Bundanoon, and many smaller villages. It is recognised for its impressive 19th and 20th century buildings and streetscapes, as well as for its natural and farming landscapes (Wingecarribee Shire Council 2021).

The urban structure and historic settlement pattern of the Wingecarribee LGA was heavily influenced by the arrival of the Main Southern Railway Line, which resulted in the rapid development of Mittagong, Bowral and Moss Vale in the 1960s. Today, the Main Southern Railway acts as a spine running north-south through the Wingecarribee LGA, with the towns and villages dispersed along the railway line (Wingecarribee Shire Council 2021).

Moss Vale is one of four main towns in the Wingecarribee LGA and has a mixed urban land use pattern ranging from detached housing to general industrial activities (Wingecarribee Shire Council, n.d.) The town is located at a junction of important road and railway routes and is accessed via the Hume Highway and Moss Vale Road (Wingecarribee Shire Council n.d.)

Figure 15 Site in context of the Wingecarribee LGA boundary

Source: Wingecarribee Shire Council

5.3 Community profile: demographic characteristics

A detailed assessment of the key community characteristics of the SSA (5km), and TSA (Wingecarribee LGA) is provided below, based on results from the 2021 ABS Census of Population and Housing. The characteristics of the study areas have been benchmarked against the NSW average for comparison purposes.

In summary, the study areas are characterised by an ageing population and lower than average socio-economic indicators. Residents typically live in low density dwellings and home ownership is high. Households are typically characterised by couples with and without children, and lone persons.

5.3.1 Current community profile

Key findings:

- 10.9% lower median household income than the NSW median at $85,810. Higher proportion of low-medium income workers
- Significantly higher median age than the NSW average, at 47.2 (compared to NSW average of 38.8)
- Less housing stress than NSW average, with more dwellings owned outright than rented
- On par levels of need of assistance
- Higher than average levels of religious affiliation, with 57% of the study area identifying as Christian.
- Higher than average car ownership per dwelling, commensurate with the rural character of the area.

Based on the ABS Census of Population and Housing 2021, the key demographic characteristics of the population in the SSA and TSA and are summarised below. It is important to note that at the time of preparing this assessment, not all information from the ABS 2021 Census is yet available. Where required, relevant information will be supplemented from the 2016 Census.

- **Population:** As of 2022, there were an estimated 14,150 residents living within the SSA, an increase from the 2016 population of 12,960. Within the TSA, population is estimated to have increased from 49,560 residents in 2016 to 53,020 residents in 2022.
- **Age Structure**: The Study Areas have an ageing population, with a median age of 47.2 in the SSA and 48.1 in the TSA, remarkably higher than the NSW median of 38.8 years. In particular, the Study Area has a high share of residents aged 70-84 years (17.4%), when compared to NSW for the same age group at 10.0%. This age group also represents the largest age group within the Study Areas, followed by 60-69 years age group which accounts for 14% of the resident population.
- **Income**: SSA residents earn a median annual household income of $85,810, some 10.9%% lower than the NSW median of $96,300. TSA residents earn slightly more than SSA residents, with a median annual household income of $87,300.
- **Household Composition**: The SSA has a diversity of household types. Family households account for 71.2% of occupied dwellings in the SSA and 71.7% in the TSA, which is similar to NSW at 71.2%. Of these family households, about a third are couple families with children – 32.2% in the SSA and 33.9% in the TSA - which is slightly higher compared to NSW at 26.4%.
- **Tenure Type**: Study Area residents have higher rates of home ownership compared across NSW. Specifically, 76.% of the SSA and 78.2% of the TSA dwellings are owned either outright or on a mortgage, by comparison to 65.5% across NSW. Notably, a high share of dwellings within SSA and TSA are owned outright, accounting for 43.5% and 45.2% of occupied dwellings respectively. Across NSW, only 32.2% of occupied private dwellings are owned outright.
- **Dwelling Structure:** Separate houses are the predominant dwelling type within the SSA and TSA, accounting for 89.2% of SSA and 90.6% of TSA dwellings. This share is significantly higher compared to the NSW benchmark of 66.0% and is reflective of the rural and low density-built environment in Wingecarribee LGA.
- **Linguistic and cultural diversity:** Majority of SSA and TSA residents were born in Australia. Some 16.5% of SSA residents and 18.9% of TSA residents were born overseas, which is lower compared to the NSW benchmark of 29.3%. About 9 in 10 households within the SSA and TSA speak English only at home, while the NSW average is 7 out of 10 households.
- **Religion:** Christianity is the predominant religion within the SSA and TSA, where about 57% of residents identify as Christians. Buddhism, Hinduism and Other Religions are practiced by a combined 3% or so of the resident population while the rest (approximately 39%) do not have religious associations.

Note on 2021 Census data: *It is our view that interpretation of small area data from the 2021 ABS Census – that is any geography smaller than a State - should have due consideration for potential outcomes arising from the COVID-19 pandemic. For example, at a small area level trend analysis relative to 2011 and 2016 Censuses should be treated with some degree of caution, as potential changes in demographics/behaviour may reflect temporary rather than structural changes as a result of COVID-19.*

5.3.2 Resident population projections

Population projections have been estimated with reference to the latest ABS 2021 Estimate Resident Population (ERP) figures. A breakdown of resident forecast within the Study Area are shown in **Table 2** below. Key findings are as follows:

- Population estimates show that there are 14,150 residents living within the SSA and 53,020 within the TSA in 2022. Population forecasts for the SSA show that there will be an estimated 14,560 residents in 2041, an increase of +410 residents over the projected period. This level of growth represents an average annual increase of +20 residents, at a rate of 0.2% per annum. The TSA is projected to have 54,360 residents in 2041, an increase of +1,340 residents from 2022 and growing by 0.1% over the projected period.
- In particular, population projections for the SSA indicate that a significant increase in residents aged 60 years and over through 2041, accompanied by a decline in residents aged >60 years (see **Table 3**).

Table 2 Resident forecasts (2022-2041)

Population	2016	2022	2031	2036	2041	2022 to 2041
SSA (5km)	12,960	14,150	14,490	14,560	14,560	+410
TSA (Wingecarribee LGA)	49,560	53,020	54,210	54,430	54,360	+1,340
Rest of NSW	2,707,940	2,842,900	2,975,210	3,023,120	3,062,430	+219,530
Greater Sydney	5,024,920	5,316,100	6,153,290	6,590,750	7,015,030	+1,698,930
Annual Growth		**2016-2022**	**2022-2031**	**2031-2036**	**2036-2041**	**2022 to 2041**
SSA (5km)		+200	+40	+10	+0	+20
TSA (Wingecarribee LGA)		+580	+130	+40	-10	+70
Rest of NSW		+22,490	+14,700	+9,580	+7,860	+11,550
Greater Sydney		+48,530	+93,020	+87,490	+84,860	+89,420
Annual Growth Rate		**2016-2022**	**2022-2031**	**2031-2036**	**2036-2041**	**2022 to 2041**
SSA (5km)		1.5%	0.3%	0.1%	0.0%	0.2%
TSA (Wingecarribee LGA)		1.1%	0.2%	0.1%	0.0%	0.1%
Rest of NSW		0.8%	0.5%	0.3%	0.3%	0.4%
Greater Sydney		0.9%	1.6%	1.4%	1.3%	1.5%

Table 3 Population projections to 2041 by age group

SSA (5km)	2016	2022	2031	2036	2041	2022 to 2041
0 to 19	3,080	3,090	2,870	2,790	2,760	-330
20 to 34	1,590	1,760	1,690	1,610	1,520	-240
35 to 59	4,050	4,230	4,180	4,160	4,190	-40
60 to 74	2,060	2,200	2,290	2,270	2,180	-20
60 to 84	1,910	2,530	2,930	3,040	3,150	620
85 years and over	270	350	550	690	780	430
Total	12,960	14,160	14,510	14,560	14,580	420

5.4 Social infrastructure context

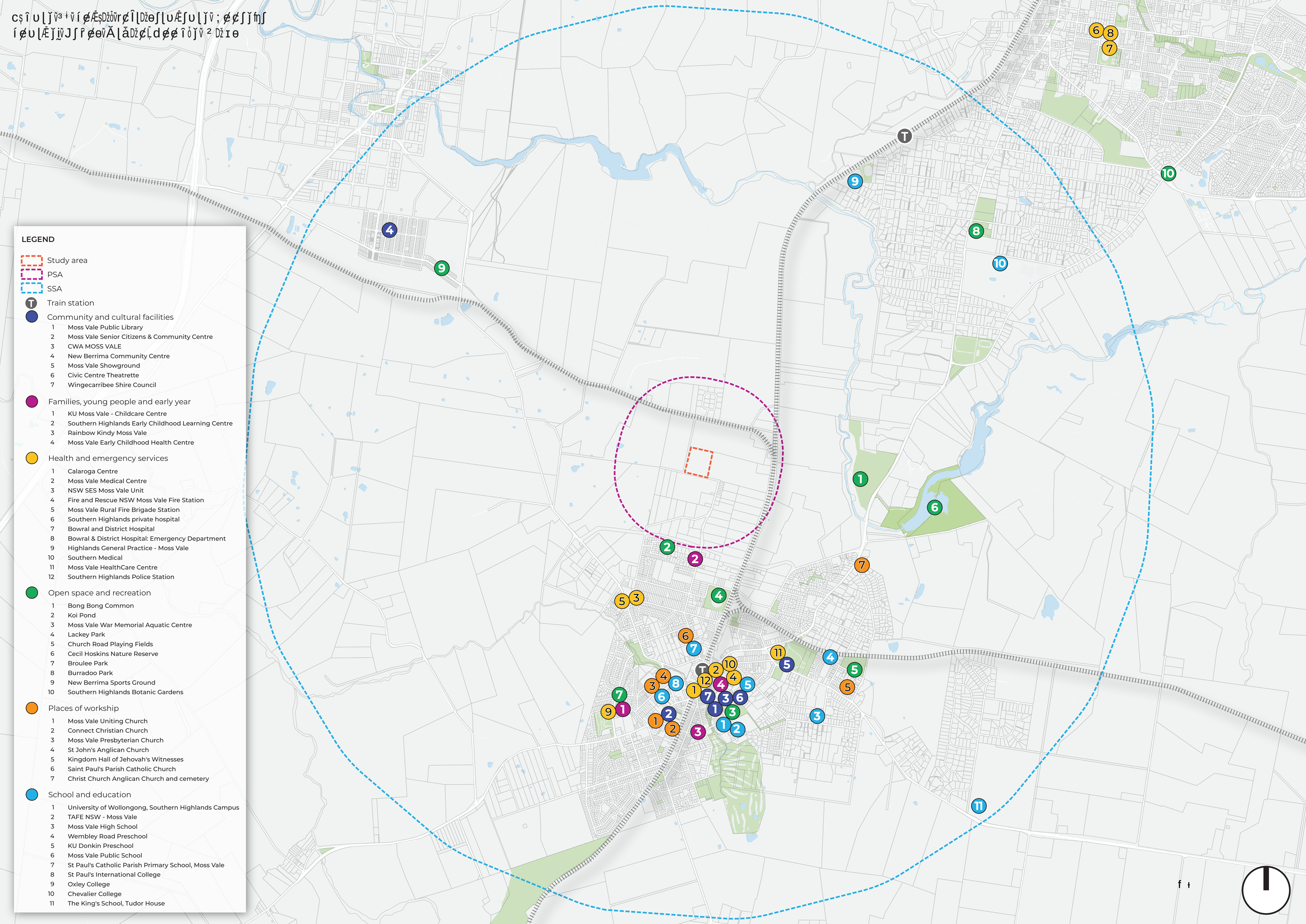
It is important to consider the provision of key social infrastructure to support the proposal – such as hospitals, emergency services, schools and other social and health services. The workforce on site may place demands on existing infrastructure and services, and any impacts associated with local social infrastructure networks must be identified.

Existing social infrastructure accessible to the Primary and Secondary Study Areas is shown in **Figure 12** on the following page. There is no existing local social infrastructure within the PSA. However there is a small amount of social infrastructure within the broader SSA locality, discussed on the following pages.

The site is approximately 3km north of Moss Vale town centre, where the local social infrastructure concentration largely exists, including a number of health and emergency services (Southern Highlands Police Station, Calaroga Centre, and Moss Vale Medical Centre) and community and cultural facilities (Moss Vale Public Library, Civic Centre Theatrette, and the Wingecarribee Shire Council building).

Other social infrastructure within the study area, largely contained to the Moss Vale town centre, includes:

- **Open space and recreation:** There are 10 open space and recreation areas in the SSA, including Koi Pond, Lackey Park, and the Bong Bong Common, a walking and cycling track to the east of the site.
- **Community and cultural facilities:** There are 7 community and cultural facilities, mostly contained to the Moss Vale town centre except for the New Berrima Community Centre (in Berrima). In Moss Vale, there is a Public Library and Senior Citizens and Community Centre.
- **Schools and education**: 11 school and educational facilities exist including TAFE NSW Moss Vale and the University of Wollongong Southern Highlands Campus, located in Moss Vale.
- **Families, young people, and early years:** Four facilities exist including the Southern Highlands Early Childhood Learning (935 metres south of the site on Beaconsfield Rd).
- **Health and emergency services**: In the SSA there are 12 health and emergency services including three in Bowral (Bowral and District Hospital, which has an emergency department, and the Southern Highlands Private Hospital).



LEGEND
Study area
PSA
SSA
Train station
Community and cultural facilities
1 Moss Vale Public Library
2 Moss Vale Senior Citizens & Community Centre
3 CWA MOSS VALE
4 New Berrima Community Centre
5 Moss Vale Showground
6 Civic Centre Theatrette
7 Wingecarribee Shire Council
Families, young people and early year
1 KU Moss Vale - Childcare Centre
2 Southern Highlands Early Childhood Learning Centre
3 Rainbow Kindy Moss Vale
4 Moss Vale Early Childhood Health Centre
Health and emergency services
1 Calaroga Centre
2 Moss Vale Medical Centre
3 NSW SES Moss Vale Unit
4 Fire and Rescue NSW Moss Vale Fire Station
5 Moss Vale Rural Fire Brigade Station
6 Southern Highlands private hospital
7 Bowral and District Hospital
8 Bowral & District Hospital: Emergency Department
9 Highlands General Practice - Moss Vale
10 Southern Medical
11 Moss Vale HealthCare Centre
12 Southern Highlands Police Station
Open space and recreation
1 Bong Bong Common
2 Koi Pond
3 Moss Vale War Memorial Aquatic Centre
4 Lackey Park
5 Church Road Playing Fields
6 Cecil Hoskins Nature Reserve
7 Broulee Park
8 Burradoo Park
9 New Berrima Sports Ground
10 Southern Highlands Botanic Gardens
Places of worship
1 Moss Vale Uniting Church
2 Connect Christian Church
3 Moss Vale Presbyterian Church
4 St John's Anglican Church
5 Kingdom Hall of Jehovah's Witnesses
6 Saint Paul's Parish Catholic Church
7 Christ Church Anglican Church and cemetery
School and education
1 University of Wollongong, Southern Highlands Campus
2 TAFE NSW - Moss Vale
3 Moss Vale High School
4 Wembley Road Preschool
5 KU Donkin Preschool
6 Moss Vale Public School
7 St Paul's Catholic Parish Primary School, Moss Vale
8 St Paul's International College
9 Oxley College
10 Chevalier College
11 The King's School, Tudor House

5.5 Transport and accessibility

Road network

The subject site sits at the interface of a local road (Lackey Road), an alternate route to Berrima Road connecting Moss Vale to Berrima and the Hume Motorway. Lackey Road connects Collins Road and the Illawarra Highway in a north-south direction. Berrima Road is a regional sub-arterial road that runs between Berrima and Moss Vale in generally a north-south direction.

Within proximity to the site is Beaconsfield Road, a no-through local road that connects Parkes Road / Garrett Street to residential and local business oriented in a north-south direction. Bulwer Road is a local road that connects Lytton Road and Beaconsfield Road in a north-east direction. The surrounding road network is shown below.

Figure 17 Surrounding road network

Source: GHD Technical report 6 – Traffic and Transport (27 January 2022)

Public transport

The site is currently not easily accessible for public transport, around 2.4km or a half an hour walk from Moss Vale Railway Station, the nearest rail station. Rail services typically operate between 50-60 minute intervals during the AM and PM peak periods and 120-minute intervals on weekends, providing access to the Sydney CBD (via Campbelltown) and Goulburn.

Existing bus stops are located along Berrima Road (approximately 1.7km south of the site) including routes 812 and 816. Bus services run approximately once to twice per AM peak and up to three services on weekdays (816).

The key active transport route connecting Moss Vale to Bowral through the Bong Bong Common is located within proximity to the east of the site on the opposite side of the railway, although it is noted that the closest railway crossing is located at Moss Vale Railway Station (limited by staircases) or Illawarra Highway.

An off-road cycle route on part of Berrima Road is identified in both directions to provide a connection to Cosgrove Park and – to an extent Cecil Hoskins Nature Reserve.

Figure 18 Existing cycle network (Source: GHD Traffic and Transport rpt)

As part of the broader economic transformation of the area it is noted that additional bus stop facilities are proposed along Douglas Road (approximately 500m from the site) and Bulwer Road as part of the development of the MVEC (EIS Main Document, GHD 2020).
The Moss Vale Enterprise Corridor Development Control Plan (2008) propose a high level of public transport and pedestrian and cycling access to the MVEC, specifically the following provisions:

Pedestrian and Cyclist Movement

Movement for cyclists within the site has been considered and should be adopted as part of the development. It is anticipated that most of the employees within the Enterprise Corridor would live within the surrounding areas and should be encouraged to ride to work as an alternative to use of vehicles. Cycle pathways 2.5m wide should be incorporated into the verge along all new and existing roads in the zone.

Bus services

Public transport access will be essential to service the development area and should be convenient and cost effective to encourage employees to avoid using private transport. An indicative bus route and possible locations of bus stops that will provide users with ease of access to their workplaces has been formulated and is shown on the Development Concept Plan.

Access and Movement

Objective - The Enterprise Corridor is serviced by a local bus route to encourage public transport use and reduce reliance on the private car.

5.6 Social issues and trends

This section identifies social issues and trends of relevance to the proposal, including macro issues, as well as intangible community assets in the locality, such as human and social capital, community values and connection to place.

5.6.1 Drivers for recycling and the circular economy

There is growing global recognition of excessive plastic consumption, widespread plastic pollution and the associated negative impact on population and planetary health. In NSW, out of 1.1million tonnes of plastic being consumed, around 650,000 tonnes are sent to landfill each year while a significant portion end up in waterways and terrestrial and marine environments, adversely impacting wildlife and natural ecosystems (NSW Waste and Sustainable Materials Strategy 2041, pg 16).

The Wingecarribee Shire Council Community Strategic Plan notes that a key objective for the region is to "achieve continuous reduction in waste generation and disposal to landfill" (pg 26).

The global shift to circular economy – catalysed in Australia by the ban on imports of mixed plastics by China, and a recent ban on exports of mixed plastics and other unsorted waste materials by the Australian Government has prompted a rethink of governance and business models surrounding waste and resource recovery.

Diverging from the present take-make-waste economy, circular economy is restorative and regenerative by design, and aims to keep resources in use for as long as possible to minimise waste and environmental footprint. According to the NSW Waste and Sustainable Materials Strategy 2041 (pg 9), the key principles of circular economy are as follows:

- Design out waste and pollution
- Keep products and materials in use
- Regenerate natural systems.

Transitioning to circular economy has demonstrable socio-economic benefits including reduced resource and import dependency, sustainable consumption, local jobs creation, innovation and new industries and markets. Recycling is a key element to the successful transition to circular economy, as illustrated in **Figure 15.** In Australia, CSIRO estimates that local plastics processing capacity, including recycling, must increase by 150% to absorb previously exported recyclable waste and entails investment in infrastructure and significant changes in the waste management sector (A circular economy roadmap for plastics, tyres, glass and paper in Australia, pg 12).

Figure 19 Circular economy opportunities across the material supply chain

Source: CSIRO, 2020

5.6.2 Evolving economic landscape of the Southern Highlands

With its vast rural landscape and rich heritage, agriculture and tourism have been key drivers of the Southern Highlands economy to date. According to Southern Highlands Destination Strategy 2020-2030 Background Report, Agriculture is among the top four industries by business count (pg 18), while tourism contributes significant value add to the economy and employment (pg 34). However, both industries are increasingly exposed and vulnerable to various risks and shocks, potentially undermining the local economy.

A key goal for the State and local government is to broaden and promote the range of business and industry sectors in the area – the Wingecarribee Shire Community Strategic Plan highlights that this aligns with the goal to provide a variety of jobs locally while embracing and capitalising on technological advancements (pg 28).

Combined with increasing demand for local jobs and push for broadening the local economic base, the Southern Highlands economy is expected to evolve with the development of the Southern Highlands Innovation Park (SHIP).

The SHIP comprises of the previously zoned MVEC and adjacent industrially zoned land, approximately 1020 hectares in size, providing a unique opportunity for large-scale industrial development conveniently close to Sydney, and good distribution to most of the country (Southern Highlands Destination Strategy 2020-2030, pg 20).

The MVEC is identified in the Moss Vale Enterprise Corridor Development Control Plan 2008 as a sustainable employment area, expected to accommodate business park commercial development and larger scale freight storage and distribution operations associated with existing rail infrastructure and a possible intermodal freight terminal.

The site is located within the SHIP catchment, and as such, is consistent with the economic strategic drivers for the region. It is noted that this economic drive is associated with broader infrastructure projects including road, pedestrian and cycle upgrades to the surroundings (e.g. Moss Vale Bypass, New Berrima Bypass, and additional bus routes).

5.6.3 Changing character of the region in the face of economic growth – from rural scenic landscapes to employment and industrial lands

Previous land-use and character in the Wingecarribee LGA comprised of predominantly rural, pastoral land used for livestock grazing, with occasional farming-related buildings and single-storey dwellings. Wingecarribee Shire's Community Strategic Plan (CSP) notes that the area is predominantly 'rural in character' with 'agricultural lands separating towns and villages characterised by unique landscape and aesthetic appeal' (CSP pg 9).

However, opportunities in various industries, including new and emerging sectors, will lead to a diverse economy and significant land-use change in the region. A significant challenge will be to maintain the area's current character and appeal, while at the same time managing future population growth and demographic mix (CSP pg 10).

The proposed industrial development contributes to the broader change being experienced in the region, as part of the development of the industrial and employment generating areas associated with the SHIP. It is noted that there are four (4) existing large-scale industrial facilities located within approximately one kilometre of the subject site, however much of the land that has been zoned 'Industrial' since 2008 has remained undeveloped, potentially giving the impression that it may remain as rural land. However, recent sales of nearby industrial zoned land, including at 23 Douglas Road and 1/24 Douglas Road have occurred (CommercialRealEstate.com.au & RealCommercial.com.au, 31 August 2022).

Due to the industrial development highlighted in the MVEC DCP 2008, the rural character of this part of Moss Vale is expected to change. Community consultations have revealed that locals highly value the Shire's country lifestyle, rural landscape and heritage values. Future developments may result in community conflict or opposition if these do not reflect the community's long-held values and preserve the rural environment and lifestyle within the Shire- one of the key aims of the MVEC DCP 2008 (Section 1.4) is to 'protect the amenity of surrounding rural and residential areas'.

The CSP notes that the environment must be valued, protected and enriched, including minimisation of impacts from development. Maintaining rural landscape and unique characteristics of the towns and villages, whilst ensuring a strong economy works in harmony with, and in support of, the community and environment is important. The community values its 'pristine rural environment and wants this lifestyle preserved, including farmlands and local agricultural production' (CSP pg 11).

