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Introduction and Background

This chapter introduces and provides background and context to the transport assessments and planning related to the Moore Point Precinct.

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1.1 Introduction and Background

This report has been prepared on behalf of the Joint Landowners Group (JLG) in response to the Gateway Conditions, and in particular to ensure alignment with the updated Moore Point Master Plan.

In a parallel process, further transport management and access planning is currently being progressed in consultation with TfNSW and Liverpool City Council as part of the Stage 2 Transport Management and Access Plan study. The following provides the history and an overview of the transport assessments and stages undertaken by the JLG to date and will be continued as the project moves forward.

1.1.1 Transport Assessment and Planning Background

In March 2019, a Draft Transport Impact Assessment (TIA) Brief was referred to the Transport Cluster and the Liverpool City Council for comment. In May 2019, Transport for NSW (TfNSW) responded and suggested the establishment of a working group in charge of overseeing the preparation of the TIA Brief, terms of reference and deliver transport infrastructure requirements and costings to support the land rezoning.

In consideration of the above, TfNSW requested that a twostage assessment approach be adopted, comprising the following:

- Stage 1: An initial stage of strategic transport infrastructure and services demand assessment (supported by strategic modelling) for the Liverpool Collaboration Area
- **2. Stage 2:** A detailed transport access and management for the Precinct (TMAP).

In November 2019, the Transport Infrastructure Working Group (TIWG) was established, which included representatives of the following stakeholders:

- · Liverpool City Council (Chair)
- Transport for NSW
- NSW Department of Planning
- Greater Sydney Commission
- Joint Landowners Group (JLG)

1.1.2 Stage 1

In January 2020, the TIWG adopted the 'Terms of Reference', which included:

- A two-staged assessment approach to TIA, as recommended by the Transport Cluster
- The scope, methodology and deliverables required for Stage 1.

Stage 1 report details the transport infrastructure required to support growth in the Liverpool Collaboration Area and surrounding regions over a 35-year horizon to 2056. Some of its key findings include:

- Growth can be accommodated on the transport network and high-growth scenarios can be supported with the proposed network improvements.
- Infrastructure investment is required to address existing constraints as well as supporting growth.

 Delivering Liverpool will require collaboration across the public and private sectors.

For more details regarding Stage 1, please refer to Appendix A: Liverpool Collaboration Area – Strategic Transport Infrastructure Assessment report by Aurecon, dated 1 July 2021.



Figure 1
Liverpool Collaboration Area

Source: Aurecon Liverpool Collaboration Area – Strategic Transport Infrastructure Assessment

1.1 Introduction and Background

1.1.3 Stage 2

In August 2021, the TIWG signed off on the Liverpool Collaboration Area – Strategic Transport Infrastructure Assessment Report. Following the approval of Stage 1, the TIWG endorsed the Stage 2 scope and brief for the Transport Management and Access Plan (TMAP) study, including modelling.

In March 2022, the Draft TMAP was prepared by Ramboll based on the initial infrastructure staging and Precinct Master Plan. The draft report and Stage 2 is currently being updated to include the Master Plan updates based on the Gateway Conditions and in further consultation with TfNSW and Liverpool Council.

Strategic Alignment

This chapter describes the alignment of Moore Point's transport strategy and network with State Government strategic documents and policy.

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2.1 Strategic Guidance and Direction

Moore Point has been designed as a "Car Lite" precinct, in line with Government Policy which promotes walking, cycling and public transport as the preferred modes of transport. At Moore Point the aim is to provide future residents and visitors with connectivity choices which reduces dependency on private vehicle ownership.

The following provides the strategic context and outlines the key actions taken in developing the Moore Point Network as an active and public mobility focused precinct, increasing accessibility for the future population and delivering a carlite, sustainable precinct.

2.1.1 Strategic Guidance

Relevant NSW Guidance was utilised to inform the "What" and the "How" of the future mobility strategy for the Moore Point Precinct. The Future Transport Strategy outlines the vision for transport in NSW, a vision that has provided the input to the "What" the Moore Point Precinct seeks to achieve through its future mobility networks.

The NSW Movement & Place – Network Planning in Precincts Guide, provides the strategic design and planning of transport networks to support 15-minute neighbourhoods and 30-minute cities, the "How" we have followed at Moore Point.

