

Henry Lawson Drive – Stage 1A

Socio-economic impact
assessment

Transport for NSW

Reference: 510003

Revision: 2

19 May 2021

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Executive summary

Proposal overview and background

Transport for NSW (Transport) is proposing to upgrade Henry Lawson Drive Upgrade between Keys Parade, Milperra, to Tower Road, Bankstown Aerodrome (known as the Henry Lawson Drive Upgrade Stage 1A) (the overall proposal). The overall proposal consists of upgrading a 1.3 kilometre length of Henry Lawson Drive including intersection upgrades. The upgrade would help ease existing traffic issues and increase traffic capacity at key intersections to help meet growing demand, with residential, commercial and industrial development in the surrounding area expected to increase in the coming years.

This socio-economic impact assessment has been prepared to assess the socio-economic impacts of the project. It will support a Review of Environmental Factors (REF) being prepared by Transport under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and an Environmental Impact Statement (EIS) being prepared under Part 4 of the EP&A Act.

This assessment addresses both the REF proposal and the EIS proposal, with impact assessments developed separately. The investigation of the existing environment and conclusions have been developed in consideration of the overall proposal area (combined REF and EIS proposal area).

Existing environment

Both the direct study area and socio-economic study areas are focused around the Henry Lawson Drive/Milperra Road/Newbridge Road intersection. The direct study area includes the road corridor and the areas surrounding the road corridor, including residences on the western side of the Georges River. In this assessment, the direct study area focuses on residents, stakeholders and facilities closest to the overall proposal. The socio-economic study area is the area within 400 metres of the overall proposal and considers those within general walking distance and access to the overall proposal. The broader study area used in this assessment contributes to developing the context of the existing environment and is comprised of:

- Panania - Milperra - Picnic Point Statistical Area 2 (SA2),
- Condell Park SA2,
- Bass Hill - Georges Hall SA2
- Chipping Norton – Moorebank SA2

The broader study area has been compared against the Liverpool City Local Government Area (LGA), City of Canterbury Bankstown LGA and Greater Sydney.

The broader study area has a young population, a large proportion of family households and a strong reliance on private motor vehicles to move around, when compared to Greater Sydney. Population and housing growth in the Liverpool City LGA and City of Canterbury Bankstown LGA is expected to increase substantially over the next 20 years, which is likely to be attributed to the development in South-Western Sydney. The Georges River is a key feature in the broader study area, with social infrastructure and residential development bordering the sides of the river throughout the suburbs of Milperra and Chipping Norton. Bankstown Airport is identifiable as an area of education, employment, and future growth for the broader study area. There is a strong sense of community participation and cohesion based on the events and activities available throughout the broader study area. The community consultation undertaken for the proposal (summarised in Chapter 5) identifies that the community value natural areas and the environment, community inclusivity and safety. Local community strategic plans also identified the importance of providing transport opportunities and investing in infrastructure to increase connectivity and accessibility.

Impact assessment

This socio-economic impact assessment is in accordance with the 'moderate' level of assessment, in the *Environmental Impact Assessment Practice Note – Socio-economic Assessment (EIA-N05)* (Transport, 2020a). The moderate level of assessment is used as it reflects the scale and magnitude of potential impacts to the socio-economic environment for the REF proposal and the EIS proposal.

The REF impact assessment considers a range of socio-economic factors, including property acquisition, land use, access and connectivity, social infrastructure, businesses, amenity and cumulative impacts. The EIS follows a similar approach and reflects the SEARs provided by the Department of Planning, Industry and Environment (DPIE). Although socio-economic impacts are not identified as a key issue, impacts in regard to land use and development and visual impacts are considered in this assessment amongst other socio-economic factors.

REF proposal

The REF proposal is expected to have some adverse impacts during the construction phase, including:

- **Property and land use impacts**, such as property acquisition for residences, businesses and public spaces. One full residential property acquisition would be required on the eastern side of Henry Lawson Drive (just north of the Auld Avenue/Henry Lawson Drive intersection) and some residential strip acquisition required on the western side (between Auld Avenue and Newbridge Road). Property acquisition can result in varying impacts to land owners and occupiers, with some people being more vulnerable to impacts than others. In addition, two small portions of land that are part of the Bankstown Golf Course and the Georges River Golf Course would also be acquired. This is not expected to impact the operation of the golf courses as acquisition would be located close to the edge of both properties.
- **Changes in access and connectivity for all road users** as a result of construction traffic impacts, delays around construction areas and temporary alternate traffic arrangements. In particular, changes in access at Auld Avenue and along the shared user path on Henry Lawson Drive would impact residents and the broader community that use these areas during construction. The temporary relocation of bus stops may affect accessibility during construction, however access would be maintained.
- **Changes in access and connectivity for businesses** on Henry Lawson Drive, resulting in impacts to businesses between Tower Road and Milperra Road and businesses within the Flower Power Complex. Businesses that operate over 24-hour periods, or outside of hours periods such as the BP Truckstop service station and Wild Bean Café, KFC Milperra and Hungry Jack's Burgers Milperra may experience impacts to business movements and customer access. This is likely to occur during the implementation of alternative traffic arrangements during these out of hours work periods. Similarly, freight deliveries at the Flower Power Complex outside of standard hours may also experience impacts during construction as a result of delays and alternative traffic arrangements.
- **Impacts to social infrastructure** where people may experience changes to noise, air quality and visual environment particularly when using parks and the Georges River, particularly recreational users of the Georges River and people using Gordon Parker Reserve and undertaking the Crosscurrents – Georges River Art Walk. The construction of the REF proposal would not directly impact the operation of most facilities within the socio-economic study area but may have indirect impacts on the usage as a result of visual, noise and air quality impacts associated with construction. This could reduce some resident and visitor enjoyment of social infrastructure and public spaces.
- **Impacts to community values and amenity**. During construction there would be impacts to community values and amenity in the form of noise, visual and air quality impacts for residents, businesses, services and social infrastructure. The highest impacts would be during construction activities that use noise or vibration intensive equipment. During works outside standard construction hours at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection noise intensive activities could result in some potential sleep disturbance or discomfort for residential receivers. This can have an adverse impact on the health and wellbeing of residential receivers, particularly if construction periods outside of standard construction hours occur for long periods of time without mitigation.

Potential impacts associated with vegetation removal would result in visual impacts to surrounding receivers, and impact the liveability of the direct study area, particularly surrounding the Georges River and coastal wetland areas which are valued by community. Revegetation would be undertaken prior to the completion of construction.

Consultation undertaken for the proposal indicated that safety is highly valued by the community. Construction activities such as the use of ancillary facilities located on the floodplain, earthworks and the construction of the bridge may have the potential to adversely impact safety. Impacts to flood evacuation routes, construction worker safety and residences as a result of flooding have been considered in the development of the design.

- **Potential traffic and amenity cumulative impacts** which could occur as a result of works being located near the Bankstown Airport Redevelopment, proposed Riverlands Residential Development and other road projects that form part of the Henry Lawson Drive Upgrade Program of works, including the EIS proposal. Amenity impacts are expected for projects closer to the REF proposal such as the Bankstown Airport Redevelopment, with traffic impacts expected to occur as a result of projects within the broader study area such as the Moorebank Intermodal Terminal project and other stages of the Henry Lawson Drive Program of works. These projects are expected to result in increased traffic demand, with large freight vehicles using the direct study area for access.

During the operation of the proposal socio-economic impacts include:

- **Some changes in land use in the road corridor**, including areas that were previously vacant or vegetated land alongside Henry Lawson Drive, Milperra Road and Newbridge Road would now form part of the road footprint. This potentially would impact the community who value nature and the environment. As these areas are part of the road corridor without formal connections to the pedestrian network, most of them are not frequently used by the public. The vegetated corridor between the Georges River and Henry Lawson Drive is the exception, which features the shared user path along the Georges River. Land use changes from vegetated corridor to roadway in this area may impact the amenity of pedestrians using the pathway and surrounding area temporarily as vegetation re-establishes. As most land use changes would occur close to the road corridor, impacts are not expected to be substantial. The land use changes would facilitate improved connections through the direct study area, which are likely to positively contribute to the community who value movement and connectivity. Construction of new footpaths and relocated bus stops would improve pedestrian connectivity at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection. This may provide greater incentive for the community to use public transport through better access opportunities.
- **Improvements in access and connectivity** from increased travel efficiency for local road users, through the provision of greater capacity which would provide benefits for future growth and development within the broader study area. **New turning arrangements at Auld Avenue** (left in/left out) to reduce the risk of vehicles turning into oncoming traffic and also improve the performance of the intersection. This would result in changes to access, with residents in Auld Avenue and people that use Gordon Parker Reserve and the Vale of Ah Reserve needing to approach the intersection northbound on Henry Lawson Drive. This may require traffic to alter their path of travel to get to Auld Avenue, using other roads including local roads to access the intersection. This could vary from between 400 metres to four kilometres depending on route choice. Changes in access may be inconvenient for people that use Auld Avenue, which may impact the usage to the reserves.
- **Benefits to commercial operations and businesses** within and travelling through the direct study area through increased road capacity and improved travel times.
- **Changes in community values and amenity** including slight beneficial noise impacts to residences located to the west of Henry Lawson Drive, with noise levels to decrease slightly as the travel lanes move to the east. Noise levels to the golf courses on the east of Henry Lawson Drive would slightly increase. However, it is noted that these changes are very minor and would not be perceptible. Permanent property acquisition would bring the road corridor closer to some residents on Henry Lawson Drive that have been subject to strip acquisition. This could result in reduced visual amenity as Henry Lawson Drive would occupy a larger road footprint. The widened footprint would further contribute to the built environment impacting on community values.

- The single full property acquisition of the residential property on the eastern side of Henry Lawson Drive would be subject to future Council flood mitigation planning requirements to mitigate potential flood impacts. Discrete flooding impacts during operation are likely to occur for residents and businesses within the socio-economic study area. Impacts are expected to be localised with slight increases to existing flood levels during flooding events. Mitigation, including further analysis during detailed design, would be implemented to avoid safety impacts during construction and would include flood evacuation procedures being implemented during a flood event.
- **Revegetation** would occur throughout the direct study area to improve the visual aesthetic of the upgrade.

EIS proposal

Parts of the proposal occur on land mapped as Coastal Wetlands and are deemed designated development by the *State Environmental Planning Policy (Coastal Management) 2018*. The activities proposed on these areas are assessed in an EIS. Socio-economic factors of the three EIS proposal areas were considered in addition to the socio-economic impacts identified for the REF proposal. The potential socio-economic impacts of the EIS proposal are expected to be minor. Table E1-1 provides an overview of the SEARs relevant to the proposal and how they have been addressed in this assessment.

Table E1-1 SEARs addressed in this assessment

Reference	Requirement	Summary
Land use and development	<ul style="list-style-type: none"> ■ <i>The assessment for impacts of construction and operation on and from surrounding land uses</i> 	This assessment assesses the potential impacts to land use, within the direct study area and surrounding socio-economic and broader study areas. Overall impacts to land use would be relatively consistent with the existing area, with an increase in the road footprint. This is discussed further in Chapter 8.
	<ul style="list-style-type: none"> ■ <i>An assessment of safety and access to intersection and properties during construction</i> 	This assessment assesses the potential impacts safety and access during construction, with mitigation measures proposed (Chapter 7 and 9). This includes impacts of flooding in consultation with the State Emergency Service (SES) and Council (discussed further in Chapter 5). The construction environment management plan will develop specific mitigation measures relevant to each stage of construction to mitigate potential impacts.
	<ul style="list-style-type: none"> ■ <i>Consideration and details to whether the proposed development is within, adjacent to, or in proximity to a watercourse that flows directly into Environment Emergency and Science (EES) Group-managed conservation estate (e.g. a national park, nature reserve, state conservation area, land which is declared wilderness under the Wilderness Act 1987), requirement for consultation with EES and consistency with the relevant guidelines.</i> 	It should be noted that the EIS proposal areas are not within or in proximity to, or in proximity to a watercourse that flows directly into EES Group-managed conservation estate.
Visual	<ul style="list-style-type: none"> ■ <i>An impact assessment at private receptors and public vantage points.</i> 	This assessment has considered the potential visual impacts during construction and operation, with a focus on surrounding residential receivers including those on the western side of the Georges River. This is discussed further in Chapter 8, with viewpoints discussed in detail in the Landscape and Visual Impact Assessment Report prepared for this proposal.

The REF proposal and EIS proposal would be constructed and operated concurrently. The socio-economic impacts identified for the EIS proposal are consistent with the socio-economic factors considered for the REF proposal, however, on a much smaller scale. Due to the difference in the scale of impacts, a cumulative rating of socio-economic impacts would not occur, rather the impact rating of the REF proposal, being the more prominent works would be representative of the overall proposal.

Overall proposal potential impact

The overall proposal impact assessment is consistent with the socio-economic impacts identified above for the REF proposal. The overall proposal is expected to increase travel efficiency for local road users by allowing for greater traffic capacity at key intersections. Adverse impacts during construction and operation would be mitigated through a range of mitigation measures.

A summary of the key mitigation measures required for the proposal includes:

- Community consultation throughout the overall proposal so that residents, local Aboriginal groups, businesses, emergency services and stakeholders are aware of design changes and construction activities. Transport would work with the community, stakeholders and Council to mitigate potential impacts, including community impacts during construction including noise, visual and access impacts
- Property acquisition requirements including private and crown land acquisition, in accordance with the *Land Acquisition (Just Terms Compensation) Act 1991* and the *Crown Lands Management Act 2016*.
- Temporary and permanent changes in access on the local road network will be firstly discussed with impacted land occupiers prior to commencement of construction and then followed up with community notifications/ letterbox drops to notify the broader community, recreational groups, businesses and other stakeholders. Consultation will continue during construction should arrangements change. This includes access onto Auld Avenue, Henry Lawson Drive, Starkie Drive and Tower Road.
- Business consultation to mitigate potential impacts associated with alternative traffic arrangements and potential construction traffic impacts.
- Public transport providers and users will be notified in advance of any changes to bus stop locations through signage at the existing bus stops on Milperra Road. Temporary bus stops would have similar features to existing bus stops. Adequate way finding signage would be installed.
- Traffic management for all road users, including pedestrians and cyclists and the use of alternative routes for active transport users and the use of traffic controllers where required.
- Vegetation will be replanted in accordance with the landscaping plan prepared for the proposal, which is discussed further in the Landscape and Visual Impact Assessment.
- Safety mitigation for flooding impacts during construction and operation would be maintained, including evacuation routes and procedures for residents, businesses and stakeholders.

A comprehensive list of mitigation measures required for the proposal is provided in Chapter 9.

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1 Introduction

Transport for NSW (Transport) is proposing to upgrade Henry Lawson Drive Upgrade between Keys Parade, Milperra, to Tower Road, Bankstown Aerodrome (known as the Henry Lawson Drive Upgrade Stage 1A) (the overall proposal). The proposal consists of upgrading a 1.3 kilometre length of Henry Lawson Drive and an additional 480 metres along Milperra Road, including intersection upgrades.

This socio-economic impact assessment has been prepared to assess the socio-economic impacts of the proposal. It will support a Review of Environmental Factors (REF) being prepared by Transport under Division 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and an Environmental Impact Statement (EIS) being prepared under Division 4.1 of the EP&A Act.

1.1 Proposal location and setting

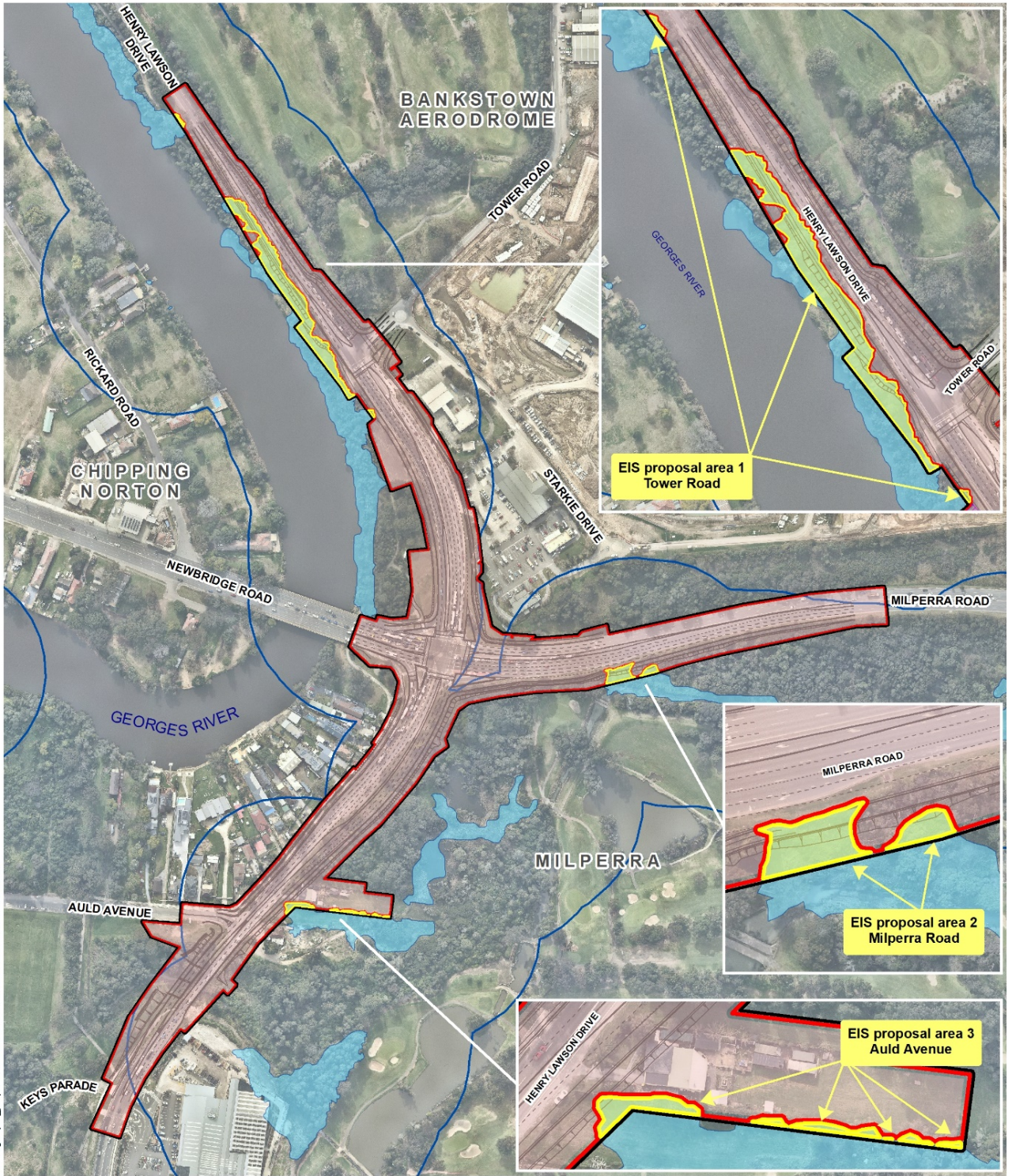
The overall proposal is located around 20 kilometres south west of the Sydney CBD in the City of Canterbury Bankstown local government area. The proposal is mainly along Henry Lawson Drive and includes intersection upgrades at Tower Road, Newbridge/Milperra Road and Auld Avenue.

Henry Lawson Drive is a key connection for traffic moving between the Hume Highway, Milperra Road/ Newbridge Road and the M5 Motorway. It is also used for local travel trips between residences and services. In terms of heavy vehicle access, Henry Lawson Drive is designated as a B-Double access route that connects surrounding large industrial areas of Milperra, Revesby, Chipping Norton and Moorebank.







The proposal is located to the east of the Georges River and surrounding recreational areas. There are a number of Coastal Wetlands within and surrounding the proposal associated with the Georges River.

Located to the south west of the proposal, is a residential area with detached housing and sporting fields and passive recreation areas. To the south east, is the Bankstown Golf Course and urban bushland areas. North of Milperra Road comprises retail and commercial development that backs onto the Bankstown Airport and land currently being redeveloped, all of which access Henry Lawson Drive via Tower Road. Located north of Tower Road is the Georges River Golf Course.

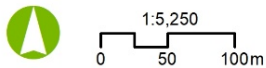
Figure 1-1 shows the overall proposal as well as the REF proposal and EIS proposal areas. Key features of the overall proposal are described in Chapter 2.



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-  Concept design
-  EIS proposal area
-  REF proposal area
-  Overall proposal boundary
-  Coastal Wetlands
-  Coastal Wetlands Proximity Area

Source: Aurecon, TfNSW, Spatial Services, Nearmap



Projection: GDA 1994 MGA Zone 56

Henry Lawson Drive Stage 1A

FIGURE 1-1: Proposal overview

1.2 Purpose and scope of this report

This report has been prepared to support the REF and EIS for the proposal. This report has been prepared in accordance with the Secretary’s Environmental Assessment Requirements (SEARs) for the proposal. The REF has been prepared for the majority of the proposal, where Transport can approve works under the State Environmental Planning Policy (Infrastructure) 2008 (referred to as the ‘REF proposal’). However, as part of the proposal is located within areas mapped as coastal wetlands under the State Environmental Planning Policy (Coastal Management) 2018, this is subject to an EIS. The work within mapped coastal wetlands is deemed designated development and is referred to as the ‘EIS proposal’. These areas are shown in Figure 1-1.

The purpose of this report is to describe the proposal, to document the likely impacts of the proposal on the environment, impacts of the environment on the proposal and to detail suitable mitigation measures if required.

This socio-economic impact assessment includes the following scope of works:

- Support the planning and design activities of the overall proposal through identification of socio-economic risks, constraints and areas of sensitivity.
- Investigate and discuss potential impacts as a result of the overall proposal through assessment and analysis of the existing environment.
- Make recommendations for the avoidance or minimisation of potential impacts in accordance with the relevant environmental assessment requirements of Division 5.1 and Part 4 of the EP&A Act.

1.2.1 Secretary’s Environmental Assessment Requirements

As sections of the overall proposal intersect with areas mapped as Coastal Wetlands under the State Environmental Planning Policy (Coastal Management) 2018, a separate EIS has been prepared to assess these sections of the overall proposal under Part 4 of the Environmental Planning and Assessment Act 1979. For this EIS, SEARs were issued by the Department of Planning, Industry and Environment (DPIE) on 8 April 2020 (number 1438), which describe assessment requirements.

The requirements relevant to the socio-economic impact assessment are presented in Table 1-1.

Table 1-1 Secretary’s Environmental Assessment Requirements

Reference	Requirement	Where addressed
Land use and development	<ul style="list-style-type: none"> ■ <i>The assessment for impacts of construction and operation on and from surrounding land uses</i> ■ <i>An assessment of safety and access to intersection and properties during construction; and</i> ■ <i>Consideration and details to whether the proposed development is within, adjacent to, or in proximity to a watercourse that flows directly into Environment Emergency and Science (EES) Group-managed conservation estate (e.g. a national park, nature reserve, state conservation area, land which is declared wilderness under the Wilderness Act 1987), requirement for consultation with EES and consistency with the relevant guidelines.</i> 	Chapter 8 of this report Chapter 5 of the Project REF
Visual	<ul style="list-style-type: none"> ■ <i>An impact assessment at private receptors and public vantage points.</i> 	Chapter 8 of this report Project REF Project Landscape and Visual Impact Assessment Report

1.3 Report structure

The structure of this report is consistent with a 'moderate' level assessment as specified in Transport's *EIA-N05 Environmental Impact Assessment Practice Note – Socio-economic Assessment* (Transport, 2020). The report is structured as follows:

- Section 1 – introduction outlining the overall proposal background and purpose of the report
- Section 2 – REF proposal description, EIS proposal description, outlining the overall proposal objectives and construction outline
- Section 3 – methodology identifying the study areas, assessment methodology and data sources
- Section 4 – relevant policy context and planning strategies for the overall proposal
- Section 5 – community engagement undertaken for the overall proposal to date
- Section 6 – description of the existing socio-economic environment including a profile of demographic characteristics, community infrastructure, key industries and businesses and recreational areas
- Section 7 – potential impacts from the construction and operation of the REF proposal
- Section 8 – potential impacts from the construction and operation of the EIS proposal
- Section 9 – safeguards and management measures to mitigate impacts during construction and operation of the REF proposal and EIS proposal
- Section 10 – conclusion

2 Proposal description

The following section provides an overview of the key features of the REF proposal and the EIS proposal. These key features are shown in Figure 2-1 to Figure 2-3. The overall proposal objectives and construction information are also discussed in this section. More information about construction can be found in the Project REF and Project EIS.

2.1 REF proposal

Key features of the REF proposal include:

- Widening Henry Lawson Drive from two to four lanes
- Upgrading the signalised intersection of Henry Lawson Drive and Tower Road including:
 - An additional right turn lane from Tower Road onto Henry Lawson Drive
 - A new channelised short left-turn lane from Henry Lawson Drive (southbound) onto Tower Road
 - An additional right turn lane from Henry Lawson Drive (northbound) onto Tower Road
 - Retaining the pedestrian crossing across Henry Lawson Drive on the southern side of the intersection
- Upgrading the signalised intersection of Henry Lawson Drive and Milperra Road /Newbridge Road including:
 - An additional right turn lane on the Milperra Road and Newbridge Road approaches to Henry Lawson Drive
 - An additional through lane on the Henry Lawson Drive southbound approach
 - The removal of the bus only lane on Milperra Road to provide an additional right turn lane on the Henry Lawson Drive northbound approach.
- Removing the dedicated left turn slip lane into the ALDI and fast-food area with access being retained via a standard property driveway
- Retaining the existing bus stop on Milperra Road (eastbound) and moving the westbound bus stop 20 metres to the west
- Altering access to Auld Avenue to a “left in/left out” only configuration
- Installing a new Henry Lawson Drive road bridge (over Milperra Drain) to the south of Auld Avenue (referred to as the Auld Avenue bridge) to carry northbound traffic and retaining the existing bridge for southbound traffic
- Constructing new footpaths on the eastern side of Henry Lawson Drive to connect Tower Road to the existing bus stop on the eastbound lanes of Milperra Road and a new footpath on the southern side between Henry Lawson Drive to the bus stop on the westbound lanes of Milperra Road
- Widening the shared user pathway between Flower Power (Keys Parade) and Newbridge Road to three metres and reconstructing footpaths along the western side of Henry Lawson Drive, where required
- Adjusting existing drainage, including lengthening culverts, installing new drainage infrastructure and water quality controls
- Relocating utilities (including electrical, gas, water and telecommunications)
- Final roadworks including pavement, kerb and gutters, signs, lighting and line marking
- Ancillary work for the proposal including, but not limited to road furniture, tie-in works, landscaping, earthworks and the like
- Temporary ancillary compounds, stockpile sites and associated facilities

2.2 EIS proposal

There are key features of the designated development proposal occurring within land mapped as coastal wetlands. These areas form the EIS proposal areas as required by the *State Environmental Planning Policy (Coastal Management) 2018*. There are three EIS proposal areas as described below for each EIS proposal area.

EIS proposal area 1 – Henry Lawson Drive opposite Tower Road

The key features of EIS proposal area 1 are:

- Widening of Henry Lawson Drive northbound lanes
- Installing of fill embankments along the edge of the new carriageway to meet existing ground levels
- Extending existing stormwater culvert and installing outlet scour protection measures
- Installing additional stormwater drainage infrastructure and water quality treatments
- Installing a vegetated swale along the toe of the new fill embankment
- Adjusting the existing shared path to suit the new re-alignment and to connect it back to the existing path
- Installing road furniture, including road safety barriers

EIS proposal area 2 – Milperra Road opposite Bankstown Airport

The key features of the EIS proposal area 2 are:

- Installing a new bus stop relocated from its existing position on Milperra Road
- Installing a section of a new footpath to the bus stop (connecting to the remainder of the new path to Henry Lawson Drive – REF proposal)
- Installing fill embankments along the edge of the new carriageway to meet existing ground levels
- Extending existing stormwater culvert and installing outlet scour protection measures
- Installing additional stormwater drainage infrastructure connecting to the outlet of the extended culvert
- Installing road furniture, including road safety barriers

EIS proposal area 3 – Henry Lawson Drive opposite Auld Avenue

The key features of the EIS proposal area 3 are:

- Removing of existing ancillary structures
- Installing temporary fencing, flagging of exclusion boundaries and temporary erosion and sediment controls for use as an ancillary facility and construction area
- Installing fill embankments along the edge of the new carriageway to meet existing ground levels
- Stabilising the ground surface following the completion of construction to minimise erosion.

2.3 Proposal objectives

The key objectives of the overall proposal include:

- Improve travel times, journey time reliability and road safety outcomes for all road users
- Improve freight efficiency and reduce vehicle operating costs on the road network

- Support new development in the precinct by improving traffic flow and connectivity to Bankstown Airport, Milperra Industrial Estate and proposed residential development in the area and the surrounding road network in the south west of Sydney
- Improve connectivity and safety for pedestrians and cyclists

2.4 Construction

2.4.1 Construction activities

The overall proposal boundary shown in Figure 2-1, Figure 2-2 and Figure 2-3 is the construction footprint. The overall proposal is anticipated to involve the following general construction activities.

- Establishment works including ancillary facilities, construction access areas and the implementation of environmental, traffic and pedestrian controls
- Utility adjustment works
- Existing building and fencing removal
- Clearing and grubbing
- Earthworks
- Widening and pavement works
- Bridge and drainage works
- Pedestrian pathway, intersection crossing, and shared path works
- Landscaping and finishing works
- Removal of ancillary facilities and site rehabilitation

These details are discussed in more detail in the REF and EIS.

2.4.2 Construction hours and duration

Construction is expected to commence in early 2023 and would take about 24 months to complete.

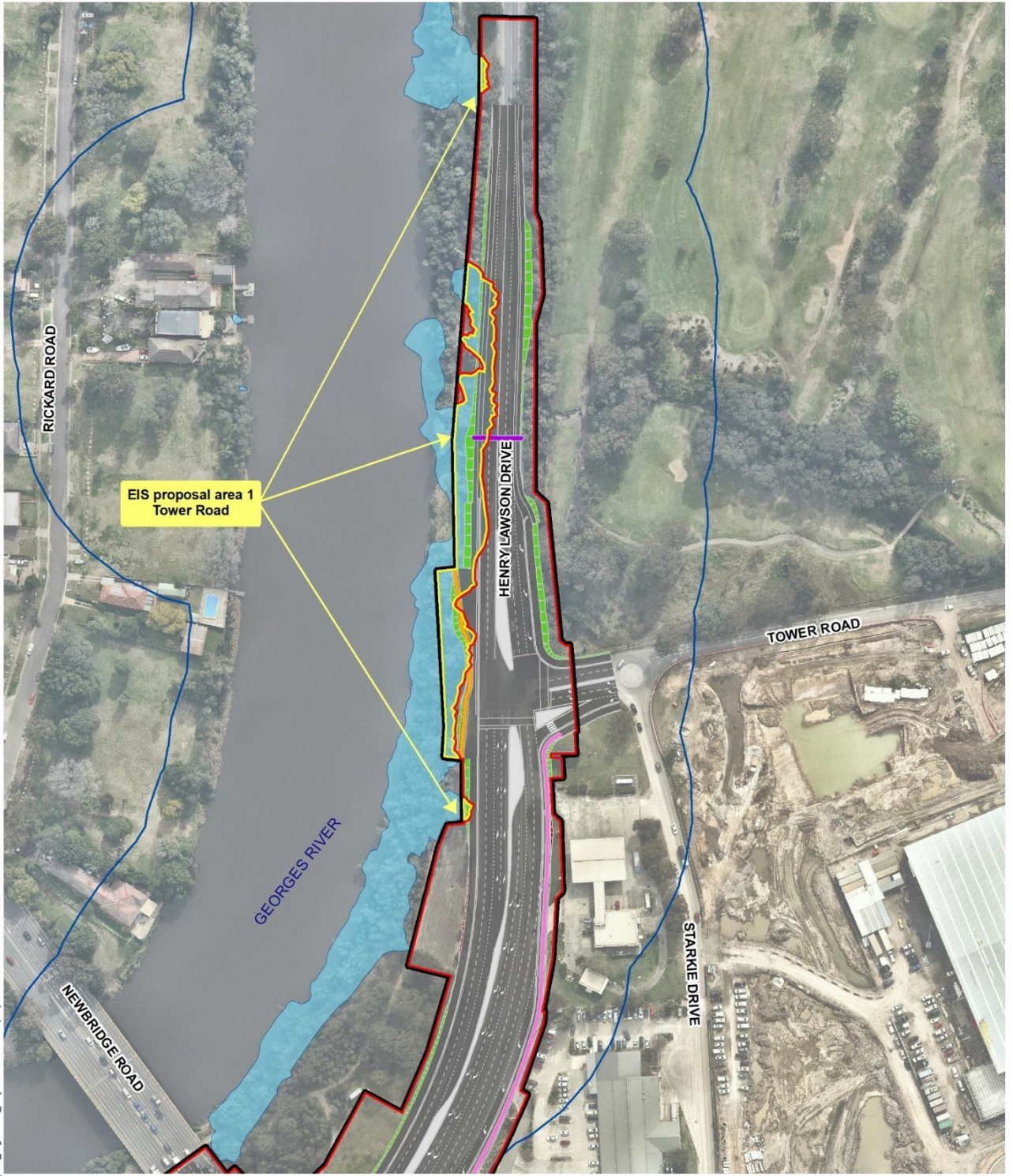
Construction works would be undertaken in both standard hours and out of works hours for the proposal. Standard construction hours as defined in the Interim Construction Noise Guideline (DECC 2009b) are:

- Monday to Friday: 7.00 am – 6.00 pm
- Saturday: 8.00 am – 1.00 pm
- Sunday and Public Holidays: No work

Out of hours works would be required to minimise disruptions to the road network. The main works that would be required to occur out of hours would include:

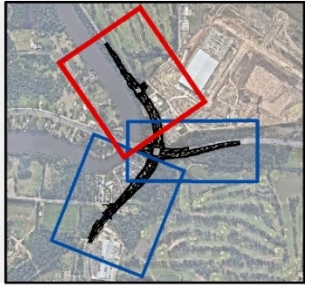
- Intersection works at the Milperra Road/Henry Lawson Drive and Tower Road/Henry Lawson Drive intersections
- Auld Avenue bridge upgrade works

Any out of hours works would be undertaken in accordance with the *Construction Noise and Vibration Guideline* (Roads and Maritime 2016).