6.0 Community and stakeholder perspectives

6.1 Engagement overview

The following section explores the perspectives of key stakeholders and communities, which have a bearing on the proposed development. Engagement and public participation undertaken as part of the proposal form a component of the SIA.

This section is informed by the following:

- Appendix G Engagement Outcomes Report (GHD, 22 December 2021)
- Submissions made to the SSDA lodged January 2022, including business letter submissions, community letters, newspaper articles and public authority submissions
- Interview with Michael Park, Executive Manager Strategic Outcomes – Wingecarribee Shire Council – conducted on 26 July 2022 at 2pm via Microsoft Teams.

Additional community consultation was not undertaken by Ethos Urban during preparation of this SA, as outcomes of the engagement undertaken during preparation of the EIS, as documented in the GHD Engagement Outcomes Report are considered an adequate representation of relevant community issues.

The engagement undertaken to date is considered to be satisfactory in addressing the SIA Guideline for community consultation.

Key findings – community and stakeholder engagement

A review of the report notes the following key themes arising from this engagement:

- 4 online sessions were held in mid-late 2021 due to COVID-19 restrictions on regional travel. Webinar and online sessions held in 2021 had neutral and information-collecting views – some people expressed support for the plastics reprocessing
- 168 local residents, community members and stakeholders attended the two in-person community engagement sessions in November 2021 where strong opposition was noted from the community
- During public exhibition of the SSDA in 2022, five in-person and one online community sessions were held. Mixed opposition, support and neutral views arose.
- General community sentiment was one of opposition to industrial and employment generating development in this part of Moss Vale but also surprise that the area had been rezoned to industrial. It appeared that some members of the community were not aware of the rezoning.
- Other key matters raised during the consultation phases related to traffic and transport, water and waste, and site selection, and the consultation process.

6.2 Engagement approach and principles

6.2.1 Objectives

GHD, on behalf of Plasrefine Recycling, has undertaken community and stakeholder engagement to inform this SSDA. The GHD Engagement Outcomes Report (GHD, 22 December 2021) outlines the engagement approach and objectives, tools and activities undertaken, feedback received, and a summary of the outcomes of the stakeholder engagement activities. Engagement activities are recommended for the future stages of the proposal.

Objectives were identified to successfully deliver appropriate community and stakeholder engagement in accordance with the SEARS and DPE's 'Undertaking Engagement Guidelines for State Significant Projects (July 2021)'.

A Community Engagement Strategy was developed at the commencement of the proposal, which:

- Identified key stakeholders (as part of the SEARs)
- Identified directly impacted stakeholders
- Captured a communications risk assessment

- Recommended an engagement program

The engagement approach was informed by the "Core Values and Code of Ethics of the International Association for Public Participation (IAP2)".

The principles outlined at the commencement of the proposal included:

- Being responsive to all stakeholders
- Providing information on the proposal and any impacts
- Explaining how community feedback is used
- Providing ongoing opportunities for feedback.

6.2.2 Channels

Various communication channels were used to support different phases of engagement, to allow GHD to respond promptly to stakeholders' questions and concerns. This included the following:

Established	Engagement tools
September 2020, ongoing	• Toll free proposal hotline (24/7) 1800 information line • Proposal email (community.input@ghd.com) • Stakeholder database (record of correspondence)
November 2020	• Stakeholder meetings and briefings as required
December 2020	• Introductory email to local member of state parliament
March 2021	• Newsletter hand delivered to over 4,600 residences within proximity to the proposed site and emailed to stakeholders • Door knocks to residents along Beaconsfield Road and Bulwer Road • Plasrefine Recycling website (ongoing)
May 2021	• FAQs – provide responses to commonly asked questions from the community and stakeholders
July, August and November 2021	• Online and in person community engagement sessions - promoted via the proposal email and in Council's engagement update newsletter. In-person sessions also promoted via the Southern Highlands newspaper. - 4 x online community engagement sessions – minutes provided after the meeting and uploaded to the Plasrefine Recycling website. 49 attendees. - 2 x In person sessions (November 2021) – 168 local residents, community members, stakeholders, media representatives attended the first evening town hall type session. 25 attended the second in-person session held the following morning.
November 2021	• Local media – advertisement in local newspaper • Responses to local media enquiries as required
December 2021	• FAQ – provide responses to commonly asked questions from the community and stakeholders. Over 300 questions and comments received during the sessions.

Detailed analysis has been provided as to the categories of IAP2 Levels of Participation for each engagement activity, contained within the GHD Engagement Outcomes Report.

6.2.3 Stakeholder identification

The key stakeholder groupings for the proposal and the EIS are identified in the Engagement Outcomes Report (GHD, 22 December 2021). A summary of these groupings is below.

- Elected government members (NSW and local government)
- Interest groups, including peak bodies, community, environment and other specialist groups
- Landowners and landholders with properties within close proximity to the subject site
- Local / regional businesses
- The general public/local community

6.2.4 Statutory stakeholder engagement

In accordance with the SEARS, statutory stakeholder engagement was undertaken in January 2021 with letters issued to stakeholders including Wingecaribee Shire Council, Environmental Protection Authority (EPA), Fire and Rescue NSW, Transport for NSW, Environment, Energy and Science Group, Heritage NSW, DPE, and NSW Local Aboriginal Land Council.

6.2.5 Public exhibition of the SSDA

The EIS has been publicly exhibited for a period of 28 days and copies of the submissions have been made available on the DPE website, as well as provided by the applicant.

During the EIS notification the following activities in relation to community engagement were undertaken:

- Advertisements in the local media, providing information regarding the proposal and display of the EIS
- Series of in-person and online community engagement sessions during the first week of public exhibition to assist proposal stakeholders with making an informed submission
- Briefings to stakeholders and community members, as required
- Proposal newsletters.

Liaison with Wingecarribee Shire Council has occurred over two years as part of the EIS development phase, on matters including strategic land use and planning, access to the subject site, flood planning, capacity of Council's sewage treatment plant, water supply and community engagement.

The nearest sensitive receiver is Australian Bioresources, who the Applicant has engaged with during development of the proposal in relation to site access for environmental investigations, potential and perceived impacts to daily operations, noise monitoring and modelling, water use, construction of the proposal, fire risk and management, site layout, access to the site and services.

6.3 Consistency of engagement approach with SIA Guideline requirements

The community engagement undertaken by GHD as part of the SSDA process is considered to deliver on the SIA Guideline requirements for this SIA, (in particular, Appendix A – Community Engagement), on the basis that:

- Likely affected people have been identified and were provided with an understanding of the proposal, how it may affect them, and how they can participate. The public was provided multiple opportunities to comment on the proposal during the design phases – email, toll-free phone number, letters, newsletter and stakeholder/community meetings both in person and online (during COVID-19).
- Interests from the public on the proposal have been outlined and how the impacts may be experienced by them adequately explored. A summary of all raised issues has been identified to easily direct the reader to the key areas of interest.
- Consideration of the views of people in meaningful ways has occurred and the insights have informed proposal planning and design, mitigation and enhancement measures, and monitoring and management frameworks. Detailed written responses have been provided for all questions received – emailed to those on the proposal mailing list and uploaded to the Plasrefine Recycling webpage along with the presentation.
- Continued communication with the public has occurred to ensure that people know how their input and views have been considered.
- Assistance in helping people understanding how other specialist studies prepared will mitigate social impacts has been provided. Continued telephone briefings since proposal commencement has been offered.

6.4 Engagement outcomes: issues raised and responses

Overall, the proposal generated significant interest from the community and stakeholders. A large majority of the feedback received during the preparation of the EIS was focused on its location and daily operations.

The comments and feedback received during the proposal's engagement activities were collated into five main topic areas:

1. Environment – biodiversity, heritage, hazards and risks, water management/flooding, greenhouse gas impacts, human health impacts, environmental assessment process
2. Site selection and access – site access, suitability
3. Amenity – traffic and transport, noise and vibration, air quality and odour
4. Operation of the facility – proposal justification and need, operation of the facility
5. Community impacts and benefits – environmental benefits, employment, acquisition, direct property impacts, community safety
6. Other

6.4.1 Summary of matters raised during the in-person community engagement sessions

Two in-person community engagement sessions were held in November 2021. A total of 168 local residents and community members attended these sessions. 268 questions were collected and responded to. These are detailed further in the GHD Engagement Outcomes Report.

The majority (35%) of the questions related to traffic, transport and/or access with key topics being the proposed haulage route and proposed new access road.

Other topics related to:

- Water and waste (11%) - w*ater demand, water and wastewater management*
- Air Quality and Odour (9%) - *pollution control and plastics recycling process*
- Site suitability (8%) - z*oning, choice of site*
- Noise and vibration (3%) - *mitigation measures and noise, and vibration*

6.4.2 Responses to community and stakeholder feedback

Where possible the Applicant has sought to incorporate community and stakeholder feedback directly into the design process. Selected key changes to the proposal as a result of feedback include:

- The Traffic and Transport Assessment has been updated to assess the revised number of truck movements. Further consideration of the types of trucks servicing the site has identified average loads of 20 tonnes in trucks (rather than 10 tonnes as originally assumed).
- An alternate road access option has been explored through detailed traffic and safety assessments, civil and environmental engineering, and consultation with the local community and Council to remove the need to use Beaconsfield Road during the majority of the construction period, and all of operation.
- Enclosing all plastic waste receival, recycling, reprocessing, and storage within buildings with automatic opening and closing doors to minimise noise impacts and prevent waste materials from entering the environment has been proposed.
- Shifting parts of the developed area of the site eastwards to provide greater distances from the waterway on the western side of the site and to meet riparian zone objectives in accordance with relevant legislation.
- Minimising the overall size of the buildings onsite – a revised architectural design has been proposed.
- Designing the concept site layout where waste delivery trucks would enter and exit to be placed on the western side of the building, facing away from the nearest sensitive receivers
- Careful selection of plant, equipment and building materials to reduce noise emissions and vibration
- Incorporating air pollution control devices to treat air emissions at source
- Provision of on-site wastewater treatment plant to recycle water used in the plastic cleaning processes in order to maximise water re-use and reduce demand on potable water. Enclose to reduce noise and odour.

- Preparing a water quality treatment train including gross pollutant traps for primary treatment of runoff from impervious ground surfaces, lined storage basins – to ensure all water discharged off-site would have a neutral (or beneficial) effect on water quality.

6.5 LGA-wide consultation

In addition to proposal-specific engagement it is useful to note engagement outcomes from recent engagement undertaken by Wingecarribee Shire Council to inform the development of the Community Strategic Plan. This broad community engagement offers insights into community issues and perspectives of relevance to this assessment.

A desktop review of the outcomes of these community engagement activities has identified key social drivers for the site and proposal. The key priorities identified through the community and stakeholder consultation are outlined in the *Wingecarribee Shire – Community Strategic Plan 2031* (June 2017).

The community have identified a number of Wingecarribee's key issues and challenges. Relevant issues to this proposal include:

- Roads and road maintenance including traffic congestion in towns
- Development and its effect on the environment and infrastructure
- Provision of diverse local employment opportunities
- Environmental Issues including climate change, biodiversity, waste, water, energy and carbon reduction
- Preservation of the character of the Shire
- Sustainable economic development.

6.6 Ethos Urban interview with Wingecarribee Shire Council – July 2022

On 26 July 2022, Ethos Urban conducted an online interview (via Microsoft Teams) with the Executive Manager – Strategic Outcomes at Wingecarribee Shire Council Michael Park, to inform this SIA.

Key matters raised during the interview

- It was noted that Council is supportive of recycling infrastructure, in principle. But there are concerns about this particular development.
- It was noted that the capacity of the existing infrastructure (water and sewerage) may not be able to meet the demands of the facility, due to the staging of planned Council upgrades.
- Impacts on neighbouring site (Australian Bioresources Research facility) are a concern – specifically noise, air quality and vibration impacts on the animals bred there for biomedical research.
- Council concern over environmental impacts – including perceived air quality, visual impacts, traffic impacts and catchment-wide groundwater impacts.
- The volume of submissions (over 100) received by Council (not the consent authority) whilst proposal was notified to DPE indicates a high level of community concern.
- The need for a high-quality SIA as part of the application. Council considered that social impacts had not been adequately assessed and would like to understand how the applicant proposes to use the SIA should be documented.
- Inconsistencies in how Council's views are represented in the community engagement outcomes report by GHD – that is, the applicant stating Council is in support, when Council is not.
- Community concerns about the engagement process, and perceptions that they did not have adequate opportunities to provide feedback due to the format of engagement.
- It was noted that there are components of some of the technical reports submitted by the applicant that require addressing, through further information and review.

6.7 Data considerations for this assessment

We note that the community and stakeholder perspectives are primarily based on engagement activities that require an active interest to participate. This may lead to over-representation of the voices of certain community or stakeholder groups (e.g. older community members are more likely to have time and interest to participate in community meetings) and underrepresentation of others, and may hence be biased to an extent.

However, the GHD approach appears well considered and engagement activities broad enough to gauge and represent a range of community views to adequately inform the SIA.

6.8 Future engagement strategies

Ongoing engagement tools have been identified in the Engagement Outcomes Report prepared by GHD, and include:

- Continued monitoring of toll-free proposal hotline
- Continued monitoring of proposal email
- Stakeholder database updates
- Printed information (letters, proposal newsletter letter box drops)
- Maintain Plasrefine Recycling website
- Emails – promote engagement channels and opportunities to learn more about the proposal, promote when community feedback and inputs are required.

Response to Submissions

Written submissions received by DPE during the EIS exhibition period have been forwarded to Plasrefine Recycling and GHD for consideration and review. A Response to Submissions report will be prepared to document all submissions received and published on the DPE Major Projects website.

In the event that design changes to the proposal are required, to reduce or minimise impacts, an Amendment Report will be prepared and further engagement on the Amendment Report may be required by DPE.

Engagement during design and delivery of the project

If approved, the proposal would undertake further communication and engagement activities to ensure that landholders, community and stakeholders have a high level of awareness of all processes and advanced notification of activities associated with the proposal.

In addition, a 1800-number and email address would continue to be available during construction. Targeted engagement methods such as letters, signs, face-to-face communications will continue. The Plasrefine Recycling website will also include updates on the progress of the proposal.

The applicant has proposed a Community Consultative Committee (CCC) to enable community and stakeholders to continue to provide feedback on the proposal delivery during construction and the first few years of operation (EIS GHD January 2022 Table D.3).

6.9 Summary of issues

This section assesses the consultation undertaken with the proposal, as required by Appendix A of the SIA Guideline.

Overall, it is considered that, based on the Engagement Outcomes Report prepared by GHD, adequate community engagement has been undertaken as part of the proposal to inform the preparation of this Social Impact Assessment in accordance with the NSW SIA Guideline.

It is recommended, given the scale and volume of submissions made on this proposal, that the community and other stakeholders have an active involvement in the development through the remaining phases of the development (pre-approval amendments, post-approval, pre-construction and during operation), and should be provided with continued opportunities to participate in the decision-making of various aspects as the development progresses.

Further consultation is recommended (refer to **Section 7.11** of this report) so that the community and stakeholders are able to engage in decision making around the construction and operation of the proposal if approved. For example,

submitters should be provided with details of amended plans, and given opportunities to influence the next steps (for example, inform future management strategies and plans). The Applicant has noted that the Response to Submissions (RTS) will be made available on the DPE website once lodged for public comment and the applicant will continue to monitor the email and phone numbers, and provide further community sessions and stakeholder meetings, to keep the community informed, give them opportunities to continue to engage, and to respond to any questions or queries.

7.0 Social Impact Assessment

7.1 Assessment framework and scope

This SIA has been prepared based on the SIA Guideline. This assessment considers the potential impact on the community and social environment should the social impacts envisaged occur, compared to the baseline scenario of the existing use of the site and social context.

The purpose of this social impact analysis is to:

- Identify, analyse and assess any likely social impacts, whether positive or negative, that people may experience at any stage of the proposal lifecycle, as a result of the proposal
- Investigate whether any group in the community may disproportionately benefit or experience negative impacts and proposes commensurate responses consistent with socially equitable outcomes
- Develop social impact mitigation and enhancement options for any identified significant social impacts.

Ultimately, there can be two main types of social impacts (both positive and negative) that may arise as a result of the proposed development. First, direct impacts can be caused by the proposal which may cause changes to the existing community, as measured using social indicators, such as population, health and employment. Secondly, indirect impacts that are generally less tangible and more commonly related to matters such as community values, identity and sense of place. Both physically observable as well as psychological impacts need to be considered.

This study identifies the following key social factors relevant to the assessment of social impacts of the proposal:

- Way of life
- Health and wellbeing
- Accessibility
- Community
- Culture
- Surroundings
- Livelihoods
- Decision-making systems

7.2 Key affected communities

This assessment covers both the PSA, which is expected to experience social impacts associated with the temporary construction activities and some of the future operational impacts, as well as the broader social localities (SSA and TSA) that are likely to experience the resulting benefits from the operational phase of the proposal. Key communities to experience social impacts and/ or benefits of the proposal can be grouped as follows:

- Neighbouring residents
- Neighbouring businesses and organisations
- Workers and visitors to the Moss Vale study area (SSA)
- Temporary construction workers
- Populations in the TSA – primarily related to livelihoods and economic development opportunities

As the SIA Guideline notes, different community members may be impacted in different ways, even within a small locality such as a Primary Study Area (see **Section 5.2**).

In the case of this development, community members within the Primary Study Area (800m catchment from the subject site) may be differently impacted depending on their location in relation to view corridors and their location in relation to Beaconsfield Road, which will be used by vehicles during the early stage of construction.

It is further noted that within the PSA, the majority of residential dwellings are located within the southern portion of the study area, towards Moss Vale and in a higher density setting, and relatively further from the subject site.

7.3 Impact assessment factors and responses

The following section sets out the assessment of social impacts arising from the proposed development and recommended responses, including measures to enhance social benefits and mitigate potentially negative impacts, across the suite of factors set out in the SIA Guideline. The assessment has been based on the information available to date, and is primarily a desktop study, informed by a review and analysis of available documents relevant to the proposal.

7.3.1 Categories of impacts

The SIA Guideline classifies social impacts in the following way, which forms the core basis of this assessment:

- **Way of life:** how people live, get around, work, play and interact with one another on a day-to-day basis
- **Community:** its composition, cohesion, character, how it functions, and sense of place
- **Accessibility:** how people access and use infrastructure, services and facilities
- **Culture:** people's shared beliefs, customs, values and stories, and connections to Country, land, water, places and buildings
- **Health and wellbeing:** people's physical, mental, social and spiritual wellbeing
- **Surroundings:** access to and use of natural and built environment, including ecosystem services, public safety and security, as well as aesthetic value and amenity
- **Livelihoods:** including impacts on employment or business, experience of personal breach or disadvantage, and the distributive equity of impacts and benefits
- **Decision-making systems:** the extent to which people are able to participate in decisions that affect their lives, procedural fairness, and the resources provided for this purpose.

7.3.2 Significance of impacts

The evaluation includes an assessment of the **social significance** of each impact across the suite of factors, including the **likelihood** of each identified impact, along with the envisaged **duration, extent, and potential to mitigate/ enhance**.

Magnitude of impact generally considers the following dimensions (see **Table 4** over page):

- Extent – Who specifically is expected to be affected (directly, indirectly, and/or cumulatively), including any vulnerable people? Which location(s) and people are affected? (e.g. near neighbours, local, regional, future generations)?
- Duration – When is the social impact expected to occur? Will it be time-limited (e.g. over particular proposal phases) or permanent?
- Severity or scale – What is the likely scale or degree of change? (e.g. mild, moderate, severe)?
- Intensity or importance – How sensitive/vulnerable (or how adaptable/resilient) are affected people to the impact, or (for positive impacts) how important is it to them? This might depend on the value they attach to the matter; whether it is rare/unique or replaceable; the extent to which it is tied to their identity; and their capacity to cope with or adapt to change?
- Level of concern/interest – How concerned/interested are people? Sometimes, concerns may be disproportionate to findings from technical assessments of likelihood, duration and/or intensity.

Each impact has ultimately been assessed and assigned an overall **significance rating**, which considers both the **likelihood** of the impact occurring and the **consequences** should the impact occur. The assessment also sets out recommended **mitigation, management and monitoring measures** for the identified impacts.

The social impact significance matrix specified in the SIA Guideline (see **Table 6)** has been adapted for the purposes of undertaking this social and impact assessment.

Table 4 Defining magnitude levels for social impacts

Magnitude level	Meaning
Transformational	• Substantial change experienced in community wellbeing, livelihood, infrastructure, services, health, and/or heritage values; • permanent displacement or addition of at least 20% of a community.
Major	• Substantial deterioration/improvement to something that people value highly, either lasting for an indefinite time, or affecting many people in a widespread area.
Moderate	• Noticeable deterioration/ improvement to something that people value highly, either lasting for an extensive time, or affecting a group of people.
Minor	• Mild deterioration/ improvement, • for a reasonably short time, for a small number of people who are generally adaptable and not vulnerable.
Minimal	• Little noticeable change experienced by people in the locality.

Source: NSW DPE, 2021, Technical Supplement - Social Impact Assessment Guideline for State Significant Projects

Table 5 Defining likelihood levels of social impacts

Likelihood level	Meaning
Almost certain	Definite or almost definitely expected (e.g. has happened on similar projects)
Likely	High probability
Possible	Medium probability
Unlikely	Low probability
Very unlikely	Improbable or remote probability

Source: NSW DPE, 2021, Technical Supplement - Social Impact Assessment Guideline for State Significant Projects.

Table 6 Social impact significance matrix

Likelihood	**Magnitude**				
	Minimal	**Minor**	**Moderate**	**Major**	**Transformational**
Very unlikely	Low	Low	Low	Medium	Medium
Unlikely	Low	Low	Medium	Medium	High
Possible	Low	Medium	Medium	High	High
Likely	Low	Medium	High	High	Very high
Almost certain	Low	Medium	High	Very high	Very high

7.4 Way of life

This section assesses: *Way of life – how people live, get around, work, play and interact with one another on a day-to-day basis.*

Way of life
Potential impacts

The existing way of life in the area is predominantly semi-rural residential, accompanied by some light, general and heavy industrial facilities. The way of life in the major township of Moss Vale is centred on its main street and its concentration of social infrastructure.

It is understood that construction would occur over a ~15-17 month period and includes the construction of a new site access road, construction compound, staff amenities, bulk earthworks, the erection of pre-cast concrete panels and installation of processing equipment. Construction working hours would be undertaken during the periods specified in the *draft Construction Noise Guidelines* (NSW EPA 2020a).

It is noted that there are 71 residences within the PSA. The residence nearest to the plastics recycling and reprocessing facility is located at 72 Beaconsfield Road, about 180 metres southeast at the closest point (EIS GHD January 2022).

Various technical reports including a traffic impact assessment, noise and vibration impact assessment, and air quality assessment, have been undertaken for the proposal, which have further informed the extent of social impacts and opportunities for mitigation/enhancement regarding way of life.

Construction phase

- The scale of construction and the proposed industrial use, in the context of the site's existing semi-rural residential setting with a small number of industrial developments means there is the potential for some construction activities to impact on local way of life, particularly on the surrounding residents in the PSA. The most significant impacts during construction are likely to relate to bulk earthworks, and associated traffic movements, such as truck movements for delivering building materials and construction workers vehicles to the site. The capacity of local roads and associated social impacts is an identified issue according to engagement outcomes.
- Residences are sensitive receivers and therefore may be vulnerable to impacts to how they live, play and interact with each other as a result of noise, dust and vibrations associated with construction. It is also noted that the COVID-19 pandemic has fundamentally shifted how people use their homes, especially through increased working from home patterns; therefore, construction activities have more potential to temporarily impact on residents as compared to way of life before the pandemic.
- Construction and use of the new access road has the potential to temporarily disrupt normal patterns of movement on Beaconsfield Road and routines associated particularly with adjacent and nearby landowners. The EIS (GHD January 2022) states that 'residences within 19 metres of Beaconsfield Road are likely to be impacted by construction traffic noise during this time'.
- However, the potential impacts will be limited to 1-3 months for the properties at the southern end of Beaconsfield Road (whilst the East-West road is constructed) which may minimise the extent of the impact for these properties.