Both of these strategic documents seek to reduce car dependency and increase the mode share of walking, cycling and public transport, in particular in urban areas. This outcome we believe we have achieved through the design and staging of Moore Point which will result in a future population with a reduced car ownership within the precinct.

Further details on the alignment to these strategic documents and outcomes sought in designing Moore Point's transport network are captured below.

2.1.2 Future Transport Strategy

The NSW Future Transport Strategy, released in August 2022, sets the strategic directions for Transport to achieve world-leading mobility for customers, communities, businesses and our people, including supporting a forecast population growth of 3.5 million people by 2061.

The Strategy outlines the areas of focus to deliver customers "better alternatives to driving and a more sustainable transport system that fosters participation and inclusion. To do this, we will need to improve connections through stronger investment in public transport, and walking and cycling networks, supported with travel demand management and improved digital connectivity."

A number of strategic directions and responses, identified in Future Transport, have driven the development of the Moore Point Precinct including:

- Enhance 30-minute metropolitan cities
- Support thriving and healthy 15-minute neighbourhoods
- Support car-free, active, sustainable transport options
- Support growth around public transport
- Improve parking provision and management
- · Provide customer journey resilience



Figure 2
Future Transport Strategy
Source: NSW Future Transport Strategy

2.1 Strategic Guidance and Direction

2.1.3 NSW Movement & Place – Network Planning in Precincts Guide

The NSW Movement & Place – Network Planning in Precincts Guide (the Guide) provides best practice principles, tools, examples and case studies of a transport network that facilitates the efficient movement of people and goods while supporting 15-minute neighbourhoods and 30-minute cities, as well as the desired place, safety, public health and wellbeing, environmental and economic outcomes.

The Guide shifts the emphasis in network planning from a hierarchy of roads towards a complete network that is place-based and prioritises walking, cycling, and public transport. This is the process we have followed in developing the Transport Access and Management Plan for the Moore Point Precinct, guided by the identified issues and opportunities relating to integrated mobility that have been prevalent in the planning of developments locally, nationally and internationally.

Relevant problem statements and issues, from the Guide, include:

- Mode Shift: A car-centric transport network leads to congestion, unattractive places and high levels of carbon emissions. However, without good provisions for walking, cycling and public transport, people will choose to drive out of convenience.
- Mode Shift: Too many parking spaces in well-connected urban areas can lead to low walking, cycling and public transport use and unintended traffic congestion.

- Land-use integration: Residential development is sometimes staged with limited consideration for walking, cycling and public transport, requiring residents to drive from the outset.
- Infrastructure, services and technology: Walking, cycling and public transport are often considered last with the assumption they can be incorporated into the road network once it's completed. This results in poor walking and cycling experience with indirect connections and limited infrastructure.

The guiding opportunities to address these issues are:

- Mode Shift: High uptake of walking, cycling and public transport delivers significant health, environmental and economic benefits, creates resilient communities, and enables our communities to be more equitable, inclusive and liveable for everyone. It also reduces congestion.
- Mode Shift: Fewer car parking spaces means more space for footpaths, playgrounds, safe crossings, street trees, outdoor dining and bike lanes.
- Land-use integration: A precinct with integrated land use and transport makes it more convenient to walk, cycle and take public transport between destinations. This results in less congestion, lower average vehicle kilometres and lower emissions.
- Infrastructure, services and technology: Prioritising walking, cycling and public transport creates multimodal transport networks that become the backbone of accessible precincts. This leads to successful places, a stronger economy and better safety, public health and wellbeing.

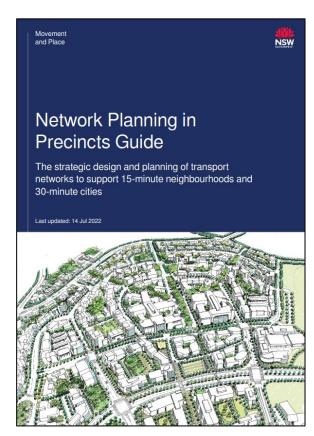


Figure 3

Network Planning in Precincts

Source: NSW Movement and Place

2.2 Strategic Alignment

The core points of alignment between Moore Point and the State guiding strategy documents are captured in the following sections.