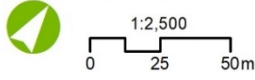


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- | | |
|--------------------------------|---------------------------------|
| Concept design | Cut |
| EIS proposal area | Fill |
| REF proposal area | Coastal Wetlands |
| Overall proposal boundary | Coastal Wetlands Proximity Area |
| Extend major 1.2mx2.4m culvert | |
| Pedestrian path (2m) | |
| Shared path (3m) | |



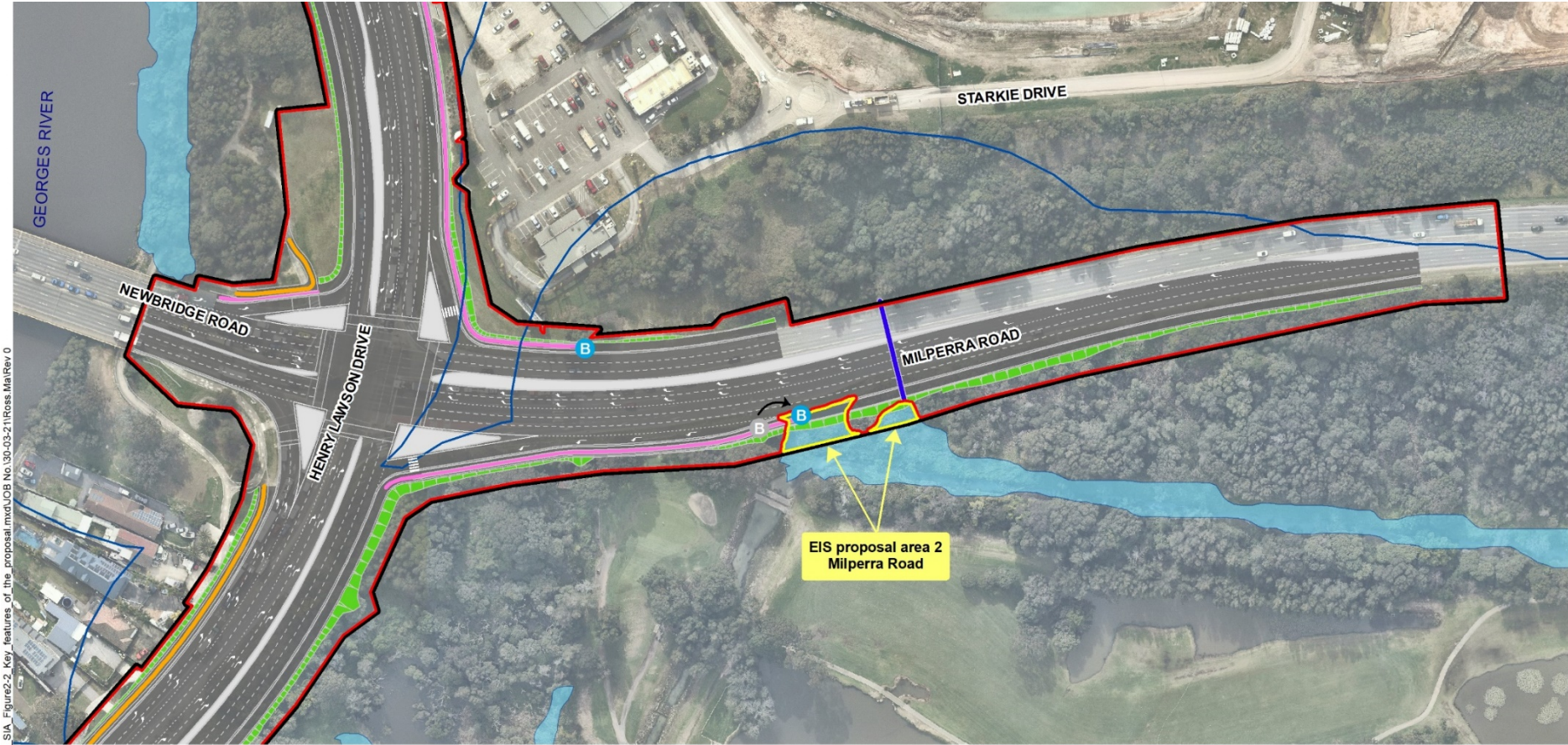
Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A Socio-economic Impact Assessment

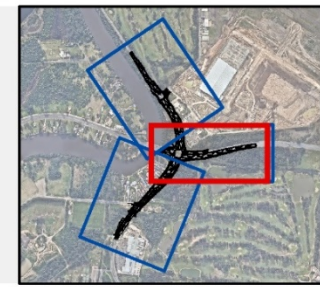
Projection: GDA 1994 MGA Zone 56

FIGURE 2-1: Key features of the proposal



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- | | |
|-----------------------------------|---------------------------------|
| Concept design | Extend major 2x1.2m box culvert |
| EIS proposal area | Pedestrian path (2m) |
| REF proposal area | Shared path (3m) |
| Overall proposal boundary | Cut |
| Proposed bus stop locations | Fill |
| Existing bus stop to be relocated | Coastal Wetlands |
| | Coastal Wetlands Proximity Area |

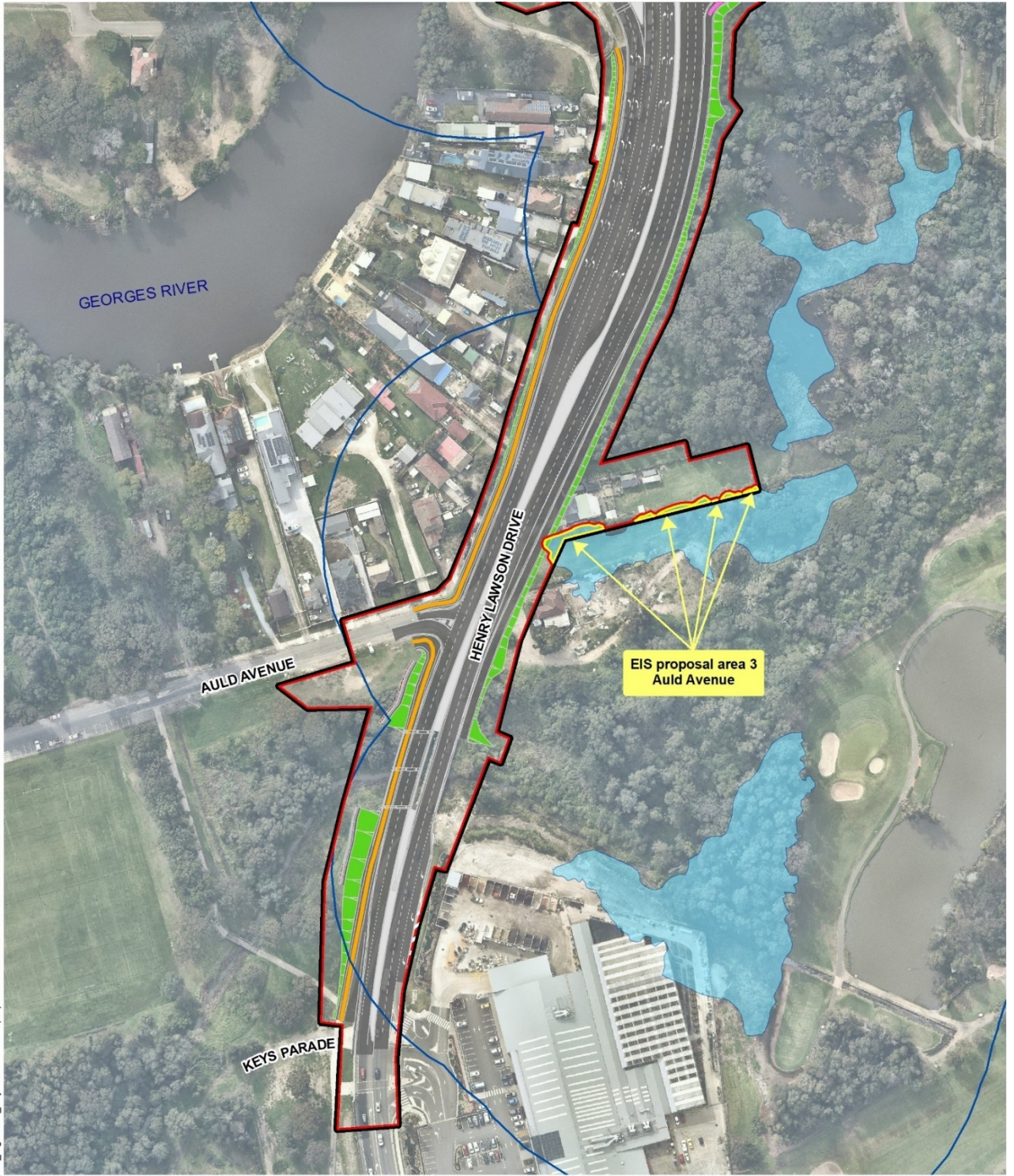


Source: Aurecon, TINSW, Spatial Services, Nearmap
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Projection: GDA 1994 MGA Zone 56

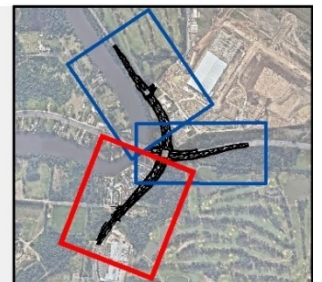
Henry Lawson Drive Stage 1A **Socio-economic Impact Assessment**

FIGURE 2-2: Key features of the proposal

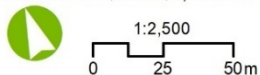


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- | | |
|---------------------------|---------------------------------|
| Concept design | Fill |
| EIS proposal area | Coastal Wetlands |
| REF proposal area | Coastal Wetlands Proximity Area |
| Overall proposal boundary | |
| Pedestrian path (2m) | |
| Shared path (3m) | |
| Cut | |



Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A Socio-economic Impact Assessment

Projection: GDA 1994 MGA Zone 56

FIGURE 2-3: Key features of the proposal

2.4.3 Proposed ancillary facilities

To support construction, a range of ancillary facilities would be required. The facilities would include:

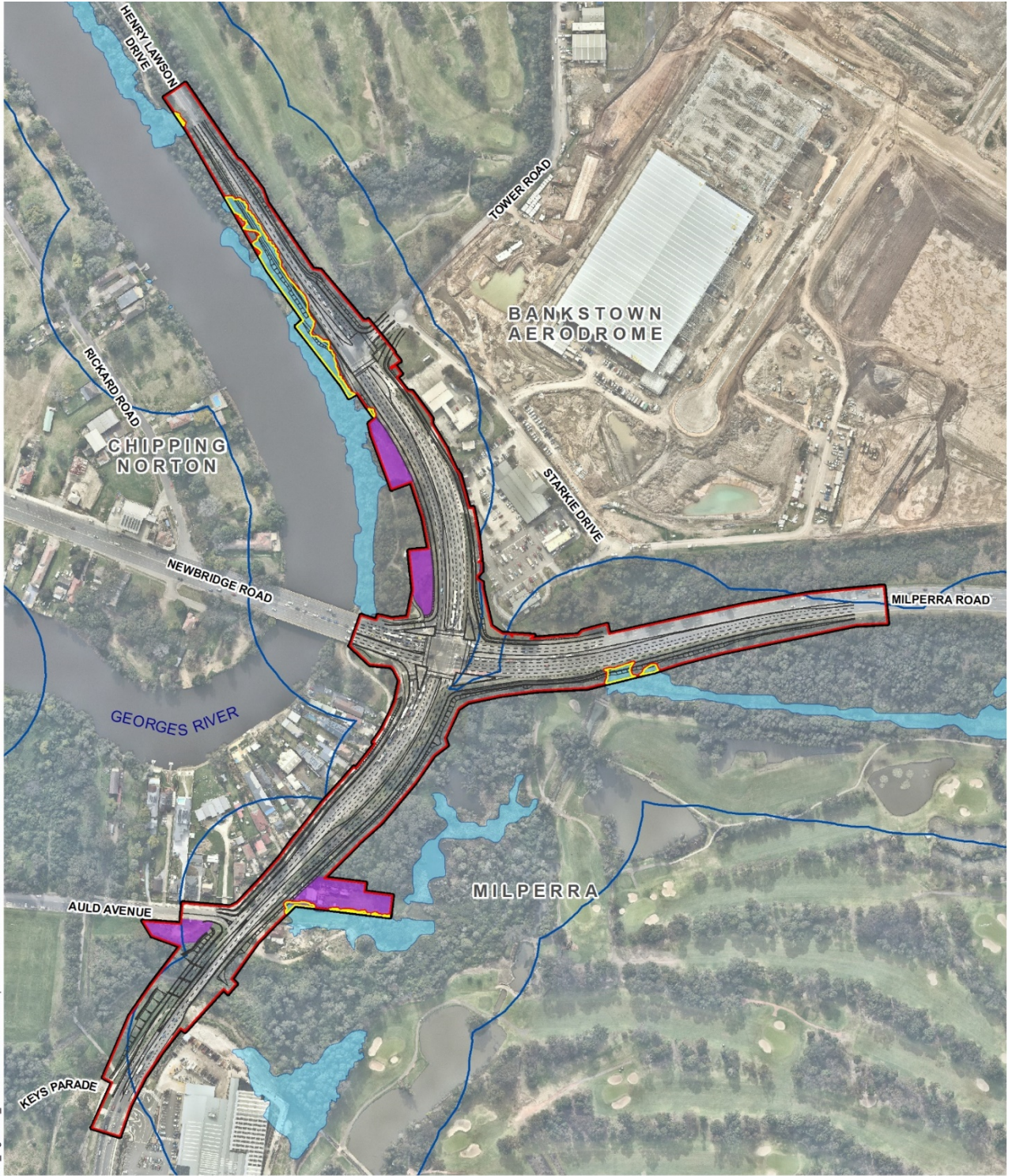
- Site compounds for site offices, car parking, sheds, workshops and storage
- Areas for material delivery and storage, including auld avenue bridge structural elements
- Water capture and treatment locations
- Stockpile locations for materials spoil and mulch

There are four sites identified for ancillary facilities, which are described in Table 2-1 and shown in Figure 2-4:






- Georges River site – on Henry Lawson Drive on a previous car park area
- Newbridge Road site – on the corner of Newbridge Road and Henry Lawson Drive in the road reserve
- Henry Lawson Drive site – on Henry Lawson Drive opposite Auld Avenue (flood prone land)
- Auld Avenue site – on the corner of Auld Avenue and Henry Lawson Drive

Table 2-1 Ancillary facilities sites

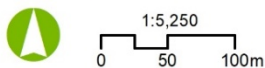
Feature	Site 1 Georges River	Site 2 Newbridge Road	Site 3 Henry Lawson Drive	Site 4 Auld Avenue
Location	Located on Henry Lawson Drive opposite the service station, along the Georges River	Located north west of the Newbridge Road and Henry Lawson Drive intersection	Located south west of the Henry Lawson Drive and Newbridge Road intersection	Located directly north of the proposed Auld Avenue bridge location
Existing site description	The site is a former carpark, cleared of trees with some existing pavement, surrounded by dense vegetation	The site is adjacent to the existing road reserve, mostly cleared with some vegetation along the western and northern borders. It is about 20 m east of the Georges River.	The site is comprised of a vegetated creek line and grassed areas that connect to Bankstown Golf Course, encroaches on land defined as coastal wetlands	The site is currently used as an informal parking area, with dense vegetation bordering the south of the site, surrounding a creekline and residential properties located to the north.
Potential use	General material storage (no fuel or hazmat-based materials), site staff parking, general waste storage (appropriately bunded or secured) and pick up bay	Connection of Henry Lawson Drive, Newbridge Road and Georges River shared use pathways, road corridor, storage of equipment and machinery, materials storage, delivery pick up and drop off, site staff parking	Acquired for road widening, loose material storage, site staff parking, main site offices, materials storage, storage of topsoil, imported material, green waste.	Facilitation site for bridge construction, hardstand and laydown area, fuel storage, crane setup, bridge and underbore material storage, plant and equipment storage, alternative location for site offices
Approximate area	0.13 ha	0.24 ha	0.29 ha	0.14 ha



P:\GIS\Project-4\project510003_HenryLawsonDriveHLD_SIA_Figure2-4_Potential construction compound locations.mxd\JOB No. 025-05-21\Ross.MatRev 0

-  Concept design
-  EIS proposal area
-  REF proposal area
-  Overall proposal boundary
-  Potential compound sites
-  Coastal Wetlands
-  Coastal Wetlands Proximity Area

Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A Socio-economic Impact Assessment

Projection: GDA 1994 MGA Zone 56

FIGURE 2-4: Potential construction compound locations

3 Methodology

3.1 Assessment methodology for the REF

This socio-economic impact assessment has been prepared for a 'moderate' level assessment (as per Transport's *EIA-N05 Environmental Impact Assessment Practice Note – Socio-economic Assessment* (Transport, 2020)). The moderate level of assessment is used as it reflects the scale and magnitude of potential impacts to the socio-economic environment. The assessment includes:

- Review of statutory planning and legislative requirements, including a review of existing State and local government strategies relevant to the social and economic environment of the study areas such as the Local Strategic Planning Statements (LSPS), Community Strategic Plans and Local Environment Plans (LEPs). This includes a review of the NSW South District Plan (Greater Sydney Commission).
- A site visit was undertaken on 15 July 2020 between 10.00 am to 2.00 pm to understand the existing environment. This involved:
 - A walk through of the REF proposal area to understand potential direct impacts of the proposal
 - Driving around the surrounding area (Milperra, Georges Hall and Condell Park) to understand potential indirect impacts was undertaken
- Description of the existing socio-economic environment of the study areas to establish the baseline, including:
 - Analysis of key population and demographic indicators, including data from the *2016 ABS Census of Population and Housing*
 - Analysis of existing data and information on local business and industry, employment and income, and dwelling characteristics
 - Review of existing social infrastructure and community features near to the proposal including recreation uses, educational facilities, places of worship, public transport and walking and cycling facilities
 - Analysis of existing consultation feedback gathered by Transport to date for this proposal (such as the Henry Lawson Drive Early Concept Design Consultation Report, July 2020) and other nearby proposals
- Identification and assessment of the potential socio-economic impacts of the proposal's construction and operation on local amenity and community values, social infrastructure, business, land use and property impacts (such as temporary and permanent property access impacts and perceived economic impacts associated with property acquisition), access and connectivity. Section 3.1.1 provides more detail about the impact assessment methodology used in this assessment.
- Measures to avoid, minimise and manage potential construction and operation impacts on the socio-economic environment and maximise potential benefits of the proposal.

The impact assessment will be prepared in accordance with the methodology of assessing impacts based on sensitivity and magnitude to determine potential significance of impacts prescribed in the Transport *EIA-N05 Environmental Impact Assessment Practice Note – Socio-economic assessment (2020)*.

3.1.1 Impact assessment methodology

The impact assessment implements the following methodology as per the *Environmental Impact Assessment Practice Note – Socio-economic assessment (EIA-N05)* (Transport, 2020). This includes:

- Identification and analysis of likely changes to existing socioeconomic conditions of the direct study area and socio-economic study area during construction and operation.
 - Determination of the significance of likely impacts, based on the sensitivity and magnitude of the impacts

- Sensitivity refers to the qualities of the receptor which influence its vulnerability to change and capacity to adapt
- Magnitude refers to the scale, duration, intensity and scope of the overall proposal including how it will be constructed and operated

This assessment applies the impact grading matrix to assess the level of significance for potential negative impacts only.

Table 3-1 Grading matrix to assess the level of significance

Sensitivity	Magnitude			
	High	Moderate	Low	Negligible
High	High	High-moderate	Moderate	Negligible
Moderate	High-moderate	Moderate	Moderate-low	Negligible
Low	Moderate	Moderate-low	Low	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

Sensitivity ranges from negligible to high. If impacts to sensitivity are considered negligible, this means that no vulnerability is expected and/or receptors are likely to be able to absorb or adapt to change. High sensitivity is when there is the potential for multiple vulnerabilities to occur and/or receptors would have very little capacity to absorb or adapt to change.

The levels of magnitude also range from negligible to high. Negligible can be classified as having no distinct change caused by the impact (i.e. is like what is currently experienced at the baseline). High magnitude is considered a change that dominates over existing baseline conditions. The change is widespread or persists over many years or is effectively permanent.

3.2 Assessment methodology for the EIS

The assessment of impacts for the EIS follows a similar approach to the REF impact assessment. As the EIS proposal areas are a small part of the overall proposal area, the same study areas (refer Section 3.3) have been considered for both the REF proposal and EIS proposal areas.

Impacts are discussed separately in Chapter 8. The EIS impact assessment section of this report focuses on the socio-economic impacts of the activities and features on the EIS proposal areas. This includes the consideration of land use and development and visual impacts as specified in the SEARs. Impacts specific to the EIS proposal have been evaluated based on sensitivity and magnitude to determine potential significance of impacts prescribed in the Transport’s *EIA-N05 Environmental Impact Assessment Practice Note – Socio-economic Assessment* (Transport, 2020).

3.3 Study areas

For the purpose of this socio-economic assessment, the following areas have been selected. Each area described in Table 3-2 has been developed to assess the direct and indirect impacts of the overall proposal as well as provide context about the existing environment. These areas are shown in Figure 3-1 and is discussed in more detail in Chapter 6.

Table 3-2 Areas used in the assessment

Area	Definition
Direct study area	Direct impacts would be assessed based on a 200-meter buffer around the design. This buffer includes receivers on the other side of the Georges River and facilities and businesses set back from Henry Lawson Drive. Receivers within and immediately surrounding the overall proposal area would be assessed to determine direct impacts. Direct impacts are most likely to include potential amenity impacts in the form of noise and vibration and visual impacts, property and access impacts. EIS proposal areas 1, 2 and 3 are in the direct study area.

Area	Definition
Socio-economic study area	The socio-economic study area covers indirect impacts which would be based on a 400 metre buffer from the overall design. People who are not within the direct impact area but who would interact with the overall proposal area, either by driving, using the bus stops or the shared use paths are considered to be subject to indirect impacts. Indirect impacts are likely to include amenity impacts and access and connectivity impacts. This area has been selected as a representation of the area surrounding the overall proposal and it is acknowledged that some indirect impacts may not extend that far, while others may extend further afield.
Broader study area ¹	<p>To provide context on the liveability of the area surrounding the overall proposal, the socio-economic database coverage area is based on the following ABS 2016 areas:</p> <ul style="list-style-type: none"> ■ Statistical Area – 2 <ul style="list-style-type: none"> – Panania - Milperra - Picnic Point – Condell Park – Bass Hill - Georges Hall – Chipping Norton – Moorebank ■ In comparison with <ul style="list-style-type: none"> – City of Canterbury Bankstown LGA – Liverpool City LGA – Greater Sydney <p>Information from these areas would be compared with the two local government areas (LGA) that the overall proposal is in, including Liverpool City and City of Canterbury Bankstown as well as Greater Sydney.</p> <p>The investigation of these areas outside of the direct and indirect impact areas is important to understand the range of services, facilities and lifestyle of the community. Key features of the surrounding area such as train stations, shopping/town centres and places of special interest contribute to developing the context of the existing environment. This includes surrounding projects and development such as other Transport road upgrades in the surrounding area, large scale residential development and significant infrastructure/developments. By understanding the broader study area, movements through and around Henry Lawson Drive can be assessed to determine the potential impacts of the overall proposal.</p>

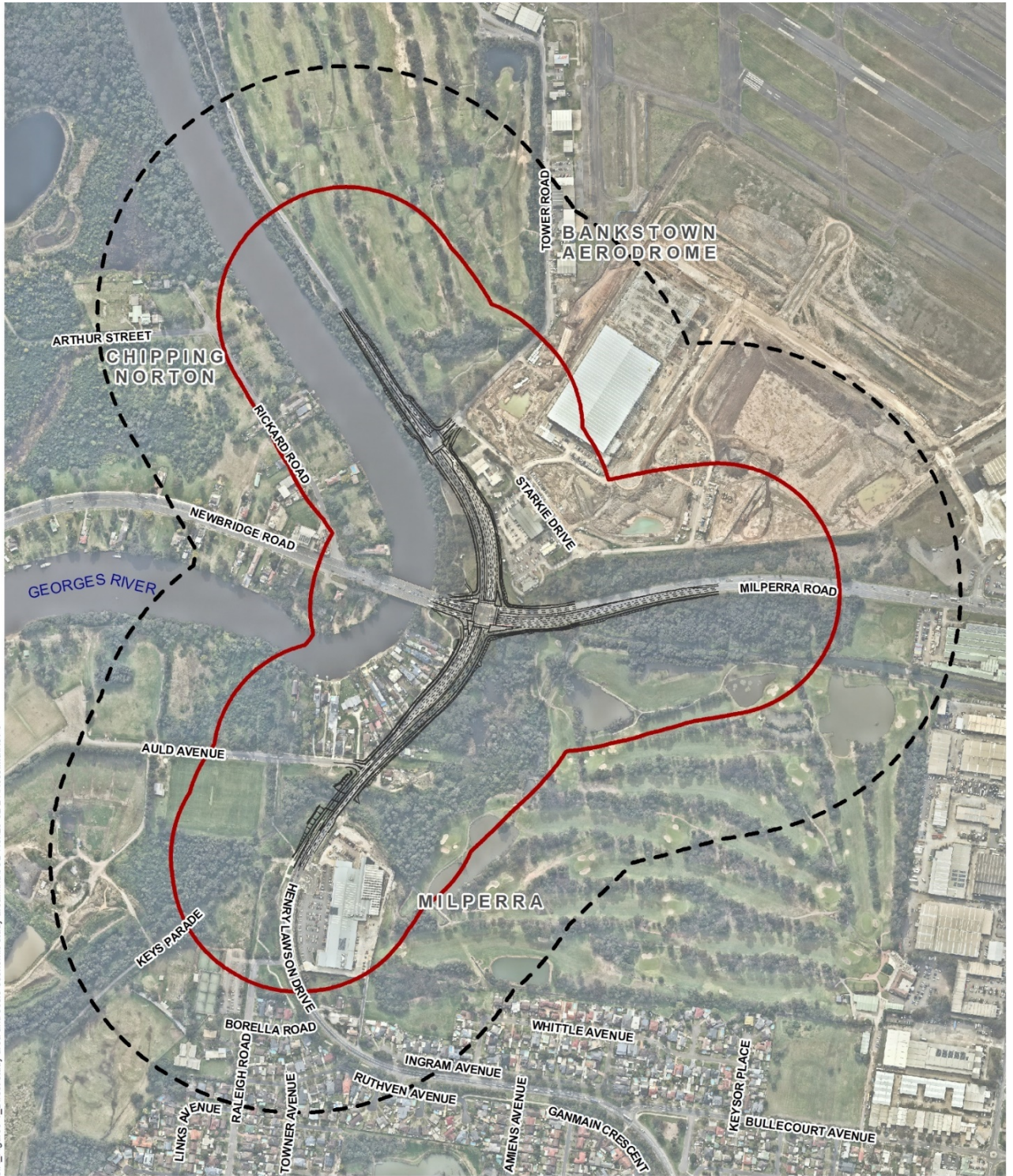
Table note:

1 At the 2016 Census, there were no people living in the Bankstown Aerodrome (State Suburb classification).

3.4 Data sources

Information used to inform the socio-economic assessment is from the following sources:

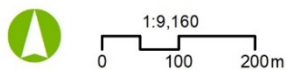
- Census of Population and Housing (ABS, 2016)
- City of Canterbury Bankstown and Liverpool City LGA reports and strategies (listed in Section 5.2)
- NSW Government strategic planning reports and plans
- Consultation feedback and responses from residences
- NSW Department of Planning and Environment population and dwelling projections (Department of Planning and Environment, 2016)
- Specialist reports prepared to support the REF, including:
 - Landscape and Visual Impact Assessment Report (TRACT, 2021)
 - Noise and Vibration Assessment (Aurecon, 2021)
 - Statement of Heritage Impact Assessment (Aurecon, 2021)
 - Traffic and Transport Assessment Report (Transport, 2021)
 - Biodiversity Assessment Report (WSP, 2021a) and Biodiversity Development Assessment Report (WSP, 2021b)
 - Flooding Assessment Report (Lyall and Associates, 2021)



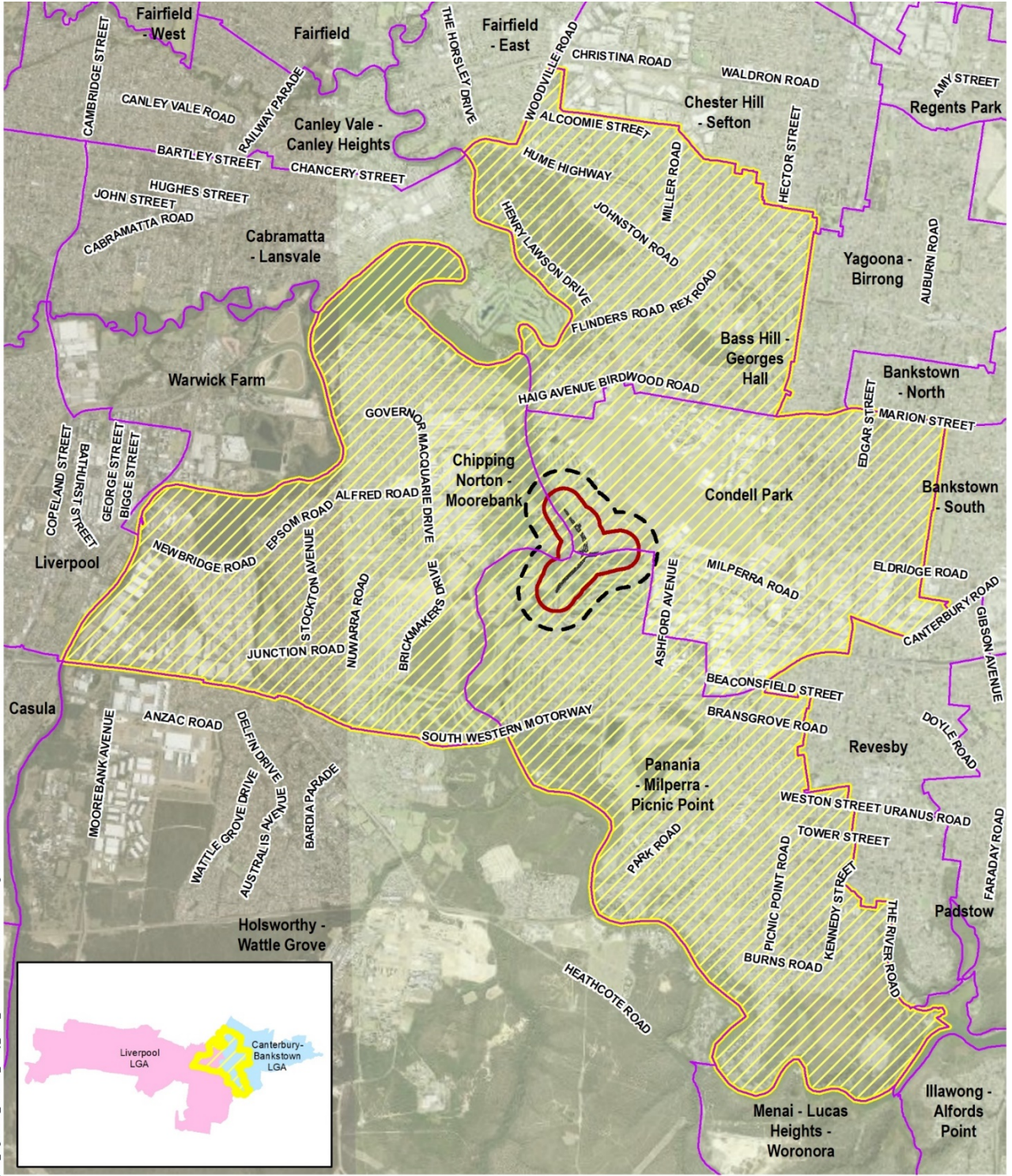
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- Concept design
- Direct study area
- Socio-economic study area

Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A **Socio-economic Impact Assessment**
 Projection: GDA 1994 MGA Zone 56 **FIGURE 3-1: Direct study area and socio-economic study area**

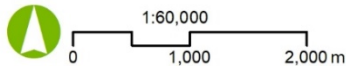


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- Concept design
- Direct study area
- Socio-economic study area
- Broader study area
- ABS statistical area level 2 (SA2)

Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A **Socio-economic Impact Assessment**

Projection: GDA 1994 MGA Zone 56

FIGURE 3-2: Broader study area

4 Policy context

4.1 Summary of strategic planning

The overall proposal is consistent with strategic socio-economic, land use and transport considerations in City of Canterbury Bankstown LGA, Liverpool City LGA and NSW.

Road safety and planning for growth are key themes within the strategies reviewed in this section. The overall proposal would aim to contribute to the safety and efficiency of the road network of the direct study area through the upgrade of Henry Lawson Drive and associated features including active and public transport provisions. The overall proposal would align with the themes and direction explored in NSW and local strategic planning documents with a focus on safety, efficiency and meeting the future needs of local and regional motorists.

The following section provides an overview of each plan and its relevance to this socio-economic assessment.