Operational phase

- Operation of the development may impact way of life should residents within and around the site change their patterns of movement or the ways in which they work, live, and play to accommodate or avoid the potential for noise, air emissions, and/or vibration, and visual impacts associated with the operation of the recycling facility. This way of life impact has the potential to affect residents within the PSA, particularly where their property or important sightlines are located adjacent to the facility.
- It is noted that residences, as a sensitive land use, can be more vulnerable than some other land uses to impacts on way of life. It is further noted that some residents in the PSA may not be aware of the changing industrial zoning as part of the SHIP, or have yet been impacted by industrial development as part of the SHIP, and are therefore more likely to experience way of life impacts for the first time as a result of this proposal. The existing operational impacts from the Australian BioResources and Dux Hot Water industrial developments may have already had impacts to way of life for residents in the PSA, particularly for the

sensitive receivers on Beaconsfield Road (at the northern end) and on Bulwer Road (facing the north). The operation of the subject facility may have cumulative way of life impacts to these residents.

- Vehicle movements associated with the operation of the site, including the transport of waste to the facility and finished products out, have the potential to disrupt existing patterns of movement resulting in increased traffic volumes and reduced amenity on local roads, including Lackey Road and the new access road. During operation, Table 4.3 of the Traffic and Transport Assessment ('TTA')(GHD, 27 January 2022) outlines an estimated total daily average of 380 vehicle movements, including 100 heavy vehicle movements, and 280 light vehicle movements. The figure of 280 light vehicle movements per day assumes all 140 FTE staff inbound and outbound daily (TTA, pg. 39) which may not always occur subject to carpooling, and/or use of public and sustainable transport or other means of travel. It is further noted that, as advised by the Applicant, the heavy vehicles would not be permitted to utilise Beaconsfield Road.
- Noise impacts from industrial facilities, if not managed effectively, have a potential to impact on way of life, both from machinery noise (with a 24/7 facility proposed) and traffic noise associated with the operation of the facility. As discussed below, operational phase noise was assessed as per the Submissions Report (GHD 13 September 2022 pg. 102) to predict noise levels at residences for assessment against the Noise Policy for Industry project noise trigger levels for each of the three noise catchment areas – 'the predictions indicate compliance with the requirements of the Noise Policy for Industry, including compliance with the amenity criteria against which cumulative impacts are assessed, at all sensitive receiver locations.'
- As identified in the Landscape and Visual Impact Assessment ('LVIA') (GHD, 2 November 2021) operation of the proposal would change the visual environment and landscape at viewpoints around the proposal site. Visual impacts resulting from views of the facility and additional light and heavy vehicles in the locality may arise. These changes would be visible from some residences and businesses in the PSA, particularly those within close proximity to the facility and vehicle access routes. This may impact some residents' outlook from their properties, which has the potential to affect their daily routines – for example affecting the amount of time they spend outdoors where previously they would have been viewing a vacant vegetated site.
- Operation of the facility would potentially positively impact how community members within the affected PSA and SSA might work, through an increase and diversification of ongoing local employment opportunities. It is anticipated that the development will generate 140 full time equivalent (FTE) local/regional ongoing jobs (direct and indirect) during full scale operation, which is significant in the local context.

Enhancement / mitigation measures

Mitigations identified in other technical reports

- The LVIA (GHD, 2 November 2021) recommends measures to manage and mitigate these potential impacts including proposed screening planting. In addition it is noted the proposed design has been revised to mitigate the visual impact of the buildings.
- Mitigation of construction related impacts to way of life includes implementation of technical assessment recommendations such as traffic, noise, visual impact, dust and odour.
- Appendix D of the EIS (GHD, January 2022) highlights key mitigation measures to manage potential impacts of the proposal. This includes but is not limited to:
  - The TTA (GHD, 27 January 2022 – Chapter 8.2) recommends the development of a Green Travel Plan specific to the proposal. It is noted that the TTA supports this enhancement measure, as well as the preparation of a Construction Traffic Management Plan (CTMP) prior to the commencement of works.
  - The GHD Engagement Outcomes Report (GHD, 22 December 2021 Chapter 4.4) outlines that a Complaints Management System (CMS) will be developed and implemented prior to the commencement of construction – maintained through the construction period and for a minimum of 6 months following completion of the construction program.
  - Section 8.1.6 of the LVIA (GHD, 2 November 2021) notes that "perimeter buffer planting in advance of construction works" would be undertaken "particularly in locations where short-term visual mitigation would be beneficial."
  - The adoption of a Construction Noise and Vibration Management Plan (CNVMP)(Appendix D of the EIS NV2, GHD, January 2022).

  - An Operational Noise Model should be prepared to account for potential changes in the design as recommended in the Noise and Vibration Assessment ('NVA')(GHD, 24 January 2022)

- The LVIA (GHD, 2 November 2021) identifies a number of visual amenity and built form mitigations, such as setbacks, roadside planting, lighting, façade design and materials. During construction it is recommended to implement early works screening, with landscaped area across lot frontages to internal access roads and along boundaries. Avoiding placing stockpiles and machinery within visually prominent locations, seed collection and no-go zones around drainage and water capture areas, are also recommended.

Additional recommended social mitigations

- Ensure the design of the facility including landscaping responds to issues raised by the community – particularly surrounding residents, and is as sensitive as possible in its design to the surrounding natural environment.
- Develop a Communications and Engagement Strategy (CES) that will outline an approach to ongoing communication and engagement with landowners, surrounding residents and businesses, and other key stakeholders through construction and operational stages. The CES should seek to communicate key proposal milestones and timeframes and provide a mechanism for stakeholders and the community to provide further proposal input/feedback, with a commitment to this feedback being considered and where possible responded to in development planning. During the construction stage, the CES should align with the CEMP to provide a mechanism for landowners to communicate and collaborate with the project team throughout construction.
- The CES should include the following additional communication and engagement activities:
  - Engaging with resident adjacent to affected roads to discuss any concerns they have and how road safety can be maintained over time
  - Specifying all heavy vehicles and over-dimensional vehicle haulage routes for all work stages and communicating related traffic and road network impacts to the affected communities well in advance
- Develop a Complaints Management Procedure (CMP) that would provide a range of avenues (e.g., direct phone number, email) for community members to express their concerns or ask questions, and enable quick resolution of issues during construction such as impacted access to properties or dust, noise or other amenity impacts.
- Explore opportunities for partnerships to enhance potential positive impacts associated with job creation during the construction and operational stages. This may include partnerships with organisations such as TAFE to offer special apprenticeships and programs, or the development of a local procurement strategy or social procurement strategy for employment, to target vulnerable groups in the employment market.

Summary:	
Overall impact and social impact significance rating	Negative social impacts during construction are associated with a likely change to the existing way of life that residents living within the PSA value highly, though the construction impacts will be temporary. It is noted that this change to way of life is commensurate with construction of a facility of this scale, and mitigation measures are outlined below and in **Table 7**. However, once operational, the proposal is not anticipated to have a significant impact on way of life for residents of Moss Vale subject to mitigation. Negative social impacts associated with way of life will be most significant for some residents living within the PSA, dependent on their proximity to the site. Though the industrial development may be generally consistent with the intended development of the SHIP - which will undergo significant development and a change in character of the future, it is still considered that possible negative social impacts may arise to way of life to the existing community. **Overall social impact ratings to way of life are:** • Construction phase: High (Likely – Moderate) – negative • Operational phase: Medium (Possible - Moderate) – negative or positive, dependent on receiver

Way of life	
Likelihood	Short term construction impacts with longer term medium way of life impacts resulting primarily from the impacts to view and visual amenity and potential environmental and traffic impacts which could affect way of life – however in general, these impacts can be mitigated.
Duration	Operational impacts are long term, construction impacts are temporary. Impacts to way of life may be more acute in the initial phases of this proposal, as changes associated with this development first begin to impact residents and workers in the PSA and broader SSA (e.g. heavy construction vehicle movements, siteworks) particularly as the site has been generally vacant for almost 100 years.
Severity/ sensitivity	Moderate severity to impacts as the community has a slightly higher disadvantage in terms of socio-economic characteristics (lower average household incomes, higher average ages). It is noted that residences can be more vulnerable than some other land uses to impacts on way of life. It is further noted that some residents in the PSA, particularly to the south and east of the site are not yet as impacted by the emergence of the SHIP and are therefore may be likely to experience way of life impacts as a result of industrial development for the first time. However, it is noted that the impacts may be reduced given the presence of the nearby Australian BioResources facility and Dux Hot Water industrial development. Further the industrial development is generally in alignment with the envisaged character of the SHIP and in terms of way of life impacts, it would be expected that the community may have some knowledge of the envisaged changes and may expect that the future character of the area will change. Recent land sales of nearby industrial zoned have occurred. Regardless, given the interest in the proposal from stakeholders and the public it is considered that the proposal represents a moderate level of change to way of life for the community.
Extent	While this proposal may impact way of life for residents and workers within the SSA (Moss Vale Area, 5km radius from the subject site) – impacts are most significant for residents living within the PSA (within a 800m radius from the subject site). Construction impacts are temporary - including the new access road (1-3 month timeframe) - which will mitigate the extent of the impacts to way of life to some degree as long as appropriate mitigation methods are implemented.
Potential to mitigate/ enhance	High – see **Table 7** below.

Refer to **Table 7** for an overview of the assessment ratings, including an identification of residual impacts after mitigation is considered.

7.5 Accessibility

This section assesses: *Accessibility – how people access and use infrastructure, services and facilities.*

Accessibility
Potential impacts

The primary identified impact to accessibility is related to access to transport infrastructure, and how the proposal during construction and operation may limit access to the site's nearest social infrastructure, services and facilities, which are generally currently concentrated in the Moss Vale Town Centre within the SSA. There are no identified social infrastructure, services or facilities located within the immediate area of impact (the PSA) (refer **Section 5.4**).

Nearby transport infrastructure in detailed in **Section 5.5.** There are nearby bus stops at the intersection of Berrima Road servicing the 812 and 816 routes. Surrounding pedestrian and cycle infrastructure is limited, and the surrounding roads are generally single lane (each way) including:

- Berrima Road – a regional sub-arterial road with a single travel lane in each direction. South of Taylor Avenue is a level rail crossing. 5 bus stops in the southbound and 2 bus stops in the northbound direction.
- Douglas Road and Collins Road – local collector roads with one travel lane in each direction.
- Lackey Road – a local collector road with one travel lane in each direction and follows the Southern Highlands and Southern NSW rail line
- Beaconsfield Road – a no-through local road, that connects Parkes Road/Garrett St to residential and local business, oriented in a north-south direction. One travel lane in each direction.
- Bulwer Road – a local road with one travel lane in each direction
- Lytton Road – a local road with one travel lane in each direction

The proposal has been revised to address potential operational traffic and transport impacts, which have been identified as a key concern in the community as per **Section 6.0**.

The Lackey Road and proposed new access road intersection would be upgraded to include a right turning lane. The design of the intersection treatment would be subject to detailed design and assessment of adequate sight distances (pg. 123, Submissions Report, 13 September 2022).

Construction phase

- Construction would occur from Monday to Friday between 7.00am and 6.00pm and 8.00am to 1.00pm Saturdays. Peak construction workforce is 30 people maximum and the estimated peak daily vehicle movements during construction are 60 light vehicle movements and 40 heavy vehicle movements (Table 4.2, TTA GHD 27 January 2022). There are potential indirect impacts associated with increased temporary traffic movements during construction on the local road network, which may reduce accessibility for residents, visitors and workers and their ability to access nearby infrastructure. The impacts will likely be most prevalent during construction of the new access road to the facility, which will take approximately 1-3 months and will occur prior to onsite construction activity. This may partly utilise the existing road network of Beaconsfield and Lytton Roads (TTA, GHD 27 January 2022) to construct the new access road only. Beaconsfield Road residents and users may be impacted during this construction period in terms of access to the Moss Vale town centre and train station. Utilising Beaconsfield Road was a key issue raised in the consultation and Council submission to the RTS.
- Once the access road is constructed, site construction access would utilise Lackey Road and newly constructed access road. There would be additional worker and truck movements along Lackey Road and the new access road during construction, which could impact upon existing users of Lackey Road and surrounding roads as a result of additional traffic.
- Traffic modelling undertaken as part of the TTA (GHD, 27 January 2022) identifies that during construction an "acceptable Level of Service with spare capacity in both the weekday morning, evening weekday and in 2020 and future 2030 post development scenarios" is likely (pg.52). Further "the construction of the proposal is therefore expected to have minimal impacts to the surrounding road network from a traffic operation perspective" (pg52). Therefore, significant impacts to accessibility within the locality are not anticipated during construction of the proposal and will be temporary in nature.

Accessibility

Operational phase

- During operation the daily number of heavy vehicles associated with the proposal would be approximately 40-50 trucks per day delivering and exporting plastics (approximately 100 truck movements per day – equates to an average of 4 trucks per hour). In addition, with up to 140 FTE staff the predicted 'worst-case scenario' is a total of 60 light vehicles accessing the site for daytime shifts, with 40 vehicles each associated with the afternoon and night shifts. (TTA Section 4.2.2). This is the 'worst-case' scenario and may be able to be mitigated with the implementation of a Green Travel Plan, car pooling and/or ridesharing (TTA section 4.2.2).
- Operational traffic would largely access the site via the newly constructed access road which connects to Lackey Road. The operation of this proposal therefore has the potential to impact local access to transport infrastructure by increasing traffic movements and contributing to potential increased congestion on Lackey Road and surrounds. Vehicles are expected to access the facility site via Lackey Road (primarily via either Douglas Road/Collins Road (from the north) or as a secondary alternative, via Berrima Road (from the south) (TTA, GHD 27 January 2022).
- The TTA (GHD 27 January 2022, pg. 45) concludes that general heavy vehicles associated with operation of the facility would likely access and egress from the west (i.e. key nodes of Sydney, Canberra, and/or Wollongong) which will minimise the impacts to accessing Moss Vale townships. The secondary route, along Berrima Road from the south, via Innes and Lackey Road is 'unlikely to be used because of the shorter distance along the primary route'. Traffic modelling has been undertaken in the TTA, which concludes that "the proposal would have negligible impact on surrounding road networking in the vicinity of the proposal site, subject to the recommendations outlined" (pg 53). It is considered that operational impacts on accessibility are therefore not likely to arise. Adequate onsite parking is proposed including bike parking and accessible parking, as well as internal circulation space, which will minimise the potential for on-street overflow parking and queuing. The proposal has been amended to include a right-hand turn in the access road, to mitigate traffic impacts.

Enhancement / mitigation measures

Baseline / regulatory mitigations already in place

- A CTMP will be prepared prior to commencement of works. Should partial road closures be required as part of the works, the contractors will be required to ensure that both TfNSW and Council approvals are obtained prior to implementation and appropriate Traffic Control Plans (TCP) and Traffic Guidance Schemes (TGS) are developed and implemented as part of the works. The TCP and TGS should be developed as part of the detailed CTMP prior to commencement of construction.

Further mitigations identified in other technical reports

- The TTA (GHD, 27 January 2022) recommends:
  - The CTMP should include provisions for contractors to discourage the use of on-street parking and encourage the use of alternate travel arrangements to decrease traffic movements and parking demand associated with construction workers
  - Provision of the recommended numbers of onsite parking to accommodate predicted staff numbers and visitors to the site, design access, service loading and parking areas as per Australian Standards including accessible parking as required. It is estimated that a parking provision of 70 car spaces will be sufficient to cater for anticipated parking demands (pg 52, TTA GHD 27 January 2022).
  - Provision of motorcycle and bicycle parking, and associated end-of-trip facilities, to support alternate transport options to the site.
  - Prepare a GTP which summarises alternate transport options to access the development, outlining where and how these services can be accessed and the frequency of the service. A GTP is identified as having the potential to mitigate, albeit in the longer term, impacts associated with traffic movements by directly reducing the quantum of private motor vehicle movements and positively influence the capacity of individuals to access to infrastructure and services. Staff will be encouraged to utilise alternate transport options, including carpooling, active transport and public transport (in association with the future SHIP bus network).

Accessibility	
Additional recommended social mitigations • Develop a CES that will outline an approach to communicating with landowners, surrounding residents and businesses, and other key stakeholders ongoing during construction and operational phases. The CES should seek to communicate key proposal milestones and timeframes and provide a mechanism for stakeholders and the community to provide further proposal input/feedback, which will guide how the facility is constructed and operated in a socially responsible way that will alleviate local community issues and concerns. • During the construction stage, the CES should encompass traffic and accessibility concerns, including regular updates on traffic volumes, proposed timeframes for use of Beaconsfield Road, and information regarding any partial road closures or peak periods of construction vehicle traffic.	
Summary:	
Overall impact and social impact significance rating	Negative social impacts during construction on accessibility may occur due to the use of the existing roads by heavy vehicles, and the additional traffic that may ensue. Residents to the south of Bulwer Road and Beaconsfield Road in the PSA and SSA will likely experience the majority of accessibility impacts during construction of the new access road (1-3 months). Once operational, subject to recommended mitigation measures, impacts on accessibility are considered medium due to the additional traffic from employees, deliveries and heavy vehicles as a result of operation of the facility. There may be positive impacts to some, as a result of a new public road being constructed as a result of part of the proposal, and provision for a future footpath and cycleway. **Overall social impact ratings to accessibility are:** • Construction phase: Medium (Possible – Moderate) – negative • Operational phase: Low (Unlikely – Minor) to Medium (Possible – Minor) – negative or positive, dependant on receiver.
Likelihood	Likely impacts to accessibility during construction but low potential for permanent accessibility impacts during operation
Duration	Operational impacts are long term, construction impacts are temporary. Impacts to accessibility may be experienced during both construction and operational phases. During construction, the use of Lytton Road and Beaconsfield Road for access may impact on some residents and workers in the PSA particularly residents on these roads. The construction of the new access road to the site is anticipated to take 1-3 months. During operation, the road network may experience delays due to additional heavy vehicles, employee vehicles and trucks, which may impact accessibility in the long-term. However, there are no permanent changes to the accessibility of the surroundings and it is considered that mitigation of road network usage can be undertaken to ensure the impacts are minimised.
Severity/ sensitivity	The severity/sensitivity of the proposed change to accessibility is likely to be mild to moderate. Traffic and transport issues were a common theme in the engagement identified in Section 6.2 therefore the community has identified an interest in this aspect.
Extent	While this proposal may impact accessibility for residents and workers within the SSA, impacts are more significant for residents, workers and visitors needing to access the same roads that will be used for construction and operation.
Potential to mitigate/ enhance	High – see **Table 7** below.

Refer to **Table 7** for an overview of the assessment ratings, including an identification of residual impacts after mitigation is considered.

7.6 Health and wellbeing

This section assesses Health and Wellbeing – people's physical, mental, social and spiritual wellbeing – especially for people vulnerable to social exclusion or substantial change, psychological stress (from financial or other pressures), access to open space and effects on public health.

Health and wellbeing
Potential impacts

The following analysis identifies social impacts on health and wellbeing considering community perspectives and provides enhancement / mitigation measures to minimise negative impacts and maximise benefits.

Note: This section does not constitute a technical Health Impact Assessment. Rather, it provides a high-level assessment of health and wellbeing-associated impacts on the community, based on available technical information and community engagement outcomes.

Planning and development phase

- The establishment of initial proposal signage and site establishment has the potential to create impacts associated with fear or anxiety that change of ownership and construction activities will impact their property or their livelihoods. The site has been vacant for a long period of time.
- The seeking of planning permissions has potential health and wellbeing impacts associated with worry and/or anxiety about the possibility of the facility impacting local residents' property value and/or affecting their physical health. Some members of the community may have concerns about living in proximity to a plastics recycling facility due to the potential emissions, which some may believe have long term health impacts. This concern was raised in the Engagement Outcomes Report (GHD, 22 December 2021) however the applicant has noted that 'there would be virtually no opportunities for microplastics to escape from the buildings as part of the process. All operations associated with the proposal would occur inside buildings' (pg 5 Engagement Outcomes Report GHD 22 December 2021).

Construction phase

- Construction activities may cause dust, noise, vibrations, light pollution, traffic on local roads, and visual impacts. This may potentially impact physical and mental wellbeing, e.g., by disrupting rest and sleep patterns temporarily, or causing frustration and inconvenience. The establishment of the construction site, construction activities, and use of local roads may have potential health and wellbeing impacts associated with worry or anxiety that the facility will impact property values and/or affect physical health.
- Residences are sensitive receivers and therefore may be more vulnerable than some other land uses to these impacts. It is also noted that the community is older than the NSW average, which suggests a higher likelihood of more potential health vulnerabilities.
- Potential construction impacts to health and wellbeing may occur in relation to dust, noise, vibrations and odour. Various technical reports have been prepared in relation to this impact:
  - An Air Quality and Odour Assessment ('AQOA') has been submitted with the EIS (GHD, 25 January 2022). The report notes "the impact from all construction activities for nuisance, health impacts and impacts to ecological receptors was found to be low."
  - The NVA (GHD, 24 January 2022) submitted with the EIS describes the existing ambient and background noise and vibration and assesses the potential noise impacts associated with the construction phase of the proposal. The report notes that there is potential for some community impacts from construction noise, including road traffic noise due to the proximity of residential receivers. "Residences within 19 metres of Beaconsfield Road are likely to be impacted by construction traffic noise during this time (when the access road is being constructed)"(pg.vii EIS Main Document, GHD January 2022). Mitigation measures are recommended in this report to reduce construction noise from traffic.
- It is further highlighted that the proposed use of heavy machinery during construction may generate noise and vibration impacts, however these impacts will be temporary as per Table 12.13 of the EIS (GHD, January 2022) which notes a maximum duration of 7 months for such works.
- The Submissions Report (GHD, 13 September 2022) notes that 'the potential for noise and vibration impacts have been quantitatively assessed against the relevant guidelines referenced in the SEARs – construction noise levels during all stages of construction are predicted to result in noise levels above the relevant noise management level (pg. 80).

- The NVA (GHD, 24 January 2022) notes that excavation activities have the potential to exceed the human comfort vibration criteria should these works occur within 73m of residences, while rolling works have the potential to exceed human comfort levels within 100m. However, no residences have been identified within 100m of these vibration intensive works and as such, no adverse vibration impacts are anticipated as a result of the project (Section 5.2.5, NVA, GHD, 24 January 2022).