2.2.1 Enhance 30-minute Metropolitan Cities

The 30-minute city concept focusses on ensure most people can access key destinations, such as CBDs and Strategic Centres, Major Health Precincts, Tertiary education institutions and significant cultural and leisure destinations by public transport in 30 minutes. A key action and outcome identified within this direction is to enhance 30-minute travel catchments in the Six Cities Region and reduce reliance on private vehicles to access key destinations in our cities as well as supporting a more sustainable transport system.

The Moore Point precinct is centrally placed, within easy walking or cycling distance to the major transport interchange at Liverpool Station, meaning connectivity to a range of key destinations within 30-minutes by public transport will be available to future residents of Moore Point. In addition, the significant waterfront and commercial amenity provided within the precinct is located with easy walking access to the train station and existing Liverpool CBD and will further enhance Liverpool as a key destination improving 30-minute city outcomes for many residents in Sydney's central and western regions.

Moore Point has been flexibly designed to accommodate a range of public transport services within the precinct, including bus networks. The proximity to many key destinations locally including Liverpool Hospital and University campuses means that Moore Point is perfectly positioned and connected to function as part of a 30-minute city, with less private vehicle reliance than many precincts in Sydney's west.

2.2.2 Support Thriving and Healthy 15-minute Neighbourhoods

TfNSW's 15-minute neighbourhood concept aims to support local communities, sustainability and healthy lifestyles by prioritising place making, walking, cycling, micro mobility and last mile freight, to support 15-minute access to connected, local transport networks, precincts and local destinations.

Moore Point has been designed from the ground up, in consultation with Local and State Governments as a 15-minute neighbourhood aligning with the actions outlined for new developments in the Future Transport Strategy. Moore Point is a genuine mixed-use precinct, which provides for jobs, homes, education and services in a strategic centre, and delivers on the GCC's objectives for a rebalanced Sydney.

The delivery of new walking and cycling connections across the Georges River, better linking the Health Precinct and Liverpool CBD and Station will also support these neighbourhoods in reducing car dependency and improving their 15-minute neighbourhood outcomes.

2.2.3 Support Car-free, Active, Sustainable Transport Options

Investment in walking, cycling and micro mobility programs will give people more choice in how they move. The benefits of more people choosing these options include improved air quality and urban amenity, reduced car use and traffic congestion, and a general improvement in the health of communities.

To achieve this, the Strategy identifies the need to integrate safe and separate, first and last mile walking and cycling connections and trip facilities into plans and projects to promote active transport for all travel purposes for people of all ages and abilities. This has been a fundamental in the planning of the Moore Point precinct, where the street network has been designed to offer spaces for a range of uses and support the various Movement & Place needs of future residents, workers and visitors.

The network provides dedicated walking and active transport spaces, generous footpaths to encourage activation, space for urban greening and limits the space allocated to private vehicles. Linear parks and pedestrian spines throughout the precinct have also been included, increasing open space, amenity and tree canopy for residents. An example street section is shown below.

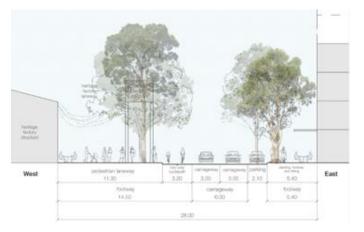


Figure 4
Network Planning in Precincts
Source: NSW Movement and Place

2.2 Strategic Alignment

2.2.4 Support Growth around Public Transport

Growth around frequent public transport could accommodate some of NSW's growing need for jobs, education and housing, and simultaneously increase the viability of major public investments, particularly in metro, rail and light rail.

The Moore Point precinct is conveniently located adjacent to the Liverpool CBD and will have direct walking and cycling access to the Liverpool Transport Interchange via a dedicated walking and cycling bridge. The Strategy identifies that smarter high-density development can bring networkwide efficiencies, improve agglomeration economics, and deliver place making benefits, including more walkable neighbourhoods, and improved accessibility and liveability for residents.

Delivering this for Moore Point will result in a reduced reliance on private vehicles, with residents, workers and visitors choosing active or public transport as their preferred mobility option.