4.2 National and State (NSW) strategic planning

4.2.1 NSW Premier's Priorities

The NSW Premier's Priorities were developed with the goal to enhance the quality of life of the people in NSW. The priorities are:

- A strong economy
- Highest quality education
- Well-connected communities with quality local environments
- Putting customer at the centre of everything we do
- Breaking the cycle of disadvantage

Through the establishment of these priorities the NSW Government strives to improve quality of life for citizens throughout New South Wales. The priority to have “well connected community with quality local environments” aligns closely with the overall proposal objectives to improve travel times, network efficiency and road safety outcomes for all road users, while improving connectivity and safety for active transport users on Henry Lawson Drive. As a result, the overall proposal could enhance the quality of life for the surrounding community and road network users. This may encourage people to use a greater range of transport options, including active and public transport.

As a key piece of road infrastructure, the upgrade of Henry Lawson Drive would support a range of future developments, improving the efficiency and connectivity within south-western Sydney and along the main roads of Henry Lawson Drive and Newbridge Road/Milperra Road. With the other stages of the Henry Lawson Drive upgrade, access to Hume Highway and M5 Motorway would also be improved.

4.2.2 NSW Road Safety Strategy 2012-2021

The NSW Road Safety Strategy 2012-2021 (RSS) was published in December 2012 by Transport. The strategy provides a framework for the direction of road safety in NSW with the primary objective to reduce road trauma. Context associated with road crashes across NSW are highlighted in the strategy to identify areas of opportunity for improvement. The data in the strategy indicates that major cities in NSW had the highest young driver serious casualties and pedestrian serious casualties between 2008 and 2010. Major cities also had a highest incidence of serious casualties across NSW between 2008 and 2010. Risk-taking behaviour, age and gender also contribute to understanding the context of crashes.

The RSS focuses on a 'safe system approach' which has an end goal of no death or serious injury occurring on the road transport network, known as 'working towards vision zero'. Challenges and initiatives are explored in the RSS, with the key initiatives being:

- Safer roads
- Safer vehicles
- Safer road users, including children and young people, pedestrians, bicycle riders, motorcyclists,
- Impaired road users, which refers to people affected by alcohol, drugs, fatigue or distraction
- Safer speeds
- Safer heavy vehicle operation
- Road safety for Aboriginal communities
- Post-crash response and trauma treatment

The overall proposal aligns with the road safety initiative identified in the RSS. The strategy states that the ongoing development and upgrade of the NSW road network is essential to improving road safety and reaching safety targets. The overall proposal would include the upgrade of Henry Lawson Drive and connecting infrastructure, to enhance road safety in the area.

The overall proposal would also aim to provide efficient connections to public transport and improved pedestrian infrastructure through the provision of new pathways and the relocation of bus stops. In addition, the increased capacity at intersections would improve efficiency and safety as traffic would be able to use dedicated turning lanes, be separated to a median and have additional through lanes. This is discussed further in Chapter 6.

4.2.3 Greater Sydney Region Plan: A Metropolis of three cities – connecting people

The Greater Sydney Commission released the updated Greater Sydney Region Plan (GSRP): A Metropolis of three cities – connecting people in June 2018. The GSRP highlights the opportunities, challenges and vision for each of the three cities discussed in the plan. The three cities that make up the Greater Sydney Region are defined in the plan as:

- The established Eastern Harbour City – building on its recognised economic strength and addressing liveability and sustainability
- The developing Central River City – investing in a wide variety of infrastructure and services and improving amenity
- The emerging Western Parkland City – establishing the framework for the development and success of an emerging new city

The GSRP highlights the importance of providing infrastructure to support cities, while also having the ability to adapt to meet the needs of future growth. The overall proposal would contribute to meeting these objectives through the upgrading of infrastructure on Henry Lawson Drive. This would increase traffic efficiency for local road users and provide for future growth by allowing greater traffic capacity at key intersections and allow for better connectivity within Western Sydney.

One of the GSRP objectives focuses on ensuring the freight and logistics network is competitive and efficient. It highlights the importance of locations surrounding key freight networks and ensuring they are not adversely impacted by traffic patterns and congestion. As a B-double route the upgrade of Henry Lawson Drive would contribute to achieving this GSRP objective through additional capacity along Henry Lawson Drive in the direct study area.

The plan also details the importance of liveability through creating communities that are healthy, resilient and socially connected. It also highlights the importance of ensuring services and infrastructure can meet the changing needs of communities. Although the overall proposal objectives do not specifically relate to liveability, the upgrade and enhancement of cycling and pedestrian infrastructure would provide greater active transport opportunities that could improve the liveability of surrounding residents. The objectives of the overall proposal also identify the requirement to support of new development. The upgrade of Henry Lawson Drive responds to the future demand of the surrounding area including large developments such as the redevelopment of the Bankstown Airport and the proposed Riverlands residential development (discussed further in Chapter 6).

4.2.4 Future Transport Strategy 2056

In March 2018, the NSW Government released the Future Transport Strategy 2056. The Future Transport Strategy 2056 was developed in preparation of changes to the transport system in NSW over the next 40 years. The strategy recognises transport as an enabler of economic and social activity, contributing to long term economic, social and environmental outcomes. There are six outcomes included in the strategy, which are shown in Figure 4-1.

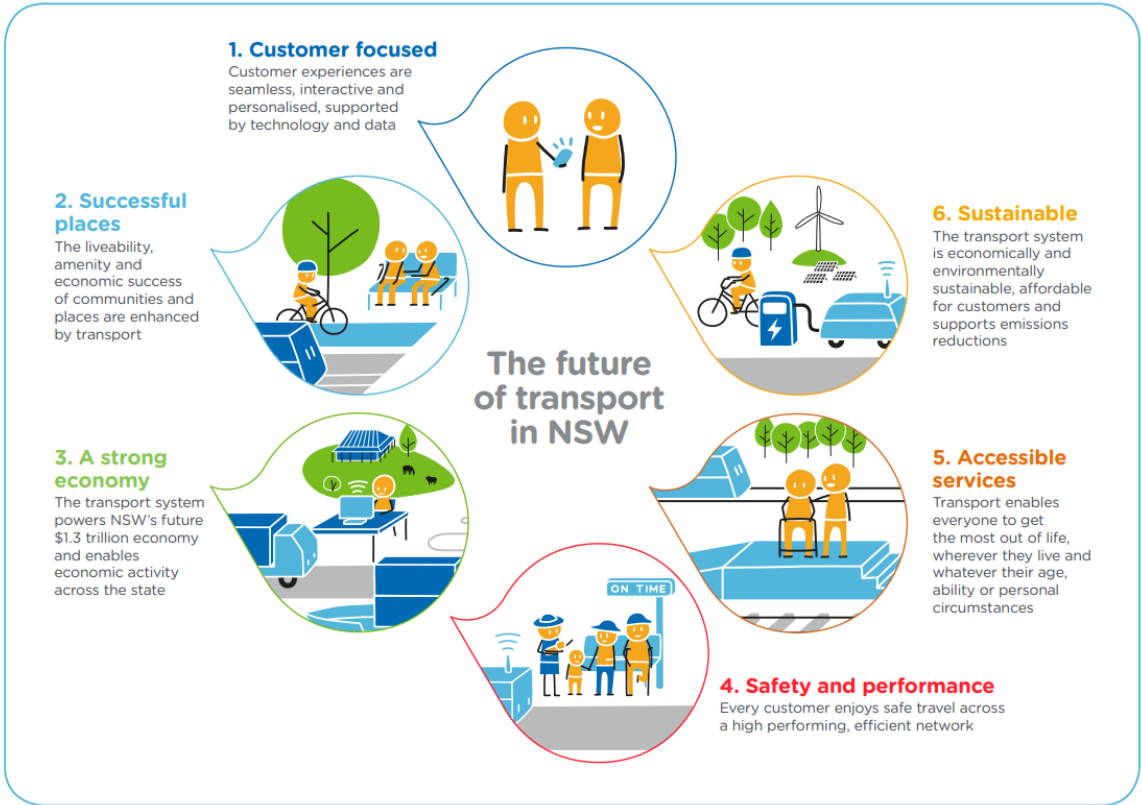


Figure 4-1 Future Transport’s six state-wide outcomes

Source: Future Transport Strategy (Transport, 2018a)

The strategy promotes the role that an efficient transport network plays in land use, and a greater economic performance. The strategy also explores the importance of transport choice and the planning and investment in future travel behaviours. In order to manage the road network in a safe, efficient and reliable manner, while also enhancing the liveability and amenity of places, the Movement and Place framework is introduced within the strategy as a tool to promote these outcomes (Transport, 2018a). The need to encourage active transport is also explored within the strategy. The overall proposal aligns with the Movement and Place framework and its associated themes relating to community as the upgrades to Henry Lawson Drive would enhance the efficiency of the road network, while also providing safer journeys for all road users, including pedestrians and cyclists.

The Future Transport Strategy 2056 states that the progressive review of roads and road space can achieve better outcomes for the existing road network. In particular, the plan identifies a Safe System Approach. The Safe System Approach involves designing a transport system integrated with human behaviour to ensure safety risks are avoided. It involves all elements of the system (including infrastructure, vehicles, speeds and users behaviour) working together and interacting with the system itself to ensure safety (Transport, 2018a). The overall proposal promotes the objective of the Safe System Approach as the upgrades to Henry Lawson Drive would improve the efficiency and ease congestion, while increasing road safety and cycling options through the area. Specific features of the overall proposal that would contribute to achieving the objectives of the strategy include more efficient connections to public transport and improving and installing pedestrian infrastructure.

The following sections summarises the sub-plans that support the *Future Transport Strategy 2056*.

Freight and Ports Plan

The NSW Freight and Ports Plan 2018-2023 (2018) is a supporting plan for the Future Transport Strategy 2056. It sets the State government's objectives on the long-term investment in the freight and logistics network, with the aim to provide assurance to the industry that these investments would not only benefit the industry but support the state economy.

The FPP explores the need to accommodate population growth and increases in capacity. It identifies the need to improve the road network to achieve safety and efficiency as NSW continues to grow. Safety and efficiency of the road network surrounding Henry Lawson Drive is a key focus of the overall proposal.

Around 80 per cent of the Greater Sydney freight task is undertaken by road. The overall proposal would aim to address three of the primary goals in the FPP: 'improve safety and efficiency' 'improve the road network' and 'improve travel times and reliability'. This overall proposal, as part of the broader Henry Lawson Drive upgrade program, would seek to facilitate connections from the M5 Motorway and Hume Highway to large industrial/manufacturing areas such as the Milperra and Moorebank Industrial Estates, in addition to improving safety and efficiency within the surrounding road network and easing congestion within the area.

Tourism and Transport Plan

As part of the *Future Transport Strategy 2056*, the *Tourism and Transport Plan* provides a framework for customer outcomes for visitors and initiatives over ten years (Transport, 2018d). Customer outcomes listed in the plan are as follows:

- Enhancing the visitor experience
- Greater access to more of NSW
- Making transport the attraction
- A seamless experience

The overall proposal would aim to enable 'greater access to more of NSW'. Under this customer outcome, the Tourism and Transport Plan states that new corridor strategies, regional road upgrades and improved signage can enhance the visitor experience. The overall proposal would seek to improve journey time reliability and road safety outcomes for all road users, while also providing greater access to the overall proposal area and recreational areas surrounding the Georges River. Increased accessibility within the direct study area could benefit businesses, social infrastructure and community facilities within south western Sydney.

4.2.5 Building Momentum - State Infrastructure Strategy 2018 – 2038

The State Infrastructure Strategy 2018 – 2038 – Building Momentum (2018) (SIS) is a 20-year strategy that makes recommendations on policies and projects for NSW's key infrastructure sectors to provide a positive impact on the future of the State. The SIS discusses predictions for rising congestion on parts of the road network, which would increase travel times and affect the reliability of the system (Infrastructure NSW, 2018).

The SIS recognises the importance of unlocking the capacity of current assets and ensuring the appropriate maintenance, repurposing and upgrading of this infrastructure. This involves continuously improving infrastructure and addressing existing inefficiencies, as well as 'pinch-points'. The proposed upgrades to Henry Lawson Drive, aim to make structural improvements to an established and pre-existing road network. The overall proposal would address congestion, inefficiencies and improve safety for all users, which would contribute to addressing the SIS's strategic directions.

A strategic objective of the SIS is to 'continuously improve the integration of land use and infrastructure planning'. This strategic objective aligns with the overall proposal as it would integrate with the Bankstown Airport Masterplan and other developments within the surrounding area as discussed within Section 6.3.3.

4.2.6 Road Safety Plan – Towards Zero

Transport released the final *Road Safety Plan - Towards Zero* in February 2018. The Plan was released by the NSW Government to improve road safety, with a state priority of reducing road fatalities by 30 per cent by 2021. It also seeks to achieve zero harm by 2056 (Transport, 2018e). The plan sets out a framework with six priority areas for actions:

- Saving lives on country roads
- Liveable and safe urban communities
- Using the roads safely
- Building a safer community culture
- New and proven vehicle technology
- Building a safe future

The Plan has identified the need to keep NSW urban areas equally liveable and safe, taking into consideration that most pedestrian and cyclist incidents occur on NSW urban streets. To combat this, the Plan recommends smarter road and intersection design in areas with higher pedestrian/cyclist activity. The Plan also identifies the importance of providing pedestrian and cyclist separation within infrastructure treatments. The overall proposal would contribute to ensuring pedestrian and cyclist safety through the reinstatement of the shared user pathway and provision of new pathways and connections, improving upon existing pedestrian infrastructure.

The overall proposal would undertake structural changes (i.e. intersection upgrades) to existing roads, to address the key objectives of the overall proposal including easing traffic congestion and increasing traffic efficiency for local road users. The outcomes of the overall proposal would assist in achieving the priority areas of the Plan, specifically through enhancing road safety of urban communities.

The overall proposal would also align with the priority action area in the plan to 'build a safe future' through the provision of upgraded infrastructure that can cater for surrounding future growth and development. Having a reliable local road network for all road users would be valuable to community, particularly in areas where there is change and development. The upgrade of Henry Lawson Drive would benefit the current and future community by increasing capacity and connectivity.

4.3 Local strategic planning

The local strategic planning documents summarised in the following section provide insight into the City of Canterbury Bankstown City Council and Liverpool City Council's strategies and objectives for the future of the LGA. From these strategic planning documents, it is evident that investment in infrastructure is important in order to reduce traffic congestion and provide an efficient and reliable road network. There are consistent themes across these documents that include:

- The importance of community cohesion and character, with safe and liveable environments
- The ongoing emphasis on supporting the growth of local economies
- Accessibility, safe and efficient transport networks

4.3.1 Community Strategic Plans

City of Canterbury Bankstown

The City of Canterbury Bankstown Council's *Community Strategic Plan (CSP) – CBCITY 2028* is a ten-year plan that provides council, community and stakeholders with the direction, vision and priorities of the LGA community. There are seven 'destinations' identified through consultation that would lead to achieving the vision of the CSP, including:

- Safe and Strong
- Clean and Green
- Prosperous and Innovative
- Moving and Integrated
- Healthy and Active
- Liveable and Distinctive
- Leading and Engaged

One aspect of Destination Four "Moving and Integrated" is to "create transport corridors that improve travel times and encourage public transport use". The overall proposal aligns with this CSP direction, as widening of Henry Lawson Drive, along with the associated infrastructure upgrades would ease existing traffic issues between the M5 motorway and the Hume Highway. It would also increase travel efficiency for local road users, enhance road safety within the transport network and provide additional appropriate pedestrian facilities to the bus stops within the direct study area.

In addition, Direction One "Clean and Green" aims to encourage walking, cycling and the use of public transport. The overall proposal would align with this CPS direction as it aims to provide greater cycling options and improve the existing pedestrian infrastructure.

Liverpool City

The Liverpool City Council's *Community Strategic Plan (CSP) Our Home Liverpool 2027* is a 10-year plan that defines the vision and priorities of the Council, community and stakeholders. The CSP is the overarching plan and is designed to improve life in Liverpool and the wellbeing of its residents. There are four 'directions' outlined within the CSP, which have been identified through community consultation, including:

- Creating connection
- Strengthening and protecting our environment
- Generating opportunity
- Leading through collaboration

The CSP acknowledges transport accessibility as one of the challenges facing the Liverpool City LGA due to its growing population. The CSP describes commitments from the Liverpool City Council, which relate to the overall proposal including meeting the challenges associated with the growing population and being an advocate for transport networks to create an accessible city.

Specifically, the third direction of the CSP relates to generating opportunities, which include Liverpool City Council developing transport networks to create an accessible city. The overall proposal aligns with Direction Three of the CSP as the upgrades to Henry Lawson Drive seek to improve safety and access through the direct study area while providing greater choice for active transport modes. Through improved safety and providing greater choice of active transport modes, this could improve the wellbeing of the local community.

4.3.2 Local Strategic Planning Statements

Connective City 2036 – Canterbury Bankstown City Council

Connective City 2036 is the City of Canterbury Bankstown Council's Local Strategic Planning Statement (LSPS). The LSPS was developed as the 20 year guide to Canterbury Bankstown's renewal and growth to accommodate a population of 500,000 residents and 165,000 workers and visitors by 2036. As a 20-year framework for planning priority needs, the LSPS establishes objectives and strategies to address social, environmental, economic and civic leadership issues as identified in the Community Strategic Plan (CSP) (City of Canterbury Bankstown, 2018).

A key theme explored in the LSPS is the 'evolution' towards 'movement for commerce and place'. In particular, the LSPS acknowledges that connectivity is critical, and a safe and efficient transport network fosters better connections for people. The overall proposal aims to make infrastructure improvements to enhance the transport network connections and improve safety through the area. The overall proposal also seeks to enhance connections to the surrounding development and future planning activities through the integration with the Bankstown Airport Masterplan.

Connected Liverpool 2040 - Liverpool City Council

The Liverpool City LGA forms part of the socio-economic study area and broader study area to the east of the overall proposal. Liverpool City Council's LSPS '*Connected Liverpool 2040*' was released in 2019. The statement represents the shared vision of Council and the community and informs future land use planning for Liverpool. As a 20-year framework for Liverpool's expected future growth (with the population expected to increase by 60% between 2019 and 2036), the LSPS establishes actions to deliver on the planning priorities, in accordance with the directions developed by the CPS (Liverpool City Council, 2017).

There are four planning priorities within the LSPS:

- Connectivity
- Productivity
- Liveability
- Sustainability

The LSPS states a number of key challenges and opportunities for the LGA, including 'transport accessibility', the 'city economy' and 'local character'. The overall proposal would seek to address these issues, by easing congestion and increasing efficiency, while supporting connections to ongoing development and growth through Liverpool.

The LSPS also discusses the growing population and demand on existing infrastructure, with Liverpool City Council promoting mode shift and improved active transport opportunities. The overall proposal closely aligns with the LSPS as it aims to improve pedestrian and cycling facilities. This would increase accessibility for the Liverpool community and provide increased connectivity to social infrastructure and open space areas adjacent to the Georges River.

4.3.3 Other City of Canterbury Bankstown Plans

City of Canterbury Bankstown Community Participation Plan

The City of Canterbury Bankstown Community Participation Plan (CPP) sets out when and how Council will engage with the community as part of the planning functions it performs. It states that when exercising their planning functions, the City of Canterbury Bankstown Council would provide transparency and clarity for the community to clearly understand its role in the development assessment and plan making process.

The CPP provides guidance on how the community can have a say on different types of planning documents, so better economic, social and environmental outcomes can be achieved for today's community and future generations.

The overall proposal meets the requirements under the CPP, as it has undertaken a range of community consultation activities, including engagement with key stakeholders and the general community on the preferred design and seeking feedback. Community consultation would continue to occur through future stages of the overall proposal.

5 Community engagement

The Community Engagement Strategy for the overall proposal has included community consultation of the early concept design, community consultation seeking input for the preparation of impact assessment studies and the REF and EIS and future planned consultation including public display of the REF and EIS for comment and targeted engagement with identified key stakeholders.

Community consultation undertaken to date for the proposal has informed the development of this socio-economic impact assessment.

5.1 Key stakeholders

Key stakeholders that have been consulted throughout the development of the overall proposal include:

- Environment, Energy and Science Group (Biodiversity and Conservation, and Environment Protection Authority)
- Regions, Industry, Agriculture and Resources Group (former Department of Industry) of the Department Planning, Industry and Environment
- Department of Premier and Cabinet (Heritage)
- Rural Fire Service
- Fire & Rescue NSW
- Canterbury Bankstown City Council
- Bankstown Airport
- NSW SES
- Sydney Water
- Special interest groups, including the Gandangara Local Aboriginal Land Council and Registered Aboriginal Parties
- The surrounding landowners and occupiers that are likely to be impacted by the overall proposal

5.2 Communication and Consultation Strategy

In 2021, Transport prepared the Henry Lawson Drive Upgrade Stage 1A Communication and Consultation Strategy. The strategy was developed to inform residents, businesses and stakeholders of the overall proposal and ensure that they are consulted during the development and delivery of the upgrade. This includes during the concept design, environmental assessment, detailed design and construction phases.

The communication and consultation strategy outlines Transport milestones, methods and reporting. The strategy helps provide channels of engagement to include the community and stakeholders that would be potentially impacted by the overall proposal. By including multiple activities and techniques across the project life, a broader range of people can be reached to provide feedback and continue to be informed.

Communication and consultation milestones include:

- Consultation and reporting on the early concept design (completed 2020)
- Consultation with affected residents, businesses and stakeholders for the preparation of the SEARS report (completed 2020)
- Public display of the project's REF and EIS (by mid-2021) including:
 - Notifications
 - Engagement with local council
 - Project web portal

- Public meetings and/or community information events (virtual or otherwise)
- Publication of FAQ documents
- Briefing notes
- Media engagement (coordinated with Transport media)
- Publication of outcomes
- Public consultation during the detailed design phase
- Public engagement during construction to notify the community of:
 - Advanced/start of work notifications
 - Traffic management notifications, including any lane closures
 - Night-time work notifications and consultation
 - Quarterly project updates
 - Responding to enquiries and complaints
 - End of construction
- Ongoing construction communications (jointly provided by Transport and construction contractor)

Other activities include separate engagement with local residents, businesses and stakeholders on specific or sensitive aspects of the project.

5.3 Summary of community consultation to date

Table 5-1 summarises consultation carried out on the Henry Lawson Drive upgrades and the relevance to the socio-economic assessment.

Table 5-1 Summary of community consultation to date

Activity	Summary	Comments relevant to socio-economic assessment
Henry Lawson Drive Upgrade – Have your say – early concept design features February 2020	The 'have your say' consultation activity was undertaken to inform community members and stakeholders about the early concept design features. Community members and stakeholders were invited to provide feedback until Friday 6 March 2020.	Updating the community and requesting feedback.
Henry Lawson Drive Upgrade – Early concept design community consultation July 2020	A community consultation report was developed in July 2020 to present the feedback from the community. A community update was distributed to around 5500 properties in the surrounding area. During the consultation period 78 comments were received.	<ul style="list-style-type: none"> ■ Design queries, including: <ul style="list-style-type: none"> – Where widening should start and finish – Cycling infrastructure should be retained – Active transport connectivity requirements – Visual amenity including the removal of trees and replanting around Georges River Parklands ■ Noise: <ul style="list-style-type: none"> – Construction and operational noise ■ Traffic <ul style="list-style-type: none"> – Construction traffic impacts associated with the proposal – Concerns regarding how residents will access their properties after widening – Concerns about the safety of Auld Avenue turning options ■ Potential impacts on adjacent streets and retaining property driveway access

Activity	Summary	Comments relevant to socio-economic assessment
		<ul style="list-style-type: none"> ■ Timing and staging of the project ■ Property acquisition concerns ■ The development at Bankstown Airport and its integration with the project ■ Safety concerns <ul style="list-style-type: none"> – Safety of residents accessing properties on Henry Lawson Drive – Unsafe driver behaviour and overtaking on Henry Lawson Drive <p>The community responses reflect a substantial degree of community interest in the proposal. Undertaking and reviewing the consultation from 2020 has assisted in the consideration of key issues of concern to the community and values of the community. This includes traffic, safety and amenity impacts in particular.</p>
Aboriginal Focus Group (AFG) Meeting September 2020	The purpose of the AFG meeting was to inform the Aboriginal heritage assessment prepared for the proposal. The meeting provided an opportunity for the representatives to provide feedback and ask questions about the project in regard to Aboriginal heritage and areas of cultural significance.	<p>Feedback received during the meeting that demonstrate this were in relation to:</p> <ul style="list-style-type: none"> ■ Vegetation and the age of trees within the direct study area that have the potential to be impacted ■ Mitigation proposed during construction including identifying unexpected finds and training of construction staff in cultural awareness.
Henry Lawson Drive Community Feedback October 2020	A range of community feedback was received from telephone discussions in response to Transport letters.	Based on the consultation in October 2020, context about the use and movement of people throughout the direct study area provided insight into the needs and values of the community. This included safety concerns at Auld Avenue including required U-turns and accessibility at Auld Avenue including school bus accessibility.
Henry Lawson Drive Community Feedback November 2020	A range of community feedback was received on November 2020 regarding the upgrades to Henry Lawson Drive.	<p>The main responses relating to the socio-economic environment are listed as follows:</p> <ul style="list-style-type: none"> ■ Environmental Protection Authority <ul style="list-style-type: none"> – Noise and vibration concerns for out of hours works on sensitive receivers ■ Sydney Water <ul style="list-style-type: none"> – Early consideration for staging, timing and consultation with Sydney Water. ■ Heritage NSW <ul style="list-style-type: none"> – Heritage awareness training would be appropriate for contractors. ■ Local residents <ul style="list-style-type: none"> – Design concerns regarding the 'left in/left out' of Auld Avenue and the impact to residential access – Design concerns regarding the central median on Henry Lawson Drive – Design concerns regarding the widening of Henry Lawson Drive – Concerns regarding access to property on Henry Lawson Drive ■ Safety concerns for residents accessing properties on Henry Lawson Drive
Henry Lawson Drive consultation with Sydney Metro Airports (Bankstown Airport) February 2021	A range of consultation was undertaken with Sydney Metro Airports (Bankstown Airport) in order to discuss their concerns or comments on the proposal.	<p>The main concern for Bankstown Airport related to:</p> <ul style="list-style-type: none"> ■ Lighting impacts to the airport ■ Impacts to the Bankstown Airport Masterplan 2019 <p>Design requirements relating to airspace protection</p>

Activity	Summary	Comments relevant to socio-economic assessment
<p>Henry Lawson Drive, Georges Hall – Community Consultation Report February 2021</p>	<p>The Intersection upgrades on Henry Lawson Drive, Georges Hall – Community Consultation Report (Transport, February 2021) summarises the consultation in 2021. The campaign reached 31,500 people surrounding the proposal. Feedback was received from 92 people.</p>	<p>The consultation largely related to the Georges Hall stage of the project; however, there were a series of responses relevant to the proposal.</p> <p>Seven submissions expressed a strong desire to see the duplication of Henry Lawson drive from two lanes to four lanes along its entire length between Hume Highway and the M5 South Western Motorway</p>
<p>State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) Consultation undertaken as part of the REF</p>	<p>The ISEPP requires public authorities to consult with local councils and other public authorities prior to the commencement of certain types of development.</p> <p>City of Canterbury Bankstown Council have been consulted about the proposal as per the requirements of clauses 13 and 15A of ISEPP. The SES have also been consulted about the proposal as per the requirements of clause 15AA of ISEPP.</p> <p>More information about consultation requirements under the ISEPP is provided in Section 5.4 of the project REF.</p>	<p>The main concerns raised by the City of Canterbury Bankstown Council were:</p> <ul style="list-style-type: none"> ■ The proposal's proximity to items of local heritage significance ■ Potential noise and vibration impacts to nearby sensitive receptors, including residential dwellings ■ The role of the Georges River as part of a broader biodiversity corridor. This links to the community value of the natural area within the LGA. <p>The main concerns raised by the SES related to:</p> <ul style="list-style-type: none"> ■ Flood evacuation routes for the community and residents needing to be considered in the design of road levels ■ Flood risks associated with properties within the direct study area - Voluntary Buyback Scheme (discussed further in Chapter 6). <p>Consultation with these agencies indicated that there are existing community concerns and requirements which need to be considered in the design and construction of the proposal, including safety, amenity impacts and potential impacts to community values.</p>

6 Existing environment

This section outlines and compares the characteristics of the existing socio-economic environment in the broader study area, City of Canterbury Bankstown LGA, Liverpool City LGA and Greater NSW, using information from the ABS 2016 Census.

The ABS 2016 data used to inform the existing socio-economic environment is at Appendix A.

6.1 Summary of the existing environment

The broader study area has a young population, a large proportion of family households and a strong reliance on private motor vehicles to move around, when compared to Greater Sydney. Population and housing growth in the Liverpool City LGA and City of Canterbury Bankstown LGA is expected to increase substantially over the next 20 years, which is likely to be attributed to the development in South-Western Sydney. There is a strong sense of community participation and cohesion based on the events and activities available throughout the broader study area. The Georges River is a key feature in the broader study area, with social infrastructure and residential development bordering the sides of the river throughout the suburbs of Milperra and Chipping Norton. Bankstown Aerodrome is identifiable as an area of education, employment, and future growth for the broader study area. The socio-economic characteristics of the broader study area can be summarised as follows:

- There were 77,671 people living in the broader study area in 2016, which accounts for 1.6 per cent of the Greater Sydney population. There was a higher proportion of people aged 14 years or younger in the broader study area, City of Canterbury Bankstown LGA and Liverpool City LGA, compared to Greater Sydney. The broader study area also had the highest proportion of people aged 65 years or older.
- The Aboriginal and Torres Strait Islander population within the broader study area was 1.1 per cent in 2016, this was above the City of Canterbury Bankstown LGA (0.7 per cent) but below the Liverpool City LGA and Greater Sydney (1.5 per cent).
- The broader study area had the lowest proportion of overseas born residents at 31 per cent, compared to the City of Canterbury Bankstown LGA (44 per cent), Liverpool City LGA (41 per cent) and Greater Sydney (37 per cent). This may reflect less cultural diversity in the broader study area or historic migration patterns (Profile id, 2016) with varying clusters of overseas born people living across the City of Canterbury Bankstown and Liverpool City LGAs.
- The population of the City of Canterbury Bankstown LGA is expected to increase by up to 41.2 per cent between 2016 and 2040. This is relatively consistent with the growth expected in the Greater Sydney Region which is expected to grow by around 51.5 per cent. The Liverpool City LGA is expected to increase significantly (108.2 per cent), which may be attributed to anticipated high rates of development, including the rezoning of 25 hectares in the Liverpool centre for the creation of Sydney's "third CBD".
- Employment in health care and social assistance; construction; and retail trade comprised the highest proportion of the work force in the broader study area, City of Canterbury Bankstown and Liverpool City LGAs. The high number of construction workers may be attributed to current growth and development within Western Sydney, providing more opportunities and a higher demand for construction related jobs. Similarly, the higher levels of employment in health care and social assistance and retail trade, may be attributed to the proximity to the hospitals located just outside of the broader study area (Bankstown-Lidcombe Hospital and Liverpool Hospital) and the urban centres located throughout, which are comprised of small to large commercial areas.
- In 2016, vehicle ownership in the broader study area ranged between 1.8 – 2 vehicles per dwelling, with 6.5 per cent of dwellings having no motor vehicles. In comparison, 11.1 per cent of dwellings within the Greater Sydney Region did not have any motor vehicles. The high vehicle ownership in the broader study area may be reflective of the needs of the residents within the area, the reliance on private motor vehicles and lack of public transport choice for residents.

- There are a number of social infrastructure facilities located within the broader study area, including the Gordon Parker Reserve, Vale of Ah Reserve, Bankstown Golf Course, Georges River Golf Course and the Crosscurrents – Georges River Art Walk. It is likely that the local community use Henry Lawson Drive and connecting streets to access these social infrastructure facilities.

6.2 Population and demography

6.2.1 Population

In 2016, the population within the broader study area was 77,671 people (1.6 per cent of the Greater Sydney population). Table 6-1 provides an overview of the key population and demographic information about the broader study area, compared to the City of Canterbury Bankstown LGA, Liverpool City LGA and Greater Sydney.

Table 6-1 Population and demography in 2016

Indicator	Broader study area		City of Canterbury Bankstown LGA		Liverpool City LGA		Greater Sydney	
	Number	%	Number	%	Number	%	Number	%
Total persons	77,671	-	346,302	-	204,326	-	4,823,991	-
Proportion of people aged 14 years or younger	16,940	21.8%	71,037	20.5%	46,302	22.7%	900,229	18.7%
Proportion of people aged 65 years or older	11,599	14.9%	48,246	13.9%	21,325	10.4%	672,561	13.9%
Aboriginal and Torres Strait Islander population	866	1.1%	2,552	0.7%	3,012	1.5%	70,135	1.5%
Overseas born	24,068	31.0%	152,708	44.1%	83,368	40.8%	1,773,483	36.8%
People with need for assistance	4,864	6.3%	23,119	6.7%	12,759	6.2%	236,139	4.9%

Source: Census of Population and Housing (ABS 2016a)

Following the review of ABS data presented in Table 6-1, the following key trends were identified:

- There was a slightly younger population demographic in the broader study area, compared to Greater Sydney, which is consistent with the City of Canterbury Bankstown LGA and Liverpool City LGA. This may be reflective of family composition and education infrastructure available for younger people in these areas compared to Greater Sydney.
- Both the City of Canterbury Bankstown LGA and Liverpool City LGA had high proportions of people born overseas, 44 per cent and 41 per cent, respectively when compared with Greater Sydney at 37 per cent. This may reflect less cultural diversity in the broader study area, suggesting that people born overseas may choose to live close to other people born overseas.
- The broader study area, City of Canterbury Bankstown and Liverpool City LGAs had a higher proportion of people with need for assistance compared to Greater Sydney. The need for assistance can be defined as people who require help or assistance with self-care, mobility and communication, because of a long-term health condition, disability or old age (Core Activity Need for Assistance)¹. This was highest in the City of Canterbury Bankstown LGA. The need for assistance could mean the need for increased access to health care and community facilities.