Operation phase

- Key health and wellbeing issues during operation relate to potential impacts relating to odour impacts, noise impacts, water and air quality, which might arise during operation of the plastics recycling and reprocessing facility. Specifically, the technical reports indicate the following potential impacts, which may affect health and wellbeing of the PSA residents, visitors and businesses in particular:
  - **Potential odour impacts** (which may affect general wellbeing through prohibiting outdoor activities for example) - as a result of the primary pollutants generated during the operation of the proposal which includes particular matter from mechanical processing of plastics, volatile organic compounds and odour from heating of plastics, and odour from the wastewater treatment plant (pg i-ii (AQOA GHD, 25 January 2022). However, the AQOA notes (pg ii, GHD 25 January 2022):
    - 'A review of sensitive receptor locations found that the nearest residential receptor is greater than 200 m from the closest point of the processing buildings and approximately 450 m from the wastewater treatment plant.
    - Winds causing the nearest sensitive receptors to be located downwind of the proposal operations would be infrequent.
    - The wastewater treatment plant will be used to treat and separate contaminants and from the water required in the main processing operations for reuse.
    - Given the mostly physicochemical nature of the wastewater treatment processes, only minor odours would be generated'
  - The Response to Submissions (RTS) Air Quality Letter (GHD, 3 August 2022) includes an Odour Assessment (Chapter 6) concluding that 'odour impacts are not anticipated subject to best practice pollution and odour controls (pg 18)' and 'the wastewater is highly diluted with minimal residual wastes such as beverage liquids compared to total water flows and is unlikely to be a source of offensive odours' (pg. 18).
  - **Potential air quality impacts** (which may affect general health and wellbeing of nearby residents) may also arise with a facility of this nature, from volatile compounds associated with the plastic recycling activities. In relation to microplastics, the cumulative impact assessment for particulate matter predicts that there would be no exceedances of the NSW EPA criteria at any residential location, but there would be a minor exceedance at the nearest commercial receptor, if the background levels were unusually high (RTS Air Quality Letter, GHD, 3 August 2022, Section 4.4).
  - Further, the Submissions Report (section 6.3.2.1 – Emissions) by GHD dated 13 September 2022, states the following:
    - Impacts from volatile compounds associated with the plastic recycling activities are relatively low due to the low process temperatures and would likely meet NSW Government POEO limits without any additional pollution controls; and
    - Emissions of fine particulate matter to the atmosphere will comply with the NSW POEO Clean Air Regulation standards of concentration (pg.99)
  - **Potential machinery noise impacts** as a result of the operation of the 24/7 facility may have impacts on health and wellbeing of nearby residents, businesses and visitors to the area. Dominant noise sources from the site include the delivery truck during the day period and the emission noise from Building 1 through walls and roller doors and from the stacks of both buildings during all periods (Section 5.1.4, NVA GHD 24 January 2022). Further 'there is the potential for the stack outlets to result in low frequency noise at receivers' and 'there is the potential for sleep disturbance only if there are short-duration, high noise level noise events' (Section 5.1.5, NVA, GHD 24 January 2022). However, this section further notes that 'while the proposal will be operation during the night period, the noise generating activities will all occur within the enclosed buildings and are expected to be in practice, continuous in nature'. The Submissions Report (GHD, 13 September 2022) notes that (pg102) 'an assessment of operational phase noise was undertaken to predict noise levels at residences for assessment against the Noise Policy for Industry project noise trigger levels for each of the three noise catchment areas assuming 24 hour operation of the facility and truck movements between 7am and 6pm Monday to Friday' and 'the predictions indicate

compliance with the requirements of the Noise Policy for Industry, including compliance with the amenity criteria against which cumulative impacts are assessed, at all sensitive receiver locations'. Further noise modelling of the internal areas of the facility would be undertaken during detailed design to ensure impacts are compliant with the relevant standards – this will be critical to mitigate impacts to health and wellbeing in terms of noise.

- **Potential operational traffic noise impacts** would similarly possibly affect health and wellbeing of nearby residents through sleep disturbance as the facility will operate 24/7. However, these impacts are not expected to be significant, as restrictions on waste delivery times are proposed and the nearest sensitive receivers along Douglas Road, Collins Road and Lackey Road are set back over 130m from the road (NVA, GHD 24 January 2022). The NVA (pg. ii) notes "operational traffic noise levels at the most-affected residential receivers along the new access road were assessed. The results indicate that operational road traffic noise levels are predicted to comply with the road traffic noise assessment criteria at the nearest residential receivers to the new access road. All other residential receivers further away are predicted to experience lower road traffic noise levels".
- **Potential water quality impacts** could result in health impacts to the PSA, SSA and beyond – the site is located within the Sydney drinking water catchment (GHD EIS, January 2022). It is proposed to undertake an environmental monitoring program, with all water treated before discharged to the watercourses. Preliminary water quality modelling to be undertaken in accordance with relevant requirements has been undertaken which indicates that 'the proposed treatment system would have a neutral or beneficial effect on water quality.' (GHD Engagement Outcomes Rpt 22 December 2021).
- Section 6.3.3 (Water) of the Submissions Report (GHD, 13 September 2022) notes:
  - The predicted water quality impacts are low as the only water discharged to the environment is rainwater that falls on roofs or internal roads, and this water is treated to a high standard through bioretention basins; and
  - None of the water used for processing plastics will run off site and will all be contained within the buildings (pg. 100).
- The majority of process water used on site will be recycled and reused after being treated at the wastewater treatment plant; and a maximum of 10 kilolitres per day would be discharged to Council sewerage system (GHD Engagement Outcomes Rpt 22 December 2021).
- There are potential impacts on the Council's infrastructure capacity in terms of the facility's projected demands, which may affect the PSA, SSA and TSA. The applicant proposes a 'temporary water supply strategy' to mitigate these impacts (refer GHD Letter to Wingecarribee Shire Council, 22 June 2022).
- The following is taken from the Ordinary Meeting of Council 17 August 2022 (3.30pm):
  - "In its submission, Wingecarribee Shire Council raised concerns about the capacity of the local infrastructure network to accommodate the proposed development, particularly water and sewer. The applicant has since revised its plans to reuse an increased portion of water on the site, and to tanker wastewater to the Berrima Sewerage Treatment Plant (STP) as a temporary measure until the Moss Vale STP upgrade is completed. The applicant has sought feedback from Council on the revised plans and updated water and sewer modelling." At the time of writing this report, it is the author's understanding that Council has not provided confirmation as to whether this approach is acceptable.

Enhancement / mitigation measures

Baseline / regulatory mitigations already in place

- Construction will be managed through compliance with a CEMP. The CEMP will manage impacts from construction associated with increased activity, noise, and movement at and around the site and will be integrated with a CES to provide a mechanism for landowners and the community to communicate and collaborate with the applicant's team throughout construction so that health and wellbeing impacts are effectively understood and minimised.
- Minimised traffic noise impacts through recommended mitigation measures in the NVA and RTS (GHD, 13 September 2022) including truck drivers being advised to limit the use of air and engine brake, keep engine revolutions per minute to a minimum, comply with site speed limits, and waste acceptance times being weekdays only, between 7am and 6pm.
- An environmental monitoring program is proposed to mitigate water run-off.
- Incorporation of air pollution control devices on all crushing, granulation and injection or extrusion moulding production lines to treat air emissions at source and therefore minimise air emissions is proposed.

- The facility would be subject to an Environment Protection Licence (EPL) under the Environment Protection Authority (EPA) which would require annual reports including data on how the plant and equipment operated that year – there may be relevant noise, water, air criteria that is set by the EPA which would licence how the facility operates.

Further mitigations identified in other technical reports

- Implementation of various mitigation measures as recommended in the EIS (GHD, 24 January 2022) contained in Chapters 9 through 18, including but not limited to the following:
  - Construction Environmental Management Plan (CEMP) and Operational Environmental Management Plan (OEMP) as recommended in Chapter 20.1.3 and 20.1.4 of the EIS (GHD, 24 January 2022)
  - Other specific plans to manage issue-specific impacts identified in the EIS including:
    - operational waste management plan
    - operational water management plan
    - Green Travel Plan
    - operational noise management plan
    - operations plan for stockpile management
    - incident response management plan
    - emergency services information package EIS Main Document (pg 20-5) "Operational Environmental Management Plan" (GHD, January 2022)
- Implementation of a CMS to be developed and implemented prior to the commencement of construction as recommended in the EIS (GHD, January 2022 pg. 6-7).
- Implementation of recommended mitigation and management measures as per the AQOA (GHD, 25 January 2022) including an Air Quality Management Plan (including odour) which details communication strategies, and ensuring emission control systems being kept operational and regularly maintained, as well as any further requirements outlined in the RTS Letter dated 3 August 2022 (RTS – Air Quality). Plasrefine Recycling is committed to best available technology at this facility and the equipment used would ensure that emissions meet relevant NSW limits or better. Emissions of fine particulate matter to the atmosphere will comply with the NSW POEO Clean Air Regulation standards of concentration.
- Mitigation measures to reduce noise levels and risk of noise impacts during construction and operation as recommended in the NVA (GHD 24 January 2022) including methods to minimise sleep disturbance as a result of the 24/7 operations including car door slamming from employees. The RTS Responses document (Ref: 12524108 dated 3 August 2022) notes that 'each stack would require a silencer to eliminate the potential for low-frequency noise at receivers'.
- The Submissions Report (GHD 13 September 2022) notes that further noise monitoring of the internal areas of the facility would be undertaken during detailed design to confirm compliance with the project noise trigger levels at sensitive receivers with special consideration to low-frequency noise.

Additional recommended social mitigations

- Reasonable and feasible work practices with all potentially impacted residents to be consulted during construction.
- Ongoing engagement with nearby residents of the PSA to establish if negative health and wellbeing impacts are being experienced – and to work out mitigation techniques if appropriate and required.
- Prepare a CES to include strategies to promote community understanding and awareness of real and perceived health and wellbeing impacts. The CES should also include a CMP that would provide a range of avenues for community members to express their concerns or ask questions.

Health and wellbeing	
Summary:	
Overall impact and social impact significance rating	A review of the various technical reports to inform the potential health and wellbeing impacts has been undertaken. During construction, the potential for health and wellbeing impacts are likely to be High (likely- moderate) based on the potential for noise related impacts from construction traffic and equipment – however, these impacts would be temporary. During operation, health and wellbeing impacts are likely to be Medium (possible – moderate). **Overall social impact ratings to health and wellbeing are:** • Planning phase: Low (unlikely – minor) – negative or positive, dependant on receiver • Construction phase: High (likely – moderate) – negative • Operational phase: Medium (possible – moderate) - negative
Likelihood	Negative impacts are possible during construction and operation.
Duration	Operational impacts are long term, construction impacts are temporary. Impacts to health and wellbeing may be experienced during both the construction and operational phases. The impacts may be more acute during initial phases of the proposal - for example, during construction - where noise impacts may be experienced and has the potential to cause noise and vibration impacts if not mitigated. The construction of the proposal is likely to take 15-17 months.
Severity/ sensitivity	Residences as sensitive receivers can be more vulnerable than some other land uses to impacts on health and wellbeing. It is important to mitigate all aspects of this development accordingly (including noise, odour, air quality and water quality) to minimise impacts on health and wellbeing.
Extent	Construction impacts would likely impact the adjacent residents and nearby communities within the PSA however the scale of impacts for each receiver may vary dependant on proximity from the site. Noise associated with truck movements during construction may impact residents within 19m of the nominated road haulage routes, however it is noted that impacts can be appropriately mitigated and will be temporary in nature. During operation, impacts to health and wellbeing may be experienced by the broader SSA if not mitigated appropriately. Traffic and operational noise may affect nearby residential receivers if mitigation methods recommended in the technical reports are not adhered to. Potential positive impacts may arise as a result of the contribution to the recycling industry and flow-on effects to preserving the environment more broadly through reducing waste disposed to landfill.
Potential to mitigate/ enhance	High – see **Table 7** below. If approved, the EPA requires publication of annual noise, air and water quality reporting so that the community can see if the facility has been compliant with its EPL.

Refer to **Table 7** for an overview of the assessment ratings, including an identification of residual impacts after mitigation is considered.

7.7 Community

This section assesses: *Community – including its composition, cohesion, character, how it functions, resilience, people's sense of place.*

Community
Potential impacts
Population estimates show that there are 14,150 residents living within the SSA (generally comprising the Moss Vale area) and 53,020 within the TSA in 2022 (ABS, 2021) Of these residents, close to 10,000 live within the Moss Vale suburb (ABS, 2021). The area is currently predominantly farmland, with some emerging industrial land uses. As noted in **Section 5.3,** the population has a higher proportion of socio-economic disadvantage (10.9% lower median household income and a higher proportion of low-medium income workers) and a relatively older population (average age of 47.2, compared to the NSW average of 38.8). The township of Moss Vale has a strong community identity and significant civic infrastructure, contributing to its solid sense of place (see **Section 5.4)**. The following analysis identifies social impacts on the community, considering local perspectives and providing enhancement / mitigation measures to minimise negative impacts and maximise benefits. **Planning phase** • The next phases of the development, including the consent phase, construction certificate, occupation certificate, and any accompanying community and stakeholder engagement either as part of the RTS or by the applicant, has the potential to impact the cohesion of some community members in the PSA, SSA and/or TSA, due to real or perceived divisions in opinion about the proposal. This may result in tension and a lack of community cohesion during peak periods, for example lodging of applications for permits, targeted engagement activities, and the beginning of construction. • It is understood that the Moss Vale community has a significantly higher proportion of older residents, and higher than average levels of socio-economic disadvantage. These community characteristics highlight the potential for increased sensitivity to impacts to community cohesion and lower levels of resilience to change. **Construction phase** • The construction phase is anticipated to bring approximately 200 temporary construction-related jobs over the construction lifespan. This influx of workers would alter the community composition by resulting in a stronger presence of workers in the area. However, it is considered that this impact is unlikely to be noticeable outside of a peak number of 30 workers during major concrete pours. In addition, the applicant seeks to hire locally where possible and therefore some of the workforce is already likely to be in the community. • The presence of additional construction workers in the community may result in a temporary impact to sense of place and how the community functions. This impact may be positive or negative dependent on the perception of the receiver. Local business owners may welcome this change to the community due to flow-on economic benefits - construction workers are likely to visit Moss Vale, for example to access businesses and services. It is reiterated that the applicant seeks to hire mostly local employees where possible and the construction crew may not necessarily have impacts on the community composition if mostly local residents are hired. • The temporary presence of construction equipment, materials, increased noise, trucks and heavy vehicles may be perceived as a negative impact by permanent residents, with potential impacts on residents' sense of place due to changes in how the area looks and feels. • There are seven rural residential properties located within 250 metres from the proposed site (Engagement Outcomes Report, GHD January 2022 pg 3). It is noted that nearby residences are sensitive receivers and therefore may be more vulnerable to these local impacts than some other land uses. **Operational phase** • The operational phase is expected to attract workers, as well as employ local workers to fill approximately 140 FTE positions in the community. Any significant influx of non-local workers would alter the community composition by resulting in an increased population in the PSA in particular, although it is noted that the proponent intends to draw significantly upon local workers where possible. The presence of worker vehicles,

trucks and heavy vehicles during operation may increase therefore potentially impacting the community. A potential positive impact for future employees is the provision of a high quality facility with internal amenities (communal lounge areas) for social interaction as well as end-of-trip facilities.

- Additional employees as a result of operation of the facility may result in an ongoing impact to sense of place and how the community functions, which may be positive or negative dependent on the receiver. Workers are likely to visit Moss Vale, for example for lunch and to access businesses and services. Local business owners may welcome this change to the community due to flow on economic benefits.
- Tourism, education opportunities and the location of a landmark circular economy proposal may also present opportunities for new sources of community identity and pride. This may impact sense of place and local character by attracting further visitors to the area. A visitor centre is proposed.
- The permanent changes to the natural environment and landscape associated with the two warehouse-type structures to be constructed on-site has the potential to lead to changes to residents' sense of place resulting from intensified industrial activity on this site, which is currently undeveloped. As residences are sensitive receivers, local residences in the PSA are more vulnerable to these local impacts than some other land uses.
- The proposal may impact community cohesion by creating divisions between those who support the proposal and those who do not, and between community members – albeit this impact is more likely to occur during initial phases of construction and operation, and may naturally resolve over time. It is understood that the Moss Vale community has a significantly higher proportion of older residents, and higher than average levels of socio-economic disadvantage. These community characteristics highlight the potential for increased sensitivity to impacts to community cohesion and lower levels of resilience to change.

Enhancement / mitigation measures

Baseline / regulatory mitigations already in place

- Construction will be managed through compliance with a CEMP. The CEMP will specify the management of impacts from construction associated with increased activity, noise, and movement at and around the site
- Proposed visitor centre to encourage community benefit and educational opportunities.
- A CCC is proposed

Further mitigations identified in other technical reports

- The LVIA (GHD, 2 November 2021) identifies a number of visual amenity and built form mitigations, including
  - Maintaining appropriate setbacks from public and private viewpoints
  - The alignment and design of new access roads to the proposal site should consider roadside planting and strategic use of lighting, as well as taller canopy trees along the length of newly proposed access routes
  - The built form design should employ strategies to minimise the footprint, height and bulk of the building, by avoiding large blank facades without suitable articulation
  - The building materials and finishes should be compatible with surrounding visual environment and colours and materials that are sensitive to the surrounding landscape are recommended.
  - Early works screening implemented at earliest opportunity, and a minimum 15-metre-wide landscaped area established along lot frontages to internal access roads and along boundaries
  - Light pollution mitigations, including the use of directional luminaires, shields and baffles to minimise sky glow and light spill for surrounding residential properties
  - Construction mitigation, including the avoidance of placing stockpiles and machinery within visually prominent locations, buffer perimeter planting, seed collection, and no-go-zones around drainage and water capture areas.

Additional recommended social mitigations

- Explore strategies to promote the tourism, education, and employment opportunities arising from the development in order to foster a transitioning community identity and sense of pride
- Develop and implement a guideline that gives preference to local and regional residents and business, including incorporating local procurement requirements into key proposal contracts to maximise local employment and enterprise/ economic development opportunities

Community

- Maintain close dialogue with relevant stakeholders such as the Wingecarribee Shire Council so that opportunities to raise issues and connect with the community can occur. The developer and the community should liaise where possible during operation and construction to identify opportunities to encourage social interaction between workers and the local community (such as complaints management, education, traineeships, local procurement) and mitigate any issues arising

Summary:	
Overall impact and social impact significance rating	During construction the impacts to the community are possible and moderate, with the potential for additional employees, heavy vehicles, and the scale of change to the vacant site in a largely rural-residential setting. Community consultation has indicated general opposition for the proposal. Negative impacts as a result of the permanent industrial facility to the community may arise and should be considered sensitively in the context of future engagement strategies. The change may be seen as positive for some members of the community with resultant employment opportunities in an innovative technology industry. **Overall social impact ratings to community are:** • Planning phase: Medium (possible – moderate) - negative • Construction phase: Low (unlikely – minor) to Medium (possible – moderate) – positive or negative dependant on the receiver. • Operational phase: Medium (possible - minor) – positive or negative, dependent on the receiver.
Likelihood	Changes to the community are likely given the scale of the proposal.
Duration	Operational benefits are long term, construction impacts are temporary.
Severity/ sensitivity	Moderately higher sensitivity to community impacts due to the lower socio-economic outcomes of the SSA and the TSA, noting the scale of this development in its context.
Extent	The construction phase is likely to affect adjacent residents, nearby communities and parts of the PSA dependant on proximity to the site. The operational phase likely to affect the broader SSA and TSA.
Potential to mitigate/ enhance	High – see **Table 7** below.

Refer to **Table 7** for an overview of the assessment ratings, including an identification of residual impacts after mitigation is considered.

7.8 Culture

This section assesses: *Culture: including the shared beliefs, customs, values and stories, and connections to land, places, and buildings.*

Culture
Potential impacts
The subject site is located in an area historically known for agricultural uses, and consultation identified that connection to the existing landscape and historical context is strong amongst some community members. The Wingecarribee Shire Community Strategic Plan 2031 identifies that the community values its "pristine rural environment and wants this lifestyle preserved, including farmlands and local agricultural production." (p. 11). It also identified strong community value on environmental sustainability and addressing climate change. The site contains some areas of Aboriginal cultural heritage significance (six archaeological finds of varying cultural significance, including two surface isolated finds and four sites registered with the Aboriginal Heritage Information Management System (AHIMS) register) however 'the archaeological investigation has demonstrated that the study area has a very low potential to contain significant Aboriginal objects or deposits' (pg v OzArk, October 2021). The following analysis identifies social impacts on local culture, taking into account local perspectives and providing enhancement/ mitigation measures to minimise negative impacts and maximise benefits: **Construction phase** • Changes to the landscape and environment associated with the establishment of the site and construction activities have the potential to impact people's values and beliefs associated with the locality, as well as access to and use of local heritage and cultural elements on the site. This may include cultural or spiritual impacts. As the site is vacant, some people (including Aboriginal and Torres Strait Islander people) may have memories associated with the site. • Changes to sense of place, starting during construction, and continuing into operation, may impact residents in the PSA and SSA, and those people with a particular connection to the Moss Vale area. • Potential impacts to Aboriginal cultural heritage values as a result of the development as 'it is noted that six Aboriginal sites were recorded during the assessment' (ACHAR (Aboriginal Cultural Heritage Assessment Report) OzArk , October 2021). It is also noted that 'no specific cultural values were identified by the Registered Aboriginal Parties (RAPs) regarding the study area, however the strong cultural values of Aboriginal communities towards landscapes and cultural heritage sites are recognised' (pg.15). - The ACHAR has been prepared to identify likely impacts to Aboriginal heritage from the proposal. The ACHAR finds that 'the proposal will harm three isolated finds assessed as having high cultural values but low scientific values' (OzArk October 2021, pg 68). - The ACHAR concludes that there is 'very low impact to Aboriginal cultural heritage values as few Aboriginal sites were recorded and no intangible heritage values have been identified within the study area' (pg. 70). • Some community members have expressed concern that the proposal would result in negative impacts on local flora and fauna as a result of clearing habitats, noise pollution and weed management, which may impact on culture and connections to the land. The proposal would remove 0.32 hectares of native vegetation, which would potentially have impacts on two plant community types. Non-native vegetation occurs as exotic grassland within the proposal site. The eastern access road will require the removal of exotic grassland and a small patch of planted vegetation of low biodiversity value (BDAR, GHD 1 November 2021). However, the Biodiversity Development Assessment Report ('BDAR') (GHD, 1 November 2021) notes that: - 'impacts on biodiversity values would be largely restricted to the construction phase of the proposal' (pg. ii). - 'vegetation within and adjoining the proposal site is in a highly modified condition with numerous weed species present. As such there is a low to moderate risk that construction activities would introduce and/or spread any new weeds into adjoining vegetation.' (pg. 46)

- in relation to clearing of fauna habitat 'the clearing of 0.32ha of vegetation within the proposal site would not include the removal of any mature trees or important habitat for any threatened species' (pg. 46)

- Possible calls from the Southern Myotis and the large bent-winged bat – listed as vulnerable species under the BC Act – were recorded (BDAR, GHD 1 November 2021). This may result in impacts to culture (specifically, to the connection to land) during construction phase, if these ecological features are not managed as recommended. The BDAR notes 'a call from the Southern Myotis species group was recorded in the proposal site' and though 'the call characteristics of Nyctophilus sp. and the Southern Myotis are very similar' 'a conservation approach was taken, and the species was assumed to be present'. However, 'no breeding habitat occurs on the proposal site (for the large Bent-winged bat)' (BDAR, GHD 1 November 2021).