2.2.5 Improve Parking Provision and Management

The Future Transport Strategy identifies that careful parking management in metropolitan centres can encourage more people to use public transport, thereby reducing congestion, improving productivity on the roads, and making public transport services faster and more reliable.

Moore Point has responded to this with a progressive parking strategy which aligns the proposed parking provision with the lowest permissible under the current Liverpool DCP, and gradually reduces this provision throughout the delivery of subsequent stages as active transport and networks are completed and more amenity and services are introduced.

2.2.6 Provide Customer Journey Resilience

Future Transport outlines the need to plan our places mindful of the increasing frequency of natural events such as heat waves, storms, bushfires, and flooding. We must "focus on the unique characteristics of places, including their vulnerability to different types of extreme weather and natural hazards, the level of redundancy in their road and rail networks, the capacity of evacuation routes, and the capability of local resources to restore and repair networks after major events."

To do this, we will need to collaborate with multiple levels of government and work with diverse stakeholders, this is the process we have followed at Moore Point, engaging from an early stage to ensure the precinct is planned mindful of future risks and the capacity of supporting transport systems and the needs of a community with reduced car dependence.

Mindful of this context, Moore Point has been planned to utilise the capacity of the surrounding road network, and strong active transport links for evacuation in combination with the ability to shelter in place to achieve a safe outcome in the event of a flooding incident.

Future Networks and Access

This chapter describes the future transport conditions within and surrounding the Precinct and provides an initial indication of the strengths and opportunities for each mode.

3.1 A Connected and Accessible Place for People

3.1.1 An Active 15-minute Neighbourhood

The transport strategy for the precinct will be framed around the 15-minute concept, where key destinations and amenities are accessible to residents, workers and visitors within 15 minutes travel by walking, cycling or micromobility.

To deliver Moore Point as a 15-minute neighbourhood, transport initiatives to be considered include:

- Implementing low-speed zones, safer and more attractive to pedestrians and cyclists.
- Designing streets for better walking and cycling experiences, with more crossing opportunities, and better landscaping, shading and lighting.
- prioritising pedestrian movements in and around key destinations, including at traffic signals.
- Investing in technology that enables improved place making outcomes and improves movement efficiencies for pedestrians and last mile freight, bikes and e-bikes.



The Precinct will form part of a sustainable 30-minute city within Liverpool, where a range major destinations are accessible within 30 minutes by public transport, walking and cycling, providing alternatives to private vehicle ownership.

Key destinations designed to be accessible within 30 minutes will include:

3.1.2 Forming Part of the 30-minute City

- major and strategic centres.
- · major health precincts.
- · tertiary education precincts.
- significant cultural or leisure destinations.

The design of transport networks within the Precinct will focus on streamlining access to major public transport links providing access to as many destinations as possible. In particular, strong first and last mile links to public transport at Liverpool Station and bus interchange and the provision of a new bus interchange within the precinct.



Figure 6

Liveable, resilient and healthy communities are supported by connected local transport networks

Source: NSW Movement and Place Practitioners Guide

Figure 5

15-minute neighbourhoods will provide access to local destinations by walking and cycling.

Source: Education NSW

3.1 A Connected and Accessible Place for People

3.1.3 Accommodating the Urban Freight Task

Last-mile deliveries are being disrupted by e-commerce expansion, customer demands for faster delivery, population growth, rising urban land costs, and increasing congestion.

Companies are acting quickly to develop new business models for transporting goods between producers, distribution centres, and consumers to respond to these trends.

It is increasingly inefficient to service this demand in traditional ways, particularly in constrained urban areas where there are many conflicting demands for kerbside and street space.

To respond to industry trend and convert potential threats into opportunities, the Precinct will investigate the provision of freight microhubs as part of the built form, located on the periphery of the Precinct and reducing the need for larger delivery vehicles to enter the urban core.