¹ Core activity need for assistance, ABS 2016 Census Dictionary, ABS (2016). Accessed from: <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/2901.0Chapter27102016>

6.2.2 Population projections

The future population projections for the City of Canterbury Bankstown LGA, Liverpool City LGA and Greater Sydney are shown in Table 6-2. The population of all three areas is expected to increase by 2041. Liverpool City Council LGA is expected to experience the highest increase in population, with the area predicted to double in population by 2041 (DPIE 2020). This is substantially higher than the Canterbury Bankstown LGA, which is expected to increase by 42.2 per cent by 2041 and Greater Sydney which is expected to increase by 51.5 per cent.

Table 6-2 Population projections for the City of Canterbury Bankstown LGA, Liverpool City LGA and Greater Sydney

Area	2016	2021	2026	2031	2036	2041	Total % change
City of Canterbury Bankstown LGA	361,862	396,288	432,566	463,956	482,222	514,653	42.2%
Liverpool City LGA	211,983	251,322	291,187	328,447	380,085	441,427	108.2%
Greater Sydney Region	4,688,255	5,252,611	5,746,821	6,211,970	6,661,720	7,103,091	51.5%

Source: NSW population projections (DPIE, 2020)

6.2.3 Housing

Residential dwellings in the broader study area are a mix of single-storey and double storey houses within residential suburbs. Most residential dwellings within the direct and indirect impact study area are located south of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection. These residences are located to the west of Henry Lawson Drive, with most of dwellings set back from the road by a grassed/vegetated berm, and long driveways characteristic of infill housing. These properties back onto the Georges River. Figure 6-1 to Figure 6-4 provide the context of residential properties within the direct study area.

The average household size in the broader study area ranges between 2.9 – 3.4 people per household. This was relatively consistent with the City of Canterbury Bankstown and Liverpool City LGAs with an average of three people per household each, and 2.8 in Greater Sydney. The higher average household size in parts of the broader study area may indicate a lack of opportunities for young people to leave home or an increase in families choosing to establish themselves in the area.

Housing and household information is consolidated in Table 6-3, with more information provided in Appendix A.

Table 6-3 Housing and households in 2016

Indicator	Broader study area		City of Canterbury Bankstown LGA		Liverpool City LGA		Greater Sydney	
	Number	%	Number	%	Number	%	Number	%
Total private dwellings	25,546	-	115,506	-	61,741	-	1,759,927	-
Occupied separate house/dwelling	18,557	72.6%	61,550	53.3%	44,395	71.9%	924,225	52.5%
Occupied terrace/flat/other etc.	5,385	21.1%	45,811	39.7%	14,059	22.8%	692,600	39.4%
Total households	24,011	-	107,772	-	58,786	-	1,623,872	-
Family households	19,393	80.8%	83,008	77.0%	48,556	82.6%	1,195,662	73.6%
Non-family households	4,611	19.2%	24,758	23.0%	10,233	17.4%	428,213	26.4%
Average household size	Provided for each SA2 in Appendix A		3	-	3	-	2.8	-
Same address as 5 years ago as in 2016	44,838	62.3%	187,790	58.4%	107,348	56.9%	2,402,160	53.2%

Indicator	Broader study area		City of Canterbury Bankstown LGA		Liverpool City LGA		Greater Sydney	
	Number	%	Number	%	Number	%	Number	%
Different address 5 years ago as in 2016	23,206	32.2%	112,625	35.1%	67379	35.7%	1817909	40.3%
Housing tenure - mortgage	Provided for each SA2 in Appendix A		\$2,000	-	\$2,123	-	\$2,167	-
Housing tenure - rent	Provided for each SA2 in Appendix A		\$380	-	\$370	-	\$440	-
Households with no vehicles	1,558	6.5%	12,183	11.3%	4,542	7.7%	179,500	11.1%
Average motor vehicles per dwelling	Provided for each SA2 in Appendix A		1.7	-	2	-	1.7	-

Source: Census of Population and Housing (ABS 2016a)

Following the review of ABS data, the following key trends were identified:

- Occupied separate dwellings was the greatest household type in the broader study area, followed by the Liverpool City LGA. The lower proportion of separate dwellings in the City of Canterbury Bankstown LGA and Greater Sydney can be attributed to the increased range of dwelling types, particularly more dense dwellings closer to urban centres.
- The average household size within the broader study area is high when compared with Greater Sydney.
- In 2016, the broader study area, City of Canterbury Bankstown LGA and Liverpool City LGA had a high proportion of people with the same address as five years ago, compared to Greater Sydney. This suggests a strong connection to place and or could be associated with the high number of family households which may reside in these areas for longer periods of time.
- Mortgage repayments and rent were less in the broader study area and both the LGAs compared to Greater Sydney. This could reflect the value of land and housing affordability in these areas, compared to Greater Sydney.



Figure 6-1 Residential properties located on the west bank of the Georges River, opposite Henry Lawson Drive near Tower Road



Figure 6-2 Residential properties on Henry Lawson Drive, south of Newbridge Road (facing south)



Figure 6-3 Residential property on Henry Lawson Drive, opposite Auld Avenue (facing east)



Figure 6-4 Residential properties on Auld Avenue (facing west)

6.2.4 Housing projections

Table 6-4 provides an overview of housing projections for the City of Canterbury Bankstown LGA, Liverpool City LGA and Greater Sydney (DPIE, 2020). Across all areas, average persons per household is expected to decrease slightly by 2041. The number of dwellings is expected to increase by over 50 per cent in the City of Canterbury Bankstown LGA and Greater Sydney by 2041. The number of dwellings in the Liverpool City LGA is expected to sustainably increase by 2041, predicted to be more than double the number of households present in 2016. This may reflect current growth and development in the Liverpool City LGA, housing affordability and settlement patterns in the City of Canterbury Bankstown LGA and Liverpool City LGA and the south west Sydney area, generally.

Table 6-4 Housing projections in the City of Canterbury Bankstown LGA, Liverpool City LGA and Greater Sydney

	2016	2021	2026	2031	2036	2041	Total % change
Average persons per household in a private dwelling							
City of Canterbury Bankstown LGA	2.97	2.93	2.89	2.86	2.82	2.78	
Liverpool City LGA	3.16	3.08	3.02	2.98	2.94	2.90	
Greater Sydney Region	2.76	2.73	2.71	2.69	2.66	2.63	
Projected households							
City of Canterbury Bankstown LGA	120,587	133,688	147,705	160,090	168,393	181,979	50.9%
Liverpool City LGA	66,436	80,626	95,176	108,857	127,510	149,744	125.4%
Greater Sydney Region	1,669,774	1,886,432	2,080,177	2,265,645	2,449,910	2,635,172	57.8%
Implied dwelling projections							
City of Canterbury Bankstown LGA	128,798	-	-	-	-	194,370	50.9%
Liverpool City LGA	69,556	-	-	-	-	156,776	125.4%
Greater Sydney Region	1,794,231	-	-	-	-	2,821,820	57.3%

Source: NSW population projections (DPIE, 2020)

6.2.5 Socio-economic Indices for Areas

The Socio-economic Index for Areas (SEIFA) is used by the ABS to measure aspects of socio-economic advantage and disadvantage across NSW. The index uses a range of variables to develop a score for each area in the index. The NSW average is 1000. Higher scores indicate greater advantage and a relative lack of disadvantage. A higher score may infer households with higher income and skilled occupations. A lower score may infer less households with low incomes and less skilled occupations.

Table 6-5 SEIFA within the broader study area, City of Canterbury Bankstown LGA and Liverpool City LGA

Area	SEIFA score
Panania – Milperra – Picnic Point	1039
Condell Park	965
Bass Hill – Georges Hall	935
Chipping Norton – Moorebank	1046
City of Canterbury Bankstown LGA	961
Liverpool City Council LGA	972

Source: Census of Population and Housing: SEIFA (ABS, 2016b)

The SEIFA scores for the broader study area and LGAs varied above and below the NSW average in 2016. Panania – Milperra – Picnic Point and Chipping Norton – Moorebank had higher than average economic and social conditions for people and households. Most of the broader study area and both LGAs had below average economic and social conditions.

6.2.6 Economic profile

In 2015/2016, the median weekly disposable household income in Australia was \$1,438 (ABS, 2016a). Median household income in the broader study area ranged between \$1197 to \$1838, with Chipping Norton – Moorebank having the highest median household income overall. The median household income in the City of Canterbury Bankstown LGA was lower than that of residents in the Liverpool City LGA. Both LGAs had a median household income lower than Greater Sydney.

Unemployment was highest in the City of Canterbury Bankstown LGA, followed by the Liverpool City LGA compared to the broader study area and Greater Sydney.

Table 6-6 provides a summary of the economic profile, with the top employment industries in the broader study area, LGAs and Greater Sydney provided in Table 6-7.

Table 6-6 Economic profile in 2016

	Broader study area		City of Canterbury Bankstown LGA		Liverpool City LGA		Greater Sydney	
	Number	%	Number	%	Number	%	Number	%
Labour force	35,225	-	150,613	-	90,669	-	2,418,899	
Median weekly household income (\$)	Provided for each SA2 in Appendix A		\$1,298	-	\$1,550	-	\$1,750	-
Unemployment (total unemployed looking for work)	2,252	6.4%	12,420	8.2%	6764	7.5%	146187	6.0%

Source: Census of Population and Housing (ABS 2016a)

Table 6-7 Top industries of employment in 2016

	Construction	Retail trade	Professional, scientific and technical services	Education and training	Health care and social assistance
Panania – Milperra – Picnic Point	10.10%	-	-	10.10%	10.10%
Condell Park	11.40%	11.10%	-	-	11.10%
Bass Hill – Georges Hall	11.50%	10.90%	-	-	11.00%
Chipping Norton – Moorebank	9.10%	9.70%	-	-	10.10%
City of Canterbury Bankstown LGA	9.50%	10.40%	-	-	10.80%
Liverpool City Council LGA	9.90%	10.10%	-	-	11.40%
Greater Sydney	-	9.30%	9.80%	-	11.60%

Source: Census of Population and Housing (ABS 2016a)

Employment in health care and social assistance, construction and retail trade comprised the highest proportion of the work force in the broader study area, City of Canterbury Bankstown and Liverpool City LGAs (with the exception of Panania-Milperra-Picnic Point which had a high proportion of the work force employed in education and training).

The high proportion of people working in construction may be associated with the occurrence of industrial precincts and development within the broader study area and both LGAs. This may be similar for the higher levels of employment in health care and social assistance and retail trade. This may be associated with the proximity to the hospitals located just outside of the broader study area (Bankstown-Lidcombe Hospital and Liverpool Hospital) and the urban centres located throughout, which include commercial areas.

Businesses and commercial operations

There are a range of businesses that are located within the direct study area, socio-economic study area and broader study area. Businesses within the socio-economic study area include:

- Fast food outlets (including Hungry Jacks Burgers Milperra and KFC Milperra), an ALDI supermarket and BP Truckstop service station and Wild Bean Café to the east of Henry Lawson north of Milperra Road. As shown in Figure 6-5, these businesses are accessed from Henry Lawson Drive, Tower Road and Starkie Drive on the southbound side of the corridor. There is also business signage for these businesses at the intersection of Henry Lawson Drive and Tower Road shown in Figure 6-6.
- The Flower Power Complex is located in the southern section of the direct study area, to the east of Henry Lawson Drive. Within the complex is the Flower Power Garden Centre Milperra, Pet Stock Milperra, Whole Farms Market Milperra, Metro Pools and Spas pool supply store and Frankie's Food Factory Milperra Café. The Flower Power Complex is shown in Figure 6-7.
- Riverside Indian Restaurant, Echeap Furniture Warehouse, Ace Fishing Tackle and Bait shop, Cherry's Thai Massage and a BP service station on Newbridge Road in the western section of the direct study area.
- Businesses on Tower Road in the northern portion of the socio-economic study area. Businesses on Tower Road include a Carpet Recyclers, NETS - The Newborn & paediatric Emergency Transport Service, air conditioning service depot, Helicopter Transport and Training and Sydney Flying Academy, contractors and services. Tower Road is shown in Figure 6-8. The primary access route to these businesses is via the Tower Road/Henry Lawson Drive intersection.
- Recreational facilities including Bankstown Golf Course, Georges River Golf Course and Milperra Golf Driving Range.

Bankstown Airport is bordered by Tower Road and is used by a range of the business and services in this area. The Airport has a range of flying schools and suppliers located within the premises. The airport is being developed to transform into a larger precinct for education, employment and commercial activity, which is discussed further in Section 6.3.3. The location of Bankstown Airport and businesses within the socio-economic study area are shown in Figure 6-10.

Within the socio-economic study area and broader study area, there are industrial precincts, including freight and logistics precincts, warehouses and storage facilities, manufacturing and construction areas, trade services and wholesale industrial retailers. This includes businesses in industrial areas of Milperra, most which are clustered between Ashford Avenue, Milperra and Queen Street, Revesby.

In the broader study area, there are various small businesses and shopping areas. This includes shopping villages, such as the Milperra Shopping Village shown in Figure 6-9. The local shops within Milperra Shopping Village include Milperra Post Office, cafes, restaurants and a pharmacy. Other local shopping villages and centres are located throughout the broader study area which are comprised of a similar scale/nature of shops, some including larger retail chain supermarkets and shops.



Figure 6-5 Businesses on Henry Lawson Drive, north of the intersection with Milperra Road (facing south)



Figure 6-6 Existing business signage at Tower Road



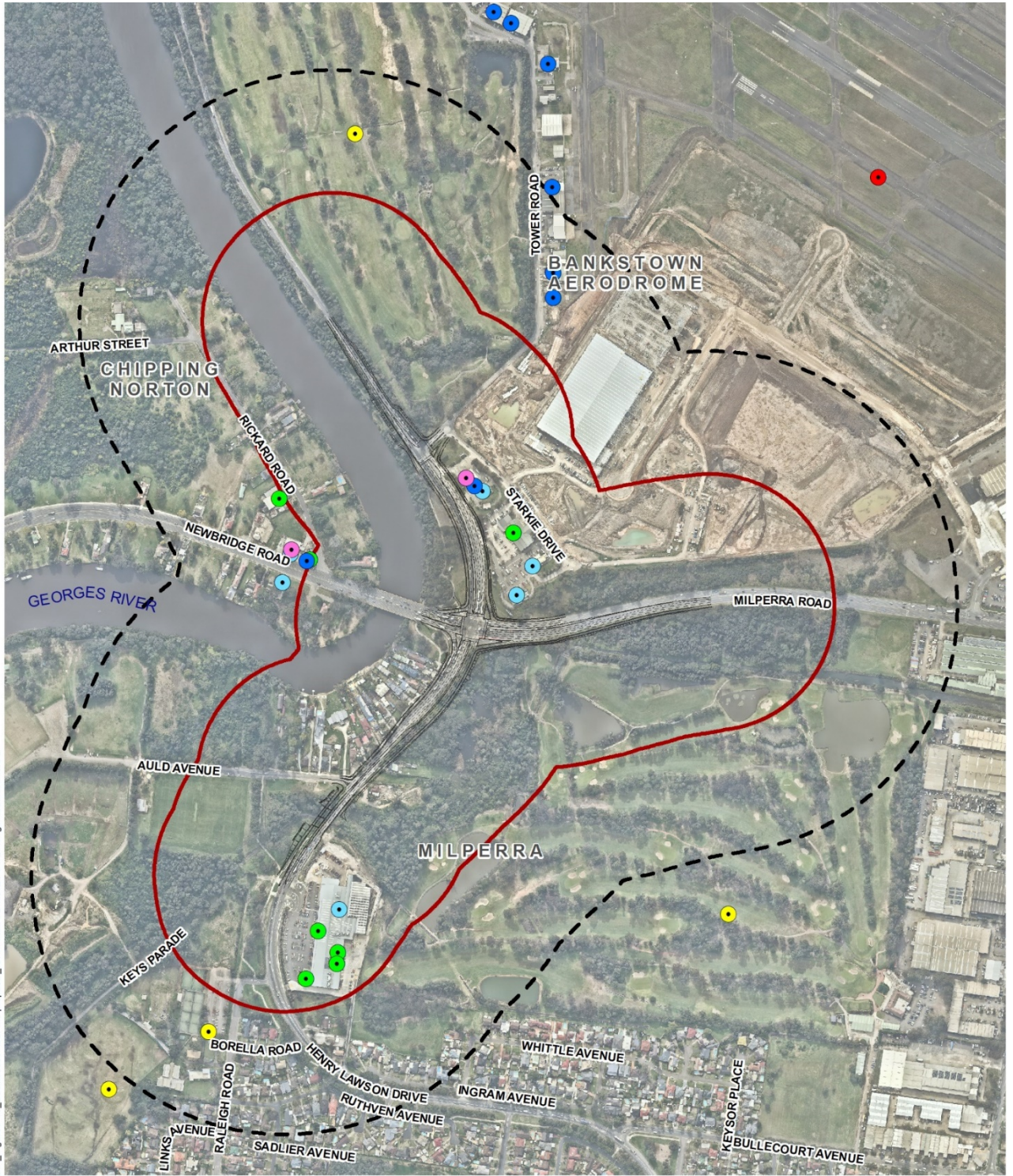
Figure 6-7 Flower Power complex on Henry Lawson Drive at Keys Parade (facing south)



Figure 6-8 Businesses on Tower Road (facing north)



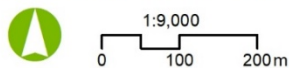
Figure 6-9 Businesses in Milperra, including the Milperra Shopping Village and industrial businesses on Bullecourt Avenue (facing west)



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- | | | | |
|--|---------------------------|--|------------------------|
| | Concept design | | Special use |
| | Direct study area | | Supermarket and retail |
| | Socio-economic study area | | Trades and services |
- Businesses**
- Golf facility
 - Restaurant/cafe
 - Service station

Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A **Socio-economic Impact Assessment**

Projection: GDA 1994 MGA Zone 56

FIGURE 6-10: Businesses near the proposal

6.2.7 Events and local tourism

Both the Liverpool City LGA and City of Canterbury Bankstown LGA are discussed in this section. It is likely that residents and visitors from the direct study area and socio-economic study area would be part of these experiences/events across each LGA.

Liverpool City LGA

To promote its vision as a visitor destination per the DMP, Liverpool City Council holds a range of community events. The following summarises some of the substantial events that are held within the Liverpool City LGA.

Love Summer – Love Liverpool

Love Summer – Love Liverpool is a family friendly picnic-style dining event running on Friday and Saturday nights from late February to early March. The event includes local food trucks, a beer garden and live musical performances, as well as an open-air cinema to attract families.

The Love Summer event is located in three separate parks across the LGA to ensure it is available to a range different residents and visitors. By having the event at three different locations across the LGA, it increases accessibility for local and non-local attendees, uses Liverpool's parklands and encourages community engagement. This aligns with the directions of the DMP, as well as the Liverpool CSP as it seeks to highlight the importance of community connections and social linkages.

Eat your heart out Liverpool

The 'Eat your heart out Liverpool' is a local tourism event that occurs within the Liverpool CBD and it celebrates the city's multicultural success. The event is a one-night street fiesta that combines an array of food, live music, performances, markets and art. It also caters for families by providing face painting and a range of different child-friendly games. This event brings plenty of colour and energy to different corners of Liverpool city each year.

This event aligns with the Liverpool City Council DMP as it aims to highlight and celebrate Liverpool's rich ethnic diversity. The DMP states that Liverpool's diversity is a significant driver of visitation, with thousands of international visitors coming into the LGA each year to visit friends and relatives.

Liverpool City Council charity ball

Liverpool City Council host an annual charity ball that is one of south west Sydney's premier black-tie events. It provides a unique night out while helping a worthwhile cause. The event also allows guests the opportunity to connect with local businesses. This event allows community members and local businesses to connect and create social linkages. This aligns with the DMP and CSP as it emphasises the importance of connecting the Liverpool Community.

Way out West festival

The 'Way out West' festival is hosted at the Casula Powerhouse Arts Centre and is a week-long event. It has a variety of paid and free events that bring thousands of children and their families to Casula Powerhouse Arts Centre. The event provides hands-on fun and learning through art and craft, film, theatre, dance, music and more.

The festival allows families within the community to connect, which aligns with the purpose of the CSP. The DMP illustrates the need to continue to support Casula Powerhouse as the leading Arts Centre in South Western Sydney. Through hosting the 'Way out West', the Liverpool City Council continues to promote Casula Powerhouse Arts Centre as a leading Arts Centre in the region.

Liverpool on a Roll

'Liverpool on a Roll' is an annual food festival that celebrates the city's multicultural community. It showcases international food and music within a parkland setting. To cater to a range of people the event also includes giveaways, garden games, open-air arcades and a pop up beer garden.

This is another event within Liverpool City that aims to celebrate their rich ethnic diversity, while also providing the ability to create social linkages.

Australia Day

Liverpool City hold annual celebrations for Australia Day. This year the event was held virtually on Tuesday 26 January 2021 due to COVID-19 restrictions.

This event provides an opportunity for all to celebrate Australia Day. This allows Liverpool City to celebrate its heritage and aligns with the DMP and CSP through providing an opportunity to create community connections.

Other tourist venues

In addition, to these local events, Liverpool City also has a range of places that visitors and tourists visit, including:

- Casula Powerhouse Arts Centre, Casula
- Liverpool Regional Museum, Liverpool
- Army Engineer Museum, Holsworthy
- Collingwood House, Liverpool
- Liverpool Pioneers Memorial Park, Liverpool

City of Canterbury Bankstown LGA

The community and Canterbury Bankstown City Council hold a range of events annually to attract local residents and visitors. The following sections summarise various events that are held within the City of Canterbury Bankstown LGA to promote local tourism and attract tourists.

Bankstown Bites Food Festival

The Bankstown Bites Food Festival is located on Olympic Parade in Bankstown and is one of Sydney's most popular food festivals. This event includes a range of cooking demonstrations, live performances, food stalls and tours of local food outlets. It also caters to children by providing a range of child-friendly activities.

This festival aligns with the values of the City of Canterbury Bankstown CSP as it highlights the importance of creating a leading and engaged community.

A Magical Christmas

The Canterbury Bankstown community hold annual Christmas celebrations. The event comprises of a range of activities to spread Christmas cheer including carols, lighting of Christmas trees, augmented reality Christmas videos and roving Christmas characters.

This event provides the opportunity for the community and visitors to celebrate Christmas. This aligns with the Canterbury Bankstown CSP as the event provides an inclusive event that unites and celebrates the community.

Lunar New Year

Lunar New Year celebrations are held in the City of Canterbury Bankstown LGA at the ANZAC Street Mall Campsie. The celebrations include the Lunar New Year Night Noodle Market, which involve food stalls, dancers, firecrackers and traditional music.

The City of Canterbury Bankstown CSP states the importance of valuing individuals cultural, religion and heritage. This event provides the opportunity for local, domestic and international tourists to celebrate Lunar New Year within the LGA.

Ramadan Mubarak

Bankstown Canterbury celebrates Ramadan through a range of activities to explore new foods, culture and traditions within the community.

The Ramadan Mubarak also provides an opportunity for local, domestic and international tourists to celebrate and learn about Ramadan. This aligns with the City of Canterbury Bankstown CSP as it highlights the importance of valuing different heritage, culture and religion within the LGA.

Other tourist events

In addition, Canterbury Bankstown City Council also promotes the following local events and programs on their website across venues across the LGA:

- Events at the Bryan Theatre and Function Centre
- Events and sports programs/competitions at the Morris lemma Indoor Sports Centre, Riverwood
- Events and programs hosted by the library and knowledge centres of the LGA, including art classes, book clubs and reading programs, movie events, youth programs and wellbeing talks.
- Clean and green events such free household chemical cleanout and composting programs.

6.3 Land use

The overall proposal is located within the City of Canterbury Bankstown LGA. The City of Canterbury Bankstown was formed in May 2016, replacing the former Bankstown City and Canterbury City Councils. The amalgamation process did not consolidate the local environmental plans of the local councils, and as a result, the Bankstown Local Environmental Plan 2015 (Bankstown LEP) and Canterbury Local Environmental Plan 2012 (Canterbury LEP) remain in force.

The direct study area and socio-economic study area are mapped within the Liverpool Local Environment Plan 2008 (Liverpool LEP), the Bankstown Local Environment Plan (Bankstown LEP) 2015 and the Canterbury Local Environment Plan (Canterbury LEP) 2012.

As the overall proposal is located within the former Bankstown City Council local government area (LGA), the Bankstown LEP applies as is used to inform the following section and land use zones identified below.

6.3.1 Land use and zoning

The Henry Lawson Drive road corridor is a highly developed urban environment, south west of the Sydney CBD. Most of the overall proposal is mapped as SP2 – Infrastructure. Other land zoning within the direct study area is shown in Figure 6-10 and includes:

- RE1 – Public recreation
- RE2 - Private Recreation
- W1 – Natural Waterways
- R2 – Low density residential
- IN1 – General Industrial

- IN2 – Light Industrial
- E2 – Environmental Conservation

Henry Lawson Drive is zoned as SP2 – Infrastructure, as a key connection for traffic moving between the Hume Highway, Milperra Road /Newbridge Road and the M5 Motorway.

Georges River is zoned W1 - Natural Waterways. Land adjacent to the Georges River is zoned as RE1 – Public Recreation. There is a range of open space and recreational activities including the Georges River Golf Course, Gordon Parker Reserve, Vale of Ah field, Bankstown Golf Club.

The eastern side of Henry Lawson Drive, north of Milperra Road is also zoned SP2 – Infrastructure and is comprised of the Bankstown Airport. The airport includes three runways and a variety of ancillary services.

The area south of Milperra Road is largely zoned as RE2 – Private Recreation and R2 – Low Density Residential. There are a range of industrial services within the area, comprised of warehouses and industrial activities, however these are further east in the broader study area.

More information about existing facilities and social infrastructure in the socio-economic study area is discussed in Section 6.4.

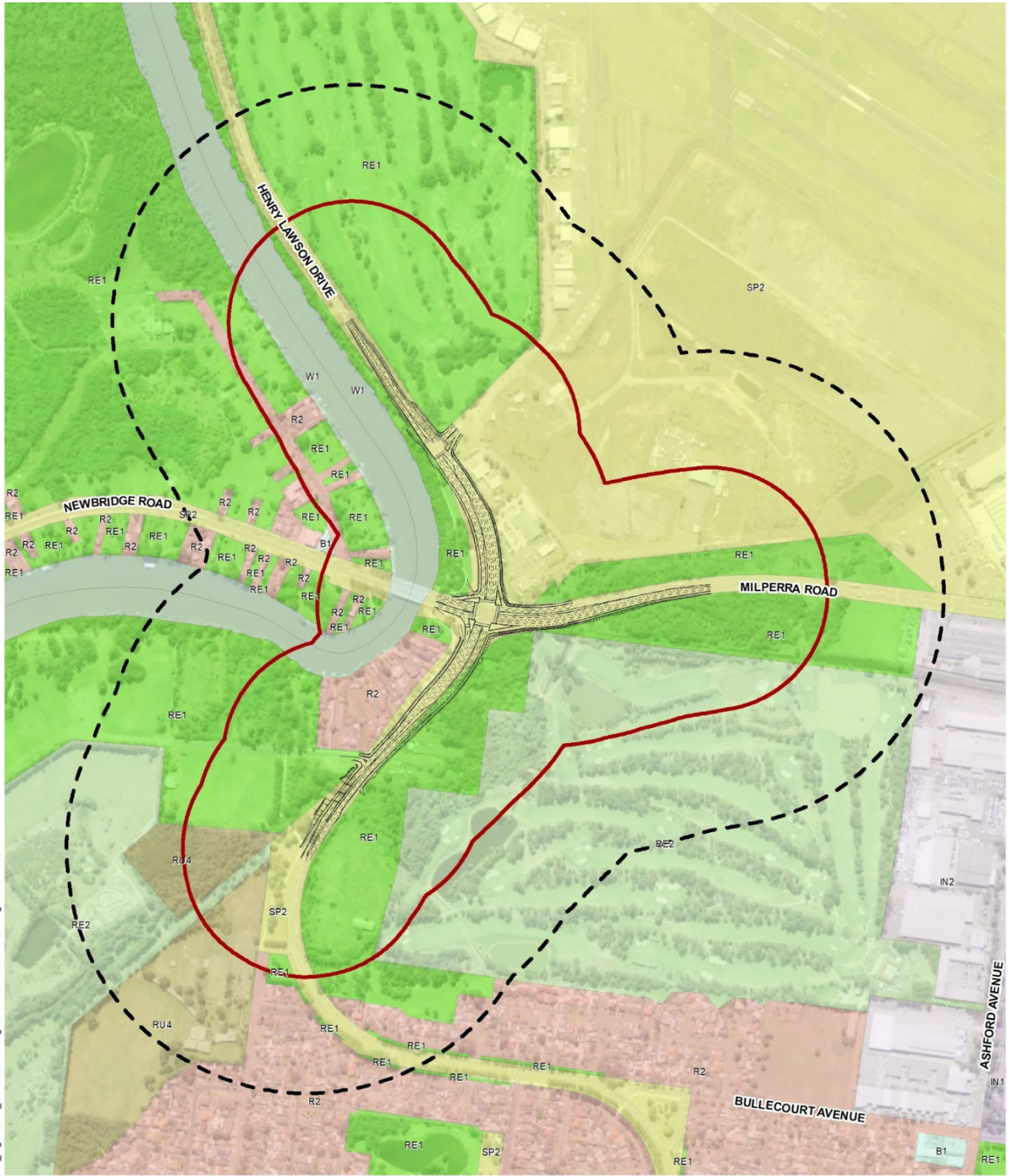
6.3.2 Property

Property within the direct study area is owned by:













- Transport for NSW
- Canterbury Bankstown City Council
- The Crown (crown land)
- Private owners such as residents and businesses.

There are also properties across the City of Canterbury Bankstown LGA that form part of the NSW Government's *Floodplain Management Program* to implement voluntary purchase schemes. There is one property within the direct study area that is subject to the program, located on the eastern side of Henry Lawson Drive near the intersection with Auld Avenue. The purpose of this program is to reduce risks to properties in highly hazardous flood conditions from riverine or overland flooding (Office of Environment and Heritage, 2013).

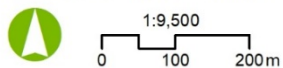
More information about the program and the proposed acquisition and leasing requirements for the overall proposal are discussed further in Section 7.1.1. More details about the properties that would be required for the overall proposal is included in the Project REF and Project EIS.



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- | | |
|---|---|
|  Concept design |  R2 Low Density Residential |
|  Direct study area |  RE1 Public Recreation |
|  Socio-economic study area |  RE2 Private Recreation |
| Land zoning | |
|  B1 Neighbourhood Centre |  RU4 Primary Production Small Lots |
|  IN1 General Industrial |  SP2 Infrastructure |
|  IN2 Light Industrial |  W1 Natural Waterways |

Source: Aurecon, TfNSW, DPIE, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A **Socio-economic Impact Assessment**

Projection: GDA 1994 MGA Zone 56

FIGURE 6-11: Land use zoning

6.3.3 Major projects and development

A search of the DPIE Major Projects portal was undertaken on 11 March 2021 to investigate major projects near the overall proposal. The search did not indicate any current projects within the direct study area or socio-economic study area. However, the following outlines projects currently undergoing strategic planning within the broader study area.

Bankstown Airport

Bankstown Airport was established in 1940, as Sydney's second airport following the start of World War II (Bankstown Airport Limited (BAL), 2019). Owned and operated by BAL, the airport currently operates as:

- A flying base for emergency services, including the NSW Police Aviation Support Branch, the National Parks and Wildlife Service and NSW Ambulance.
- A flying base for major flying schools, including the UNSW School of Aviation, TAFE NSW (Sydney Flight College), Soar Aviation and Basair Aviation College.
- A facility that comprises small to medium-size air freight, charter and private business flights.
- Aviation-related services, including aircraft sales, service and maintenance for general aviation aircraft.
- Non-aviation activities including wholesale and retail trade, manufacturing, transport services, construction and education.

There are currently no Regular Public Transport (RPT) services at the airport. Bankstown Airport contributes nearly \$1 billion annually through its operations, as well as provides over 6,000 jobs to the NSW economy (BAL, 2019). A high proportion of employment is in manufacturing, aircraft repairs, construction and pilot education, with a smaller proportion of jobs in retail trade, business services and public administration (BAL, 2019).

BAL proposes to expand Bankstown Airport through the introduction of new emergency services, flight training services, aircraft maintenance and specialist aviation activities (BAL, 2019). There are also plans for substantial non-aviation initiatives included in the expansion, contributing to developing the South West Precinct. As shown in Figure 6-11, the *Bankstown Airport Master Plan 2019*, divides the airport into four land use zones:

- Airport Business Zone - the northern part of the Bankstown Airport site, which is the main point of airport operations and includes the main terminal, aviation and commercial related businesses.
- Aviation Zone - the central section of the Airport where runways, taxiways, aircraft movement and parking areas are located, as well as airside tenancy buildings.
- Commercial Zone – the southern part of the Bankstown Airport site and characterised as the commercial growth area in close proximity to key industrial areas and routes such as Henry Lawson Drive, the Moorebank Intermodal Terminal and Milperra industrial areas.
- Industrial Zone – located on the eastern side of the site at the end of the runway and where there is an existing established industrial area.

The plan provides a framework for the airport over the next 20 years in relation to the four zones. This includes planning for potential future infrastructure development and economic growth, such as runway extensions, road and transport improvements, office and warehouse facilities, training and education facilities, neighbourhood/community areas and aviation related attractions.

Henry Lawson Drive, Milperra Road and Newbridge Road would need to support the proposed Bankstown Airport expansion and redevelopment. As the proposed commercial zone is located closest to the overall proposal, it is expected that a high frequency of vehicles and road user movement from the zone would occur in this area. The intersection of Henry Lawson Drive and Tower Road would also need to address the increased traffic demand from the airport.