Operational phase

- Permanent changes to the landscape associated with the delivery of the facility – comprising two large warehouses constructed on-site – particularly in the context of cumulative changes in the SHIP, has the potential to impact area narratives and cultural identity. It is noted that the SSA has a significantly higher proportion of older residents, and lower than average levels of socio-economic advantage - both contributing to higher levels of vulnerability and sensitivity to cultural changes.
- Potential operational phase impacts to surrounding vegetation and habitat values may arise as a result of generation of additional light and noise, erosion and sedimentation as a result of runoff from hard stand areas, introduction of weed propagules by vehicle and/or residents/businesses, fauna mortality as a result of collision with vehicles, increased risk of fire, and rubbish dumping (GHD, 1 November 2021). In terms of social impacts this may lead to negative outcomes for connections to land, and more broadly the culture of the site and surrounds in terms of natural vegetation and wildlife.
- It is understood that "some beneficial impacts would occur as a result of the Riparian Vegetation Management Plan and the revegetation associated with the realignment of the eastern watercourse" (GHD, 1 November 2021). This is identified as having a potentially positive impact on local preservation and enhancement of biodiversity and landscape character.
- The Submissions Report (13 September 2022) notes
  - The proposal involves significant landscaping and restoration of riparian vegetation within the site, with more than 3 hectares of land that is currently unmanaged grazing land being improved.
  - More than five times the area of native vegetation that is being removed within the proposal site will be replanted with native species as summarised in Table 6.3 (pg. 107 Submissions Report, GHD 13 September 2022).
- The delivery of a recycling facility that supports the circular economy and wider community demand for sustainable waste management in NSW has the potential to positively support cultural values -for those that support the integrity of preserving the environment.
- No European heritage-listed items or sites are located on or within 200 metres of the proposal site. No direct impacts on items or sites of European local, state or national heritage significance are anticipated.

Enhancement / mitigation measures

Baseline / regulatory mitigations already in place

- Preparation of an Aboriginal Cultural Heritage Management Plan (ACHMP) will be developed in consultation with RAPs prior to construction commencing to minimise potential impacts to Aboriginal cultural heritage values. The ACHMP will contain policies for unexpected finds.
- The CES would include engagement with local community groups and Aboriginal organisations, and the CHMP would be prepared in consultation with the RAPs.
- Construction will be managed through compliance with a CEMP. The CEMP will be integrated with the ACHMP to mitigate/ avoid damage or destruction of identified areas or objects of cultural heritage significance. As part of the CEMP, each registered place should be protected by the creation of clearly marked no-go zones, and an ongoing finds protocol should be developed and incorporated into the ACHMP.
- Biodiversity offsets through securing and retiring appropriate credits from stewardship sites is proposed.

Culture

Further mitigations identified in other technical reports

- The following management principles as per the ACHAR (11.2.2 OzArk, 2021) should be applied to the three isolated finds liable to be harmed by the proposal:
  - The ACHMP will advocate that an attempt is made to locate the isolated finds before the start of construction. This should be undertaken with the assistance of the Aboriginal community and all visible artefacts should be collected.
  - The ACHMP will recommend that the long-term management of the collected artefacts is that they are re-buried within the study area but outside any impacts from the proposal.
- The BDAR (Section 5.3) prepared by GHD (1 November 2021) recommends that a Riparian Vegetation Management Plan (RVMP) is prepared and complied with prior to construction. Other recommendations include:
  - Planting of native vegetation along the riparian corridors of the western and eastern watercourses
  - Vegetation protection
  - Ongoing management of priority weeds according to statutory requirements
  - Ongoing water quality management
  - Prescribed fencing requirements
  - Ecologically sensitive street lighting design
- A payment to the Biodiversity Conservation Trust will be considered if a suitable number and type of biodiversity credits cannot be secured.
- The ACHAR (OzArk (2021) recommends the following:
  - The northern boundary of the study area adjacent to Beaconsfield Rd IF-1 should be temporarily fenced and signed and no vehicle movements or the storage of materials to the north of the fence during construction activities
  - The impact footprint of the proposal should be temporarily fenced during construction to ensure there are no inadvertent impacts to surrounding landforms
  - An attempt should be made to locate the isolated finds in the ACHAR before the start of construction with the assistance of the Aboriginal community and all visible artefacts collected
  - The artefacts from the sites recorded during the test excavation program should be re-buried with any other artefacts collected within the study area. The way they are reburied, and the location of the reburial will be set out in the ACHMP
  - The ACHMP will provide policies for unexpected finds, including human skeletal material.

Additional recommended social mitigations

- Provide pre-construction and ongoing education to on-site staff (e.g., via inductions) regarding project history, local community history (including Aboriginal and European heritage) which describes current connection to land as well as the more recent agricultural history and community information to encourage respectful behaviours, and enable workers to recognise Aboriginal and European heritage to prevent accidental damage and promote the swift reporting of heritage discovery.

Culture	
Summary:	
Overall impact and social impact significance rating	The proposed development may have a medium impact to culture, depending on community perceptions. Potential disturbance to Aboriginal cultural heritage sites will have a significant impact to culture. Mitigation recommendations in the ACHAR should be adhered to prior to construction. **Overall social impact ratings to culture are:** • Construction phase: Medium (possible – moderate) - negative • Operational phase: Medium (possible – minor) – negative or positive, depending on receiver and impact
Likelihood	Positive impacts of the proposed development during operation will depend on community perceptions and an individual's connection to place.
Duration	Operational impacts are long term, construction impacts are temporary. Both construction and operation would have long-term impacts on culture, if recommendations are not adhered to.
Severity/ sensitivity	Moderate level of sensitivity given the community has expressed concerns with the loss of vegetation and due to the community having higher disadvantage than the NSW population, including lower household incomes and higher average age.
Extent	Likely impacts to culture would be to the PSA but may extend to the SSA and beyond.
Potential to mitigate/ enhance	High – see **Table 7** below.

Refer to **Table 7** for an overview of the assessment ratings, including an identification of residual impacts after mitigation is considered.

7.9 Surroundings

This section assesses: *Surroundings – access to and use of natural and built environment, including ecosystem services (shade, pollution control, erosion control), public safety and security, as well as aesthetic value and amenity.*

Surroundings
Potential impacts

The existing surrounding environment is a rural landscape setting generally characterised by small-scale grazing activities and rural living dwellings, with some light and heavy industrial uses along Lackey Road. The LVIA (GHD, 2 November 2021) has identified four landscape character zones within proximity to the proposal, including pastoral open undulating land, rural residential fringe, Moss Vale town, and industrial and commercial. The site is currently undeveloped grazing land.

The following analysis identifies social impacts on surroundings considering community perspectives, relevant technical studies, and provides enhancement / mitigation measures to minimise negative impacts and maximise benefits:

Construction phase

- The EIS (section 21.1.2) notes "during construction there is the potential for actual or perceived amenity impacts associated with increased vehicle movements on the local road network, noise, vibration, dust and views to the proposal site." This may result in decreased air quality and visual amenity, as well as disruption of quiet. Residences are sensitive receivers and therefore move vulnerable than some other land uses to environment and amenity impacts. The COVID-19 pandemic has fundamentally shifted how people use their homes, especially through increased working from home patterns: therefore, construction activities have more potential to temporarily impact on residents' amenity than in the past.
- There are likely to be temporary noise impacts as a result of construction traffic. "Noise levels from traffic generated during construction are predicted to increase at residential receivers along Beaconsfield Road by more than 2 dBA during the hour with minimum existing traffic and are likely to exceed the controlling criteria during the peak hour." (pg 64, NVA GHD, 24 January 2022). This impact would likely be more significant during construction of the new access road, which would then be used for all construction and operational heavy vehicle traffic thereafter.
- Impacts as a result of construction of the access road are proposed to last 1-3 months. More than 50% of the residences in the PSA are below the ridgeline of Bulwer Road and Beaconsfield Road and once the construction of the new access road is complete, they are potentially not likely to have the same degree of noise impact as those residents to the north of the ridgeline, subject to mitigation.
- An assessment of potential noise impacts during the construction phase has been undertaken against the Interim Construction Noise Guideline (ICNG) during standard hours. The NVA (GHD, 24 January 2022) has identified a number of residential receivers within the PSA and without mitigation measures implemented, there is the potential for community impacts from construction noise (pg.ii). It further notes that "construction noise levels during all stages of construction are predicted to result in noise levels above the NML (Noise Management Level) at receivers in each of the NCAs (Noise Catchment Areas)" (pg 64).
- The Submissions Report (GHD 13 September 2022) notes:
  - Construction noise levels during all stages of construction are predicted to result in noise levels above the Interim Construction Noise Guidelines (ICNG) Noise Affected Management Level however 'will not exceed the ICNG Highly Noise Affected Noise Management Level of 75dBA at any receiver'. (pg.80)
- Potential dust and odour emissions during construction projects can impact surroundings in terms of amenity. The AQOA (GHD, 25 January 2022 pg ii) has provided commentary on impacts from the proposal during construction, and notes that 'the impact from all construction activities for nuisance, health impacts and impacts to ecological receptors was found to be low'.
- The removal of vegetation may have impacts on the surroundings (amenity) for the PSA. The site is currently vacant, and the proposed industrial development requires the removal of 0.32 hectares of native vegetation, resulting in impacts to two plant community types (pg i) (BDAR GHD, 1 November 2021). In addition, approximately 9.05 hectares of exotic grassland would be removed. From the perspective of some community members this will potentially impact the environmental values of the site. The BDAR (GHD 1

November 2021) states (pg 40) 'the proposal would result in direct impacts on native biota and their habitats within the proposal site.... There is also the potential for indirect impacts on adjoining areas of planted native vegetation adjacent to the proposal site, both during construction and from the resulting operation of the plastic recycling facility.' However it is noted that the proposal has aimed to avoid impacts on native vegetation and habitat values by focussing development on areas of exotic grassland where possible.

- There may be positive impacts on surroundings – as discussed above the Submissions Report (13 September 2022) notes
  - The proposal involves significant landscaping and restoration of riparian vegetation within the site, with more than 3 hectares of land that is currently unmanaged grazing land being improved.
  - More than five times the area of native vegetation that is being removed within the proposal site will be replanted with native species as summarised in Table 6.3 (pg. 107 Submissions Report, GHD 13 September 2022).

Operational phase

- The EIS (Section 21.1.2) notes that "during operation, there is also potential for actual or perceived amenity impacts associated with increased vehicle movements on the local road network, noise, air emissions and changes to landscape character and views to the proposal site".
- There are not likely to be significant operational noise impacts from the facility, subject to adoption of recommended mitigation measures and further noise modelling as the design progresses. The NVA(GHD, 24 January 2022) concludes that "no receivers are predicted to receive noise levels above the proposal noise trigger levels established for the three NCAs" (pg 64).
- Operational traffic is proposed to access the site via the new access road, to be dedicated to Council for maintenance and use as a public road. Ongoing vehicle movements during operation have the potential to impact on surroundings and amenity of the local area for local residents in the PSA - consultation undertaken for the EIS indicated that the reversing beep noise from heavy vehicles and forklifts is a key concern amongst local residents. Traffic noise generation along the new access road has been modelled in the NVA which concludes 'no receivers are predicted to exceed the worst-case 1 -hour criteria' (pg 64, GHD 24 January 2022).
- Potential operational air quality and odour emissions may arise, impacting on the surroundings, however, as noted in Section 7.6 the impacts may be minimised through mitigation.. The AQOA (GHD, 25 January 2022) notes that potential emissions generated during the operation of the proposal are expected to be particulate matter from mechanical processing of plastics (e.g. crushing), particulate matter, volatile organic compounds, and odour from heating of plastics, and odour from the proposed wastewater treatment plan. It will be important to consider the impacts through mitigation in the context of the cumulative air quality impacts as a result of nearby operations at Dux Manufacturing, Australian BioResources, Moss Vale Meter Station and Moss Vale Sewage Treatment Plan which are 'likely to emit significant amounts of air pollutants' (GHD EIS, January 2022 pg 2-9).
- The scale and nature of the buildings in the existing context (pastures, long-range views north to the Southern Highlands) would result in permanent changes to the landscape. This has the potential to negatively impact the amenity of the area from the perspective of landowners and community members. The LVIA (GHD, 2 November 2021) notes that the viewshed for the proposal is largely confined to land within two kilometres of the proposal site, due to the existing nature of the vegetation and undulating landscape. Extensive landscaping and screening of the buildings with trees will minimise these impacts.
- During night hours, there is also potential for impacts to visual amenity resulting from lighting at the site (where there is none currently).
- The LVIA (GHD, 2 November 2021) confirms that "the visual impact of the proposal would be high for surrounding sensitive receivers" (pg57) and it is anticipated that ongoing changes through the re-development of rural land would result in long-term and adverse impacts to the landscape character of Landscape Character Zone 1 and the surrounding sensitive receivers, with significant and irreversible, changes to the attributes, elements and value of the rural landscape character. These impacts are most likely to affect residential receivers between Beaconsfield Road and Lackey Road, and north of Bulwer Road (LVIA GHD, 2 November 2021).
- The proposal has the potential to result in permanent social impacts on surroundings for nearby residential receivers as well as visitors to the area and surrounds. It is noted that the visual impacts may be minimised through design.

Surroundings
Enhancement / mitigation measures

Baseline / regulatory mitigations already in place

- Construction impacts can be managed through compliance with a Construction Environment Management Plan (CEMP). The CEMP will include strategies to minimise potential negative impacts associated with construction activities, including traffic, noise, dust, and visual impacts.
- The CEMP will incorporate findings and recommendations from the Traffic Impact assessment and Noise Impact Assessment reports so as to mitigate identified potential impacts in line with best practice standards

Further mitigations identified in other technical reports

The technical studies recommend various mitigation measures to address these issues, including but not limited to the following:

- Implementation of the recommendations in the NVA (GHD 24 January 2022 - Section 6) during construction and operation, including but not limited to:
  - Silences and mufflers on mobile equipment
  - Preparation of a Construction, Noise and Vibration Management Plan (CNVMP)
  - Traffic noise mitigation

  In addition, it recommends that further refinement is undertaken as the design progresses to minimise potential for operational impacts. An operational noise model should be updated during detailed design (NVA, GHD 24 January 2022 – pg ii). The mitigation measures to reduce noise levels and the risk of noise impacts during construction should be incorporated into the CEMP. Plasrefine Recycling proposes to avoid using heavy vehicle/forklift alarms where possible.
- Potentially affected receivers will be informed of the expected noise impacts and duration. Mitigation measures to reduce noise levels and the risk of noise impacts during construction will be adopted.
- Recommended mitigation measures (Section 7) of the AQAO(GHD, 25 January 2022) including during construction (e.g. Dust Management Plan) and operation (e.g. develop an Odour Complaints Management Procedure) (pg. 39 and 40).
- Section 8 of the LVIA (GHD, 2 November 2021) identifies a number of visual amenity and built form mitigations, including a Landscaping Plan, urban design assessment recommendations, appropriate setbacks, use of lighting, planting along the new access road, early works screening including landscaping, and minimising the footprint, height and bulk of the building. A revised building design has since been prepared (GHD, July 2022). Extensive landscaping and screening of the buildings with trees would minimise visual impacts.
- Light pollution mitigations, including the use of directional luminaires, shields and baffles to minimise sky glow and light spill for surrounding residential properties. Downward facing exterior lights are proposed.
- Prepare a RVMP and CEMP as recommended in the BDAR (GHD, 1 November 2021) to mitigate impacts on surrounding neighbouring properties and waterways and detail the vegetation restoration associated with the realignment of the eastern creekline and revegetation of the western creekline on the proposal site. Recommendations in Table 5.1 of this report to be adopted.

Additional recommended social mitigations

- Develop a CMP that would provide a range of avenues for community members to express their concerns or ask questions during the construction and operational phases of the proposal.
- Prepare a CES for the proposal ongoing, which addresses amenity impacts on surroundings.
- Ensure the CEMP is integrated with the CES during the construction stage, to provide a mechanism for landowners and the community to communicate and collaborate with the Proposal team throughout construction so that amenity impacts are effectively understood and minimised.

Surroundings	
Summary:	
Overall impact and social impact significance rating	During construction and operation the proposed development will potentially have a negative impact on the surroundings, as a result of various amenity impacts including noise, traffic, air emissions and visual appearance. **Overall social impact ratings to surroundings are:** • Construction phase: Medium (possible – moderate) - negative • Operational phase: Medium (possible – moderate) to High (likely - moderate) - negative
Likelihood	Impacts to surroundings are likely.
Duration	Operational impacts are long term, construction impacts are temporary.
Severity/ sensitivity	Moderate severity to impacts as the community has a slightly higher disadvantage in terms of socio-economic characteristics (lower average household incomes, higher average ages). It is noted that residences can be more vulnerable than some other land uses to impacts on way of life resulting from the operational stage. It is further noted that some residents in the PSA, particularly to the south and east of the site are not yet as impacted by the emergence of the SHIP and are therefore may be likely to experience changes to the surroundings, as a result of industrial development, for the first time.
Extent	The proposed development would likely affect the PSA in terms of surroundings, and of that largely confined to the residences in the north of the PSA radius However there may be impacts to the broader SSA who may visit the area.
Potential to mitigate/ enhance	High – see **Table 7** below.

Refer to **Table 7** for an overview of the assessment ratings, including an identification of residual impacts after mitigation is considered.

7.10 Livelihoods

This section assesses *Livelihoods – including people's capacity to sustain themselves through employment or business*.

Livelihoods
Potential impacts

Construction phase

- Increased access to employment opportunities within the construction sector. Whilst these jobs will be temporary in nature, project-based work is typical to the sector. It is estimated that during construction, the proposal is estimated to create:
  - A maximum of 200 staff working across the entire span of the construction
  - Peak workforce is expected during major concrete pours of up to 30 people.
- Potential flow-on effects in terms of improved temporary viability for local businesses in the area, associated with trade from construction workers including construction materials which are noted as being sourced locally where possible.

Operational phase

- Potential positive cumulative impacts on livelihoods – in relation to employment and enterprise – for residents, visitors and local workers with the proposal being part of a broader strategic transformation in the area associated with the SHIP.
- The proposal would generate a number of operational jobs potentially contributing to the livelihoods of the affected people in the PSA, SSA and TSA, as a result of employment opportunities. During operation, approximately 40 staff would be required per shift (three shifts) within the receival and processing buildings and up to 20 staff for maintenance, engineering and technical support and management. There would be a total of 140 full time equivalent staff during full scale operation.
- The proposal will support on-site jobs as well as further indirect employment across a range of industries elsewhere in the economy (for example, stimulate the growth of the economy and local businesses such as cafes, retail and services as a result of the increased visitors, workers and potentially new residents to the area). The new employment opportunities and investment within the new economy, will also have positive social benefits for both the local community and businesses as a result of new local employment opportunities and workers within the area utilising the services of local businesses (e.g. petrol stations, supermarkets, cafes, other services).
- The proposal has the potential therefore to contribute to the variety of businesses and industry sectors within the Wingecarribee LGA, to attract people to work and live in the LGA, and to make use of key enabling infrastructure such as the proposed Moss Vale Bypass and Moss Vale Sewerage Treatment Plant – upgrades that are designed to unlock the economic potential of the SHIP.
- The proposal has the potential to benefit the livelihoods of the community through the proposed research and community education centre which would also include viewing platforms (Engagement Outcomes Report, GHD, 22 December 2021, Pg 152).
- Annual revenue generated for the local Council from the presence of this facility (for example through developer contributions and/or Council rates) and its contribution to the future industrial corridor has the potential to strengthen the capabilities of Wingcarribee Shire Council to deliver on projects and programs for the community, such as improvements to local infrastructure.

Enhancement / mitigation measures

Baseline / regulatory mitigations already in place

- The new construction and operation jobs are likely to be sourced locally where possible which will improve the livelihoods of the existing PSA and SSA residents.

Additional recommended social mitigations

- Develop and implement a guideline that gives preference to local and regional residents and businesses, including incorporating local procurement requirements and social impact principles into key project contracts, to maximise local employment and enterprise/economic development opportunities. To amplify

social impact, the Applicant should seek to offer traineeships, or employment of people from vulnerable backgrounds.

- Procurement from local businesses and employees accessing local businesses will also bring local socio-economic (ie., livelihoods) benefits, and it is recommended this be a priority commitment for the proposal throughout all phases of construction and operation.
- Collaborate with nearby educational institutions (e.g. Moss Vale TAFE) to potentially offer internships and training opportunities for students in the facility. The 'Frequently Asked Questions' (pg 136 of the Engagement Outcomes Report by GHD dated 22 December 2021) notes that Plasrefine and GHD are:
  - Liaising with community bodies to identify employment opportunities for locals in the area and have already received phone calls and emails from several local community members who would like the opportunity to work at the facility.
  - Proposing facilities to enable educational activities for school groups and other interested parties to be carried out (and learn about plastic waste, recycling and turning waste into valuable resources).
- Prepare a Communications and Engagement Strategy to communicate with surrounding residents, nearby businesses, workers and visitors to the area, to ensure that all stakeholders are made aware of the timing and likely impact of the construction period, and procurement and other opportunities therein.

Summary:	
Overall impact and social impact significance rating	The proposed development will have moderate positive impact (likely-minor) in respect to livelihoods, associated largely with the delivery of new employment opportunities in the region and flow-on effects to surrounding businesses with the influx of employees both during construction and operation. **Overall social impact ratings to likelihoods are:** • Construction phase: Medium (likely – minor) to High (likely-moderate) – positive • Operational phase: High (likely-moderate) - positive
Likelihood	Positive impacts on livelihoods from the proposed development are likely
Duration	Operational benefits are long term, construction impacts are temporary
Severity/ sensitivity	Moderately higher sensitivity to livelihood impacts due to the lower socio-economic outcomes of the SSA and the TSA, noting the scale of this development in its context.
Extent	Benefits associated with livelihoods may arise for the SSA. Both construction and operational phase are likely to draw workers from Wingecarribee Shire and beyond, however it is noted the applicant seeks to hire locally where possible.
Potential to mitigate/ enhance	High – see **Table 7** below. Construction impacts to any surrounding businesses as a result of temporary access or noise/dust/air quality changes should be considered prior to construction and appropriate engagement undertaken.

Refer to **Table 7** for an overview of the assessment ratings, including an identification of residual impacts after mitigation is considered.

7.11 Decision-making systems

This section assesses: Decision-making systems including the extent to which people can have a say in decisions that affect their lives, and have access to complaint, remedy, and grievance mechanisms.

Decision-making systems
Potential impacts

Planning phase

- The planning phase of the proposal has involved wide ranging stakeholder and community engagement (see **Section 6.0**). It is considered that this aspect of the planning process has had positive impacts on the ability of some members of the community to have a say and participate in the decision-making process.
- The community have had access to proposal information sessions, FAQs, and a proposal landline, have been able to make enquiries to Council and their local member, and have contacted DPE. Numerous informal social media sites/pages have been set up to facilitate conversation about the proposal amongst community members.
- The proposed new access road, if compulsory acquisition is pursued, may have impacts on decision-making systems. However, it is noted that the applicant may purchase the land for the access road instead and the final process is undetermined at the time of writing this report.

Construction phase

- During construction, there is a likely social impact if the potential for the community to notify the proposal team of issues and concerns related to construction impacts cannot be provided. A clear process to resolve issues and feedback to the proposal team should be provided to enable the community members to influence and manage negative impacts during construction.
- The applicant proposes a community information and awareness strategy (Appendix D EIS, GHD January 2022) to be included in the CEMP, which would outline measures to maintain communication with the community and all relevant stakeholders throughout construction of the proposal.
- It is understood that the Moss Vale community has a significantly higher proportion of older residents, and higher than average levels of socio-economic disadvantage. These community characteristics highlight the potential for increased sensitivity around decision-making systems – for example, barriers for low-income earners to access to digital channels (digital inclusion), which has the potential to exacerbate impacts relating to their ability to participate in the decision-making process. The GHD Engagement Outcomes Report (pg. 14) states that some members of the community were 'hesitant' or not comfortable with the online platform 'due to unfamiliarity with online platforms' (pg 20).
- Continuation of the community consultation methods provided during the planning phases and construction phase will enable nearby residents to notify the proposal team of issues and concerns related to construction impacts like changed access, dust, or access needs associated with surrounding land uses. This will provide the community with a clear process to resolve issues and feedback to the proposal team. This may go some way to enabling community members to influence and manage negative impacts during construction.