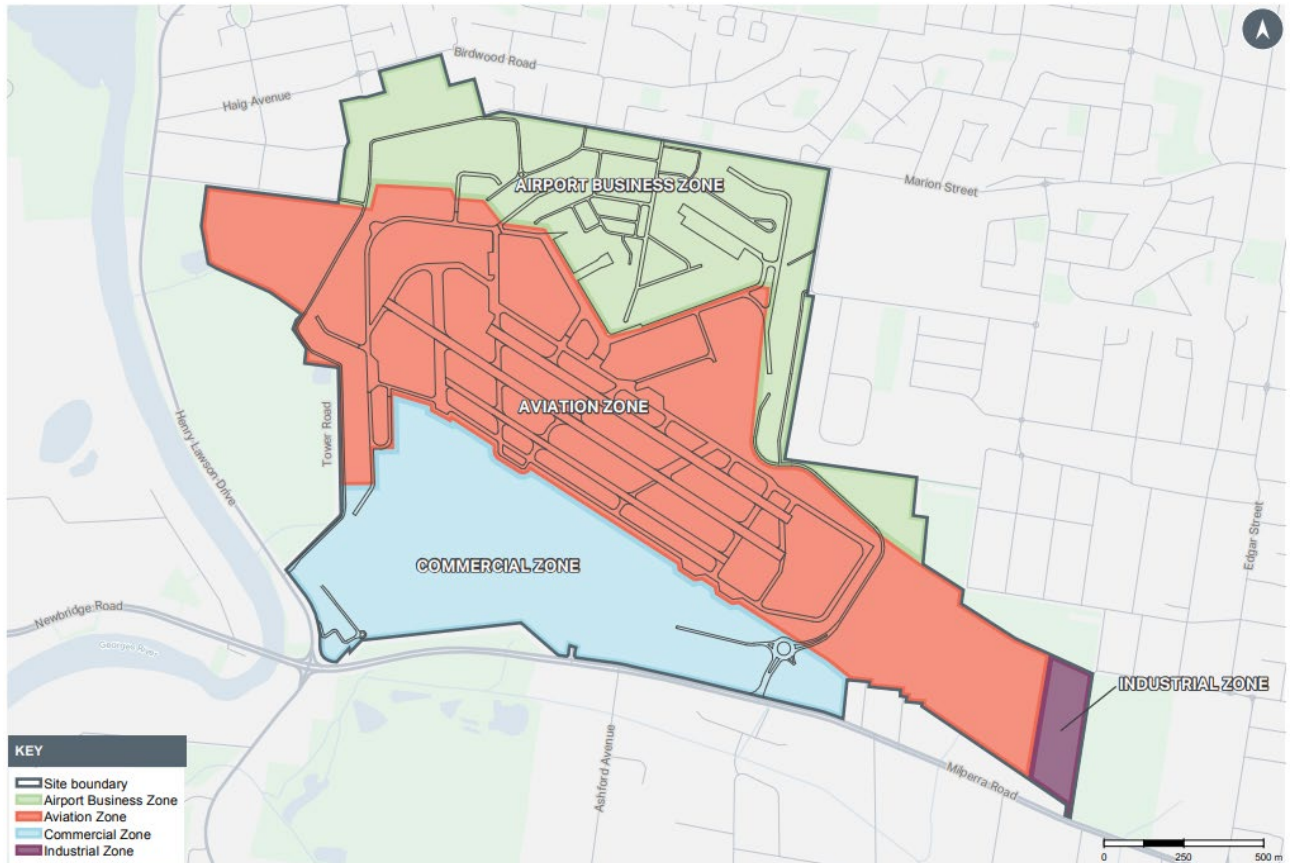


Figure 6-12 Bankstown Airport Zone Plan

Source: BAL, 2019

Bankstown Airport Polair Major Development Plan

Approval has been granted for the development of a new purpose-built integrated facility within the Aviation Zone Airport to connect with the existing NSW Police Force Aviation Support Branch (NSW Police Air Wing). The development consists of a two-storey office building, hangar and maintenance areas to accommodate the helicopter and fixed-wing operations (BAL, 2019).

Bankstown Airport South West Precinct Site Works and Warehouse Major Development Plan

A major industrial, logistics and innovation precinct with retail gateways has been proposed within the Commercial Zone. The proposed precinct works would include site works and a warehouse, addressing site wide drainage, external road connections, internal roads and allotment layouts, as well as an industrial development of up to 40,000 square metres (gross leasable floor area) (BAL, 2019).

Riverlands Development

The proposed Riverlands Development is located to the south-west of the overall proposal. The area to be developed is the former Riverlands Golf Course that borders the Georges River. The development would provide 500 dwellings in Stage 1 and another 500 dwellings in Stage 2 (The Transport Planning Partnership Pty Ltd, 2020). The main access points to the development would be accessible via Keys Parade, Raleigh Road and Prescot Parade in Milperra (The Transport Planning Partnership, 2020). New internal roads and transport connections would be developed within the Riverlands Development to provide access and connectivity for residents and visitors. Henry Lawson Drive would serve as the main road that provides access to the development, meaning that the overall proposal would need to provide capacity for the new residential area.

Moorebank Intermodal Terminal

The Moorebank Intermodal Terminal (also referred to as Moorebank Logistics Park) would be developed within Moorebank, located south of the M5 Motorway on Moorebank Avenue. The terminal is expected to provide a vital part of the Australian freight network, supporting capacity for freight and connections to both road and rail corridors. The terminal would have international and interstate terminals, as well as warehousing provisions for packing and deliveries². Henry Lawson Drive provides connectivity to the M5 Motorway, the Hume Highway and the suburb of Moorebank via Newbridge Road. The Moorebank Intermodal Terminal A would generate around 13,884 car and truck movements a day when fully operational in 2030 (Parsons Brinckerhoff, 2014). As stated in the *Moorebank Intermodal Terminal Traffic, Transport and Accessibility Impact Assessment Report*, some minor increases in truck traffic near the Moorebank Intermodal Terminal would be associated with Moorebank Avenue, the Hume Highway and Newbridge Road (Parsons Brinckerhoff, 2014). Newbridge Road is identified as one of the main local roads near the Moorebank Intermodal Terminal, providing a local arterial route between Bankstown Airport, Milperra and the Liverpool CBD.

As stated in the Bankstown Airport Masterplan, the proposed commercial zone of the airport is driven by the location of the airport in regard to the surrounding area. This includes the access the zone has to air transport, the road and rail freight network and the proposed Moorebank Intermodal Terminal. The close proximity has been identified as a major opportunity for the zone to develop as a major hub for transport logistics and distribution facilities, warehousing and industrial/commercial development, along with retail facilities (BAL, 2019).

The proposal would support access and connectivity for freight vehicles travelling to and from the Moorebank Intermodal Terminal through the direct study area and Bankstown Airport.

M5 Motorway Westbound Traffic Upgrade

Transport propose to upgrade the M5 Motorway, for westbound traffic about 4.2 kilometres south west of the overall proposal. The M5 Motorway is located south of the overall proposal and connects to Newbridge Road and Henry Lawson Drive. The proposed upgrade is being undertaken to address congestion as a result of merging traffic issues on the M5 motorway during peak periods. The proposed upgrade project would also aim to address increasing heavy vehicles travelling from the Moorebank Intermodal Terminal which are expected to add to congestion (Transport, 2020).

6.4 Social infrastructure and areas of community interest

6.4.1 Social infrastructure

The direct study area and socio-economic study area has a mix of urbanised and natural areas, with a combination of low-density residential dwellings, commercial and industrial areas and open recreational spaces near the Georges River. Key social infrastructure in the socio-economic study area is reflective of this context and includes:

- Parks and reserves including Gordon Parker Reserve (refer Figure 6-12), Vale of Ah Reserve, Hind Park, Peterson Park and Riverside Park.

Both Gordon Parker Reserve and Vale of Ah Reserve serve as recreational facilities for local sporting associations and community groups and local schools. These include:

- Bankstown Touch Association
- Sydney Morning Cricket
- Milperra Lions Soccer Club
- Milperra Viking Cricket Club

² <https://www.micl.com.au/the-project1>

- East Hills Oztag
- Sydney Junior Winter Cricket
- Vale of Ah Dog Park ‘Social’ Group
- Vawdon Touch Football
- Bankstown District Amateur Football Association
- Mount St Joseph Catholic College, Milperra
- Georges River Grammar
- East Hills Primary Schools Sports Association.

Access to Gordon Parker Reserve and Vale of Ah Reserve is via Henry Lawson Drive and Auld Avenue.

The Vale of Ah Reserve also hosts special events for the community groups including Assyrian Khabour Social Association, Chaldean Australian Association and the Levant Club of Hardine.

- Educational facilities including a range of aviation and flying schools located on Tower Road and within Bankstown Airport.

Most schools and tertiary education facilities are in the broader study area and include Georges River Grammar, Mount St Joseph’s Catholic College, Condell Park High School and Western Sydney University – Bankstown.

- Emergency facilities including NETS Ambulance Service on Tower Road. NETS Ambulance Service operates 24 hours a day, seven days a week and is a newborn and paediatric emergency transport service. The facility on Tower Road is also a hospital which treats patients³.

The NSW Ambulance Rescue Helicopter Base, PolAir and Sydney HEMS Base Hospital are also located within Bankstown Airport. Bankstown Lidcombe Hospital is located outside of the broader study area about 3.6 kilometres away.

An overview map of social infrastructure located within the socio-economic study area is shown in Figure 6-16.

6.4.2 Areas of community interest

Within communities, there are areas that hold value and are appreciated by the community. This includes local spaces, gathering areas, roadside memorials and other places that are visited by the community. There are three primary areas of community value that are located within the direct study area (discussed in the following sections).

Georges River

The Georges River is located to the west of the direct study area (shown in Figure 6-14). The Georges River provides connections to southern Sydney as is used for recreational boating, fishing and activities by the community. The areas surrounding the river including foreshore spaces, bridges and overpasses provide views to the northern and southern extents of the river. In most places along its extent, the Georges River is densely vegetated and in some areas, contains SEPP Coastal Wetlands which are protected in NSW.

³ <https://www.nets.org.au/>

Crosscurrents - Georges River Art Walk' Camoufleur' artwork and Trail Markers

Canterbury Bankstown City Council launched the 'Crosscurrents - Georges River Art Walks' Project in 2009. The project was established to commemorate Bankstown's developments from its original Aboriginal inhabitants, early colonial settlement and immigrations to present day being one of Sydney's most culturally diverse communities⁴.

The Camoufleur artwork located on the corner of Henry Lawson Drive and Newbridge Road forms part of the walk (refer Figure 6-15). It represents the Sydney Camouflage Group (artist like Max Dupain and Frank Hinder) who worked at Bankstown Airport during World War II to disguise aircraft during potential attacks.

In addition, there are also a series of markers along the walk that represent the local history of the area. Whilst not listed, the markers provide historical background for users and community members along the art trail, depicting site specific boundaries of early land grants that divided up the area for development and settlement in the early years of the colony (refer Figure 6-16).

Figure 6-17 shows a community board on the shared user pathway within the vegetated corridor between the Georges River and Henry Lawson Drive. The board provides a map of the art trail and more information about the Camoufleur artwork.

Roadside memorial on Milperra Road

There is a roadside memorial located on the southern side of Milperra Road near the existing bus stop. The memorial is located on an existing road safety bollard near the road footprint. It is in the shape of a cross, features the name of the person which the memorial is for and faces toward the road corridor.

⁴ <https://www.weekendnotes.com/crosscurrents-georges-river-art-walk/>



Figure 6-13 Gordon Parker Reserve



Figure 6-14 Georges River



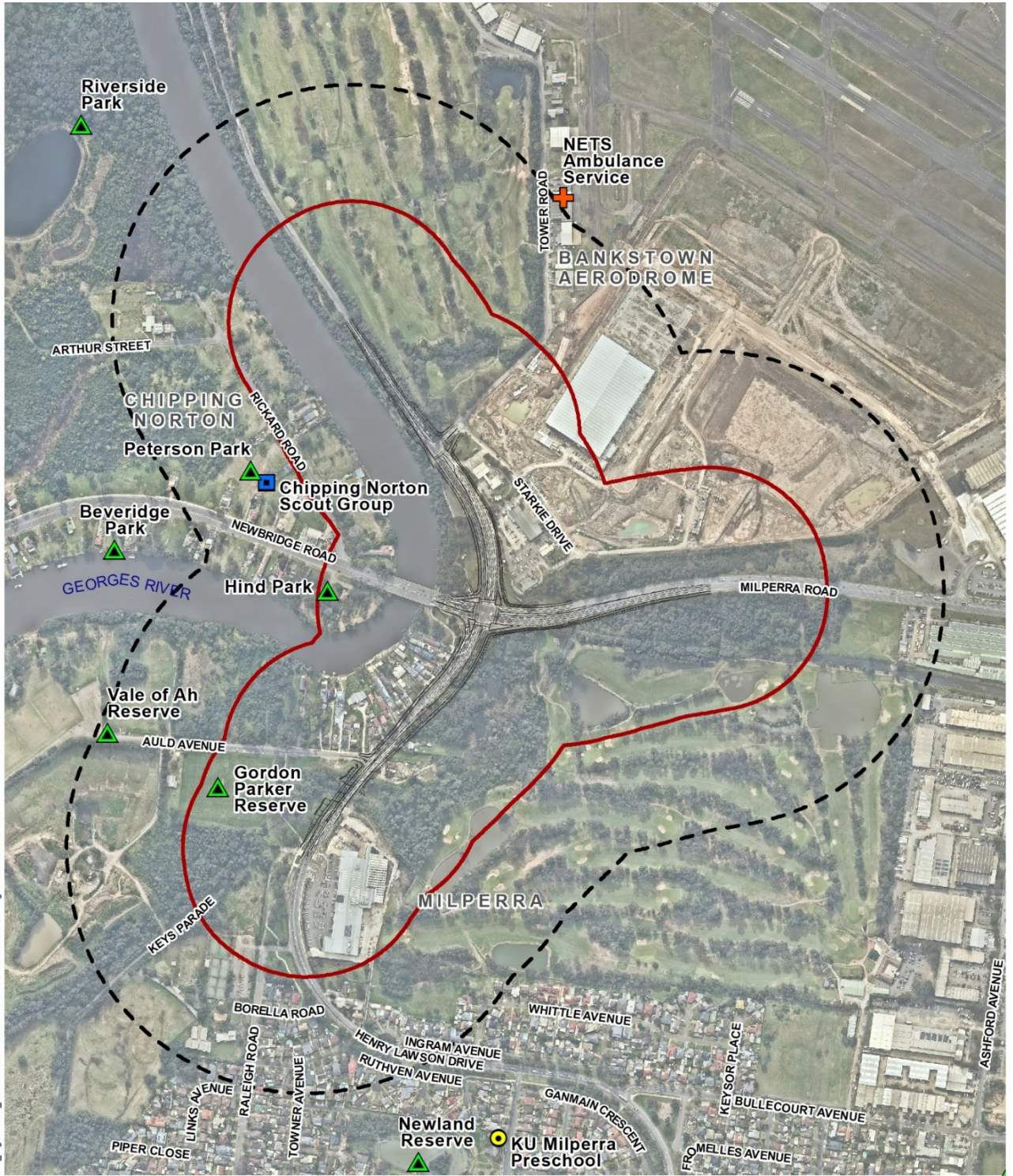
Figure 6-15 Georges River Art Walk Camofleur artwork










Figure 6-16 Georges River Art Walk Trail Marker



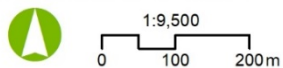
Figure 6-17 Georges River Art Walk map on community board



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- | | | | |
|---|---------------------------|---|---|
|  | Concept design |  | Community facilities, centres, halls, scout halls |
|  | Direct study area |  | Emergency services and facilities |
|  | Socio-economic study area |  | Parks and Reserves |
| Social infrastructure | |  | Child care centres, kindergarten, day care |

Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A **Socio-economic Impact Assessment**

Projection: GDA 1994 MGA Zone 58

FIGURE 6-18: Social infrastructure

6.5 Access and connectivity

6.5.1 Travel patterns

Table 6-8 provides a summary of the vehicle ownership and Table 6-9 provides a list of other transport methods used in the broader study area, City of Canterbury Bankstown LGA, Liverpool City LGA and Greater Sydney.

Table 6-8 Vehicle ownership in 2016

Indicator	Broader study area		City of Canterbury Bankstown LGA		Liverpool City LGA		Greater Sydney	
	Number	%	Number	%	Number	%	Number	%
Households with no vehicles	1,558	6.5%	12,183	11.3%	4,542	7.7%	179,500	11.1%
Average motor vehicles per dwelling	Provided for each SA2 in Appendix A		1.7	-	2	-	1.7	-

Source: Census of Population and Housing (ABS 2016a)

Table 6-9 Travel to work data in 2016

Indicator	Broader study area		City of Canterbury Bankstown LGA		Liverpool City LGA		Greater Sydney	
	Number	%	Number	%	Number	%	Number	%
Travel to work by train (one method)	2,811	8.5%	19,504	14.1%	5,641	6.7%	247,051	10.9%
Travel to work by bus (one method)	323	1.0%	2,753	2.0%	1,314	1.6%	125,503	5.5%
Travel to work by ferry (one method)	4	0.0%	20	0.0%	6	0.0%	7,467	0.3%
Travel to work by tram (one method)	3	0.0%	91	0.1%	4	0.0%	2,617	0.1%
Travel to work by taxi (one method)	42	0.1%	400	0.3%	111	0.1%	5,301	0.2%
Travel to work by car (as driver - one method)	21,424	65.0%	79,112	57.2%	54,561	65.0%	1,197,269	52.7%
Travel to work by car (as passenger - one method)	1,458	4.4%	6,453	4.7%	4,157	5.0%	89,273	3.9%
Travel to work by truck (one method)	483	1.5%	1,555	1.1%	1,236	1.5%	19,540	0.9%
Travel to work by Motorbike/scooter (one method)	106	0.3%	528	0.4%	274	0.3%	14,890	0.7%
Travel to work by bicycle (one method)	72	0.2%	406	0.3%	166	0.2%	16,471	0.7%
Other (one method)	166	0.5%	806	0.6%	372	0.4%	11,778	0.5%
Travel to work by walking only (one method)	411	1.2%	2,787	2.0%	1,661	2.0%	91,577	4.0%
Worked at home ¹	1,036	3.1%	3,832	2.8%	2,530	3.0%	98,906	4.4%

Table note:

¹ Notes about the data from the ABS 2016 Census of Population and Housing: The data does not consider the potential impact of COVID 19 on travel, including the number of public transport users and people working from home.

Source: Census of Population and Housing (ABS 2016a)

The following travel patterns were identified from the review of ABS data:

- City of Canterbury Bankstown LGA had relatively high proportions of people commuting to work by train and the bus compared to the broader study area and Liverpool City LGA.
- The preferred method of travel to work in the broader study area, Liverpool City LGA, City of Canterbury Bankstown LGA and Greater Sydney was travel to work by car (as driver). The broader study area and Liverpool City LGA had the highest portion of residents overall.
- Travel to work by train was the second most used method of travel to work in the broader study area, Liverpool City LGA, City of Canterbury Bankstown LGA and Greater Sydney. This is likely to be due to the additional public transport facilities located throughout both LGAs including train and bus services (discussed further in Section 6.5.3).

6.5.2 Roads

The main roads within the direct study area include Henry Lawson Drive, Milperra Road, Newbridge Road, Auld Avenue, and Tower Road.

As per the *Schedule of Classified Roads and Unclassified Regional Roads*, different sections of Henry Lawson Drive are classified as State and Regional roads. Milperra Road and Newbridge Road are classified as State Roads. Auld Avenue and Tower Road are both classified as Local Roads.

Henry Lawson Drive is a two-lane road (one lane in each direction), except for small sections where the road intersects with the A32 Route and M5 Motorway – where it extends to a four-lane road (two lanes in each direction) to accommodate for the respective motorway on/off-ramps. The road is a 60 kilometres/hour road through the direct study area. Parking in the direct study area is provided for on adjacent streets off Henry Lawson Drive.

Milperra Road and Newbridge Road are both six-lane roads (three lanes in each direction) which make up the A34 Route. The two roads converge at the Henry Lawson Drive intersection. Milperra Road runs east from Henry Lawson Drive to The River Road. Newbridge Road runs west from Henry Lawson Drive to Terminus Street. Both Milperra Road and Newbridge Road have a speed limit of 70 kilometres/hour.

Auld Avenue has a speed limit of 50 kilometres/hour, and Tower Road has a speed limit of 40 kilometres/hour. Both Auld Avenue and Tower Road are two-lane roads (one lane in each direction). The western side of Auld Avenue accommodates for parking along the boundary with the Vale of Ah Reserve, and there is Shared Use Path (SUP) on the eastern side of the road. Parking along Tower Road is accommodated through along the side of the road on the eastern side of the golf courses and western side of the road in front of businesses.

More information about the local road network is discussed further in the *Henry Lawson Drive Upgrade Stage 1A - Traffic and Transport Assessment* (Transport, 2021).



Figure 6-19 Henry Lawson Drive, north of the Auld Avenue Bridge (looking north)



Figure 6-20 Henry Lawson Drive, north of the Milperra Road/Newbridge Road intersection (looking south)



Figure 6-21 Henry Lawson Drive and Tower Road intersection (looking north)



Figure 6-22 Auld Avenue (looking west)

6.5.3 Public transport

Public transport through the socio-economic study area is primarily through buses. There are two main bus stops within the direct study area. Both bus stops are located on Milperra Road to the east of the Henry Lawson Drive/Milperra Road intersection. One bus stop is located on the northern side of Milperra Road for buses travelling east and the other bus stop is located on the southern side of Milperra Road for buses travelling west. The M90 – Burwood to Liverpool bus route traverses Milperra Road/Newbridge Road, directly through the direct impact area.

School bus services for local schools including but not limited to Milperra Public School, Georges River Grammar School and Mount St Joseph Secondary School, use these local services in combination with dedicated school buses⁵.

There are no rail lines which traverse the socio-economic study area. Four heavy rail lines surround the socio-economic study area however, including the T2 (Inner West and Leppington Line), T3 (Bankstown Line), T5 (Cumberland Line) and T8 (Airport and South Line) lines.

There are no train stations located within the socio-economic study area, however it is likely that some residents within the socio-economic study area would use the surrounding train stations within the broader study area. The nearest train station is Panania Station on the T8 Line which travels west from Central and terminates at Macarthur. It is located around 3.1 kilometres south east of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection. The travel to work data indicated that 8.5 per cent of residents in the broader study area choose to use the train to travel to work.

⁵ <https://www.transdevnsw.com.au/services/timetables/schools/>



Figure 6-23 Existing bus stop on Milperra Road (facing east)

6.5.4 Freight

As discussed in Section 4.2.4, majority of Sydney's freight task is undertaken by road. Henry Lawson Drive is an important route for freight and industrial type business operations.

A number of vehicles travel through the direct study area on Henry Lawson Drive, Milperra Road and Newbridge Road. Henry Lawson Drive is designated as a B-Double access route that connects surrounding large industrial areas of Milperra, Revesby, Chipping Norton and Moorebank, which are made up of warehouses, manufacturing, storage and logistics businesses. As a result, a range of vehicles including heavy vehicles travel throughout the local road network of the broader study area.

The *Freight and Ports Plan 2018-2023* (Freight and Ports Plan) discusses the reliance of freight on the connecting road network. The NSW Government is aiming to reduce travel time and congestion on the NSW road network for freight. The M5 Motorway and the Hume Motorway is identified within the Freight and Ports Plan as two of Greater Sydney's key freight corridors. As discussed in Section 4.2.3, Henry Lawson Drive, connects and supports these key freight routes.

6.5.5 Walking and cycling

The Roads and Maritime Cycleway Finder is a database that identifies cycleway infrastructure throughout NSW (Roads and Maritime, 2019a). The direct study area consists of a mix of shared use paths (used by both pedestrians and cyclists) and on-road cycling facilities. There is a shared use path which extends throughout the direct study area on the northbound side of Henry Lawson Drive. The path provides a north/south connection and is located within the vegetated corridor between the Georges River and Henry Lawson Drive in the northern part of the direct study area. The pathway connects to the southern side of the intersection with Henry Lawson Drive/Milperra Road/Newbridge Road below the Newbridge Road bridge. The path continues south to Auld Avenue where there are provisions for cyclists to continue their travel along Auld Avenue and through the southern part of Gordon Parker Reserve.

The cycle paths are on-road and vary in difficulty, from Off Road and Low Difficulty to Hard Difficulty:

■ **Off Road:**

- Henry Lawson Drive north of Newbridge Road/Milperra Road intersection
- Newbridge Road west of Henry Lawson Drive intersection
- Auld Avenue to Ruthven Avenue
- Ruthven Avenue to Ganmain Crescent
- Nancy Ellis Leebold Drive to Sheridan Close

■ **Low Difficulty:**

- Raleigh Road from Henry Lawson Drive to Pozieres Avenue
- Ruthven Avenue
- Gainmen Crescent

■ **Hard Difficulty:**

- Henry Lawson Drive between Auld Avenue and Hermies Avenue

There is currently a lack of formal walking and cycling access on Milperra Road and on the southbound side of Henry Lawson Drive south of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection.

Where the Newbridge Road shared use pathway connects to the Georges River shared path, connection provisions are provided both below and over the bridge.

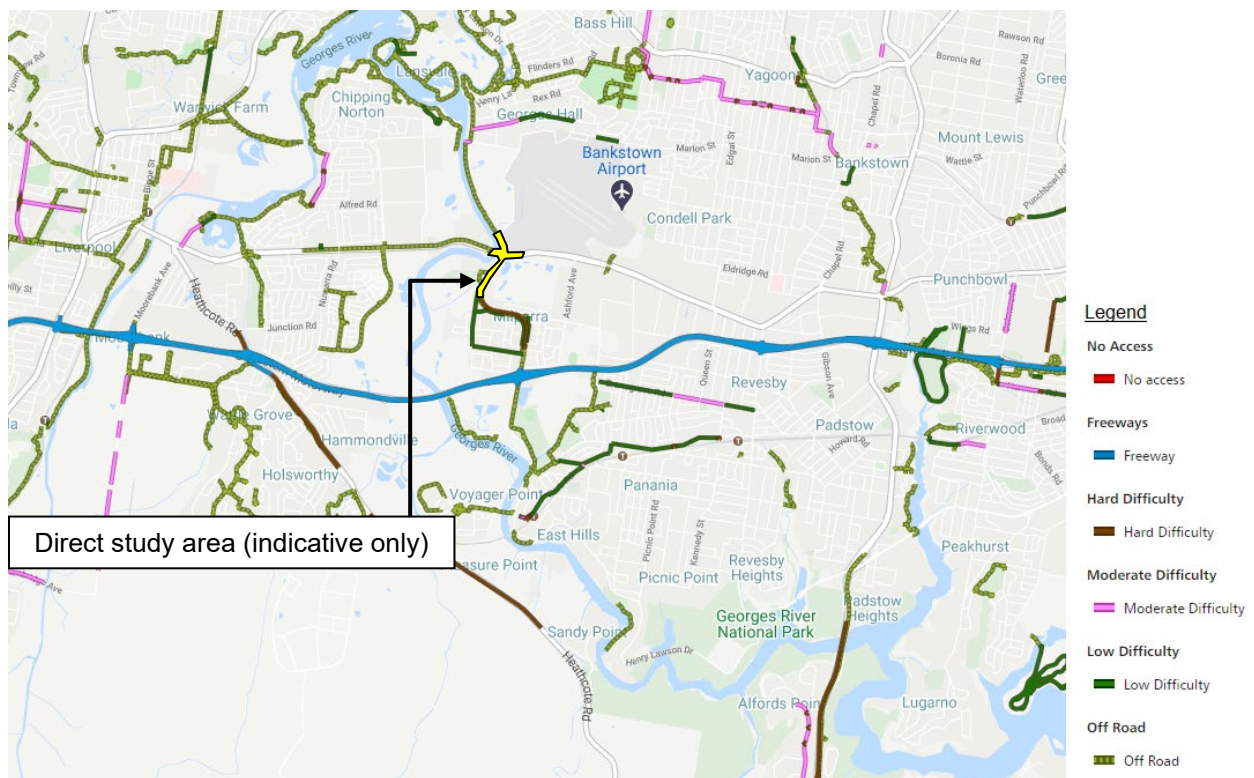


Figure 6-24 Cycleway Finder results within and surrounding the broader study area

Source: Cycleway Finder, Roads and Maritime, 2019



Figure 6-25 Existing shared user pathway along Henry Lawson Drive north of Newbridge Road (facing south)



Figure 6-26 Existing shared user pathway along Henry Lawson Drive south of Newbridge Road (facing north)



Figure 6-27 Shared user pathway on Auld Avenue (facing west)



Figure 6-28 Shared user pathway connecting from Auld Avenue to Henry Lawson Drive, via Gordon Parker Reserve



Figure 6-29 Existing road shoulder path along Henry Lawson Drive (facing north)

6.6 Community values

Understanding the values of a community is fundamental to identify what is most important for residents for quality of life and wellbeing and provides context and insight into how the community may perceive impacts of the overall proposal. Values often relate to amenity, social cohesion, social wellbeing and can be associated with social infrastructure.

The Liverpool City Council's CSP and the City of Canterbury Bankstown Council's CSP are used to inform the community values for this assessment as they have been developed recently and informed by extensive community consultation. The two CSP's define the vision and priorities of the community and are designed to improve life for the residents.

The Liverpool CSP identifies four directions as follows:

- Creating connection – emphasising the importance of connections within Liverpool to create a harmonious community including celebrating diversity, providing access and equity for the community and creating a dynamic and inclusive environment.
- Strengthening and protecting our environment – planning a high-quality, sustainable urban environment to create a great place to live, work and play.
- Generating opportunity – underlines the need for Council to support economic growth, including employment and investment options. This direction includes the need to develop transport networks to create an accessible city.
- Leading through collaboration – highlights the importance of a Council proactively leading the community, while continually engaging the community to ensure an aligned vision.

The Liverpool City Council aims to make Liverpool City LGA liveable through cultural experiences, business activity, accessibility and the environment. The CSP discusses the importance of connecting the community in relation to ensuring social linkages, as well as accessibility to social infrastructure and transport networks. However, due to the growing population and high traffic volumes within the Liverpool City LGA, transport accessibility was identified as a challenge. In response to this challenge, Liverpool City Council has committed to developing transport networks to enhance its accessibility as a city.

Furthermore, the City of Canterbury Bankstown Council's CSP contains several 'destinations' identified through community consultation. The 'destinations' include:

- Safe and Strong
- Clean and Green
- Prosperous and Innovative
- Moving and Integrated
- Healthy and Active
- Liveable and Distinctive
- Leading and Engaged

The City of Canterbury Bankstown Council's CSP aims to have a thriving and dynamic city through creating a happy, healthy, and safe community that provides for their needs. It also aims to value individual's culture, religion, and heritage, while respecting the environment. The CSP highlights the importance of having an accessible city that facilitates movement around the city for all users. It also identifies the significance of creating a liveable city that is well designed.

Both the Liverpool City Council and the City of Canterbury Bankstown Council's CPS highlight the importance of investing in active transport and good infrastructure to increase connectivity and accessibility.

Based on the community consultation undertaken for the proposal (summarised in Chapter 5) and community strategic plans, the following community values have been identified:

- Access and connectivity
- Natural areas and the environment
- Community diversity and inclusivity
- Having transport options/opportunities
- Safety

7 Review of environmental factors impact assessment

This section outlines the potential socio-economic impacts of the REF proposal.

7.1 Construction

7.1.1 Property acquisition and adjustments

The REF proposal would require the acquisition and adjustment of properties within the direct study area. In addition, some land parcels would also be temporarily leased for ancillary facilities. Properties affected by acquisition and leasing by the REF proposal is shown in Figure 7-1 to Figure 7-3.

Permanent acquisition and temporary lease arrangements would be required for the new road, ancillary facilities and the construction footprint on Henry Lawson Drive, Milperra Road and Newbridge Road. A summary of property acquisition required for the REF proposal is as provided below.

Full property acquisition

The broader study area has a high proportion of people with the same address as five years ago in 2016 which suggests a strong connection to place. One residential property would be fully acquired for the REF proposal to the east of Henry Lawson Drive, just north of the Auld Avenue/Henry Lawson Drive intersection. Impacts of property acquisition can include stress, anxiety and loss of social networks. These impacts occur when residents are required to relocate, with some property owners and tenants being more vulnerable to the impacts of moving than others. This includes people with the need for assistance, older people and those with lower levels of economic resources. Additionally, people who have resided in homes for longer periods of time can also be more susceptible to the impacts associated with property acquisition. Property owners/tenants at this property may experience feelings of loss and separation to place and the surrounding environment as a result of acquisition.