Operational phase

- The delivery of a high-technology plastics recycling facility has the potential to deliver on (in-principle) values and interests that the community has already identified through previous engagement processes, including addressing plastics waste and landfill and the environmental impacts of human consumption of materials.
- Ongoing community engagement opportunities would assist in mitigating impacts to decision-making systems in the community.

Enhancement / mitigation measures

Baseline / regulatory mitigations already in place

- Establishment of a Community Consultative Committee (CCC) (Table D.2 - Appendix D EIS, GHD January 2022) is proposed to ensure the community and stakeholder groups are:
  - Kept informed of the status of the proposal, any new initiatives, and the performance of the facility

  - Consulted on the development of the proposal, management plans and proposed changes to the approved proposal
  - Able to provide feedback on key issues that may arise during the development or implementation of the proposal

- A CMS is proposed for this proposal (pg 33 Engagement Outcomes Report, GHD January 2022) to be developed and implemented prior to the commencement of construction and be maintained throughout the construction period and for a minimum of six months following completion of the construction program.

Additional recommended social mitigations

- Prepare a CES to provide a mechanism for landowners and the general community to engage with the proposal team throughout construction phase of the proposal. This should be prepared alongside the required CEMP and CTMP to ensure that the construction process is informed by those impacted. It should also:
  - Include regular proposal updates and provide opportunities for the community to share feedback throughout the proposal's life cycle.
  - Build on the engagement activities undertaken to date and take into consideration the needs and aspirations of the community that have already been explored as well as existing relationships and networks within the community.
  - Provide opportunities for visits to the site with local residents, community groups, and other organisations throughout the operation stage which may help build relationships and community ownership of the proposal and ensure ongoing engagement with landowners and other stakeholders.
  - Include the preparation of a CMP for the operational phase of the development that would provide a range of avenues for community members to express their concerns or ask questions

Decision-making systems	
Summary:	
Overall impact and social impact significance rating	Positive impacts associated with opportunities to participate in decision-making processes facilitated by engagement processes for this SSDA are identified, without further enhancement, to be Medium (possible – minor). This significance rating considers the potential negative experience of some sections of the community to perceptions of participation, as weighing against a higher rating. Mitigation measures to ensure that the highest possible participation and involvement in the decision-making process is achieved will be identified below. **Overall social impact ratings to decision-making systems are:** • Construction phase: Low (unlikely – minor) to Medium (likely – minor) positive or negative • Operational phase: Low (very unlikely – moderate) to Medium (possible – minor) - positive or negative
Duration	The impacts, experienced as both positive and potentially negative, associated with the engagement activities are highest during the planning and construction phases. However, the presence of grievance and remedy mechanism incorporated into the CEMP and CES has the potential to extend these positive impacts throughout the lifecycle of the proposal.
Severity/ sensitivity	The high volume of submissions made to Council and in the EIS indicates a high sensitivity to decision-making systems that will be put in place.
Extent	SSA (encompassing both immediately adjacent residents and the wider 5km catchment).
Potential to mitigate/ enhance	High – see **Table 7** below.

Refer to **Table 7** for an overview of the assessment ratings, including an identification of residual impacts after mitigation is considered.

7.12 Summary of social impacts

In accordance with the SIA Guideline, the potential social impacts in the Moss Vale locality have been re-assessed following the implementation of additional responses and controls.

Table 7 over page provides a summary of impacts 'without mitigation' (as provided in **Sections 7.4-7.11**), along with an assessment of residual impacts following the implementation of the responses and opportunities identified in this SIA.

The table provides a summary of social impacts 'without mitigation' along with an assessment of residual impacts with mitigation.

Table 7 Social impact significance ratings with and without mitigation – residual impacts

Impact	Impact dimensions			Potential impact without mitigation[1]				Potential Impact with Mitigation				Avoidance, minimisation or enhancement approach	Significance of residual impact
	Period	Duration	Extent	Likelihood	Magnitude	Social Significance Rating	Experience	Likelihood	Magnitude	Social Significance Rating	Experience		
Way of Life													
Impacts associated with construction activities including noise, vibrations, dust, and visual impacts. Some changes to daily activities associated with heavy vehicle movements may cause potential disruptions to residents, workers and visitors, particularly along Beaconsfield Road during construction of the new access road.	Construction	Medium-term (12-15 months), with heightened impacts over short-term (1-3 months) associated with construction of the access road.	PSA	Likely	Moderate	**High**	Negative	Likely	Minor	**Medium**	Negative	Develop a comprehensive communications and engagement strategy. During the construction phase, the CES should: • align with the CEMP to provide a mechanism for landowners to communicate and collaborate with construction crews. • Include a Complaints Management Procedure (CMP) • engage with residents adjacent to affected roads to discuss any concerns they have and how road safety can be managed over time, and clearly communicating impacts well in advance.	Present during construction – while the impact may inconvenience way of life, proactive communications can assist people in the PSA to manage their lives around the disruptions.
Impacts associated with operation, including increased vehicle movements, noise, and visual amenity.	Operation	Ongoing	PSA	Possible	Moderate	**Medium**	Negative	Possible	Moderate	**Medium**	Negative	• Ensure the design of the facility – including in relation to materials, planting for visual screening, etc., responds to issues raised by the community – particularly surrounding residents, and is as sensitive as possible in its design to the surrounding natural environment. • CES (see above) • Explore opportunities for partnerships to enhance potential positive impacts associated with job creation during the construction and operational stages. This may include partnerships with organisations such as TAFE to offer special apprenticeships and programs, or the development of a local procurement strategy or social procurement strategy for employment, to target disadvantaged groups in the employment market.	Substantially mitigated with adequate communication, complaint remedy procedure, and proactive management of impacts.
Accessibility													
Temporary accessibility impacts for residents accessing Beaconsfield Road associated with the construction of the new access road	Construction	1-3 months	PSA	Likely	Moderate	**High**	Negative	Possible	Moderate	**Medium**	Negative	• CES (see above), including regular updates on traffic volumes, proposed timeframes for use of Beaconsfield Road, and information regarding any partial road closures or peak periods of construction vehicle traffic.	Present during construction – while the impact may inconvenience ease of accessibility, proactive communications can assist affected residents to manage their movements

[1] Note that without mitigation refers to without specific social mitigation measures that are above and beyond the technical mitigations that will be in place, as described in relevant technical reports.

														around the disruptions.
Accessibility impacts due to increased vehicle movements in the area, placing pressure on the road network.	Construction	12-15 months	SSA	Possible	Moderate	**Medium**	Negative	Possible	Moderate	**Medium**	Negative	CES (see above), including regular updates on traffic volumes, proposed timeframes for use of Beaconsfield Road, and information regarding any partial road closures or peak periods of construction vehicle traffic.	Present during construction – while the impact may inconvenience ease of accessibility, proactive communications can assist affected residents to manage their movements around the disruptions.
Impacts associated with operation on local access to transport infrastructure, including Lackey Road.	Operation	Ongoing	SSA	Possible	Minor	**Medium**	Negative	Unlikely	Minor	**Low**	Negative or Positive, dependant on receiver	CES (see above), and the implementation of traffic management mitigation measures to assist with mitigating traffic impacts as a result of operation.	Substantially mitigated with adequate communication, complaint remedy procedure, and proactive management of impacts.
Health and wellbeing														
The seeking of planning permissions has potential health and wellbeing impacts associated with worry and/or anxiety about the possibility of the facility impacting local residents' property value and/or affecting their physical health.	Planning and development phase	Short term	PSA	Possible	Moderate	**Medium**	Negative	Unlikely	Minor	**Low**	Negative	Prepare a CES to include strategies to promote community understanding and awareness of real and perceived health and wellbeing impacts. The CES should include a CMP that would provide a range of avenues for community members to express their concerns or ask questions – paired with ongoing engagement with nearby residents of the PSA and additional mitigation as identified.	With effective and proactive engagement and communications, this impact associated with mental health and wellbeing is capable of being mitigated.
Construction activities creating dust, noise, vibrations, light pollution, traffic on local roads, and visual impacts may potentially impact physical and mental wellbeing.	Construction	12-15 months, heightened impacts for 7 months associated with heavy machinery	PSA	Likely	Moderate	**High**	Negative	Likely	Moderate	**High**	Negative	Prepare a CES to include strategies to promote community understanding and awareness of real and perceived health and wellbeing impacts. The CES should include a CMP that would provide a range of avenues for community members to express their concerns or ask questions – paired with ongoing engagement with nearby residents of the PSA and additional mitigation as identified.	Mitigation measures can quite effectively minimise likely impacts of construction activities, however some impacts remain likely. Effective communication can assist with minimising negative experiences of impacts, however, will not abate the impact entirely.
Potential impacts during the facility's operation associated with odour, air quality, noise, and water quality.	Operation	Ongoing	SSA	Possible	Moderate	**Medium**	Negative	Possible	Moderate	**Medium**	Negative	Prepare a CES to include strategies to promote community understanding and awareness of real and perceived health and wellbeing impacts. The CES should include a CMP that would provide a range of avenues for community members to express their concerns or ask questions – paired with ongoing engagement with nearby residents of the PSA and additional mitigation as identified.	Mitigation measures can quite effectively minimise likely impacts of operation activities, however some impacts remain possible. Effective communication can assist with

														minimising negative experiences of impacts, however, will not abate the impact entirely.
Community														
Impacts to Moss Vale's community cohesion associated with real or perceived divisions in opinion about the proposal, heightened by the planning process and associated engagement activities	Planning	Short-term	SSA	Possible	Moderate	**Medium**	Negative	Possible	Moderate	**Medium**	Negative	No additional social mitigation identified, beyond the baseline mitigation and additional mitigations identified in other technical reports.	Impacts remain present during planning and development phase
Changes to the community's composition associated with a higher number of workers in the area has the potential to impact on sense of place and how the community functions.	Construction	12-15 months	SSA	Unlikely	Minor	**Low**	Mixed – dependent on the receiver	Unlikely	Minor	**Low**	Mixed – dependent on the receiver	• Develop and implement a guideline that gives preference to local and regional residents and business, including incorporating local procurement requirements into key proposal contracts to maximise local employment and enterprise/ economic development opportunities • Maintain close dialogue with relevant stakeholders such as the Wingecarribee Shire Council to identify opportunities to encourage social interaction between workers and the local community (such as complaints management, education, traineeships, local procurement) and mitigate any issues arising.	Impacts present during construction, with the ability to enhance peoples' experience of impacts to community cohesion and sense of place through enhancement techniques.
Impacts to community pride and cohesion associated with the delivery of a landmark circular economy proposal, visitor centre, additional workers in the area, and social connection opportunities delivered through this proposal.	Operation	Ongoing	SSA	Possible	Minor	**Medium**	Positive	Likely	Minor	**Medium**	Positive	• Explore strategies to promote the tourism, education, and employment opportunities arising from the development in order to foster a transitioning community identity and sense of pride • Develop and implement a guideline that gives preference to local and regional residents and business, including incorporating local procurement requirements into key proposal contracts to maximise local employment and enterprise/ economic development opportunities	Positive impacts remain, with high potential for enhancement to increase the likelihood of these positive impacts occurring.
Permanent changes to surroundings and ongoing divisions regarding the proposal, potentially impacting community cohesion and sense of place.	Operation	Ongoing, heightened in the short-term	SSA	Possible	Minor	**Medium**	Negative	Possible	Minor	**Medium**	Negative	Maintain close dialogue with relevant stakeholders such as the Wingecarribee Shire Council to identify opportunities to encourage social interaction between workers and the local community (such as complaints management, education, traineeships, local procurement) and mitigate any issues arising.	Impacts remain during operation. Negative experiences with these impacts are likely to be heightened in the short term, although persons are likely to adapt to these impacts over time.

Culture														
Permanent changes to the landscape and environment associated with construction activities and delivery of structures on site have the potential to impact people's values and beliefs associated with the locality, particularly for residents in the PSA and those people with a particular connection to Moss Vale area.	Construction and operation	Permanent	SSA	Possible	Moderate	**Medium**	Negative	Possible	Moderate	**Medium**	Negative	• Provide pre-construction and ongoing education to on-site staff (e.g., via inductions) regarding local community history and biodiversity values.	Impacts remain during construction and operation. Effective communication and enhancing positive impacts can assist with minimising negative experiences of impacts, however, will not abate the impact entirely.
Potential impacts on local flora and fauna associated with construction activities, and ongoing operational activities, may impact on culture and connections to the land.	Construction and operation	Ongoing, heightened during construction period (12-15 months)	PSA	Possible	Minor	**Medium**	Negative	Possible	Minor	**Medium**	Negative	• Provide pre-construction and ongoing education to on-site staff (e.g., via inductions) regarding local community history and biodiversity values.	Impacts remain during construction and operation. Effective communication and enhancing positive impacts can assist with minimising negative experiences of impacts, however, will not abate the impact entirely.
The delivery of a recycling facility that supports community values regarding sustainable waste management and revegetation associated with the realignment of the eastern watercourse has the potential to support local culture	Operation	Ongoing	SSA	Possible	Minor	**Medium**	Positive	Possible	Minor	**Medium**	Positive	• Provide pre-construction and ongoing education to on-site staff (e.g., via inductions) regarding local community history and biodiversity values.	Impacts remain during operation. Effective communication and enhancing positive impacts can assist with minimising negative experiences of impacts, however, will not abate the impact entirely.
Surroundings														
Construction activities causing dust, vibration, noise and light pollution, removal of vegetation, and visual impacts may Impact the overall amenity of the surroundings and access to ecosystem services.	Construction	12-15 months	PSA	Possible	Moderate	**Medium**	Negative	Possible	Moderate	**Medium**	Negative	Develop a CMP and CES, addressing community concern and ongoing amenity impacts on surroundings	Impacts remain during construction. Effective communication and can assist with minimising negative experiences of impacts, however, will not abate the impact entirely.
The scale and nature of the buildings in the existing environmental context has the potential to negatively impact the amenity of the area from the	Operation	Ongoing	PSA	Likely	Moderate	**High**	Negative	Likely	Moderate	**High**	Negative	PConsider whether any additional planting is required on adjoining properties to further reduce visual impacts. This should be a collaborative process with affected residents and accompanied by further consultation with affected residents.	Impacts remain during operation. Collaborative mitigation through

perspective of landowners and community members														landscape design can help alleviate negative experiences of impacts, however, will not abate the impact entirely.
Amenity impacts associated with ongoing vehicle movements, noise, air quality and odour, and visual amenity impacts	Operation	Ongoing	PSA	Possible	Moderate	**Medium**	Negative	Possible	Moderate	**Medium**	Negative	Develop a CMP and CES, addressing community concern and ongoing amenity impacts on surroundings		Impacts remain during operation. Effective communication and can assist with minimising negative experiences of impacts, however, will not abate the impact entirely.
Livelihoods														
Increased access to employment opportunities within the construction sector, and potential indirect enhancement of viability for local businesses associated with trade from construction workers.	Construction	12-15 months	SSA	Likely	Minor	**Medium**	Positive	Likely	Minor	**Medium**	Positive	• Develop and implement a guideline that gives preference to local and regional residents and business, including incorporating local procurement requirements and social impact principles into key proposal contracts. • Collaborate with nearby educational institutions to offer internships and training opportunities for students in the facility. • Prepare a CES to communicate proposal opportunities.		
Positive social benefits for local community and businesses associated with the provision of on-site operational jobs, the proposed research and community education centre, and further indirect employment across a range of industries elsewhere in the economy, contributing to supporting the livelihoods of affected people in Moss Vale.	Operation	Ongoing	SSA	Possible	Minor	**Medium**	Positive	Likely	Moderate	**High**	Positive	• Develop and implement a guideline that gives preference to local and regional residents and business, including incorporating local procurement requirements and social impact principles into key proposal contracts. • Collaborate with nearby educational institutions to offer internships and training opportunities for students in the facility. • Prepare a CES to communicate proposal opportunities.		
Positive cumulative impacts on livelihoods for residents, visitors and local workers as part of the broader strategic transformation of the Southern Highlands Innovation Park, with the potential to attract people to work and live in the LGA, make use of key enabling infrastructure upgrades, and generate annual revenue and strengthen the capabilities of the Wingecarribee Shire to deliver on proposal and programs for the community.	Operation	Cumulative	TSA	Likely	Moderate	**High**	Positive	Likely	Moderate	**High**	Positive	• Develop and implement a guideline that gives preference to local and regional residents and business, including incorporating local procurement requirements and social impact principles into key proposal contracts. • Collaborate with nearby educational institutions to offer internships and training opportunities for students in the facility. • Prepare a CES to communicate proposal opportunities.		

Decision-making systems													
Increased access for some community members to have a say and participate in the decision-making process, associated with wide ranging stakeholder and community engagement for this proposal	Planning and development	Short-term	SSA	Likely	Minor	**Medium**	Positive	Likely	Minor	**Medium**	Positive	No additional social mitigation identified, beyond the baseline mitigation and additional mitigations identified in other technical reports.	Impact remains during planning and development
Potential compulsory acquisition for the new proposed access road. It is understood that negotiations for purchase, instead of acquisition, are underway at the time of writing this report.	Planning and development	Short-term	PSA	Very unlikely	Moderate	**Low**	Negative	Very unlikely	Moderate	**Low**	Negative	No additional social mitigation identified, beyond the baseline mitigation and additional mitigations identified in other technical reports.	The impact, although unlikely, remains during planning and development
The potential for an inability to notify the proposal team of issues and concerns related to construction impacts, either through a lack of clear processes or barriers to digital inclusion	Construction and operation	Ongoing	PSA	Possible	Minor	**Medium**	Negative	Unlikely	Minor	**Low**	Negative	• Prepare a CES to provide a mechanism for landowners and the general community to engage with the proposal team throughout construction phase of the proposal. This should be prepared alongside the required CEMP and CTMP to ensure that the construction process is informed by those impacted. • Continuation of the community consultation methods provided during the planning phases and construction phase will enable nearby residents to notify the proposal team of issues and concerns related to construction impacts like changed access, dust, or access needs associated with surrounding land uses. This will provide the community with a clear process to resolve issues and feedback to the proposal team. This may go some way to enabling community members to influence and manage negative impacts during construction.	Impact remains, although the potential to mitigate this impact through the preparation of a comprehensive CES and communication channels will reduce the likelihood of this impact occurring.
The delivery of a high-technology plastics recycling facility has the potential to deliver on (in-principle) values and interests that the community has already identified through previous engagement processes, including addressing plastics waste and landfill and the environmental impacts of human consumption of materials.	Operation	Ongoing	SSA	Possible	Minor	**Medium**	Positive	Possible	Minor	**Medium**	Positive	No additional social mitigation identified, beyond the baseline mitigation and additional mitigations identified in other technical reports.	The impact remans during operation

8.0 Mitigation, management, and monitoring

This section sets out a suite of mitigation and management measures in response to the potential social impacts identified in **Section 7.0**. The implementation of a proposal post-planning approval should ideally include continuous mitigating, enhancing, monitoring and managing of social impacts, as per the SIA Guideline. This management can help to ensure negative impacts are better mitigated, positive impacts are further amplified and that the applicant maintains and enhances positive working relationships with local communities and stakeholders.

The mitigation and management of other predicted potential impacts that may interrelate with social impacts (such as noise, visual impacts, odour and air quality, biodiversity, and traffic management) would contribute to the mitigation and management of social impacts of the proposal.

Mitigation and management measures identified in the technical assessments and sections of the EIS relevant to the mitigation of potential social impacts include:

- Transport and Traffic Assessment
- Noise and Vibration Assessment
- Landscape and Visual Impact Assessment
- Aboriginal Cultural Heritage Impact Assessment
- Air Quality and Odour Assessment
- Biodiversity Development Assessment
- Construction Environmental Management Plan
- Operational Waste Management Plan

The measures and recommendations outlined within the technical reports will assist to mitigate social impacts as discussed in Sections 7.4-7.11.

A summary of the additional measures recommended (but not covered in the technical reports,) to mitigate and manage potential impacts of the proposal, are outlined in **Table 8**. The table summarises the recommendations outlined in both **Table 7** above and **Sections 7.4-7.11** and includes a selection of key issues that may affect the community.

Table 8 Social impacts mitigation measures (additional to technical report measures as per Sections 7.4-7.11)

Impact/ issue	Mitigation and enhancement measures	Social Factor
Construction management	• Prepare a Communications and Engagement Strategy (CES) including a Complaints Management Procedure (CMP), which will enable a mechanism for landowners and the general community to engage with the proposal team throughout the construction phase of the proposal. • The CES should be prepared alongside the CTMP and CEMP to ensure the construction process is properly informed by those impacted. • Explore opportunities for partnerships to enhance potential positive impacts associated with job creation during the construction stage. • Reasonable and feasible work practices with all potentially impacted residents to be consulted during construction. Ongoing engagement to identify potential health and wellbeing impacts and work out mitigation techniques if appropriate and/or required. • Provide pre-construction and ongoing education to on-site staff (e.g. via inductions) regarding local community history and biodiversity values.	• Way of Life • Health and Wellbeing • Surroundings • Culture • Decision-making systems • Livelihoods
Traffic management	• Communicate both construction and operational traffic and road network impacts to affected stakeholders and community members appropriately (as part of a CES and/or Operational Waste Management Plan)	• Way of Life • Health and wellbeing • Surroundings • Accessibility
Air quality and odour, noise, water	• The CES should include strategies to promote community understanding and awareness of real and perceived health and wellbeing impacts. The CMP should provide a range of avenues for community members to express their concerns or ask questions – paired with ongoing engagement with nearby residents of the PSA and additional mitigation as identified.	• Way of Life • Health and wellbeing • Surroundings
Environmental and habitat	• Ensure the design of the facility, including in relation to materials, planting for visual screening etc responds to issues raised by the community – particularly surrounding residents, and is as sensitive as possible in its design to the surrounding natural environment. Consider whether any additional planting is required on adjoining properties to further reduce visual impacts. This should be a collaborative process with affected residents and accompanied by further consultation with affected residents.	• Way of Life • Health and wellbeing • Surroundings • Culture • Community
Communications	• Prepare a CES for the project ongoing to communicate with surrounding residents, nearby workers and visitors to the area. The CES should include the preparation of a CMP for the operational phase of the development that would provide a range of avenues for community members to express their concerns or ask questions. • Ensure the CEMP is integrated with the CES during construction stage, to provide a mechanism for landowners and the community to communicate and collaborate with the proposal team.	• Decision-making systems • Culture • Way of Life • Health and Wellbeing • Surroundings • Livelihoods

Impact/ issue	Mitigation and enhancement measures	Social Factor
	• The CES should include regular proposal updates and provide opportunities for the community to share feedback throughout the proposal's life cycle • The CES should build on the engagement activities undertaken to date and take into consideration the needs and aspirations of the community that have already been explored as well as existing relationships and networks within the community. • Maintain close dialogue with relevant stakeholders such as Wingecarribee Shire Council to identify opportunities to encourage social interaction between workers and the local community (such as complaints management, education, traineeships, local procurement) and mitigate any issues arising. • Continuation of the community consultation methods provided during the planning phase and construction phase to enable nearby residents to notify the proposal team of issues and concerns related to construction impacts	
Cultural and community cohesion	• Explore strategies to promote the tourism, education and employment opportunities arising from the development in order to foster a transitioning community identity and sense of pride. • Develop and implement a guideline that gives preference to local and regional residents and business, including incorporating local procurement requirements into key proposal contracts to maximise local employment and enterprise/economic development opportunities. • Provide pre-construction and ongoing education to on-site staff (e.g. via inductions) regarding project and local community history which describes current connection to land as well as the more recent agricultural history and community information to encourage respectful behaviours, and enable workers to recognise Aboriginal and European heritage artefacts to prevent accidental damage and promote the swift reporting of heritage discovery.	• Culture • Community
Community benefit	• Explore opportunities for partnerships to enhance potential positive impacts associated with job creation during the construction and operational stages. This may include partnerships with organisations such as the nearby TAFE to offer special apprenticeships and programs, or the development of a local procurement strategy or social procurement strategy for employment, to target disadvantaged groups in the employment market. • Develop and implement a guideline that gives preference to local and regional residents and business including incorporating local procurement requirements and social impact principles into key proposal contracts. • Prepare a CES to communicate proposal opportunities.	• Community • Way of Life • Livelihoods • Culture • Decision-making systems • Livelihoods

9.0 Concluding comments

This Social Impact Assessment (SIA) has been prepared in relation to the State Significant Development Application (SSDA-9409987) for the proposed plastics recycling and reprocessing facility (the 'proposal') at 74-76 Beaconsfield Road, Moss Vale NSW. The applicant is Plasrefine Recycling Pty Ltd (Plasrefine Recycling).

The SIA has been prepared in accordance with the NSW's Department of Planning and Environment (DPE) Social Impact Assessment Guideline for State Significant Projects - November 2021 ('the SIA Guideline') and potential impacts have been assessed against specific social factors, taking into account the findings of completed specialist technical reports for the proposal and the ease (or otherwise) of mitigating these impacts, as well as community and stakeholder consultation undertaken by GHD.

Overall, the relevant social impacts, if mitigation methods are successfully adopted, will range from **low** to **high**. Social impacts may be viewed as positive or negative, dependant on the receiver.

Key identified social impacts as a result of the proposal include:

- Temporary potential negative impacts associated with construction activity, which may affect health and wellbeing due to amenity impacts, for some members of the PSA. Construction is anticipated to take approximately 15-17 months with construction of the new access road anticipated to take 1-3 months - after such time the potential impacts in terms of accessibility and amenity (noise) may be reduced for residents, visitors and workers - particularly to Beaconsfield Road.
- Potential permanent visual impacts, due to the scale and nature of the industrial development on a previously vacant site, may have a negative social impact on surroundings. This has the potential to impact on the area from the perspective of landowners and community members in the PSA in particular.
- Positive social impacts arising from the proposal may be experienced for some members of the PSA, SSA and TSA, as a result of improved livelihoods and way of life, with the proposal providing increased local employment opportunities, and positive cumulative impacts as part of the broader strategic transformation of the Southern Highlands Innovation Park.
- Positive social impacts to livelihoods as a result of the proposal include the potential to attract people to work and live in the LGA, make use of key enabling infrastructure upgrades, deliver on programs and education opportunities for the community, and strengthen the capabilities of the Wingecarribee Shire through generating additional revenue.

In addition to the range of mitigation measures associated with other technical disciplines, which will assist to mitigate some of the identified impacts above, the following social impact mitigation measures are recommended:

- Prepare a Communications and Engagement Strategy (CES) including a Complaints Management Procedure (CMP), which will enable a mechanism for landowners and the general community to engage with the proposal team throughout the construction phase of the proposal. The CES should be prepared alongside the Construction Traffic Management Plan (CTMP) and Construction Environmental Management Plan (CEMP) to ensure the construction process is properly informed by those impacted.
  - The CES should include regular proposal updates and provide opportunities for the community to share feedback throughout the proposal's life cycle
  - The CES should build on the engagement activities undertaken to date and take into consideration the needs and aspirations of the community that have already been explored as well as existing relationships and networks within the community.
  - Ensure the CEMP is integrated with the CES during construction stage, to provide a mechanism for landowners and the community to communicate and collaborate with the proposal team.
  - The CES should include strategies to promote community understanding and awareness of real and perceived health and wellbeing impacts. The CMP should provide a range of avenues for community members to express their concerns or ask questions – paired with ongoing engagement with nearby residents of the PSA and additional mitigation as identified.

  - Communicate both construction and operational traffic and road network impacts to affected stakeholders and community members appropriately (as part of a CES and/or Operational Waste Management Plan)
  - Reasonable and feasible work practices with all potentially impacted residents to be consulted during construction. Ongoing engagement to identify potential health and wellbeing impacts and work out mitigation techniques if appropriate and/or required.
  - The CES should communicate any opportunities in the proposal for community benefits
- Maintain close dialogue with relevant stakeholders such as Wingecarribee Shire Council to identify opportunities to encourage social interaction between workers and the local community (such as complaints management, education, traineeships, local procurement) and mitigate any issues as they arise, both during construction and operation.
- Continuation of the community consultation methods provided during the planning phase and construction phase to enable nearby residents to notify the proposal team of issues and concerns related to construction impacts
- Ensure the design of the facility, including in relation to materials, planting for visual screening etc responds to issues raised by the community – particularly surrounding residents, and is as sensitive as possible in its design to the surrounding natural environment.
- Consider whether any additional planting is required on adjoining properties to further reduce visual impacts. This should be a collaborative process with affected residents and accompanied by further consultation with affected residents.
- Provide pre-construction and ongoing education to on-site staff (e.g. via inductions) regarding project and local community history which describes current connection to land as well as the more recent agricultural history and community information to encourage respectful behaviours, and enable workers to recognise Aboriginal and European heritage artefacts to prevent accidental damage and promote the swift reporting of heritage discovery
- Explore strategies to promote the tourism, education and employment opportunities arising from the development in order to foster a transitioning community identity and sense of pride.
- Explore opportunities for partnership building to enhance potential positive impacts associated with job creation during the construction and operational stage. This may include partnerships with organisations such as the nearby TAFE to offer special apprenticeships and programs, or the development of a local procurement strategy or social procurement strategy for employment, to target disadvantaged groups in the employment market.

Subject to effective implementation of such mitigation measures, the proposal can achieve some positive social outcomes for the residents, workers, and community in the PSA, SSA and Wingecarribee LGA and beyond. Potential negative impacts can be mitigated through implementation of various technical management plans and recommendations, to be further developed through detailed design phase, and ongoing consultation with the local community and relevant stakeholders throughout all stages of the development, including post-construction and into the operational phase.

References/Abbreviations

Technical reports prepared for the SSDA

- *Appendix G - Engagement Outcomes Report (Rev 1)* (GHD, 22 December 2021)
- *Moss Vale Plastics Recycling and Reprocessing Facility EIS* (GHD, January 2022)
- *Moss Vale Plastics Recycling and Reprocessing Facility EIS Volume 1 and Appendices* (GHD, January 2022)
- *Response to Submissions Air Quality Letter* (GHD, 3 August 2022)
- *Moss Vale Plastics Recycling and Reprocessing Facility – Confidential – Work in Progress - Submissions Report Rev A ('Submissions Report') (GHD 13 September 2022)*
- *Technical Report 1 - Biodiversity Development Assessment Report ('BDAR')* (GHD, 1 November 2021)
- *Technical Report 2 - Noise and Vibration Assessment ('NVA') (*GHD, 24 January 2022)
- *Technical Report 3 - Air Quality and Odour Assessment ('AQOA')* (GHD, 25 January 2022)
- *Technical Report 6 – Traffic and Transport ('TTA')* (GHD, 27 January 2022)
- *Technical Report 7 - Landscape and Visual('LVIA')* (GHD, 2 November 2021)
- *Technical Report 8 - Aboriginal Cultural Heritage Assessment Report ('ACHAR')* (OzArk, October 2021)
- *WSC 2017 - Community Strategic Plan 2031*
- *WSC 2022 – Council meeting agenda 17 August 2022*

Strategic policies and other government documents

- *ABS Census of Population and Housing 2021 (Australian Bureau of Statistics, 2021)*
- *Moss Vale Enterprise Corridor Development Control Plan 2008* (WSC, 2012)
- *National Waste Policy (Australian Government, 2018)*
- *National Waste Policy Action Plan* (Australian Government, 2019)
- *NSW Waste and Sustainable Materials Strategy 2041* (NSW Government, 2021)
- *NSW Plastics Action Plan* (NSW Government, 2021)
- *NSW Circular Economy Policy Statement* (NSW Government, 2019)
- *NSW 2021 – Waste and Sustainable Materials Strategy 2041*
- *South East and Tablelands Regional Plan 2036* (NSW Government, 2017)
- *Social Impact Assessment Guideline for State Significant Projects* (NSW DPE, 2021)
- *Southern Highlands Destination Strategy 2020-2030* (WSC, 2020)
- *Southern Highlands Destination Strategy Background Report 2020-2030* (WSC, 2020)
- *Wingecarribee Community Strategic Plan 2031* (WSC, 2017)
- *Wingecarribee Local Strategic Planning Statement 2040* (WSC, 2020)

Other documents

- *Supplementary Agenda – Ordinary Meeting of Wingecarribee Shire Council - 17 August 2022* (WSC, 2022)
- *A circular economy roadmap for plastics, tyres, glass and paper in Australia* (CSIRO, 2020)
- *Lot 23 Douglas Road, Moss Vale (Commercialrealestate.com.au, n.d. accessed 30 August 2022 at: https://www.commercialrealestate.com.au/property/1-24-douglas-road-moss-vale-nsw-2577-2017453066)*
- *Lot 1,24 Douglas Road, Moss Vale (RealCommercial.com.au, n.d. accessed 30 August 2022) https://www.realcommercial.com.au/sold/property-lot-23-douglas-road-moss-vale-nsw-2577-503916498*

Appendix A Demographic profile (SSA)

Category	Secondary Study Area (5km)	Tertiary Study Area (Wingecarribee Shire)	New South Wales
Income			
Median individual income (annual)	$41,530	$41,410	$42,370
Variation from New South Wales median	*-2.0%*	*-2.3%*	*n.a.*
Median household income (annual)	$85,810	$87,300	$96,300
Variation from New South Wales median	*-10.9%*	*-9.3%*	*n.a.*
Individual income			
No income	8.0%	8.2%	9.9%
Low	33.4%	33.7%	32.2%
Medium	44.9%	44.4%	43.4%
High	13.7%	13.8%	14.5%
Household income			
No income	1.5%	2.0%	2.0%
Low	15.9%	15.0%	13.7%
Medium	41.0%	40.5%	37.8%
High	41.5%	42.5%	46.5%
Age Structure			
0 years	1.0%	0.9%	1.1%
1-2 years	1.7%	2.0%	2.3%
3-4 years	1.7%	2.0%	2.4%
5-6 years	2.3%	2.1%	2.5%
7-11 years	6.4%	5.9%	6.3%
12-17 years	7.5%	7.5%	7.2%
18-24 years	6.6%	6.1%	8.4%
25-34 years	8.7%	9.0%	14.2%
35-49 years	16.2%	16.3%	20.2%
50-59 years	13.0%	13.4%	12.3%
60-69 years	14.0%	14.1%	11.0%
70-84 years	17.4%	17.4%	10.0%
85 years and over	3.5%	3.3%	2.2%
Males	48.2%	48.0%	49.4%
Females	51.8%	52.0%	50.6%
Median Age (years)	47.2	48.1	38.8
Country of Birth			
Australia	83.5%	81.1%	70.7%
Aboriginal and Torres Strait Islanders	*2.6%*	*2.4%*	*3.6%*
Other Major English Speaking Countries	8.9%	10.2%	6.5%
Other Overseas Born	7.6%	8.7%	22.8%
% speak English only at home	*93.2%*	*92.7%*	*72.3%*
Household Composition			
Couple family with no children	32.2%	33.9%	26.4%
Couple family with children	27.5%	27.6%	32.6%
Couple family - Total	59.7%	61.5%	59.0%
One parent family	10.6%	9.5%	11.2%
Other families	0.8%	0.8%	1.0%
Family Households - Total	71.2%	71.7%	71.2%
Lone person household	27.3%	26.2%	25.0%

Group Household	1.6%	2.1%	3.8%
Dwelling Structure (Occupied Private Dwellings)			
Separate house	89.2%	90.6%	66.0%
Semi-detached, row or terrace house, townhouse etc.	7.1%	6.4%	11.7%
Flat, unit or apartment	2.2%	2.3%	21.7%
Other dwelling	1.5%	0.7%	0.6%
Occupancy rate	*91.7%*	*90.0%*	*90.7%*
Average household size	2.5	2.5	2.6
Tenure Type (Occupied Private Dwellings)			
Owned outright	43.5%	45.2%	32.2%
Owned with a mortgage	32.6%	33.0%	33.2%
Rented	22.8%	19.4%	32.7%
State or territory housing authority	2.6%	1.1%	3.2%
Housing co-operative/community/church group	3.0%	1.4%	0.9%
Other	17.3%	17.0%	28.7%
Other tenure type	1.1%	2.4%	1.8%
Attending Education (% of those attending)			
Pre-school	8.3%	9.0%	8.4%
Infants/Primary Total	36.6%	35.3%	32.7%
Government	21.0%	21.4%	22.6%
Catholic	5.5%	5.8%	6.4%
Other	10.1%	8.1%	3.8%
Secondary Total	31.3%	30.0%	25.7%
Government	12.0%	12.0%	14.7%
Catholic	9.4%	7.7%	6.3%
Other	9.9%	10.2%	4.7%
Technical or Further Educational Institution	10.5%	11.2%	10.5%
University or other Tertiary Institution	10.3%	11.9%	19.0%
Other type of educational institution	3.1%	2.6%	3.6%
% of total population attending education	*22.3%*	*21.5%*	*24.4%*
Highest Level of Education Completed (% of population aged 15 years and over)			
Year 12 or equivalent	57.9%	58.6%	63.4%
Year 9-11 or equivalent	39.1%	38.6%	31.5%
Year 8 or below	2.9%	2.5%	3.9%
Did not go to school	0.1%	0.3%	1.2%
Employment Status			
Need for Assistance			
With Need for Assistance	6.0%	5.9%	6.1%
No Need for Assistance	94.0%	94.1%	93.9%

Top 10 Countries of Birth	**Primary Study Area (5km)**	**Secondary Study Area (Wingecarribee Shire)**	**New South Wales**
1	Australia (83.5%)	Australia (81.1%)	Australia (70.7%)
2	England (5.2%)	England (5.9%)	China (3.3%)
3	New Zealand (1.7%)	New Zealand (1.6%)	England (3.1%)
4	Philippines (1.1%)	India (0.8%)	India (2.8%)
5	Nepal (0.7%)	Nepal (0.8%)	New Zealand (1.6%)
6	Scotland (0.6%)	Scotland (0.7%)	Philippines (1.4%)
7	South Africa (0.6%)	South Africa (0.7%)	Vietnam (1.3%)
8	China (0.5%)	Germany (0.6%)	Nepal (0.9%)
9	India (0.5%)	United States of America (0.6%)	Lebanon (0.8%)
10	United States of America (0.5%)	Philippines (0.5%)	Iraq (0.7%)

Top 10 Languages Spoken at home (other than English)	**Primary Study Area (5km)**	**Secondary Study Area (Wingecarribee Shire)**	**New South Wales**
1	Nepali (0.8%)	Nepali (0.9%)	Mandarin (3.6%)
2	Mandarin (0.7%)	Italian (0.5%)	Arabic (3.0%)
3	Italian (0.5%)	Mandarin (0.4%)	Cantonese (2.0%)
4	Filipino (0.4%)	German (0.4%)	Vietnamese (1.5%)
5	Tagalog (0.4%)	Spanish (0.4%)	Hindi (1.0%)
6	Cantonese (0.4%)	Greek (0.3%)	Greek (1.0%)
7	Thai (0.3%)	French (0.3%)	Spanish (0.9%)
8	Greek (0.3%)	Punjabi (0.3%)	Nepali (0.9%)
9	Spanish (0.2%)	Thai (0.2%)	Italian (0.8%)
10	Arabic (0.2%)	Tagalog (0.2%)	Korean (0.8%)
Religion			
Buddhism	1%	1%	3%
Christianity	57%	57%	51%
Hinduism	1%	1%	4%
Islam	0%	0%	5%
Judaism	0%	0%	1%
Other Religions	1%	1%	1%
No religious association	39%	39%	36%
Provided Unpaid Childcare			
Females	30%	28%	30%
Males	23%	24%	24%

Social Impact Assessment - Addendum

Moss Vale Plastics Recycling and Reprocessing Facility

74-76 Beaconsfield Road, Moss Vale NSW
Plasrefine Recycling Pty Ltd

Prepared by Ethos Urban
Submitted for Plasrefine Recycling Pty Ltd

24 February 2023 | 2220293

Ethos Urban

'Gura Bulga'
Liz Belanjee Cameron

'Gura Bulga' – translates to Warm Green Country. Representing New South Wales.

By using the green and blue colours to represent NSW, this painting unites the contrasting landscapes. The use of green symbolises tranquillity and health. The colour cyan, a greenish-blue, sparks feelings of calmness and reminds us of the importance of nature, while various shades of blue hues denote emotions of new beginnings and growth. The use of emerald green in this image speaks of place as a fluid moving topography of rhythmical connection, echoed by densely layered patterning and symbolic shapes which project the hypnotic vibrations of the earth, waterways and skies.

Ethos Urban acknowledges the Traditional Custodians of Country throughout Australia and recognises their continuing connection to land, waters and culture.

We acknowledge the Gadigal people, of the Eora Nation, the Traditional Custodians of the land where this document was prepared, and all peoples and nations from lands affected.

We pay our respects to their Elders past, present and emerging.

Contact	Liesl Codrington Director	lcodrington@ethosurban.com

This document has been prepared by:		**This document has been reviewed by:**	
Amy-Grace Douglas	13/02/2023	Liesl Codrington	24/02/2023

Version No.	**Date of issue**	**Prepared By**	**Approved by**
1.0 (DRAFT)	16/02/2023	AD	MB
2.0 (FINAL)	24/02/2023	AD	LC

Ethos Urban | Ethos Urban Pty Ltd | ABN 13 615 087 931 | 173 Sussex Street Sydney NSW 2000 (Gadigal Land) | +61 2 9956 6962 | ethosurban.com

Contents

Executive summary

Overview and purpose of the Addendum

This document is an addendum to the Social Impact Assessment (SIA) (Ethos Urban, 14 September 2022) that accompanied a State Significant Development Application (SSDA-9409987), for the construction and operation of a plastics recycling and reprocessing facility and ancillary infrastructure at 74-76 Beaconsfield Rd, Moss Vale. The site is within the Wingecarribee Shire Local Government Area. The SIA was prepared by Ethos Urban for the applicant, Plasrefine Recycling Pty Ltd. The proposal includes the construction of two main buildings for waste receival, recycling, and reprocessing, and finished product storage. Ancillary infrastructure including a wastewater treatment plant, office building, and visitor information centre is also proposed. The proposal originally included construction of a new access road to extend from the facility to Lackey Road, via the currently unformed Braddon Road and Braddon Road 'east extension' (refer to **Figure 1**).

The SSDA has been submitted to the Department of Planning and Environment (DPE) and publicly exhibited in 2022. A Response to Submissions Report (RTS) is currently being prepared and includes an amendment to the nominated preferred access road to the site as shown in **Figure 2**. This Addendum has been prepared to review the social impacts and benefits identified in the SIA dated 14 September 2022 in response to the amendment to the preferred access road. The purpose of this report is to analyse the potential social impacts and benefits that may arise as a result of the change to the preferred access road, during construction and operational phases.

Identified social impacts and benefits

The SIA found that, in summary, the proposal can achieve some positive social outcomes for the residents, workers and community in the Primary Study Area (PSA) and Secondary Study Area (SSA), subject to effective implementation of mitigation measures through implementation of various technical management plans and recommendations. The detailed responses are to be further developed through detailed design phase, and ongoing consultation with the local community and relevant stakeholders.

An overview of the originally identified potential positive and negative social impacts and benefits is provided in summary form below. Refer to the full SIA (Ethos Urban, 2022) for comprehensive details of these.

Social benefits identified:	Negative social impacts identified:
• Improved livelihoods as a result of the potential to attract people to work and live in the LGA, make use of key enabling infrastructure upgrades deliver on programs and education opportunities for the community and strengthen the capabilities of the Wingecarribee Shire through generating additional revenue. • Way of life and livelihoods improvements for some members of the PSA, SSA and TSA due to the increased local employment opportunities and contribution to the broader strategic transformation of the Southern Highlands Innovation Park.	• Temporary potential impacts associated with the construction activity (e.g. accessibility, noise and amenity) particularly for residents on Beaconsfield Road. • Potential permanent impacts to visual amenity as a result of the nature of the industrial development in a currently vacant site.

Amended social impacts and benefits

On review of the revised amended access to the site utilising Option 3 north south road, it is considered that the majority of the identified potential negative and positive social impacts remain relevant to the proposal.

However, with the proposed revision there may be:

- **additional negative impacts** on surroundings (amenity), community, and culture, as a result of the clearing of nine mature trees for the north-south road.

- **potential for a reduction in negative impacts** for the PSA in relation to accessibility, health and wellbeing, and surroundings (amenity), particularly for those utilising or living on Beaconsfield Road (where the previous access road was proposed) particularly during construction.

In summary, there are some positive social outcomes arising as a result of the north-south road (than previously assessed) due to an increased distance from residential receivers likely improving amenity, accessibility and way of life impacts. The development no longer proposes the use of Beaconsfield Road during the construction stage. It is noted there is no need for land acquisition, with the land already being reserved by Council for the purpose of a road.

However, with the proposed north south road there may be additional negative impacts on surroundings (amenity), community, and culture, as a result of the clearing of mature trees for the north-south road and potential impacts to an Aboriginal artefact. There may be potential for a reduction in negative impacts for the PSA in relation to accessibility, health and wellbeing, and surroundings (amenity), particularly for those utilising or living on Beaconsfield Road (where the previous access road was proposed) particularly during construction, as well as potential benefits to culture whereby an Aboriginal artefact may no longer be affected at the east-west road location.

It is recommended that the proposal be carefully prepared in accordance with recommendations in technical reports so as to mitigate social impacts, particularly to culture, community, and surroundings. Construction and operational noise impacts may be improved as a result of the new access road being located away from residential receivers. To mitigate impacts, the Communications and Engagement Strategy (CES) should be updated to ensure all heavy vehicles and over-dimensional vehicle haulage routes to reflect the recommendations of the Traffic Addendum.

A full assessment of the revised social impact significance ratings is outlined below.

1.0 Amendments to the proposal

1.1 Site context

The plastics recycling and reprocessing facility site (shown in blue in **Figure 1** below) currently has road access via the unformed east-west road, Braddon Road, originating at the northern end of Beaconsfield Road, Moss Vale. **Section 4.3** of the EIS lodged with the SSDA (GHD 2022) included consideration of three road access options.