Partial property acquisitions

Other property to be acquired by Transport would include partial property acquisitions near:

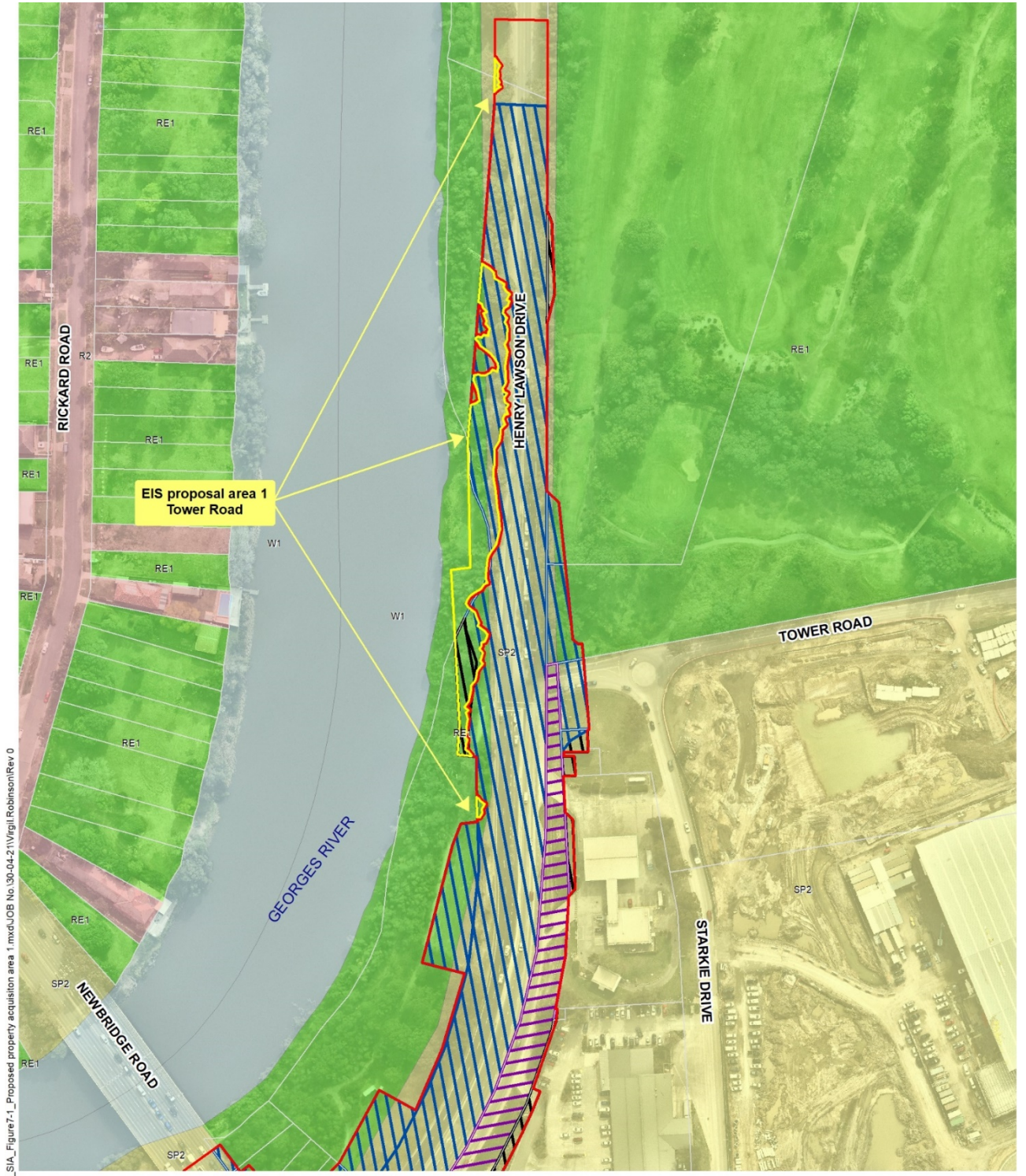
- On the eastern side of Henry Lawson Drive north of the Henry Lawson Drive/Tower Road intersection (part of the Georges River Golf Course)
- To the north of Newbridge Road near the Henry Lawson Drive/Milperra Road/Newbridge Road intersection (vegetated corridor between Georges River and Henry Lawson Drive)
- On the northern side of Milperra Road to the east of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection, near the existing bus stop
- On the southern side of Milperra Road east of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection (part of the Bankstown Golf Course)
- On the eastern and western side of Henry Lawson Drive south of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection, to just south of Auld Avenue.

These partial acquisitions are a mix of private, government and crown owned land, most of which currently comprise the vegetated areas and grassed areas that surround the road corridor. Crown land to be acquired for the proposal is located on the northern and southern sides of Milperra Road within the direct study area. These areas would be acquired under the requirements of the *Crown Lands Management Act 2016*. Private property to be acquired includes private residential strip acquisition and two small portions of land that are part of the Bankstown Golf Course and the Georges River Golf Course. Georges River Golf Course is currently located on land leased from Council and Bankstown Golf Course is privately owned. Land to be acquired from the Bankstown Golf Course is located close to the road corridor and is densely vegetated. The acquisition of land in these areas is not expected to impact the operation of the golf courses. Impacts to owners of properties requiring acquisition is expected to be minor based on the location of acquisition within each property. This is discussed further in Section 7.2.4.

Additionally, areas within the direct study area would be leased by Transport during construction. The use of these areas would be limited to the construction phase of the REF proposal. The REF proposal would require leasing arrangements along Henry Lawson Drive between the intersection of Milperra Road/Newbridge Road and the intersection of Auld Avenue. This would predominately be strip leasing arrangements at the front of properties on the western side of Henry Lawson Drive. Most properties in this location have dwellings and residential structures set back from the property boundary, with front yards and wide grassed verges. Leasing in this area is not expected to substantially impact these properties. The subsequent amenity impacts of property acquisition are discussed further in Section 7.1.6.

Transport has undertaken consultation with landowners and occupiers through the development of the design and will continue to consult with landowners and occupiers throughout construction. The extent of property acquisition would be refined during detailed design in consultation with relevant property owners.

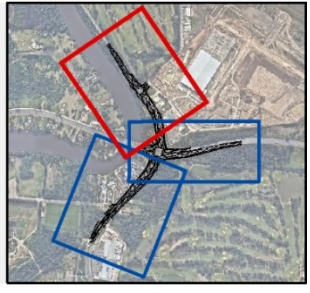
Significance of property acquisition and adjustment impacts: Based on the characteristics of property owners and occupiers, sensitivity of these stakeholders is moderate. The magnitude of both the temporary and permanent changes during construction would be low. This is based on types of proposed acquisition that would be required for the proposal which would include one full and some partial acquisitions. This would result in the overall significance of the impact being moderate - low.



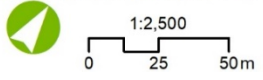
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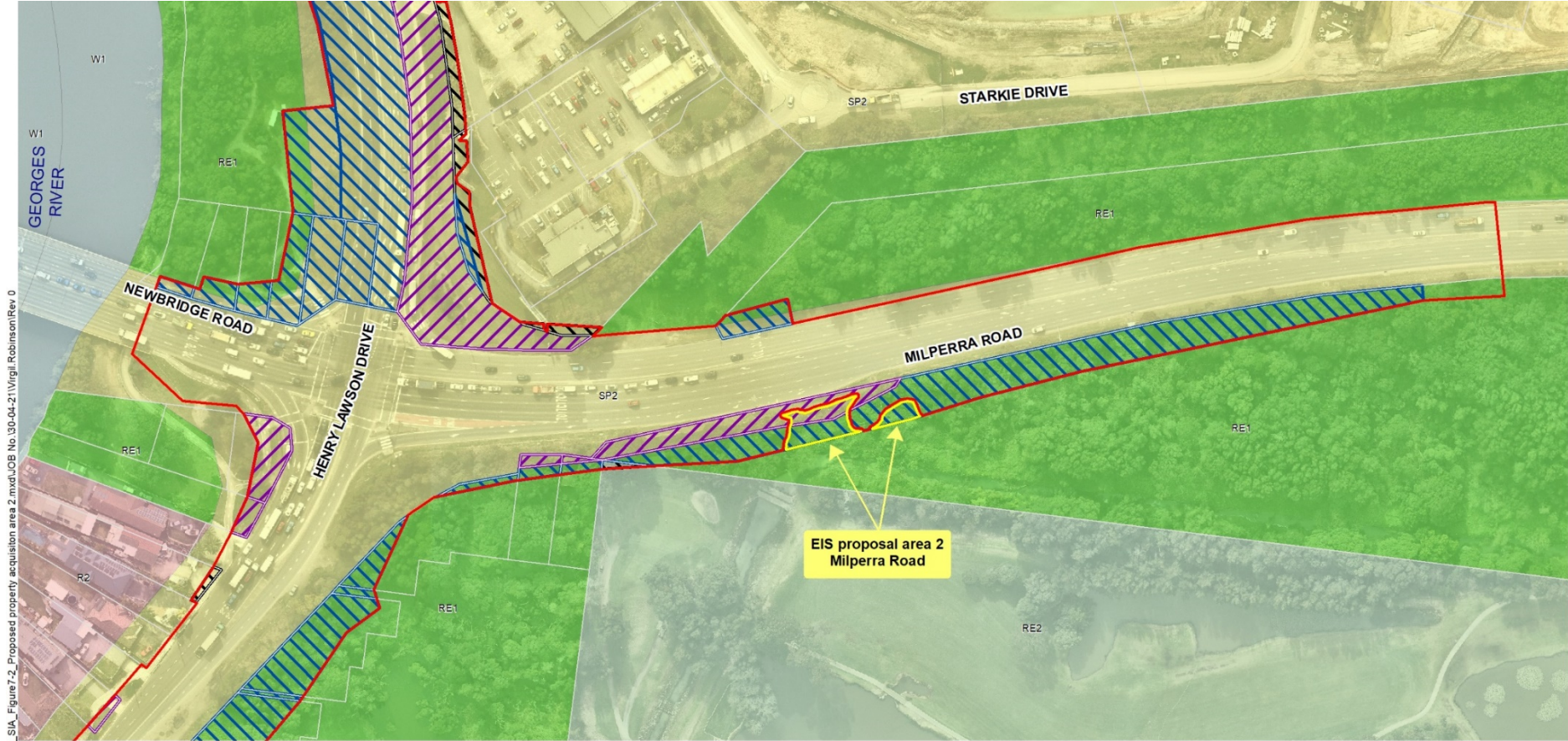
- EIS proposal area
- REF proposal area
- Property acquisition
- Property to be leased for construction
- Property owned by TfNSW

- Land zoning**
- R2 Low Density Residential
 - RE1 Public Recreation
 - SP2 Infrastructure
 - W1 Natural Waterways



Source: Aurecon, TfNSW, Spatial Services, Nearmap

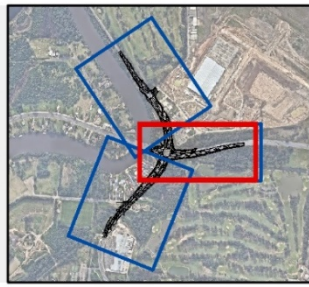




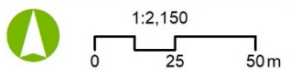
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- EIS proposal area
- REF proposal area
- Property acquisition
- Property to be leased for construction
- Property owned by TfNSW

- Land zoning**
- R2 Low Density Residential
 - RE1 Public Recreation
 - RE2 Private Recreation
 - SP2 Infrastructure
 - W1 Natural Waterways



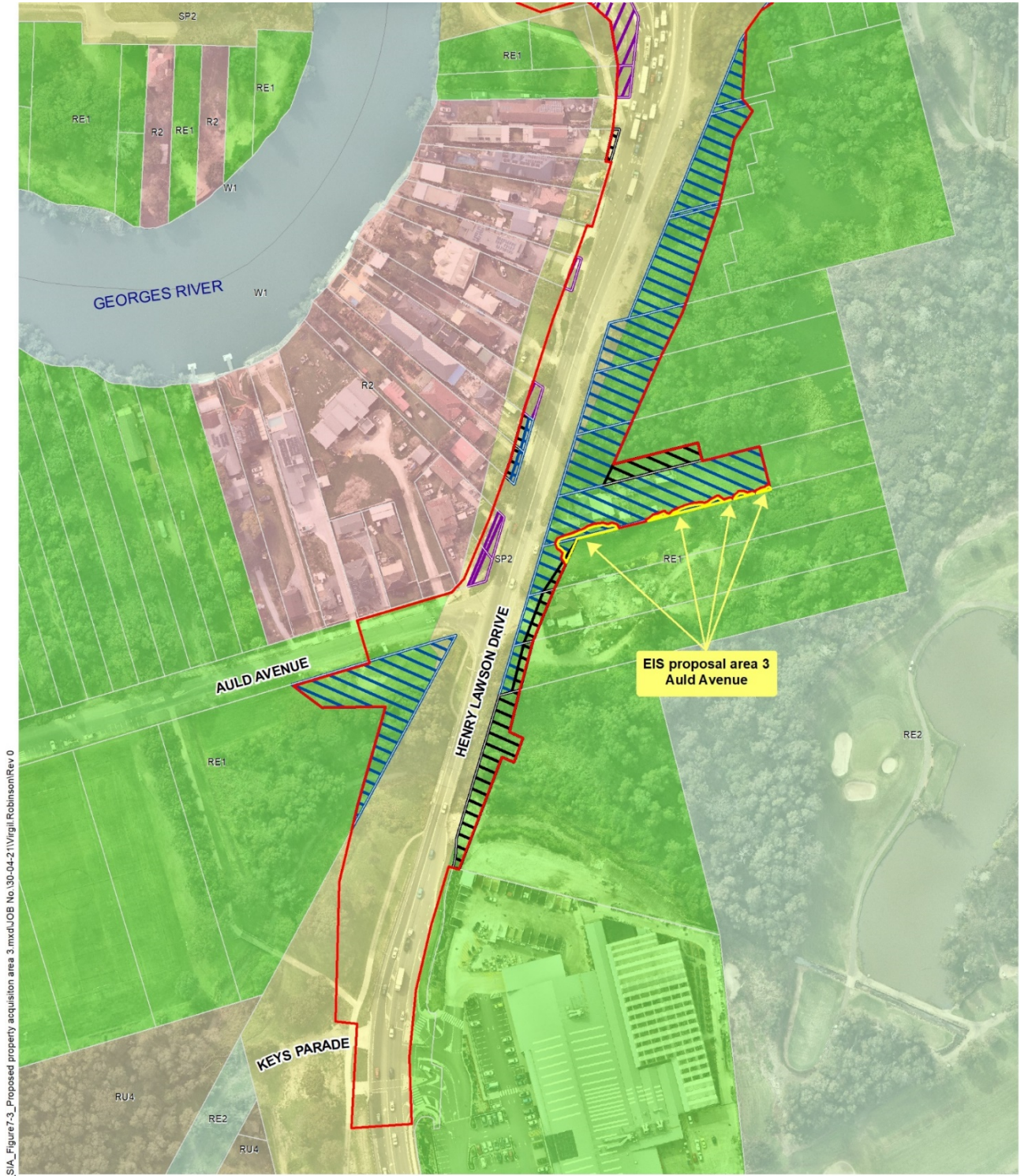
Source: Aurecon, TfNSW, Spatial Services, Nearmap



Projection: GDA 1994 MGA Zone 56

Henry Lawson Drive Stage 1A Socio-economic Impact Assessment

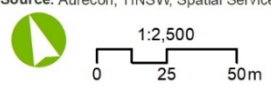
FIGURE 7-2: Proposed property acquisition



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- EIS proposal area
- REF proposal area
- Property acquisition
- Property to be leased for construction
- Property owned by TfNSW
- RE1 Public Recreation
- RE2 Private Recreation
- RU4 Primary Production Small Lots
- SP2 Infrastructure
- W1 Natural Waterways

Land zoning
 R2 Low Density Residential
 Source: Aurecon, TfNSW, Spatial Services, Nearmap



Henry Lawson Drive Stage 1A **Socio-economic Impact Assessment**

Projection: GDA 1994 MGA Zone 56

FIGURE 7-3: Proposed property acquisition

7.1.2 Land use changes

The REF proposal would require some temporary land use changes during construction.

The road corridor within the direct study area would transform into an area of construction activity, with parts of the road corridor and reserve used for construction activities such as pavement work, earthwork, utility work and the movement of construction plant and equipment. The change in land use within and surrounding the road corridor may impact motorists and active transport movements (discussed further in Section 7.2.3).

The proposed ancillary facilities would result in the following land use changes during construction:

- Site 1 – Georges River: this area would be used during construction for material storage, parking and as a pickup bay. Currently, the area is a cleared, hardstand section of the vegetated corridor that separates Henry Lawson Drive from the Georges River. This area was a former council car park for people accessing the Georges River. It is unlikely that the community that use the shared user pathway and area between Henry Lawson Drive and the Georges River would currently use this site for any purpose.
- Site 2 – Newbridge Road: this area would be used for development of the road corridor and shared user path at the intersection as well as for storage of equipment, machinery and materials and pick up/drop off of materials and equipment. Similar to site 1, site 2 is a cleared section of the vegetated corridor that separates Henry Lawson Drive from the Georges River. This site is currently partially occupied by the Camofleur Artwork, which can be observed by people driving past.
- Site 3 – Henry Lawson Drive: the site is currently the location of a residential property. As mentioned in Section 7.2.1, the site would be acquired for road widening, as well as loose material storage, site staff parking, main site offices and materials storage.
- Site 4 – Auld Avenue: this area is currently used as an informal parking area and has previously been used as a construction compound. The site would be used to facilitate the bridge construction, serving as a hardstand laydown area that would be used for fuel storage and crane storage. The change in land use may have impacts to people using Gordon Parker Reserve during busy periods when parking availability along Auld Avenue is limited (i.e. during weekend sport). This is discussed further in Section 7.2.3.

In some areas surrounding the road footprint for the REF proposal, land use changes including changes to roadside areas and ancillary facilities would be temporary only, restored to their previous use in consultation with the property owner rehabilitated/revegetated.

Significance of land use impacts: The sensitivity of land occupiers, owners and the broader study area to changes in land use is low. This is due to the areas that would potentially be impacted during construction, including areas that form part of the road corridor that are not easily accessible by the public and located close to the road corridor. The magnitude of the changes would be low resulting in the significance of the impact being low.

7.1.3 Access and connectivity

Road network and changes to traffic

The REF proposal would result in some temporary changes to access and connectivity within the direct study area and socio-economic study area. Some minor impacts may also be experienced in the broader study area.

Construction is expected to result in delays for motorists using Henry Lawson Drive, resulting in longer travel times and potential congestion on the local road network. This is likely to occur as a result of additional traffic movements required for construction, including access to ancillary facilities and construction areas. Similar impacts are likely to be experienced on Tower Road and also Auld Avenue, particularly closest to the intersections. Impacts to the road network may be associated with the presence of heavy vehicles accessing the ancillary facility and delays associated with alternate traffic arrangements on Henry Lawson Drive during construction. Construction may require some temporary lane closures for the widening works and development of intersection arrangements at Auld Avenue and Tower Road. These lane closures may result in short term disruptions to access for residents and businesses in the direct study area and socio-economic study area. Alternate traffic arrangements would be implemented to maintain connectivity. This may result in increased traffic on the surrounding road network including local streets, which could affect traffic flow and result in some minor increased travel times. This may impact the people's use of the direct study area for travel. Local and regional road users may feel frustrated in response to changes to the network, having to travel through the direct study area using alternative and/or unfamiliar arrangements. Lane closures during construction would be timed during low traffic periods (such as at night or outside peak periods) where possible to reduce impacts on the local road network and surrounding receivers.

In addition, slower speed limits would be implemented within the direct study area around construction areas. Reduced travel speeds would contribute to congestion during the construction phase of the REF proposal. Additional construction traffic and slower speeds within the direct study area would reduce the efficiency of the road network, which would impact the liveability and amenity of the direct study area.

The direct study area is currently used by heavy vehicles accessing the M5 Motorway, Hume Highway and industrial areas in the broader study area. Construction vehicles required for the REF proposal would use Henry Lawson Drive, Milperra Road and Newbridge Road as haulage routes. These roads are approved for heavy vehicles (including B-doubles) (Transport for NSW, 2020). Use of other surrounding heavy vehicle approved local roads by construction vehicles as haulage routes would be avoided where possible, to minimise impacts to the local community. In addition, about 70 construction workforce staff are estimated to work on the REF proposal. Construction vehicles are expected to contribute an average total of 15 private vehicle movements, 20 light vehicle movements and 30 heavy vehicle movements to the local road network per day. This is expected to add some construction related traffic to the local road network, particularly within the direct study area and socio-economic study area. This may impact the efficiency of the road network and result in people using other parts of the local road network to avoid construction areas. As discussed in the Project REF, people use 'rat runs' to avoid congestion at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection. During construction, this may also occur, resulting in increased pressure on surrounding streets. This could have impacts to access and connectivity within the socio-economic study area and broader study area. It may also result in other residences feeling annoyed/concerned in response to amenity impacts in surrounding residential streets, in regard to noise, traffic and visual impacts associated with more traffic activity in quieter areas.

Property access

Residents in the broader study area have a strong reliance on private vehicles for travel. Access to properties would be maintained during construction, however access for vehicles may be limited during some construction activities particularly those residential properties on Henry Lawson Drive, south of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection. Changes in access from freely accessible prior to construction, to potentially altered and delayed access to properties may cause frustration to some residents. This includes access to Tower Road and Auld Avenue that intersect with Henry Lawson Drive. Impacts to access and the local road network during construction may limit/change people's ability to move around, impacting amenity.

Most of the properties that front onto the northbound side of Henry Lawson Drive park private vehicles within their front yards and driveways and turn within their properties to exit back onto Henry Lawson Drive. Construction of the widened road would require some partial property acquisition, which would reduce some of the space at the front of some of these properties. Vehicle movements within properties for vehicles exiting onto Henry Lawson Drive may be altered (i.e. reduction in space may result in less turning provisions within properties). This may also be impacted due to alternate traffic arrangements on Henry Lawson Drive during construction such as the temporary closure of some lanes and presence of construction plant and machinery. Changes in access would be carried out in consultation with the relevant property owner/occupier.

Access to social infrastructure

Access to social infrastructure facilities within the direct impact area would also be impacted during construction. Social infrastructure on Auld Avenue is used by schools, local sporting clubs and community groups. These groups require access to Gordon Parker Reserve and Vale of Ah Reserve and Dog Park accessed via Auld Avenue. There are no alternative roads to access the social infrastructure located on Auld Avenue. Vehicular access would be impacted particularly during busy weekend sport periods. Although access would be impacted by construction related traffic delays, access would be maintained during construction. More information about impacts to these facilities and other social infrastructure facilities in the socio-economic study area are discussed in Section 7.2.4.

Freight and business movements

Construction may impact access to businesses as a result of temporary alternate traffic arrangements on Henry Lawson Drive, Newbridge Road and Milperra Road. Access to businesses on the northern side of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection would be impacted, particularly during tie in work and work at the Tower Road/Henry Lawson Drive intersection. Some of the businesses on the northern side of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection may be operational over 24 hour periods, or outside of peak periods, therefore alternative traffic arrangements during these periods may impact business movements and customer access. This includes the BP Truckstop service station and Wild Bean Café which is open 24 hours a day, KFC Milperra which is open between 10.00 am and 10.00 pm and Hungry Jack's Burgers Milperra, which is open between 7.00 am and 10.00 pm. Access out of these businesses would still be via Starkie Drive, however patrons needing access to Henry Lawson Drive would need to travel northbound along Tower Road to exit on Rabaul Road in Georges Hall (about two kilometres to regain access onto Henry Lawson Drive). Businesses on Tower Road may also be impacted by construction traffic delays and alternate traffic arrangements. Businesses on Tower Road can also gain access from Rabaul Road in Georges Hall, located north of the direct study area.

Similarly, the Flower Power Complex located to the south of the direct study area may also experience impacts to access during upgrade work required at Keys Parade and Auld Avenue. The complex would be serviced by deliveries and large vehicles. The complex is operational between 8.00 am and 7.00 pm and it is likely that businesses would also receive deliveries outside of this period. During construction of the bridge at Auld Avenue and the tie-in works in the southern part of the direct study area, some localised impacts in access or traffic delays to the Keys Parade intersection. Impacts to access could result in delivery delays and adverse impacts to businesses in this area. In addition, impacts to access may also impact customer access during business operating hours. Impacts to business operations are discussed further in Section 7.2.5.

As Henry Lawson Drive, Milperra Road and Newbridge Road are approved heavy vehicle roads, these roads are used as freight routes, providing connections to the M5 Motorway and the Hume Highway. These routes have been identified as two of Greater Sydney's key freight corridors within the Freight and Ports Plan. As a result, keeping traffic operating efficiently along Henry Lawson Drive, Milperra Road and Newbridge Road is important to surrounding industrial areas including the industrial area within Milperra, Chipping Norton and Moorebank. If alternative traffic arrangements are proposed, heavy vehicle movements within the direct study area and socio-economic study may impact freight carriers, particularly in terms of travel times. For some activities during construction, either reduced capacity (lane closures) or detours for heavy vehicles may be required. If delivery periods are time sensitive for businesses travelling through the direct study area, such as produce deliveries or wet cement deliveries, impacts to the local road network may impact these businesses. Consultation with community on the construction activities and any traffic changes will be undertaken to mitigate potential impacts during construction.

Parking

The construction workforce required for the REF proposal may require parking facilities for private and construction vehicles. As parking is currently limited in the areas surrounding the direct study area, parking impacts from construction workers could impact parking availability. Construction workers will be encouraged to park in parking areas within ancillary facilities and share vehicles when travelling to construction areas to limit potential parking impacts in surrounding local roads.

The informal parking area on Auld Avenue would not be available for use during construction. This area would be used by patrons of Gordon Parker Reserve, particularly during busier recreational periods (i.e. weekends) and events when the kerbside parking is full. As the parking spaces within this area are limited, impacts are not expected to be substantial, with other parking available closer to the Vale of Ah Reserve. Other parking would be available south of the direct study area on Raleigh Road in Milperra, however this is about 220 metres south of the reserve but accessible by the shared user path opposite the Flower Power Complex. Impacts to parking would impact the elderly and people that have mobility constraints, as people may need to park further away from the reserves.

Emergency services

The NETS Ambulance Service is in the socio-economic study area on Tower Road. Emergency services would use Henry Lawson Drive to access facilities in the broader study area including the Sydney HEMS Base Hospital and Bankstown-Lidcombe Hospital. Based on desktop investigations of the NETS Ambulance Service, the facility is operational 24 hours a day, seven days a week. Any potential temporary alternate traffic arrangements, including traffic switching, may affect the potential response time of these services to reach their respective emergencies. Additionally, construction traffic may also result in delays on the local road work within the direct study area and socio-economic study area which could result in impacts to response time for emergencies. Prior to construction works, consultation with emergency services would be undertaken to make sure that emergency access is maintained.

Active transport

Henry Lawson Drive provides a shared user pathway along its extent through the direct study area. The shared user pathway and other connecting active transport facilities would be impacted during the construction of the REF proposal. Pedestrians and cyclists would experience impacts on Henry Lawson Drive, Milperra Road and Auld Avenue, due to alternate access pathways and disruptions to route connections during construction. This may affect travel durations, movement patterns and accessibility during construction.

The shared user pathway to the west of Henry Lawson Drive would be impacted during construction. The shared user pathway provides a continuous connection between the north and south of the direct study area. There is a connection beneath Newbridge Road and at the pedestrian crossing on Auld Avenue. During construction, the shared user pathway would be altered to accommodate construction activities, resulting in potential disruptions in connectivity and alternate routes around construction areas. Alternate arrangements for the pathway would be required during widening works, utilities work and earthworks. As discussed in Section 6.5.5, this shared user path is an important link in Sydney's cycle network. The temporary closure or adjustment of pathways and shared user connections may affect accessibility and some resident and visitor enjoyment of public spaces in the direct study area. This would mostly be experienced around the main structural widening works. Changes in access and connectivity would reduce the overall amenity of the direct study area during construction which are values that contribute to the liveability of the direct study area. Access throughout the direct study area using the shared user pathway and across intersections would be maintained during construction, through the use of detours and alternative arrangements and managed through signage and wayfinding.

Public transport

There are currently bus stops located within the direct study area on Milperra Road, with services travelling along Milperra Road and Newbridge Road. Potential impacts to public transport during construction of the REF proposal may include:

- Potential delays and detours for the M90 bus route during construction works through the Henry Lawson Drive/Milperra Road/Newbridge Road intersection
- Diversion or temporary loss of walking and cycling access to bus stops (including relocated bus stops) within the direct study area

Changes to the public transport facilities would impact people travelling through and within the direct study area. The relocation of bus stops on Milperra Road during construction works may result in people having to travel further distances to access temporary bus stops. This may be difficult for the elderly or less mobile public transport users. Temporary impacts to bus stops are likely to be relatively similar to the existing conditions associated with access to bus stop access due to the current lack of connectivity to these facilities for people.

School routes

Local school bus routes may experience slight disruptions during construction due to construction traffic, alternative traffic arrangements and reduced speeds around construction areas. This would occur mostly in areas within the direct study area. Potential disruption, delays or relocation of bus stops are likely to have similar effects to school bus routes to those associated with the public bus services.

Consultation undertaken for the overall proposal in 2020 and 2021 has indicated that the closure of Auld Avenue is likely to have impacts on school bus services and school bus coaches that access Gordon Parker Reserve and Vale of Ah Fields during the week between Wednesday and Friday. Impacts to the local road network, including access to Auld Avenue and construction traffic may impact travel times to Gordon Parker Reserve and Vale of Ah Reserve during and after school. Should these areas be accessed during the day for sport and recreation, delays can have impacts to class schedules and/or limit recreational usage time at these facilities.

Significance of access and connectivity impacts: The sensitivity of people to changes in access and connectivity is high. This rating of sensitivity has been selected considering all road users including motorists, pedestrians, cyclists and freight drivers that would be using the direct study area during construction. The magnitude of the temporary changes during construction would be moderate resulting in the significance of the impact being high-moderate. This takes into consideration the potential access and connectivity impacts to residences, facilities and businesses, as well as the proposed mitigation that would be implemented during construction.

7.1.4 Social infrastructure

Impacts to the operation of social infrastructure within the direct study and socio-economic study area during construction are discussed in Table 7-2 and Table 7-3. Potential access impacts associated with social infrastructure are discussed in Section 7.1.3.

Table 7-1 Potential impacts to social infrastructure in the direct study area

Social infrastructure	Potential impact
Gordon Parker Reserve	<p>Located on Auld Avenue in the direct study area, Gordon Parker Reserve is used as a sport and recreation facility by the community.</p> <p>The construction of the REF proposal would not directly impact the operation of this facility but may have indirect impacts on the usage of the reserve as a result of visual, noise and air quality impacts associated with construction. Proposed ancillary site 4 would also be located near to the reserve, which may result in additional amenity impacts such as noise, visual and perceived air quality impacts.</p>
Crosscurrents – Georges River Art Walk	<p>As stated in Section 6.2.5, the shared user pathway within the direct study area hosts the Crosscurrents - Georges River Art Walk 'Camoufleur' artwork and Trail Markers. Although these items are not heritage listed, they represent local history of the area and would be observed by the community when using the shared user pathway.</p> <p>During construction, these features of the art walk would be protected from construction activities by fencing. This may preclude the ability of people to view the artwork along the art walk. In addition, sections of the art walk may be closed around construction areas to mitigate safety impacts. This would result in impacts to the enjoyment of these features of the art trail by the community, as they would be separated from the shared user pathway and would be located in an area of construction.</p>
Recreational use of the Georges River	<p>The Georges River is used by recreational boats and vessels. During construction, the operation of the Georges River would not be impacted, however amenity impacts would be experienced in this area. This may include visual and noise impacts which could affect the attractiveness and enjoyment of using the river in the direct study area.</p>
Hind Park	<p>Located about 152 metres from the REF proposal, Hind Park is not expected to be substantially impacted by the REF proposal. The park would be shielded from the REF proposal by residential properties that front onto Newbridge Road and the Georges River. Some noise impacts may occur which may impact the amenity of the park. As the park is already located on a busy road, these impacts are expected to be minor. More information is provided in the Noise and Vibration Assessment.</p>

Table 7-2 Potential impacts to social infrastructure in the socio-economic study area

Social infrastructure	Potential impact
Chipping Norton Scout Group	<p>About 330 metres from the REF proposal, the Chipping Norton Scout Group is not expected to be substantially impacted by the REF proposal. Meeting times for the group usually occur in the evenings between 7.00 pm and 9.00 pm on weekdays (NSW Scouts, 2019). Accessible from Newbridge Road, the patrons of the scout group may experience delays in access to and from the hall during out of hours works required at the intersection works at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection.</p> <p>Construction noise is not expected to impact the operation of the scout group and hall during construction of the REF proposal.</p>
Vale of Ah Reserve	<p>The Vale of Ah Reserve is about 342 metres west of the REF proposal. Similar to Gordon Parker Reserve also located on Auld Avenue, the Vale of Ah Reserve is used by a range of associations and sporting clubs.</p>
Peterson Park and Riverside Park	<p>Peterson Park and Riverside Park are both located about 230 metres west of the REF proposal on the other side of the Georges River. Both parks are separated from the REF proposal by the Georges River and residential houses. The proposal is not expected to impact the use of these parks due to their distance from construction activities. Some noise impacts may be experienced at the parks, however impacts are expected to be minor. More information is provided in the Noise and Vibration Assessment.</p>

The operation of social infrastructure in the broader study area is not expected to be impacted during construction. In particular, the education facilities and the emergency facilities located on Tower Road are expected to continue to operate as normal. Some noise impacts may occur in the broader study area, however impacts are expected to be minor. No vibrational impacts are expected to occur at the education facilities and emergency facilities on Tower Road in the broader study area. More information is provided in the Noise and Vibration Assessment.

Significance of social infrastructure impacts: The overall sensitivity of social infrastructure to potential impacts of construction, including, visual and noise impacts which may impact the operation of facilities is moderate. Based on the assessment of impacts to the community enjoyment and attractiveness of facilities during construction, the magnitude of impacts is moderate. Therefore, the overall level of significance would be moderate.

7.1.5 Businesses and commercial operations

Employment opportunities

As stated in Section 6.2, there is a high proportion of people working in construction in the broader study area and both the Liverpool City and City of Canterbury Bankstown LGAs. Construction of the REF proposal, starting in early 2023, may provide additional employment opportunities in the area and opportunities for businesses involved in earthworks, roadworks, bridge construction and material supply. The REF proposal may also result in construction worker expenditure at local shops and businesses during the two year construction period.

Businesses on the corner of Henry Lawson Drive and Milperra Road

Businesses located within the direct study area and socio-economic study area may experience impacts during construction. This may include visual, noise and air quality impacts during construction. Business activity such as interactions with customers/clients, office and restaurant environments and the productivity of workers may be impacted during construction due to noise and vibration impacts. The presence of construction equipment and machinery may also impact the patronage to some businesses including businesses on Henry Lawson Drive, particularly the Wild Bean Café, KFC Milperra and Hungry Jack's Burgers Milperra.

As some of the businesses within the direct study area operate outside of standard working hours, impacts are expected to be substantial during construction. This includes noise and amenity impacts, as well as impacts to access. Some businesses along Henry Lawson Drive within the direct study area may also have concerns about loss of passing trade during construction. Service stations and fast food restaurants are likely to be more reliant on passing trade for business, such as those located on the corner of Henry Lawson Drive and Milperra Road. Access to businesses would be maintained from Tower Road and Starkie Road during construction. There are few businesses on Tower Road, with the main businesses being a large carpet supply store and air-conditioning head office. It is likely that visitors to these businesses would be pre-planned as these businesses are destination-type businesses. The presence of plant and equipment may restrict views to businesses and associated business signage. This includes the business signage to be relocated near Tower Road. Impacts would be temporary in nature and would be staged throughout the construction period to avoid long periods of construction outside particular businesses.

Golf courses

Construction is not expected to impact the use and operation of the Georges River Golf Course and Bankstown Golf Course. Both golf clubs are used for golfing activities, private functions and events. As the REF proposal is located around 750 metres away from the Bankstown Golf Course clubhouse, and 500 metres from the Georges River Golf Course clubhouse, amenity impacts including noise and visual impacts are not likely to impact events and functions. It is likely that the REF proposal would be slightly visible from both courses, however due to the existing vegetation coverage there would be minimal views to construction areas. Construction of the REF proposal is not expected to impact patronage to the golf courses as they are destination type facilities where individuals would travel to, to visit outside of residential areas and town centres. The Henry Lawson Drive Stage 1A Upgrade - Noise Impact Assessment anticipates some low-level construction noise impacts to those using the golf courses near the REF proposal.

People working from home

The emergence of the COVID-19 Virus in March 2020 has substantially impacted travel patterns throughout Sydney, NSW. In 2016, 1,036 people (3.6 per cent of the broader study area) worked from home. It is likely that this number has substantially increased as a result of lockdowns and ongoing precautions implemented by the New South Wales Government to combat the virus. As a result, the residential areas located surrounding the REF proposal, may experience similar amenity effects to businesses. Noisy works may impact people's ability to concentrate and interrupt telecommunication such as business calls and meetings. This is likely to cause frustration and concern, particularly if people have been working from home for a substantial period of time. As mentioned previously, construction may result in changes to people's habits such as avoiding the use of recreational areas during work breaks such as those located at Gordon Parker Reserve and the Vale of Ah Reserves which would have temporary amenity impacts during construction.

Other businesses

Flower Power Complex

The Flower Power Complex located in the southern section of the direct study area is comprised of multiple businesses. The construction of the proposal is not expected to impact the operation of businesses within the Flower Power Complex. As mentioned in Section 7.1.3, the complex may experience some impacts to access efficiency during construction as a result of alternate traffic arrangements.

Bankstown Airport

Bankstown Airport is not expected to experience substantial impacts during construction. Access would be maintained to the airport. The main access to the airport is via the northern and eastern part of property, off Marion Street, Georges Hall and Nancy Ellis Leebold Drive in Condell Park. As the direct study area is located outside of the take-off and approach surfaces, construction equipment for the proposal would not infringe or impact the Obstacle Limitation Surface (OLS). Construction lighting producing light spill in the direction of incoming aircraft could result in impacts to aircraft, however the CEMP will include measures that will mitigate potential impacts to the operations of the airport. More information is provided in the REF.

Significance of business and commercial impacts: The sensitivity of businesses during construction is moderate based on the context of the existing environment (current high noise and congested environment). The magnitude is moderate, due to the potential impacts to businesses that operate within and outside of standard hours and the reliance on the direct study area for freight access and connectivity. This would result in the significance of the impact being moderate.

7.1.6 Amenity and community values

Amenity

Amenity often refers to the quality of life, character and elements in a community that make it a more pleasant and comfortable place to be a part of. Impacts of a proposal such as traffic, perceived air quality impacts, noise and visual impacts can affect the amenity of an area.

During construction there would likely be a reduction of amenity in the direct study area and socio-economic study area. Receivers in the direct study area would experience the most impacts to amenity. As discussed in Section 7.3, the areas surrounding the REF proposal are a mix of low density residential and recreational areas. The majority of sensitive receivers would be businesses located on the east of Henry Lawson Drive in the direct study area and residential receivers located on properties on the west of Henry Lawson Drive in the direct study area. The highest impacts would be during construction activities that use noise or vibration intensive equipment. During works outside standard construction hours at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection noise intensive activities could result in some potential sleep disturbance or discomfort for residential receivers. This can have an adverse impact on the health and wellbeing of residential receivers, particularly if construction periods occur for sequential periods. Where possible, high noise intensive activities would be scheduled where possible in accordance with Transport's *Construction Noise and Vibration Guidelines 2016*.

In addition, the businesses located on the east of Henry Lawson Drive and residential receivers located on properties on the west of Henry Lawson Drive in the direct study area are expected to experience impacts in visual amenity as a result of the presence of construction plant and machinery during construction. During evening and night time works in particular, receivers in these areas may experience impacts as a result of light spill into the front of properties. As businesses on Henry Lawson Drive in this area are set back from the road this is not likely to be a substantial impact to these businesses. For residences, should light spill reach the front of houses, this is likely to result in substantial impacts. This is likely to cause frustration or disturbance to people sleeping or residing close to construction areas. Mitigation to avoid visual and noise impacts during construction would be implemented.

Areas of community interest

The roadside memorial located on the southern side of Milperra Road near the existing bus stop would be impacted during construction. This would need to be temporarily relocated to accommodate the road widening in this area. The relocation of the roadside memorial would be undertaken as per Transport standards in consultation with stakeholders. More information is provided in Chapter 9.

Liverpool City Council and Canterbury Bankstown City Council carry out community events throughout the year to celebrate diversity, holidays and special events. These events are often located across each LGA and change annually. Prior to construction, the construction contractor would consult with both councils to understand whether community events would be carried out in the socio-economic study area during construction activities to mitigate potential impacts.

Community values

As stated in Transport's *Environmental Impact Assessment Practice Note – Socio-economic Assessment (EIA-N05)* community values are those elements held as being important to quality of life and wellbeing. This includes physical elements such as parks and landscapes, and social elements, such as belonging and diversity. Some of the property acquisition required for the REF proposal would be on land identified by local Aboriginal groups as having cultural value. The acquisition of this land could result in a perceived reduction of cultural value of this area.

Safety was a key issue raised in consultation undertaken for the proposal. As stated in the Flooding Assessment Report prepared for the proposal, the proposal is located within the floodplain of the Georges River and one of its minor tributaries which is known locally as Milperra Drain. Construction activities such as the use of ancillary facilities located on the floodplain, earthworks and the construction of the bridge may have the potential to adversely impact safety. As mentioned in Section 5.3, consultation has been undertaken with the SES to better understand the emergency requirements of the direct study area and avoid impacts to safety as a result of flooding. Impacts to flood evacuation routes, construction worker safety and residences as a result of flooding have been considered in the development of the design. The detail design will take into account mitigation in alignment with the advice from SES for safe evacuation routes in case of emergencies and proposed road levels to mitigate flood impacts on Henry Lawson Drive and Milperra Road.

The surrounding community values the natural environment with *'Clean and Green'* and *'Strengthening and protecting our environment'* being key aspects of the community's strategic plans. The REF proposal would require some vegetation removal for the development of the new road. This would occur in the following areas:

- On the western side of Henry Lawson Drive, north of the Tower Road intersection with Henry Lawson Drive
- Areas within the vegetated corridor between the Georges River and Henry Lawson Drive, north of Newbridge Road
- On the northern and southern sides of Milperra Road to the east of the intersection with Henry Lawson Drive
- On the eastern side of Henry Lawson Drive south of the intersection with Milperra Road and Newbridge Road
- On the western side of Henry Lawson Drive where the new bridge would be constructed over the Milperra Drain near Auld Avenue

This removal of vegetation would result in visual impacts to surrounding receivers, and impact the liveability of the direct study area, particularly surrounding the Georges River and coastal wetland areas which are valued by community. The presence of construction plant and equipment would also impact the visual aesthetic of the direct study area and some of the socio-economic study area. This includes motorists, active and public transport users passing construction areas of the REF proposal. The most impacts would be experienced by dwellings and businesses in close proximity to the REF proposal. Visual impacts could also occur in the form of glare from lighting into surrounding areas, including residences on the other side of the Georges River during construction.

As stated in the Canterbury Bankstown City Council and Liverpool City's CSP's, the surrounding communities also value movement, with *'Moving and Integrated'* and *'Creating connection'* key directives within the respective plans. As mentioned in Section 7.2.3, construction of the REF proposal may impact the accessibility and connectivity for road users on Henry Lawson Drive and surrounding roads such as Auld Avenue and Tower Road. This may result from construction traffic and alternative traffic arrangements, which could be frustrating for local road users and people travelling through the direct study area. The amenity impacts associated with construction including noise, visual, air quality and perceived safety impacts around construction sites may also deter the use of the shared user pathway. This could have indirect impacts to the wellbeing of the community who may change travel behaviours to avoid construction areas.

Significance of community and amenity impacts: The sensitivity of the community to changes in amenity and values is high. The potential impacts during construction would impact the community values associated with natural spaces, movement and connectivity. The magnitude of the impacts during construction is moderate based on the potential noise, visual and air quality impacts associated with construction activities required for the proposal. This would result in the level of significance being high-moderate.

7.1.7 Cumulative impacts

Cumulative impacts can occur when the impacts of a proposal add to other past, present or future proposals/developments (Transport, 2020). Collectively cumulative impacts have the potential to result in substantial changes to the socio-economic environment of communities (Transport, 2020).

The REF proposal has the potential to result in cumulative impacts for local and regional commuters, residents and businesses due to surrounding land use and development. This cumulative impact analysis relates to an expected timing of construction impacts being experienced between early 2023 to 2025, where there is potential for construction activities to occur concurrently with other developments and projects. As stated in Section 6.3.3, the REF proposal would be located near the Bankstown Airport Redevelopment, Riverlands Residential Development and other projects that form part of the Henry Lawson Drive Upgrade Program of works, including the EIS proposal. Within the suburb of Moorebank, the Moorebank Intermodal Terminal is currently being constructed, with the M5 Motorway Westbound Traffic Upgrade also expected to commence at the same time as this proposal. As these projects all fall within the broader study area, they are likely to contribute to the cumulative impacts of the REF proposal.

Traffic

Impacts could occur in the form of construction traffic impacts from multiple projects placing additional pressure on road networks which could lead to congestion and frustration for motorists. This includes vehicles travelling to and from surrounding construction areas such as:

- Newbridge Road to access the M5 Motorway Westbound Traffic Upgrade and Moorebank Intermodal Terminal
- Henry Lawson Drive south to access the proposed Riverlands Development.

Additional light and heavy vehicles required for multiple projects could result in substantial traffic delays during standard and out of hours work periods.

Amenity

Construction amenity impacts from multiple projects resulting in increased traffic noise, visual impacts and perceived air quality impacts may also occur. When projects occur concurrently, this could result in an increased magnitude of impacts for receivers. The projects closest to the REF proposal include the Bankstown Airport Redevelopment and proposed Riverlands Development. Should cumulative impacts associated with amenity occur, they are likely to come from these projects. This is likely to be experienced by residents, businesses and people travelling through the direct study area. The construction of the proposed Riverlands Subdivision Development, which remains subject to planning approval, could occur during the same construction period as the proposal.

In addition, if projects are planned sequentially (i.e. one after the other) this could result in both consultation and construction fatigue for local communities and stakeholders. Impacts could result in feelings of constant disruption and disturbance within communities, altering the amenity of suburbs and the enjoyment of areas. As mentioned previously, this can have flow on effects impacting the health and wellbeing, having behaviours and people's use of community facilities, areas and methods of travel. As the REF proposal forms part of a broader program of works for the upgrade of Henry Lawson Drive and in an area of development and land use changes, construction fatigue could be experienced by the community and people that travel on Henry Lawson Drive frequently. This could also be the case for the Bankstown Airport Redevelopment which was in construction at the time of authoring this report. Construction commenced in early 2020 and is expected to take 15 months to complete (BAL 2019). This REF Proposal is planned to commence construction at the end of 2021 and would mean the new Airport precinct would likely be in full operation.

Significance of cumulative impacts: The sensitivity of the community to cumulative impacts is moderate due to the potential cumulative impacts associated with concurrent projects occurring near the REF proposal. The magnitude of the impacts during construction is moderate, resulting in the level of significance being moderate.

7.2 Operation

7.2.1 Property acquisition and adjustments

Permanent property acquisition would occur as a result of the REF proposal. Permanent acquisition would impact some residential properties, businesses, social infrastructure and public spaces.

As mentioned in Section 7.1.1, the REF proposal would result in the full acquisition of one residential property on Henry Lawson Drive, which would be used as a construction compound during the construction phase. This property has been identified by Canterbury Bankstown City Council as land to be acquired as part of the NSW Government's *Floodplain Management Program* to implement voluntary purchase schemes. The purpose of this program is to reduce risks to properties in highly hazardous flood conditions from riverine or overland flooding (Office of Environment and Heritage, 2013). The scheme has been developed for local Councils to be able to acquire residential properties and convert to a different land use (in this case recreational) to reduce the risk to life of residents from flooding. As this property has been identified by Council as part of the scheme, this property would be given back to Council following construction to mitigate the potential risks to residents living there.

There would not be any further property acquisitions or adjustments during operation.

Significance of property acquisition and adjustment impacts: Based on the limited impacts during operation, sensitivity of property owners and occupiers is low. The magnitude of changes during operation would be low, resulting in the significance of the impact being low.

7.2.2 Land use changes and development

The REF proposal would complement land use changes within the broader study area by increasing the capacity of Henry Lawson Drive to account for future travel demand and movement. These features would provide greater multi-modal access to social infrastructure facilities, particularly in light of the projected growth through the City of Canterbury Bankstown and Liverpool City LGAs.

The REF proposal would also result in some changes in land use in the road corridor. Areas that were previously vacant or vegetated land alongside Henry Lawson Drive would now form part of the road footprint. This would include:

- A portion of land next to the road corridor on the eastern side of Henry Lawson Drive between Milperra Road and Auld Avenue to account for the additional new lanes on Henry Lawson Drive southbound
- A portion of land next to the road corridor on the western side of Henry Lawson Drive south of Auld Avenue required for the embankment to support the new bridge at Auld Avenue
- A portion of land next to the road corridor and Ashford Reserve on the southern side of Milperra Road to facilitate the widening works and new bus stop
- A portion of land on the western side of Henry Lawson Drive, north of Newbridge Road that previously formed part of the vegetated corridor between the road corridor and Georges River for the new lanes northbound and associated embankment
- A portion of land on the eastern side of Henry Lawson Drive north of Tower Road for new turning lane into Tower Road and associated embankment

As these areas are part of the road corridor without formal connections to the pedestrian network, most of them are not frequently used by the public. The vegetated corridor between the Georges River and Henry Lawson Drive is the exception, which features the shared user path and outlooks to the Georges River. Land use changes in this area may impact the use of the pathway and surrounding area temporarily as vegetation re-establishes. As most land use changes would occur close to the road corridor, impacts are not expected to be substantial.

Properties to the west of Henry Lawson Drive would experience land use changes at the front of their properties. A portion of their property would be acquired for the REF proposal and be used for the road footprint and shared user pathway. This would result in some changes to the front of residential properties including changes to driveway areas, fences and front yards.

Overall, changes in land use would have minor visual and amenity impacts for people living and traveling through the direct study area (discussed further in Section 7.2.6).

Significance of land use impacts: The sensitivity of land occupiers, owners and the community to permanent changes in land use is low. The magnitude of these changes is low as most areas impacted would be road reserve and areas close to the road, resulting in the level of significance being low.

7.2.3 Access and connectivity

The REF proposal seeks to ease existing traffic issues and increase travel efficiency by allowing for greater capacity at key intersections within the direct study area.

The REF proposal would also provide better opportunities for active and public transport, through the construction of new footpaths on:

- The eastern side of Henry Lawson Drive to connect Tower Road to the existing bus stop on the eastbound lanes of Milperra Road
- The southern side between Henry Lawson Drive to the bus stop on the westbound lanes of Milperra Road

The provision of new footpaths to connect the bus stops on Milperra Road to the Henry Lawson Drive/ Milperra Road/Newbridge Road intersection would improve connectivity for public transport users. There are currently no footpaths in this area, making it difficult for less mobile people and elderly pedestrians to access bus stops. The provision of footpaths would provide safer and easier access to public transport, providing better transport options to the community. This would have a positive benefit to the community and visitors to the direct study area. The overall proposal would also align with Transport's *Providing for Walking and Cycling in Transport Projects Policy*, which aims to ensure that walking and cycling components of a project are incorporated from the outset and followed through to delivery and maintenance (Transport, 2021b).

The additional capacity from the widening at the Henry Lawson Drive/Tower Road intersection and Henry Lawson Drive/Milperra Road/Newbridge Road intersection, would seek to improve traffic flow by providing dual right turn lanes. These features of the REF proposal are expected to have a positive impact on access through the direct study area, socio-economic study area and broader study area.

The following permanent changes to residential and commercial property access would include:

- Removal of the dedicated left turn slip lane into the ALDI and fast-food area. However, access would be maintained from Henry Lawson Drive via a standard property driveway treatment.
- Reconfiguration of existing access to Auld Avenue, to a left-in-left-out configuration
- Change to existing access to residential properties on Henry Lawson Drive, south of Newbridge Road to left-in and left-out movement only

The removal of the dedicated left turn slip lane into the ALDI and fast-food area to the east of Henry Lawson Drive would facilitate the widening of Henry Lawson Drive with an increased length of the dedicated left turn lane onto Milperra Road. Customers of the businesses would still be able to access the businesses via Henry Lawson Drive through the new driveway or via Tower Road/Starkie Drive. As stated in the Traffic and Transport Impact Assessment, access to these businesses would not have an adverse impact on customers. Changes may take some time to adjust to and may be confusing initially for some patrons, however this would be temporary.

The REF proposal would result in a left in/left out turning arrangement at Auld Avenue. Feedback from the community on the concept design for the overall proposal has indicated concern in this change of access. This is due to the number of vehicles accessing Auld Avenue for the playing fields, particularly for weekend sports. In addition, nearby schools use these playing fields during the week. The change in access could result in people adopting alternative routes to access the playing fields that could also result in increased travel times. This may cause efficiencies or inefficiencies depending on which direction people are travelling from. The use of alternative routes may also cause short-term localised congestion during weekend periods. It may also take some time to adjust to the changes in access for some residents and members of the community.

The existing bus stops located on the northern side of Milperra Road east of the intersection with Henry Lawson Drive would be retained. The bus stop located on the southern side of Milperra Road would be relocated out of the left turn lane about 20 metres from where it is currently located (discussed further in Chapter 8 as this forms part of the EIS proposal). The bus stop relocation and installation of the new footpaths in this area would facilitate improved connections through the direct study area, which are likely to positively contribute to the community who value movement and connectivity. Construction of new footpaths and relocated bus stops would improve pedestrian connectivity at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection. This may provide greater incentive for the community to use public transport through better access opportunities.

The operation of the proposal would not result in any changes to public bus services. Impacts to parking are not expected as a result of the proposal.

Significance of access and connectivity impacts: The sensitivity of road users (both local and those travelling through the direct study area) to changes in access and connectivity is moderate. This rating takes into consideration the value of access and connectivity that the community has. The magnitude of the changes during operation would be moderate based on the assessment of benefits and potential adverse impacts, resulting in the significance of the impact being moderate.

7.2.4 Social infrastructure

Improved movement and travel times on Henry Lawson Drive would improve connectivity to services and social infrastructure facilities within the direct study area and socio-economic study area including parks, recreational areas, community facilities and educational facilities. The increased road capacity provided by the REF proposal (particularly at the Henry Lawson Drive/Newbridge Road/Milperra Road intersection), could also assist in emergency response time through the direct study area to the nearby Sydney HEMS Base and Bankstown-Lidcombe Hospital. The shared user path would be reinstated throughout the direct study area and the use of the path and surrounding areas such as the vegetated corridor between the Georges River and Henry Lawson Drive would be retained.

As stated in Section 6.2.5, the shared user pathway within the direct study area hosts the Crosscurrents - Georges River Art Walk' Camoufleur' artwork and Trail Markers. Although these items are not heritage listed, they represent local history of the area and would be observed by the community when using the shared user pathway.

During operation, the shared path that hosts the Crosscurrents - Georges River Art Walk' Camoufleur' artwork and Trail Markers would be retained and re-established. There would be nil impacts on the art trail from the proposal. However, it is noted that a water quality basin would be placed in the road verge in front of the Camoufleur' artwork that would affect visibility of the artwork by road users.

The change in access to Auld Avenue through the proposed left-in-left-out configuration may result in disruption and changed access to social infrastructure facilities such as the Gordon Parker Reserve and Vale of Ah Reserve, both of which are highly used facilities for surrounding residents, sports clubs and schools. While the change in access would not impact the operation of these facilities, it may result in increased travel times for people visiting the park due to the changed access requirements at Auld Avenue. The increased travel times and alternate access requirements may be inconvenient for people visiting the park which may impact patronage for residents and visitors. Overall, the conversion of the intersection into a left-in left-out would reduce the risk of vehicles turning into incoming traffic and also improve the performance of the intersection. More information is provided in the Traffic and Transport Assessment.

Significance of social infrastructure impact: The sensitivity of people using social infrastructure during operation of the REF proposal is high. This is based on the multiple community groups, sporting teams, schools and residents that use social infrastructure within the direct study area and socio-economic study area and their reliance on the road network for access to these facilities. The magnitude of the operation of the REF proposal on social infrastructure is moderate resulting in a high-moderate impact of significance.

7.2.5 Businesses and commercial operations

The REF proposal would provide benefits to commercial operations and businesses within and travelling through the direct study area as a result of increased road capacity and efficiency. This is also expected to have flow on effects to economic productivity and growth for freight carriers and vehicles travelling to the industrial precincts in the broader study area.

Businesses at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection may experience reduced amenity from some slight increases in noise due to the road corridor being closer to their premises. This is not expected to impact the operation of these businesses as they are already located in a high noise environment. This includes the Georges River Golf Course and Bankstown Golf Course. Future businesses in the socio-economic study area and broader study area, particularly those proposed within Bankstown Airport are also likely to benefit from the widening works, improving capacity for increased demand from these areas. As stated in Section 7.1.5, the main airport access is via the northern side of the site in Georges Hall and Condell Park. The proposal is not expected to impact the main access of the airport during operation and would benefit the alternative access to the airport from Tower Road.

The operation of the REF proposal may have some potential flood impacts to businesses on the eastern side of Henry Lawson Drive between Tower Road and Milperra Road. The car wash component of the BP Truckstop service station may experience an increased flood level (0.04 m increase on an existing depths between 0.2 and 0.3 m) as a result of a one percent annual exceedance probability (AEP) flood event for the Georges River and Milperra Drain. Flooding impacts (an increase in the depth of inundation of 0.013 m) may also occur at businesses located further east of the socio-economic study area including the Bankstown Golf Course and in the industrial area surrounding Ashford Avenue in Milperra. More information regarding the flooding impacts associated with the operation of the REF proposal are discussed in the Flooding Assessment Report. Impacts of flooding on businesses could result in damages, safety impacts and stress/anxiety for business owners and employees. Evacuation procedures would be maintained to mitigate potential impacts during operation.

Significance of commercial operations and businesses impact: The sensitivity of businesses during operation of the REF proposal is low. The magnitude of the operation of the REF proposal on businesses is low, resulting in a low impact of significance.

7.2.6 Amenity and community values

The surrounding community values movement and connectivity. Overall, the REF proposal would improve movement and travel times between the M5 Motorway and Hume Highway on Henry Lawson Drive, Milperra Road and Newbridge Road. Motorists, active transport users, businesses, freight operators and buses would benefit from the increased road capacity which would reduce pressure on the local road network and make it easier for people to move around.

The REF proposal would have slight beneficial noise impacts to residences located to the west of Henry Lawson Drive, with noise levels to decrease slightly. Noise levels to the golf courses on the east of Henry Lawson Drive would slightly increase. However, it is noted that these changes are very minor and would not be perceptible.

Vegetation removal required for the REF proposal would result in visual impacts to receivers from the loss of tall green canopies reducing the 'green' riparian zone and the shade it provides between the road corridor and the Georges River, which is used for recreation and active transport. This includes people using the shared user pathway and driving through the direct study area. Vegetation removal would impact the liveability of the socio-economic study area, which has large segments of dense vegetation, particularly along Henry Lawson Drive. Vegetation removal and replanting that would be undertaken as part of the proposal, when grown, would reinstate a riparian vegetation buffer between the shared user path and Henry Lawson Drive. Vegetation removed and replanted would need time to re-establish and grow, resulting in some temporary visual impacts to this area. As the REF proposal is located in an area that is subject to change and development near the Riverlands Development and Bankstown Airport, maintaining vegetation would be valued by the community. The REF proposal would increase the infrastructure footprint within the direct study area, which may adversely impact the natural and vegetated character of the area. Landscaping works and the proposed urban design features are expected to reduce the visual impacts associated with vegetation removal.

The operation of the REF proposal may result in impacts to flooding in the direct study area and socio-economic study area. Flood levels as a result of the proposal would be slightly higher in certain discrete locations within the direct study area socio-economic study area. Impacts of flooding could result in stress/anxiety for residents, particularly for those residents who may have not been previously subject to flooding impacts. Evacuation routes and procedures would be maintained in consultation with potentially impacted residents and businesses. More information about flooding is provided in the Flooding Assessment Report. This would impact the community as they value safety highly.

Significance of community and amenity impacts: The sensitivity of the community to changes in amenity and values is moderate. This is due to the vegetation removal required for the REF proposal that would take time to re-establish and potential visual impacts associated with the widened road corridor (increase of built infrastructure). The magnitude of the impacts during operation is moderate, resulting in the level of significance being moderate.

7.2.7 Cumulative impacts

There are not expected to be any substantial negative cumulative impacts associated with the REF proposal during operation. Cumulative impacts could occur during operation if other projects commence in the vicinity of the REF proposal. This includes other future stages of the Henry Lawson Drive Upgrade Project, the Bankstown Airport Redevelopment and the Riverlands Residential Development. The design development of the overall proposal has captured the expected traffic generation from these developments together with population growth and associated traffic demands.

Future stages of the Henry Lawson Drive Upgrade Project would be assessed separately and would consider cumulative impacts relevant to the next stage of development.

Significance of cumulative impacts: The sensitivity of the community to cumulative impacts is negligible. The magnitude of the impacts during operation is negligible, resulting in the level of significance being negligible.

7.3 REF impact assessment summary and significance

Table 7-3 REF impact assessment analysis of impacts

Aspect	Impact (with mitigation)	Sensitivity	Magnitude	Overall
Construction				
Property	<ul style="list-style-type: none"> Most residential property acquisition would be limited to strip acquisition at the front of properties, with one residential property fully acquired for use as an ancillary facility on Henry Lawson Drive. 	Moderate	Low	Moderate-low
Land use	<ul style="list-style-type: none"> Change in land use for areas required for ancillary facilities and construction activities during construction. This includes areas closest to the REF proposal including the residential property on the eastern side of Henry Lawson Drive. Changes in land use for the shared user pathway and vegetated corridor between the Georges River and Henry Lawson Drive, from a recreational space/active transport connection to an area of construction activity. 	Low	Low	Low
Access and connectivity	<ul style="list-style-type: none"> Property access would be maintained during construction, however access would be impacted due to construction traffic and alternative traffic arrangements. This would include access to properties on Henry Lawson Drive and Auld Avenue. Construction traffic, slower speeds around construction areas and the installation of temporary traffic arrangements may result in traffic delays Access to social infrastructure facilities within the direct impact area would be impacted during construction, including access to Gordon Parker Reserve and Vale of Ah Reserve and Dog Park accessed via Auld Avenue. Chipping Norton Scout Group and Vale of Ah Reserve may experience delays in road access during construction. The temporary relocation of bus stops may impact public transport users, particularly the elderly and less mobile. Businesses on the northern side of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection would need to use Starkie Drive and Tower Road for access during some intersection work required for the REF proposal. The informal parking area on Auld Avenue close to the intersection of Auld Avenue/Henry Lawson Drive would not be available during construction, which may impact visitors and patrons of Gordon Parker Reserve during busy periods. Access for the emergency services would be maintained. The temporary closure or adjustment of pathways and shared user connections may affect accessibility and some resident and visitor enjoyment of public spaces in the direct study area. 	High	Moderate	High-moderate
Social infrastructure	<ul style="list-style-type: none"> Potential impacts to the community enjoyment and attractiveness of facilities during construction. Access and amenity impacts (including noise and visual impacts from construction) at the Auld Avenue/Henry Lawson Drive intersection and use of ancillary site 4 may impact patronage to Gordon Parker Reserve. The shared user pathway which also hosts the Crosscurrents – Georges River Art Walk would be impacted during construction as a result of the widening work, embankment work, utilities work and installation of road furniture. Visual and noise impacts as well as access and connectivity impacts would be experienced by commuters. 	Moderate	Moderate	Moderate

Aspect	Impact (with mitigation)	Sensitivity	Magnitude	Overall
	<ul style="list-style-type: none"> Access to social infrastructure in the broader study area accessed via Henry Lawson Drive may be impacted as a result of increased travel time due to increased traffic and potential delays around construction areas. 			
Business and commercial	<ul style="list-style-type: none"> There would be amenity impacts in the form of noise and visual impacts for businesses closest to the REF proposal, particularly at the BP Truckstop and Wild Bean Café, ALDI Supermarket, KFC Milperra and Hungry Jack's Burgers Milperra, some which operate outside of standard working hours. The presence of plant and equipment may restrict views to businesses and associated business signage, including the business signage to be relocated on Henry Lawson Drive near Tower Road. Freight drivers and heavy vehicles with time-crucial deliveries may be impacted by traffic delays and detours around construction sites. 	Moderate	Moderate	Moderate
Amenity and community	<ul style="list-style-type: none"> Sensitive receivers near the REF proposal would experience the most impacts to amenity in the form of noise, visual and air quality impacts. Potential sleep disturbance and higher impacts during noisy works. Vegetation removal and for the upgrade would reduce the visual amenity of the direct study area Potential impacts to the community's use of public recreational greenspace, impacting liveability and wellbeing. Some of the property acquisition required for the REF proposal would be on land identified in an Aboriginal land claim, which could result in a perceived reduction of cultural value of this area. The roadside memorial located on the southern side of Milperra Road near the existing bus stop would be impacted during construction. 	High	Moderate	High-moderate
Cumulative impacts	<ul style="list-style-type: none"> The Bankstown Airport Redevelopment, Riverlands Residential Development and other projects that form part of the Henry Lawson Drive Upgrade Program of works, including the EIS proposal, could result in cumulative impacts in the form of amenity and traffic impacts. Potential consultation and construction fatigue for local communities and stakeholders as a result of the proximity and timing of these project may also occur. Traffic impacts may be experienced as a result of projects in the broader study area including the M5 Motorway Westbound Traffic Upgrade and the Moorebank Intermodal Terminal. 	Moderate	Moderate	Moderate
Operation				
Property	<ul style="list-style-type: none"> Changes to property access along the REF proposal, including residential properties along the western side of Henry Lawson Drive as a result of the widened road footprint. Access to businesses north of the Henry Lawson Drive/Milperra Road/Newbridge Road intersection would be changed to a driveway entrance from Henry Lawson Drive, rather than the previous slip lane arrangement. 	Low	Low	Low
Land use	<ul style="list-style-type: none"> Some changes in land use in the road corridor, including areas that were previously vacant or vegetated land alongside Henry Lawson Drive, Milperra Road and Newbridge Road which would now form part of the road footprint. 	Low	Low	Low

Aspect	Impact (with mitigation)	Sensitivity	Magnitude	Overall
Access and connectivity	<ul style="list-style-type: none"> Increased travel efficiency for local road users by allowing for greater traffic capacity at key intersections Construction of new footpaths and relocated bus stops to improve pedestrian connectivity at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection. Access to Auld Avenue when travelling south along Henry Lawson Drive would be removed, resulting in increased movements and potential strain on the surrounding network as disrupted users disperse through the surrounding area. 	Moderate	Moderate	Moderate
Social infrastructure	<ul style="list-style-type: none"> Improved movement and travel times as a result of increased capacity on Henry Lawson Drive would improve connectivity to services and social infrastructure Intersection improvements could also assist in emergency response time to the nearby NETS Ambulance Service, Sydney HEMS Base and Bankstown-Lidcombe Hospital The vegetated corridor between the Georges River and Henry Lawson Drive would be reduced due to the road footprint encroaching on this area, resulting in minor noise increases. The change in access to Auld Avenue may impact patronage to Gordon Parker Reserve and Vale of Ah Reserve due to the changed access requirements at Auld Avenue. A water quality basin would be placed in the road verge in front of the 'Camoufleur' artwork that would affect visibility of the artwork by road users. 	High	Moderate	High-moderate
Business and commercial	<ul style="list-style-type: none"> The REF proposal would provide benefits to commercial operations and businesses within and travelling through the direct study area through increased road capacity and improved travel times. Businesses at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection may experience some slight increases in noise (reduced amenity) due to the road corridor being closer to their premises Businesses on the eastern side of Henry Lawson Drive between Tower Road and Milperra Road, and businesses further east including the Bankstown Golf Course and industrial businesses on Ashford Avenue in Milperra may experience slightly increased flooding impacts during the operation of the proposal. This could lead to damages, safety impacts and stress for business owners and employees. 	Low	Low	Low
Amenity and community	<ul style="list-style-type: none"> Slight decrease in road traffic noise levels close to receivers, particularly those located on the western side of Henry Lawson Drive. This is expected to have a positive impact on the amenity of this area for residences that currently experience noise impacts. The REF proposal would increase the infrastructure footprint within the direct study area, which may adversely impact the natural and vegetated character of the area which is highly valued by the community. The REF proposal would have beneficial outcomes for road users through the improvement of movement, capacity and connections for all road users and active transport. The REF proposal could result in slight flooding impacts during operation. This could lead to stress/anxiety for residents close to flood prone areas, in particular residents that have not been subject to flooding events previously. This would impact community values associated with safety. 	Moderate	Moderate	Moderate
Cumulative impacts	There are not expected to be any cumulative impacts during the operation of the REF proposal. Design development of the REF proposal has included expected demand and growth from surrounding developments and land uses.	Negligible	Negligible	Negligible

8 Environmental impact statement impact assessment

This section considers the socio-economic factors relevant to EIS proposal areas 1, 2 and 3. The EIS proposal activities considered are those described in Section 2.2.