Option 2, the east west road, known as the Braddon Road East Extension, was nominated as the preferred road access as shown in red in **Figure 1.**

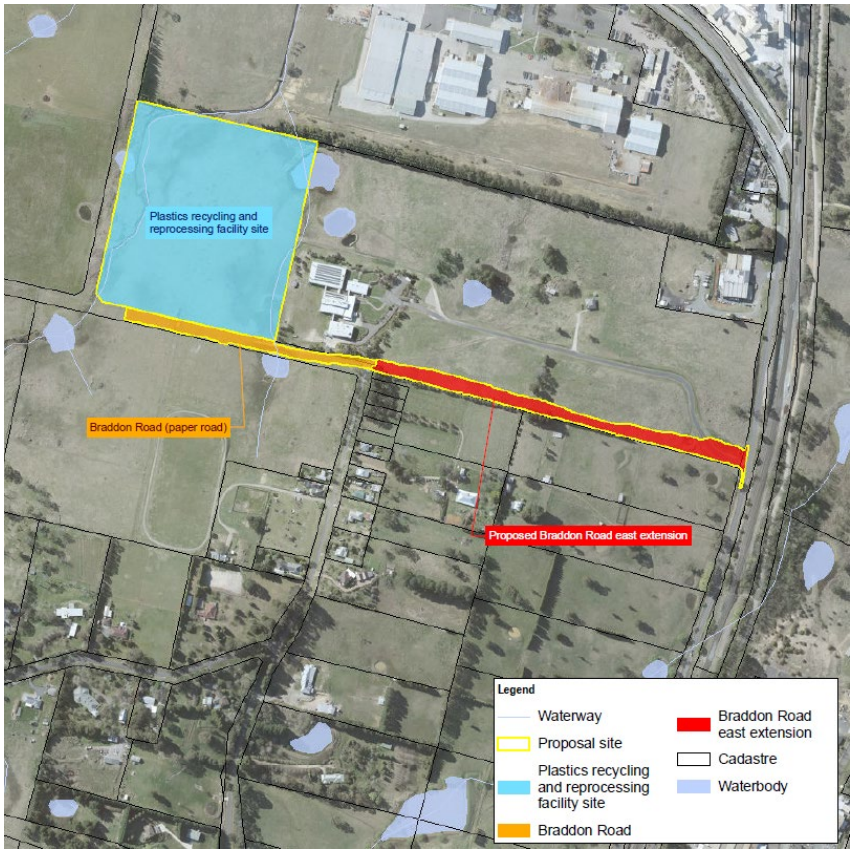


Figure 1 Original site plan and east extension

Source: GHD 4/8/2022

Following stakeholder discussions and land acquisition negotiations, Option 3 (north south road) as presented in the EIS has been nominated as the preferred access road, which would mean constructing of a portion (about 163 metres) of the future Enterprise Zone Road (currently a gravel road), the north south road (currently a Council road reserve), and a portion (about 245 metres) of Braddon Road (also currently a Council road reserve).

The north south road route is shown in **Figure 2.**

Figure 2 Proposed revised site plan – north south road

Source: GHD 25/01/2023

1.2 Change to the preferred access road

The amendment proposes a revised access to and from the facility via a north-south road, following the route of an existing gravel road off Collins Road. As part of the proposal, it is intended that all vehicles accessing and departing the plastics recycling and reprocessing facility site would do so via Collins Road. This was one of three access options included in the EIS and assessed, however the vehicles would use Collins Road instead of Douglas Road, to avoid the need to do a hook turn across the railway crossing. The revised access road utilises an existing Council road reserve for its entire distance, so there is no requirement for landowner's consent.

An update to *Technical Report 6 - Traffic and Transport* has been included in the GHD Response to Submissions Report (Section 4.4.1) outlining a detailed assessment on the existing intersection performance, traffic generation, and heavy vehicle road access, in the context of revised site access and haulage routes. The updated Traffic and Transport Assessment proposes that vehicles accessing and departing the site should do so via Collins Road, rather than using Douglas Road. Vehicles would therefore turn right onto the future Enterprise Zone Road from the proposed new north-south public access road or turn left from the new Enterprise Zone Road into the new north-south public access road.

In the EIS the north south road was the same, except that all vehicles accessed the road via Douglas Road, which meant that sharp turns across the level rail crossing were required in both directions. The use of Collins Road avoids the need for this movement.

2.0 Revised social impacts

2.1 Technical reports used in this Addendum

The following reports have been used to inform this addendum. A summary of the findings of each is provided below.

Biodiversity - Technical Report 1 – Biodiversity Development Assessment Report (revised)

- The proposed north-south road would result in impact to nine (9) mature individuals of *Eucalyptus Macarthurii* (a species of threatened eucalypt that is listed as Endangered under the NSW BC Act and Commonwealth EPBC Act).
- With regards to biodiversity, the impact is not considered significant, given the landscape context, in a Council road easement, that lacks a native understorey. The loss of the individual trees is unlikely to substantially influence the local population, nor would it result in the substantial fragmentation of habitat.

Aboriginal Cultural Heritage – 'Additional test excavation' (OzArk, 2023)

- The preferred road access option impacts a Potential Archaeological Deposit (PAD1), which was not originally to be impacted by the proposal. At the time, no initial test excavation was undertaken at this PAD.
- Artefacts were recorded at PAD1, and the area surrounding will be registered with Aboriginal Heritage Information Management System (AHIMS). As the test excavation has removed the recorded artefacts there are no further known artefacts at the site. Therefore, the site no longer has scientific significance (p.12). However, an ACHMP should be prepared, and artefacts from the site recorded and re-buried, as per recommendations in the ACHMP.
- The proposed change to the preferred access road to the north-south option means that the protection measures for Beaconsfield IF-1 as set out in the ACHAR, would not be required (p.14) as PAD3 (see **Figure 3**) would not be affected.

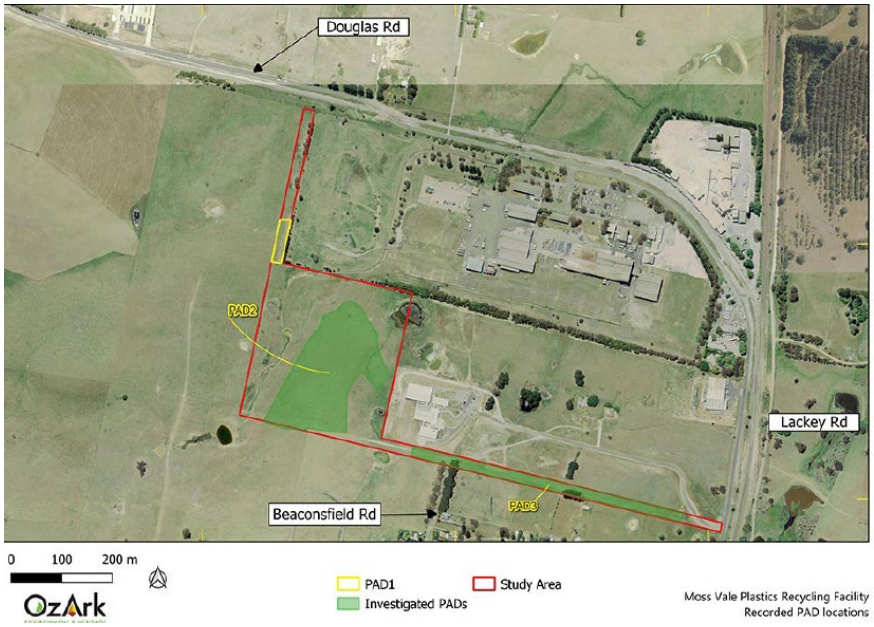


Figure 3 Location of PAD1

Source: OzArk

Traffic and Transport – RTS Section 4.4.1

- The operation of the proposed facility would have negligible impact on the surrounding road network in terms of intersection performance. Traffic generation during construction and operation of the facility is expected to remain the same as identified in the previous EIS and supporting traffic assessment.
- Beaconsfield Road would no longer be required to be used during the construction phase. This was raised as a key concern raised by the community during preparation of the EIS and Public Exhibition period.
- A review of access and key intersections also shows that sufficient sight distance is available at key access points, which is expected to allow for the safe movement of vehicles into and out of the proposed site.

Noise and Vibration – RTS Section 4.4.2

- Acoustic impacts because of the change in haulage route have been analysed. Key findings include:

- Based on the modelling undertaken, the Road Noise Policy criteria is only predicted to be exceeded at residences fronting Innes Road (AM and PM peak) and Garret Street (PM peak only) at the ultimate predicted heavy vehicle volume of 10 heavy vehicle movements per hour
- To mitigate potential noise impacts at residences along Innes Road and Garret Street it is recommended that measures are incorporated such as Road Traffic Noise Monitoring and consideration of diverting heavy vehicle movements to alternate haulage routes.
- Use of the revised haulage route would not result in a better noise outcome than previously modelled because Douglas Road would have been utilised (no residences directly adjacent.) The revised haulage route has residences along Berrima Road and Innes Road.
- During construction, use of the preferred access road would result in better noise outcomes than the original access road as the new construction haulage route utilises roads with higher traffic volumes (Berrima Road and Lackey/Collins/Douglas Road) to a greater extent than the original haulage route.
- This would reduce the increase in road traffic noise levels at sensitive receivers along the haulage route during construction phase.

The proposed use of the preferred access road (Option 3 - via a new north-south road connecting with Douglas Road) would result in better noise outcomes than the original access road for the following reasons:

- During the construction of the new access road, the nearest residences are now over 200 metres away compared to about 100 metres away from the original access road. Given this, construction noise levels at the nearest residences would be less than what was originally predicted.
- During the operational phase of the project, the new access road is now further away from the nearest residences to the east and the south of the proposal. This would result in a slight reduction in operational noise levels to two receivers (R010 and R019). For the nearest residences to the southwest (R160), the proximity of the new access road is consistent with the original access road. As such, the predicted noise levels are anticipated to be unchanged and compliance is still expected.

2.2 Revised engagement outcomes

Community and stakeholder updates

It is understood that the Applicant has updated the community via the project website about progress of the Response to Submissions Report and consultation with Wingecarribee Shire Council and Department of Planning and Environment. Refer to the **Appendix** for a copy of the public notification.

This revision to the access road has not been presented to the community as the preferred access road, however was included in the EIS as an option. It is understood the applicant has sought comments from Wingecarribee Shire Council about the proposed road design, alignment, and intersection details on a number of occasions since early December 2022, but no response has been received to date.

An updated Engagement Outcomes Report has not been prepared. However it is understood that (as per email from GHD on 22/02/2023):

- The applicant has continued to update the community via the Plasrefine Recycling website in October and December 2022, to let community members know that the RTS was delayed, due to a need for further consideration of site access, and that additional environmental studies were being undertaken to include in the RTS.
- Some emails were received in January and February from community members about the date for the RTS to be completed, and they were advised that it was to be lodged in the coming weeks.
- The nearest neighbour, ABR contacted GHD in February 2023, and they were advised about the change to the preferred access road, due to the inability for landowners' consent to be obtained.

Aboriginal and Torres Strait Islander engagement

The Addendum ACHAR (OzARK, 2023) outlines that all RAPs (Registered Aboriginal Parties) were sent a project update letter on 3 November 2022. The letter informed RAPs of the proponent's intention to impact PAD1 and OzArk's intention to undertake additional test excavation within the potential archaeological deposit. A response was received by the Wodi Wodi Traditional Owner Group enquiring about fieldwork, and from Duncan Falk on 27 November 2022, who indicated he did not have any issues with the proposed methodology while enquiring about fieldwork allocations.

2.3 Assessment of potential social impacts and revised social significance ratings

This Addendum has revised the previously documented assessment against the impact assessment factors contained within Section 7.3 of the SIA (Ethos Urban, 14 September 2022). Where otherwise noted, the assessment remains as per the original SIA, with the ratings unchanged and mitigation methods as originally recommended. Where it is considered the assessment of the social factors has been altered as a result of the amendment, this is specifically discussed below.

2.3.1 Way of Life

Relevant impact affected by revisions	Original rating (with mitigation)	Assessment against revised proposal and recommendations	Revised rating (with mitigation)
Impacts associated with construction activities including noise, vibrations, dust and visual amenity. Some changes to daily activities associated with heavy vehicle movements may cause potential disruptions to residents, workers and visitors, particularly along Beaconsfield Road during construction of the new access road.	*Likely minor (Medium) - Negative*	As the access route has been revised, construction impacts to residents, workers and visitors along Beaconsfield Road are likely minimised. There are less sensitive receivers located near to the north-south access road. Impacts would still occur in the PSA but may be minimal in nature as a result of the change.	***Possible minimal (Low) -*** *Negative* The rating is changed from 'medium' to 'low'.
Impacts associated with the operation of the facility, including increased vehicle movements, noise and visual amenity.	*Possible moderate (Medium) - Negative*	The *Traffic and Transport Assessment* -RTS Section 4.4.1 notes that 'the operation of the facility would have negligible impact on the surrounding road network in terms of intersection performance'. To mitigate impacts, the Communications and Engagement Strategy (CES) should be updated to ensure all heavy vehicles and over-dimensional vehicle haulage routes to reflect the recommendations of the Traffic Addendum.	***Possible moderate (Medium) –*** *Negative* Unchanged

2.3.2 Health and Wellbeing

Relevant impact affected by revisions	Original rating (with mitigation)	Assessment against revised proposal	Revised rating (with mitigation)
Construction activities creating dust, noise, vibrations, light pollution, traffic on local roads, and visual impacts may potentially impact physical and mental wellbeing.	*Likely moderate (High) - Negative*	Likely reduced negative impact from construction traffic noise as the *Noise and Vibration Assessment* - RTS Section 4.4.2 notes 'during the construction of the new access road, the nearest residences are now >200 metres away compared to ~100 metres away from the original access road. Given this, construction noise levels at the nearest residences would be lower than what was originally predicted' (GHD, 13 February 2023). However, this will only apply to the construction noise resulting from the new access road.	***Likely minor (Medium) -*** *Negative* The overall rating of the impact is changed from 'high' to 'medium'.

Relevant impact affected by revisions	Original rating (with mitigation)	Assessment against revised proposal	Revised rating (with mitigation)
Potential impacts during the facility's operation associated with odour, air quality, noise and water quality	*Possible moderate (Medium) - Negative*	Once operational, no identified change to noise and traffic impacts as a result of the new access route. Odour, air quality, and water quality remain as per original assessment.	***Possible moderate (Medium) –*** *Negative* Unchanged

2.3.3 Surroundings (Amenity)

Relevant impact affected by revisions	Original rating (with mitigation)	Assessment against revised proposal	Revised rating (with mitigation)
Construction activities creating dust, vibration, noise and light pollution, removal of vegetation, and visual impacts may impact the overall amenity of the surroundings and access to ecosystem services.	*Possible, moderate (Medium) - Negative*	The change in access road may reduce noise impacts to surroundings with some originally affected residents being located further away from the north-south access road (as discussed above). The reduced traffic noise impacts during construction & operation are considered to have a minor social benefit as compared to the original assessment. Heavy vehicles using the north south road will be further from residents, and therefore less likely to have impacts to surroundings (amenity) for residents in the PSA.	***Possible minor (Medium) -*** *Negative* The severity of the impact is changed from 'moderate' to 'minor'
The scale and nature of the buildings in the existing environmental context has the potential to negatively impact the amenity of the area from the perspective of landowners and community members.	*Likely, moderate (High) - Negative*	The eastern access road only required removal of exotic grassland and a small patch of planted vegetation of low biodiversity value. The nine existing mature trees required to be removed to construct the revised access road may have a detrimental visual impact and implications for the surroundings in terms of amenity. During consultation 'some community members have expressed concern that the proposal would result in negative impacts on local flora and fauna as a result of clearing habitats, noise pollution and weed management, which may impact on culture and connections to the land' (SIA, Ethos Urban 2022, p.59).	***Likely major (High)*** *– Negative* The severity of the impact is increased from 'moderate' to 'major'.
Amenity impacts associated with ongoing vehicle movements, noise, air quality and odour, and visual amenity impacts.	*Possible, moderate (Medium) - Negative*	Though the proposed access route is changed, there is a negligible change to the traffic and noise impacts as a result of the revisions during operation.	*Unchanged*

2.3.4 Community

Relevant impact affected by revisions	Original rating (with mitigation)	Assessment against revised proposal	Revised rating (with mitigation)
Permanent changes to surroundings and ongoing divisions regarding the proposal, potentially impacting community cohesion and sense of place.	***Possible*** *minor (Medium) - Negative*	The removal of vegetation was raised as an issue during consultation – p.63 of the SIA notes "from the perspective of some community members (the removal of native vegetation) will potentially impact the environmental values of the site". The previous proposal focused development on areas of exotic grassland, where possible. (p.64). The revised access route requires removal of nine mature trees which would also act as a screening/visual impact mitigation for the development. No revisions to the Visual Impact Assessment have been provided. There may be adverse impacts to surroundings and amenity as a result of this tree removal, which may affect the community's cohesion and sense of place. Impacts could be mitigated through the use of replacement planting of mature trees, or relocation of the trees.	***Likely minor (Medium) –*** *Negative* The rating likelihood is considered to increase from 'possible' to 'likely.'

2.3.5 Accessibility

Relevant impact affected by revisions	Original rating (with mitigation)	Assessment against revised proposal	Revised rating (with mitigation)
Temporary accessibility impacts for residents accessing Beaconsfield Road associated with the construction of the new access road	*Possible moderate* ***(Medium)*** *- Negative*	The north-south access road means the proposal does not require access along Beaconsfield Road. These impacts will be transferred to affect residents/receivers at the north of the site at Douglas Road/Collins Road – less density and therefore likely to be less significant impacts to accessibility. Berrima Road is unlikely to be affected significantly, as the major road connecting Berrima to Moss Vale.	***Very unlikely minimal (Low)*** *- Negative* The rating is considered to reduce from 'medium' to 'low'.
Impacts associated with operation on local access to transport infrastructure including Lackey Road	*Unlikely minor (Low)- Negative*	Impacts may extend to Douglas Road and Collins Road which are local collector roads, with one travel lane in each direction. Initial findings in the previous proposal found this may have major road safety risks as a result of level crossing collisions between trains and vehicles. The revised route does not require a hook turn to be made across the rail crossing therefore the safety impacts originally identified are eliminated. Revised conclusions note that the operation of the proposed facility would have a negligible impact on the surrounding road network in terms of intersection performance. Further, a review of access and key intersections also show that sufficient	Unchanged. Subject to compliance with the recommendations by the Traffic Addendum (GHD, 2022) there are not considered to be any changes to the previously identified social impacts to accessibility as a result of the amended access route subject to mitigation.

Relevant impact affected by revisions	Original rating (with mitigation)	Assessment against revised proposal	Revised rating (with mitigation)
		sight distance is available at key access points, which is expected to allow for the safe movement of vehicles into and out of the proposed site.	

2.3.6 Culture

Relevant impact affected by revisions	Original rating (with mitigation)	Assessment against revised proposal	Revised rating (with mitigation)
Potential impacts on local flora and fauna associated with construction activities, and ongoing operational activities, resulting in changed ability to connect with local culture	*Possible minor (Medium) - Negative*	The original SIA notes that (p.59) 'the eastern access road will require removal of exotic grassland and a small patch of planted vegetation of low biodiversity value'. The revised access arrangements, as noted above, require clearing of mature trees (and subsequent potential impacts to fauna habitat), and therefore culture (connection to land). The previous access route did not require clearing of any mature trees. Replacement/relocation of the mature trees and native planting may assist in ameliorating some of the above impacts.	***Likely minor (Medium) -*** *Negative* The rating likelihood is considered to increase from 'possible' to 'likely.'
Potential impact to Aboriginal cultural heritage as a result of additional clearing/construction required to build the new access road.	*N/A – not assessed - Negative*	As the proposed changes to the road access result in potential impacts to 'PAD1', an area of 85m x 20m additional test excavation was undertaken. Eight Aboriginal sites are known to exist within the project area (four recorded due to the assessment associated with the 2021 ACHAR, one from the 2022 additional test excavation, and three previously recorded). However, as 'five of these sites were recorded because of the test excavation program and represent low density subsurface artefact scatters, no further management is required as the sites have very limited ability to provide further information on past Aboriginal use of the area' (p.13) In addition, the proposed change to the preferred access road to the north-south option will mean that the protection measures for Beaconsfield IF-1 will not be required (p.13). It was recommended in the Addendum that, following project approval, an Aboriginal Cultural Heritage Management Plan (ACHMP) should be developed in consultation with the RAPs.	***Possible moderate (Medium)*** *- Negative*

3.0 Conclusions

This Addendum to the *Social Impact Assessment* (Ethos Urban, 14 September 2022) revises the previously documented assessment against the impact assessment factors contained within Section 7.3, in response to the proposed revision to the access route to the plastics recycling and reprocessing facility, currently under assessment with the DPE. It is understood that the community have been advised of the timing for the Response to Submissions report being prepared for submission to DPE. It is recommended that the detailed responses are to be further developed through detailed design phase, and ongoing consultation with the local community and relevant stakeholders.

Potential social benefits as a result of the north south access road (Option 3) include:

- The proposed change to the preferred access road excludes the need for heavy vehicles to use Beaconsfield Road in order to access the site. Beaconsfield Road would also no longer be required to be used during construction. Construction vehicles would be able to access the proposed new north-south public access road and the facility via the existing road connecting to Collins Road. This reduces potential for accessibility and way of life impacts to residents along Beaconsfield Road.
- Potential acoustic impacts as a result of construction and operational noise have been assessed and may be improved as a result of the change particularly to the residential receivers on Beaconsfield Road. This may have an improvement on surroundings (amenity) and health and wellbeing for some members of the PSA.

Potential negative social impacts include:

- The amended road access may have additional impacts to community and culture, as it results in potential impact to up to nine (9) mature trees (a species of threatened eucalypt) listed as 'Endangered' on the NSW BC Act and Commonwealth EPBC Act. As identified in the Appendix G 'Engagement Outcomes Report' (pg. 6 of Appendix G Traffic Questions, GHD 22 December 2021) "road access Option 3 has impacts to nine '*Eucalyptus macarthurii*' which is an endangered species under the *Biodiversity Conservation Act 2016 (NSW)* (BC Act) and *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and require crossing a watercourse."
- The removal of nine (9) mature eucalypts is '*unlikely to result in a significant impact (to biodiversity)'* and *'the proposal will reduce the number of individuals within the site, however any such impact is unlikely to substantially influence the local population, nor would it reduce the area of occupancy of the species'*. However, it is still maintained that there would be likely be a detrimental impact to community, surroundings and culture, with potential for people in the PSA in particular to feel that the removal of the mature trees without any mitigation, may change their experience and connection to land. There may be additional social impacts to the community as a result of the removal of these trees, as they are mature trees, and a threatened species – which may ultimately have potential impacts to the amenity of the site and surroundings, as well as community and culture. Potential mitigation such as replacement landscaping could have benefits to ameliorating such an impact.
- Potential impacts to Aboriginal cultural heritage may arise, given the proposal's access road may affect an identified Aboriginal site. The preferred road access option impacts PAD1 (potential archaeological deposit) which was not originally to be impacted by the superseded proposal (however the east west road access would have affected PAD3 instead and protection measures for Beaconsfield IF-1 will no longer be required). To mitigate impacts, strict compliance with the recommendations of the ACHAR must occur.
- No change to decision-making systems or livelihoods is anticipated as compared to the original assessment.

Summary

In summary, there are some positive social outcomes arising as a result of the north-south road (than previously assessed) due to an increased distance from residential receivers likely improving amenity, accessibility and way of life impacts. The development no longer proposes the use of Beaconsfield Road during the construction stage. It is noted there is no need for land acquisition, with the land already being reserved by Council for the purpose of a road.

However, with the proposed north south road there may be additional negative impacts on surroundings (amenity), community, and culture, as a result of the clearing of mature trees for the north-south road and potential impacts to an Aboriginal artefact. There may be potential for a reduction in negative impacts for the PSA in relation to accessibility, health and wellbeing, and surroundings (amenity), particularly for those utilising or living on Beaconsfield Road (where the previous access road was proposed) particularly during construction, as well as potential benefits to culture whereby an Aboriginal artefact may no longer be affected at the east-west road location.

It is recommended that the proposal be carefully prepared in accordance with recommendations in technical reports so as to mitigate social impacts, particularly to culture, community, and surroundings. Construction and operational noise impacts may be improved as a result of the new access road being located away from residential receivers. To mitigate impacts, the Communications and Engagement Strategy (CES) should be updated to ensure all heavy vehicles and over-dimensional vehicle haulage routes to reflect the recommendations of the Traffic Addendum.

Appendix – Public Notification of Timing