Table 8-1 outlines the socio-economic factors and potential impacts of the activities to be undertaken in the EIS proposal areas. However, it is acknowledged that the EIS proposal would be constructed together with the REF proposal, as such, the potential impacts are similar to the REF proposal, but at a much smaller scale.

Table 8-1 EIS impact assessment analysis of impacts

Aspect	Impact assessment - Construction	Significance of impact			Impact assessment – Operation	Significance of impact		
		Sensitivity	Magnitude	Ranking		Sensitivity	Magnitude	Ranking
Property acquisition	<p>The EIS proposal would require the acquisition of properties.</p> <p>Acquisition in EIS proposal area 1 would be required for the new road, earthwork and road furniture. Land to be acquired in this area would be from The Crown and Council. Property acquisition in this area may impact the use of this area during construction due to the presence of construction plant and machinery. For more details refer to Section 7.1.1.</p> <p>Acquisition in EIS proposal area 2 would be required for the installation of a new bus stop and footpath, installation of fill embankments along the edge of the new carriageway on Milperra Road, utility works and the installation of road furniture. Land to be acquired in EIS proposal area 2 would be a small portion of private land owned by the Bankstown Golf Club and Council land. The Council owned land forms part of Henry Lawson Drive and also part of the vegetated corridor between Henry Lawson Drive and the Georges River. Property acquisition is not expected to impact the use of the golf club (discussed further in land use section below).</p> <p>Acquisition in EIS proposal area 3 would be required for the establishment of an ancillary facility and construction area, installation of fill embankments along the edge of the new carriageway and surface stabilisation to minimise erosion in the area. Land to be acquired in EIS proposal area 3 would be private residential land. Acquisition impacts to this residential property are discussed in detail in Section 7.1.1 as the majority of acquisition would occur for the REF proposal.</p>	Low	Low	Low	During operation of the EIS proposal there would not be any property acquisition or adjustments. EIS proposal area 3 would be returned to council as part of the NSW Government's <i>Floodplain Management Program</i> . Refer to Section 7.2.1 for more details.	Negligible	Negligible	Negligible

Aspect	Impact assessment - Construction	Significance of impact			Impact assessment – Operation	Significance of impact		
		Sensitivity	Magnitude	Ranking		Sensitivity	Magnitude	Ranking
Land use and development	<p>The EIS proposal would result in some land use changes during construction.</p> <p>In EIS proposal area 1, land use changes would occur within the vegetated corridor between the Georges River and Henry Lawson Drive. As discussed in Section 6.5.5, this area is currently used for active and passive recreation by the community. During construction, EIS proposal area 1 would be used for construction activities, restricting the use of this area by the public. This may have flow on effects to people travelling within and through EIS proposal area 1 as construction areas would be fenced to ensure the community's safety from plant, machinery, excavations and other activities.</p> <p>Land use changes in EIS proposal 2 would include the use of a portion of the vegetated road reserve for transverse drainage infrastructure, embankment works and road widening.</p> <p>Construction would require land use changes within the residential property on Henry Lawson Drive, north of Auld Avenue for use as an ancillary facility during construction (EIS proposal area 3). A portion of this property would be acquired for the EIS proposal. A small section of road reserve and the property to the south of the proposed ancillary facility would also be used for construction of the road and embankment works.</p> <p>Other surrounding proposed development in the socio-economic study area and broader study area would not be impacted by construction activities within the EIS proposal areas. Impacts would be relatively consistent with those discussed in Section 7.1.2 and would be minor in nature.</p>	Low	Low	Low	<p>In EIS proposal area 1 and 2, leased land that is not required for the road footprint and associated road furniture would be returned to Council and private owners. At the time of writing, arrangements for EIS proposal area 3 were still to be confirmed.</p> <p>Vegetation removal would occur in all three EIS proposal areas during construction. EIS proposal area 1 and 2 would be revegetated prior to the completion of construction, however revegetation in EIS proposal area 3 would be subject to further discussions with council depending on the requirements of the <i>Floodplain Management Program</i>.</p> <p>The vegetation removal required for the EIS proposal may impact the use of certain areas, particularly EIS proposal area 1 which is used for recreation and active transport connectivity. Vegetation removed and replanted would need time to re-establish and grow, resulting in some temporary visual impacts. More information to impacts to the vegetated corridor between the Georges River and Henry Lawson Drive is provided in Section 7.2.2.</p>	Low	Low	Low

Aspect	Impact assessment - Construction	Significance of impact			Impact assessment – Operation	Significance of impact		
		Sensitivity	Magnitude	Ranking		Sensitivity	Magnitude	Ranking
Access and connectivity	<p>During construction within EIS proposal area 1 the shared user pathway on the northbound side of Henry Lawson Drive would be impacted. Alternate arrangements for the pathway would be required during widening works, utilities work and earthwork. The temporary closure or adjustment of pathways and shared user connections may affect accessibility, community cohesion and some resident and visitor enjoyment of public spaces in the study area. This would mostly be experienced around the main structural widening works. Changes in pedestrian or recreational access and connectivity would reduce the overall amenity of the direct study area.</p> <p>Construction work within EIS proposal area 2 would require the temporary relocation of the bus stop on Milperra Road. This bus stop would be moved to facilitate the widening works and proposed relocation of the bus stop 20 metres to the west. The relocation of the bus stop may result in commuters having to travel further distances to access alternative bus stop locations. It may also cause some confusion for commuters that are unfamiliar with services within the area.</p> <p>Refer to Section 7.1.3 for more details.</p>	Low	Moderate	Moderate -low	<p>The EIS proposal would result in improved traffic flow and efficiency in conjunction with the works required for the REF proposal.</p> <p>The reinstatement of the shared user pathway within EIS proposal area 1, the establishment of footpaths and relocated bus stop on Milperra Road in EIS proposal area 2 are expected to have a positive impact on access for all road users. Refer to Section 7.2.3 for more details.</p>	Negligible	Negligible	Negligible
Social infrastructure	<p>EIS proposal area 1 is located within the vegetated corridor between the Georges River and Henry Lawson Drive. This area is comprised of Coastal Wetlands and dense vegetation, used for active transport connectivity and passive recreation by the community. During construction, this area would be impacted by earthwork, widening and utilities work. This would impact the use of this area by the community, including those accessing this area as part of the Crosscurrents – Georges River Art Walk. In addition, recreational users of the Georges River may also experience amenity impacts in this area during construction and avoid using this section of the river for boating and recreational uses. More information about potential impacts to social infrastructure in this section of the direct study area is discussed in Section 7.1.4.</p>	Low	Moderate	Moderate -low	<p>There are no impacts to social infrastructure anticipated during the operation of the EIS proposal.</p>	Negligible	Negligible	Negligible

Aspect	Impact assessment - Construction	Significance of impact			Impact assessment – Operation	Significance of impact		
		Sensitivity	Magnitude	Ranking		Sensitivity	Magnitude	Ranking
	During construction, earthworks and widening required within EIS proposal area 2 are not expected to impact the use and operation of Bankstown Golf Club. There is no social infrastructure within EIS proposal area 3.							
Business and commercial	There are no businesses or commercial premises within or near the EIS proposal areas.	Negligible	Negligible	Negligible	There are no anticipated impacts to businesses and commercial operations during the operation of the EIS proposal.	Negligible	Negligible	Negligible
Amenity and community values	Impacts during construction would be similar to those experienced as a result of the REF proposal however on a smaller scale. In EIS proposal area 1, amenity impacts to residential receivers on the Georges River, active transport users using the shared user path and recreational users of the Georges River would occur in the form of noise and visual impacts. Visual impacts associated with the presence of construction plant and machinery and vegetation removal would also impact the community. This includes the removal of vegetation that is identified as SEPP Coastal Wetlands which have biodiversity value that is appreciated and valued by the community. More information about this is discussed in the Biodiversity Development Assessment Report prepared for the EIS. Construction plant and machinery and vegetation removal can also result in air quality impacts by surrounding receivers. For works closest to the foreshore of the Georges River, lighting glare from construction areas is likely to be experienced by residents on the Georges River. This would impact the natural landscape character of the EIS proposal area. As stated in Section 7.1.6, construction within this area may deter the use of the shared user pathway and vegetated space between the Georges River and Henry Lawson Drive.	Moderate	Moderate	Moderate	Landscaping undertaken as part of the EIS proposal would take time to mitigate visual impacts from construction. It is assumed that landscaping would take around five years to fully establish and achieve the urban design and landscaping principles for the overall proposal. This is particularly relevant to EIS proposal areas 1 and 2 where SEPP Coastal Wetland areas holds amenity and recreational value to the community. As stated in Section 7.2.6 the road footprint would also be closer to the residential properties on the Georges River which may result in minor noise increases during the operation of Henry Lawson Drive.	Moderate	Low	Moderate-low

Aspect	Impact assessment - Construction	Significance of impact			Impact assessment – Operation	Significance of impact		
		Sensitivity	Magnitude	Ranking		Sensitivity	Magnitude	Ranking
	<p>Noise impacts are expected to be experienced as a result of construction activities in all three EIS proposal areas. The most impacts to receivers is expected to occur opposite EIS proposal area 1 at the residences on the western side of Georges River and opposite EIS proposal area 3 at the residences on Henry Lawson Drive northbound. Noise impacts would occur as a result of the use of ancillary facilities and road widening in EIS proposal areas 1 and 3 and also as a result of bridge construction in EIS proposal area 3. Noise impacts would occur on a smaller scale to those that would be experienced as a result of the REF proposal.</p> <p>Impacts to amenity and community values would be relatively similar to what was assessed in Section 7.1.6 for EIS proposal area 2 and EIS proposal area 3. Construction is likely to have some indirect impacts on the Bankstown Golf Course, through construction noise and visual impacts associated with the embankment work and widening of Milperra Road. As mentioned previously, this section of the golf course would not be frequented by patrons of the facility often as it is densely vegetated and relatively close to the border of the course, away from the main playing area.</p> <p>EIS proposal area 3 forms a small component of the ancillary facility. In addition, a small part of EIS proposal area 3 also forms part of the road footprint and embankment to be widened on the southbound side of Henry Lawson Drive. There would be visual amenity impacts during construction in this area, which would be used as a construction area, rather than a residential area.</p>							
Cumulative	Please refer to Section 7.1.7 for cumulative impacts of the EIS proposal in conjunction with the REF proposal and other surrounding projects.	Negligible	Negligible	Negligible	Please refer to Section 7.2.7 for cumulative impacts of the EIS proposal.	Negligible	Negligible	Negligible

9 Mitigation measures

Table 10-1 provides the management measures that would be implemented during the construction and operation of the REF proposal and EIS proposal.

Table 10-1 Mitigation measures

Potential impact	Mitigation measure	Responsibility	Timing	To be implemented for the REF proposal	To be implemented for the EIS proposal
Community impacts during construction including noise, visual and access impacts	<p>A Community Liaison Plan (CLP) will be prepared and implemented as part of the CEMP to help provide timely and accurate information to the community during construction. The CLP would include (as a minimum):</p> <ul style="list-style-type: none"> ■ Mechanisms to provide details and timing of proposed activities to affected residents, including changed traffic and access conditions ■ Contact name and number for complaints. <p>The CLP would be prepared in accordance with <i>Transport's stakeholder engagement toolkit</i> and the <i>Transport for NSW Stakeholder and Community Engagement Policy 2019</i>.</p>	Construction contractor	Pre-construction	✓	✓
Community consultation throughout the overall proposal so that residents, businesses and stakeholders are aware of design changes and construction activities.	Continued consultation with the community, recreational groups, businesses and other stakeholders until the completion of the overall proposal. Discussions will include changes to the overall proposal as a result of detailed design, the nature and timing of construction works, mitigation measures for residents, stakeholders and people using the overall proposal.	Transport and Construction Contractor	Detailed design/pre-construction	✓	✓
Aboriginal Community consultation to mitigate potential impacts on Aboriginal Heritage and areas of significance	Further investigations into the potential to avoid impacts to Aboriginal land claims and undertake ongoing consultation with Aboriginal land councils.	Transport	Detailed design/pre-construction	✓	✓
Consultation with emergency services to maintain access	Continued consultation with emergency services to understand access requirements so that access can be maintained during construction, particularly during works at the Tower Road/Henry Lawson Drive intersection.	Transport and Construction Contractor	Detailed design/construction	✓	✓
Property impacts as a result of temporary access changes and property acquisition	Continued consultation with affected property owners and land occupiers until the completion of the overall proposal. Discussions including the nature and timing of construction works would be required to identify relevant mitigation measures for noise, traffic, access and visual impacts.	Construction contractor	Pre-construction/construction	✓	✓
Property acquisition requirements including private and crown land acquisition	Land acquisition will occur in accordance with the <i>Land Acquisition (Just Terms Compensation) Act 1991</i> and the <i>Crown Lands Management Act 2016</i> .	Transport	Detailed design/Pre-construction	✓	✓

Potential impact	Mitigation measure	Responsibility	Timing	To be implemented for the REF proposal	To be implemented for the EIS proposal
Changes in access for all road users	Temporary and permanent changes in access on the local road network will be firstly discussed with impacted land occupiers prior to commencement of construction and then followed up with community notifications/letter-box drops to notify the broader community, recreational groups, businesses and other stakeholders. Consultation will continue during construction should arrangements change. This includes access onto Auld Avenue, Henry Lawson Drive, Starkie Drive and Tower Road.	Construction contractor	Pre-construction/ construction	✓	N/A
Business consultation to mitigate potential impacts associated with alternative traffic arrangements and potential construction traffic impacts	Continued consultation with businesses within the direct study area about timing and scheduling of construction activities	Construction contractor	Pre-construction/ construction	✓	N/A
Social infrastructure impacts including access and amenity impacts	Operators of the Georges River Golf Course and Bankstown Golf Course, public transport providers as well as Council in reference to Gordon Parker Reserve, Vale of Ah Reserve and the vegetated corridor between the Georges River and Henry Lawson Drive will be consulted and informed regarding construction activities to mitigate any impacts during busy periods and events at these facilities.	Construction contractor	Pre-construction/ construction	✓	✓
Consultation with council to mitigate potential impacts on community events	Consultation with council will be undertaken to ensure that construction activities to mitigate potential impacts to council run events that may be occurring in the socio-economic study area at the same time as construction activities.	Construction contractor	Pre-construction/ construction	✓	✓
Relocation of bus stops during construction	Public transport providers and users will be notified in advance of any changes to bus stop locations through signage at the existing bus stops on Milperra Road. Temporary bus stops would have similar features to existing bus stops. Adequate way finding signage would be installed.	Transport/ Construction contractor	Detailed design /Construction	✓	✓
Traffic management for all road users, including pedestrians and cyclists	Traffic management measures required for the overall proposal are included in the Traffic and Transport Assessment, including the requirement for a Traffic Management Plan to be developed prior to construction. Active transport should be addressed as part of this TMP. Alternative routes for active transport users will be clearly identified by signage and the use of traffic controllers where required. This includes areas along Henry Lawson Drive, within the vegetated corridor between the Georges River and Henry Lawson Drive and close to Gordon Parker Reserve which is frequented by school children and families.	Transport	Pre-construction /construction	✓	✓

Potential impact	Mitigation measure	Responsibility	Timing	To be implemented for the REF proposal	To be implemented for the EIS proposal
Temporary relocation of the roadside memorial	The roadside memorial on the southern side of Milperra Road will be temporarily relocated during construction in consultation with the stakeholders who have made the memorial. Access to the relocated roadside memorial would be maintained for pedestrians during construction.	Transport	Pre-construction /construction	✓	✓
Business signage during construction to mitigate access and potential loss of passing trade impacts	Opportunities for the temporary installation of signage on approach to Tower Road for access to businesses will be investigated. Wayfinding and the location of signage during construction will be based on the construction staging and where room is available.	Transport and construction contractor	Detailed design/ /construction	✓	
Amenity impacts associated with vegetation removal	Vegetation will be replanted in accordance with the landscaping plan prepared for the proposal.	Construction contractor	Construction	✓	✓
Safety mitigation as a result of potential flooding impacts during construction	Safety mitigation measures for all construction areas will be implemented as part of the Construction Flood Management Plan to minimise risk and potential impacts on residents, businesses and stakeholders as a result of a flood event. The Plan will include evacuation routes identified for each stage of construction. Implementation of the Plan will include consultation with the community and stakeholders and based on advice provided from the SES.	Transport and construction contractor	Detailed design/ Construction	✓	✓

10 Conclusion

This assessment considers the potential socio-economic impacts associated with the proposed Henry Lawson Drive Upgrade Stage 1A. It considers potential socio-economic impacts of the REF and the EIS proposals and overall commentary on socio-economic effects of both the REF and EIS proposals.

10.1 REF proposal

The REF proposal is expected to have some adverse impacts during the construction phase, including:

- **Property and land use impacts**, such as property acquisition for residences, businesses and public spaces. One full residential property acquisition would be required on the eastern side of Henry Lawson Drive (just north of the Auld Avenue/Henry Lawson Drive intersection) and some residential strip acquisition required on the western side (between Auld Avenue and Newbridge Road). Property acquisition can result in varying impacts to land owners and occupiers, with some people being more vulnerable to impacts than others. In addition, two small portions of land that are part of the Bankstown Golf Course and the Georges River Golf Course would also be acquired. This is not expected to impact the operation of the golf courses as acquisition would be located close to the edge of both properties.
- **Changes in access and connectivity for all road users** as a result of construction traffic impacts, delays around construction areas and temporary alternate traffic arrangements. In particular, changes in access at Auld Avenue and along the shared user path on Henry Lawson Drive would impact residents and the broader community that use these areas during construction. The temporary relocation of bus stops may affect accessibility during construction, however access would be maintained.
- **Changes in access and connectivity for businesses** on Henry Lawson Drive, resulting in impacts to businesses between Tower Road and Milperra Road and businesses within the Flower Power Complex. Businesses that operate over 24-hour periods, or outside of hours periods such as the BP Truckstop service station and Wild Bean Café, KFC Milperra and Hungry Jack's Burgers Milperra may experience impacts to business movements and customer access. This is likely to occur during the implementation of alternative traffic arrangements during these out of hours work periods. Similarly, freight deliveries at the Flower Power Complex outside of standard hours may also experience impacts during construction as a result of delays and alternative traffic arrangements.
- **Impacts to social infrastructure** where people may experience changes to noise, air quality and visual environment particularly when using parks and the Georges River. For example, recreational users of the Georges River and people using Gordon Parker Reserve and undertaking the Crosscurrents – Georges River Art Walk. The construction of the REF proposal would not directly impact the operation of most facilities within the socio-economic study area but may have indirect impacts on the usage as a result of visual, noise and air quality impacts associated with construction. This could reduce some resident and visitor enjoyment of social infrastructure and public spaces.
- **Impacts to community values and amenity**. During construction there would be impacts to community values and amenity in the form of noise, visual and air quality impacts for residents, businesses, services and social infrastructure. The highest impacts would be during construction activities that use noise or vibration intensive equipment. During works outside standard construction hours at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection noise intensive activities could result in some potential sleep disturbance or discomfort for residential receivers. This can have an adverse impact on the health and wellbeing of residential receivers, particularly if construction periods outside of standard construction hours occur for long periods of time without mitigation.

Potential impacts associated with vegetation removal would result in visual impacts to surrounding receivers, and impact the liveability of the direct study area, particularly surrounding the Georges River and coastal wetland areas which are valued by community. Revegetation would be undertaken prior to the completion of construction.

Consultation undertaken for the proposal indicated that safety is highly valued by the community. Construction activities such as the use of ancillary facilities located on the floodplain, earthworks and the construction of the bridge may have the potential to adversely impact safety. Impacts to flood evacuation routes, construction worker safety and residences as a result of flooding have been considered in the development of the design.

- **Potential traffic and amenity cumulative impacts** which could occur as a result of works being located near the Bankstown Airport Redevelopment, proposed Riverlands Residential Development and other road projects that form part of the Henry Lawson Drive Upgrade Program of works, including the EIS proposal. Amenity impacts are expected for projects closer to the REF proposal such as the Bankstown Airport Redevelopment, with traffic impacts expected to occur as a result of projects within the broader study area such as the Moorebank Intermodal Terminal project and other stages of the Henry Lawson Drive Program of works. These projects are expected to result in increased traffic demand, with large freight vehicles using the direct study area for access.

During the operation of the proposal socio-economic impacts include:

- **Some changes in land use in the road corridor**, including areas that were previously vacant or vegetated land alongside Henry Lawson Drive, Milperra Road and Newbridge Road would now form part of the road footprint. This would impact the community who value nature and the environment. As these areas are part of the road corridor without formal connections to the pedestrian network, most of them are not frequently used by the public. The vegetated corridor between the Georges River and Henry Lawson Drive is the exception, which features the shared user path along the Georges River. Land use changes from vegetated corridor to roadway in this area may impact the amenity of pedestrians using the pathway and surrounding area temporarily as vegetation re-establishes. As most land use changes would occur close to the road corridor, impacts are not expected to be substantial. The land use changes would facilitate improved connections through the direct study area, which are likely to positively contribute to the community who value movement and connectivity. Construction of new footpaths and relocated bus stops would improve pedestrian connectivity at the Henry Lawson Drive/Milperra Road/Newbridge Road intersection. This may provide greater incentive for the community to use public transport through better access opportunities.
- **Improvements in access and connectivity** from increased travel efficiency for local road users, through the provision of greater capacity which would provide benefits for future growth and development within the broader study area. New turning arrangements at Auld Avenue (left in/left out) to reduce the risk of vehicles turning into oncoming traffic and also improve the performance of the intersection. This would result in changes to access and potential substantial increases to travel times. This is likely to primarily impact residents in Auld Avenue and people that use Gordon Parker Reserve and the Vale of Ah Reserve. Changes in access may be inconvenient for people that use Auld Avenue, which may impact the usage to the reserves.
- **Benefits to commercial operations and businesses** within and travelling through the direct study area through increased road capacity and improved travel times.
- **Changes in community values and amenity** including slight beneficial noise impacts to residences located to the west of Henry Lawson Drive, with noise levels to decrease slightly as the travel lanes move to the east. Noise levels to the golf courses on the east of Henry Lawson Drive would slightly increase. However, it is noted that these changes are very minor and would not be perceptible. In addition, permanent property acquisition would bring the road corridor closer to some residents on Henry Lawson Drive that have been subject to strip acquisition. This could result in reduced visual amenity as Henry Lawson Drive would occupy a larger road footprint. The widened footprint would further contribute to the built environment impacting on community values.

The single full property acquisition of the residential property on the eastern side of Henry Lawson Drive would be subject to future Council flood mitigation planning requirements to mitigate potential flood impacts. Discrete flooding impacts during operation are likely to occur for residents and businesses within the socio-economic study area. This would result in impacts to the community, particularly due to the high value the community and stakeholders place on safety. Impacts are expected to be localised with slight increases to existing flood levels during flooding events. Mitigation, including further flood impact analysis during detailed design, would be implemented to avoid safety impacts during construction and would include flood evacuation procedures being implemented during a flood event.

- **Revegetation** would occur throughout the direct study area to improve the visual aesthetic of the upgrade.

10.2 EIS proposal

Some parts of the proposal are assessed in an EIS. Socio-economic factors of the three EIS proposal areas were considered in addition to the socio-economic impacts identified for the REF. The REF proposal and EIS proposal would be constructed and operated concurrently. The socio-economic impacts identified for the EIS proposal are consistent with the socio-economic factors considered for the REF proposal, however, on a much smaller scale. Due to the difference in the scale of impacts, a cumulative rating of socio-economic impacts would not occur, rather the impact rating of the REF proposal, being the more prominent works would be representative of the overall proposal.

10.3 Overall proposal potential impact

The overall proposal impact assessment is consistent with the socio-economic impacts identified for the REF proposal. The overall proposal is expected to increase travel efficiency for local road users by allowing for greater traffic capacity at key intersections. Adverse impacts during construction and operation would be mitigated through a range of mitigation measures. Transport would continue to consult the community and stakeholders and work with Council to mitigate potential impacts.

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Appendix A

Quantitative data

The following table provides a summary of data collected from the Census of Population and Housing (ABS, 2016) used to inform this assessment.

Indicator	Panania - Milperra - Picnic Point		Condell Park		Bass Hill - Georges Hall		Chipping Norton - Moorebank		Broader study area		City of Canterbury Bankstown LGA		Liverpool City LGA		Greater Sydney	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Population																
Total persons	25,788		11,309		21828	-	18746	-	77,671	1.6%	346,302	-	204,326	-	4,823,991	-
Proportion of people aged 14 years or younger	5227	20.3%	2,657	23.5%	4909	22.5%	4147	22.1%	16,940	21.8%	71,037	20.5%	46,302	22.7%	900,229	18.7%
Proportion of people aged 65 years or older	3948	15.3%	1441	12.7%	3569	16.4%	2641	14.1%	11,599	14.9%	48,246	13.9%	21,325	10.4%	672,561	13.9%
Aboriginal and Torres Strait Islander population	419	1.6%	67	0.6%	189	0.9%	191	1.0%	866	1.1%	2,552	0.7%	3012	1.5%	70,135	1.5%
Overseas born	5,984	23.2%	4,542	40.2%	7543	34.6%	5,999	32.0%	24,068	31.0%	152,708	44.1%	83368	40.8%	1,773,483	36.8%
Advantage/disadvantage index by decline	1,039	-	965	-	935	-	1046	-		-	961	-	972	-		-
People with need for assistance	1292	5.0%	736	6.5%	1901	8.7%	935	5.0%	4,864	6.3%	23,119	6.7%	12,759	6.2%	236,139	4.9%
Housing and households																
Total private dwellings	9,012	-	3,419	-	6,967	-	6148	-	25,546	-	115,506	-	61,741	-	1,759,927	-
Occupied separate house	6424	71.3%	2,150	62.9%	5,087	73.0%	4,896	79.6%	18,557	72.6%	61,550	53.3%	44395	71.9%	924,225	52.5%
Occupied terrace/flat/ other etc.	2,062	22.9%	995	29.1%	1,407	20.2%	921	15.0%	5,385	21.1%	45,811	39.7%	14,059	22.8%	692,600	39.4%
Unoccupied private dwellings	501	5.6%	260	7.6%	455	6.5%	315	5.1%	1,531	6.0%	7,736	6.7%	2959	4.8%		

Indicator	Panania - Milperra - Picnic Point		Condell Park		Bass Hill - Georges Hall		Chipping Norton - Moorebank		Broader study area		City of Canterbury Bankstown LGA		Liverpool City LGA		Greater Sydney	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Total households	8,506	-	3,161	-	6513	-	5831	-	24,011	-	107,772	-	58,786	-	1,623,872	-
Family households	6,769	79.6%	2,641	83.5%	5087	78.1%	4896	79.6%	19,393	80.8%	83,008	77.0%	48,556	82.6%	1,195,662	73.6%
Non-family households	1,738	20.4%	513	16.2%	1,427	21.9%	933	15.2%	4,611	19.2%	24,758	23.0%	10,233	17.4%	428,213	26.4%
Average household size	2.9	-	3.4	-	3.1	-	3.1	-	-	-	3	-	3	-	2.8	-
Housing tenure - mortgage	\$2,300	-	\$2,167	-	\$2,167	-	\$2,299	-	-	-	\$2,000	-	2123	-	\$2,167	-
Housing tenure - rent	\$430	-	\$450	-	\$300	-	\$450	-	-	-	\$380	-	370	-	\$440	-
Households with no vehicles	572	6.7%	213	6.7%	573	8.8%	200	3.4%	1,558	6.5%	12,183	11.3%	4542	7.7%	179,500	11.1%
Average motor vehicles per dwelling	1.9	-	1.9	-	1.8	-	2	-	-	-	1.7	-	2	-	1.7	-
Travel																
Travel to work by train (one method)	1619	13.3%	278	6.5%	357	4.6%	557	6.3%	2,811	8.5%	19,504	14.1%	5641	6.7%	247,051	10.9%
Travel to work by bus (one method)	74	0.6%	49	1.1%	108	1.4%	92	1.0%	323	1.0%	2,753	2.0%	1314	1.6%	125,503	5.5%
Travel to work by ferry (one method)	0	0.0%	0	0.0%	4	0.1%	0	0.0%	4	0.0%	20	0.0%	6	0.0%	7,467	0.3%
Travel to work by tram (one method)	0	0.0%	0	0.0%	3	0.0%	0	0.0%	3	0.0%	91	0.1%	4	0.0%	2,617	0.1%
Travel to work by taxi (one method)	11	0.1%	4	0.1%	13	0.2%	14	0.2%	42	0.1%	400	0.3%	111	0.1%	5,301	0.2%
Travel to work by car (as driver - one method)	7,501	61.4%	2,814	65.5%	5174	67.3%	5,935	67.5%	21,424	65.0%	79,112	57.2%	54,561	65.0%	1,197,269	52.7%
Travel to work by car (as passenger - one method)	435	3.6%	257	6.0%	430	5.6%	336	3.8%	1,458	4.4%	6,453	4.7%	4,157	5.0%	89,273	3.9%

Indicator	Panania - Milperra - Picnic Point		Condell Park		Bass Hill - Georges Hall		Chipping Norton - Moorebank		Broader study area		City of Canterbury Bankstown LGA		Liverpool City LGA		Greater Sydney	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Travel to work by truck (one method)	155	1.3%	91	2.1%	131	1.7%	106	1.2%	483	1.5%	1,555	1.1%	1,236	1.5%	19,540	0.9%
Travel to work by Motorbike/scooter (one method)	37	0.3%	12	0.3%	20	0.3%	37	0.4%	106	0.3%	528	0.4%	274	0.3%	14,890	0.7%
Travel to work by bicycle (one method)	27	0.2%	7	0.2%	16	0.2%	22	0.3%	72	0.2%	406	0.3%	166	0.2%	16,471	0.7%
Other (one method)	52	0.4%	31	0.7%	46	0.6%	37	0.4%	166	0.5%	806	0.6%	372	0.4%	11,778	0.5%
Travel to work by walking only (one method)	154	1.3%	65	1.5%	93	1.2%	99	1.1%	411	1.2%	2,787	2.0%	1,661	2.0%	91,577	4.0%
Two methods	575	4.7%	221	5.1%	376	4.9%	545	6.2%	1,717	5.2%	7,977	5.8%	4,596	5.5%	131,666	5.8%
Three methods	55	0.5%	26	0.6%	43	0.6%	55	0.6%	179	0.5%	883	0.6%	584	0.7%	15,943	0.7%
Worked at home	408	3.3%	117	2.7%	238	3.1%	273	3.1%	1,036	3.1%	3,832	2.8%	2,530	3.0%	98,906	4.4%
Employment and industry																
Labour force	12,875	-	4,673	-	8,417	-	9,260	-	35,225	-	150,613	-	90,669	-	2,418,899	-
Median household income (\$)	\$1,763	-	\$1,386	-	\$1,197	-	\$1,838	-	-	-	\$1,298	-	\$1,550	-	\$1,750	-
Unemployment (total unemployed)	658	5.1%	386	8.3%	738	8.8%	470	5.1%	2,252	6.4%	12,420	8.2%	6764	7.5%	146,187	6.0%
Industry of employment																
Construction	1,232		489		884	-	797.0	-			13,113		8,340		186,332	8.2%
Retail trade			477		834	-	852.0	-			14,415		8,457		211,890	9.3%
Health Care and Social Assistance	1,203		476		847	-	888.0	-			14,976		9,590		263,351	11.6%
Manufacturing					-	-	-	-								
Education and training	1,219				-	-	-	-							182,770	8.0%

Indicator	Panania - Milperra - Picnic Point		Condell Park		Bass Hill - Georges Hall		Chipping Norton - Moorebank		Broader study area		City of Canterbury Bankstown LGA		Liverpool City LGA		Greater Sydney	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Transport, Postal and Warehousing					-	-	-	-							-	-
Professional, Scientific and Technical Services					-	-	-	-							223,708	9.8%
Place of residence																
Same address as 5 years ago as in 2016	15,582	64.7%	6,392	61.4%	12,727	62.9%	10,137	58.8%	44,838	62.3%	187,790	58.4%	107,348	56.9%	2,402,160	53.2%
Different address 5 years ago as in 2016	7,401	30.7%	3,417	32.8%	6,092	30.1%	6,296	36.5%	23,206	32.2%	112,625	35.1%	67,379	35.7%	1,817,909	40.3%
Education and voluntary work																
Highest level of education % of persons aged 15 or over no longer attending school who completed year 12 or equivalent	10,500	53.6%	4,542	55.4%	7868	49.1%	7855	56.1%	30,765	53.2%	151,176	57.6%	81128	54.3%	2,334,316	62.1%
Voluntary work	3,421	16.6%	883	10.2%	1769	10.5%	1,901	13.0%	7,974	13.1%	31,925	11.6%	17,364	11.0%	653,910	16.7%

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