A microhub is a central drop-off/pick-up location for goods and services, which can be used by multiple delivery providers, retailers, and consumers and provide a range of opportunities for the Precinct:

- · access points for shared mobility
- · touchless pick-up and drop-off points
- a home base for zero-emissions last-mile delivery, autonomous, and modalities
- · a shared public space
- · charging infrastructure

3.1.4 Flexible Parking Infrastructure and Mobility Hubs

Flexible parking structures, as part of mobility hubs can help to create transport interchange opportunities and reduce the need for private vehicles to drive within the precinct, while providing the parking required for residents and workers during early stages as the precinct is established. In future, if mobility trends mean that demand for parking decreases, these structures can be flexibly designed to support other uses. The parking facilities can be physically separate to the development within the precinct, integrated with other land-uses on the fringe of the precinct.

Over time, as travel behaviours change and new modes are integrated into the transport eco-system, these hubs could adapt to cater more for on-demand or micro mobility services which provide flexible alternatives to incentivise sustainable, non-private vehicle use within the precinct.

Connecting residents and workers with destinations within the precinct these services are agile and can respond dynamically to growth and changing travel behaviours. These services can provide the first/last mile access to mobility hubs and parking located on the precinct edge.

Figure 7 e-bike couriers can replace the need for large delivery vehicles to access the Precinct.

Source: TfNSW - Developing an urban freight micro hub





Figure 8

Mobility hubs can evolve over time to accommodate the emerging transport needs of the precinct.

Source: Studio Schwitalla

3.2 Moore Point - A Network of Streets

3.2.1 Network Overview

The Precinct has been designed with people, accessibility and safety in mind. The precinct has been defined as a grid, with streets running east-west and north-south throughout the precinct.

Vehicular access is gained from a series of intersections on Newbridge Road, which come online throughout the lifecycle of the Precinct. Pedestrians and cyclists can access the Precinct from multiple points along Newbridge Road in addition to two new proposed active transport bridge crossings over the Georges River.

3.2.2 Street Typologies

Six street typologies have been proposed throughout the Precinct. These streets have been designed to cater for efficient and sustainable movement alongside great places for people. Proposed speed limits for vehicles vary across typologies but it is anticipated that the Precinct would have a maximum speed limit of 30km/h to support the prioritisation of active modes. Street typologies include:

- Main Street (28m, 30km/h)
- Primary Street (20m, 30km/h)
- Secondary Street (18m, 30km/h)
- Entry and Exit Streets (25m 32m, 30km/h)
- Green Spine (24m, 10km/h)
- Serviceways (variable, 10km/h)

28m street 25m street 20m street 18m/23m street 14m street Pedestrian route Key recreational routes (walking and cycling) Site access Bus terminus (layover and stops) Train station proposed pedestrian bridge LAKE MOORE Figure 9 Street Typologies

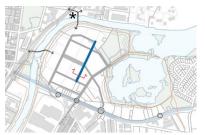
Planning Proposal boundary

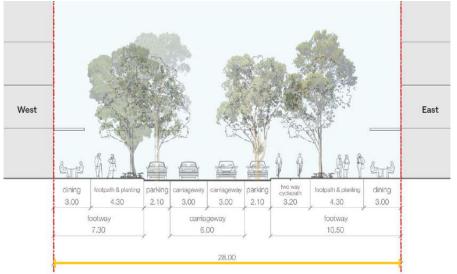
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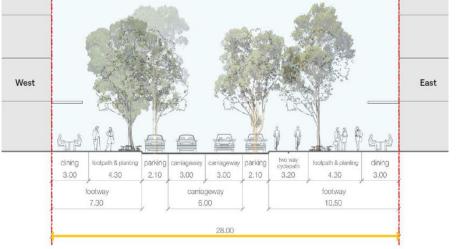
32m street

Street typologies proposed are shown in Figures 10 to 16. Source: SJB Moore Point

^{*} The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.







Development pad boundary Street reservation

Figure 10

Main Street East

Source: SJB Moore Point Design Report 🖈 The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners. The alignment of the bridge is subject to change

heritage factory structure East heritage factory carriageway carriageway parking pedestrian laneway 11,30 3.20 3.00 3.00 2.10 5.40 footway footway carriageway 6.00 5.40 28.00

Development pad boundary Street reservation

Figure 11 Main Street West

Source: SJB Moore Point Design Report



Figure 12

Primary Street

Source: SJB Moore Point Design Report

🖈 The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners. The alignment of the bridge is subject to change

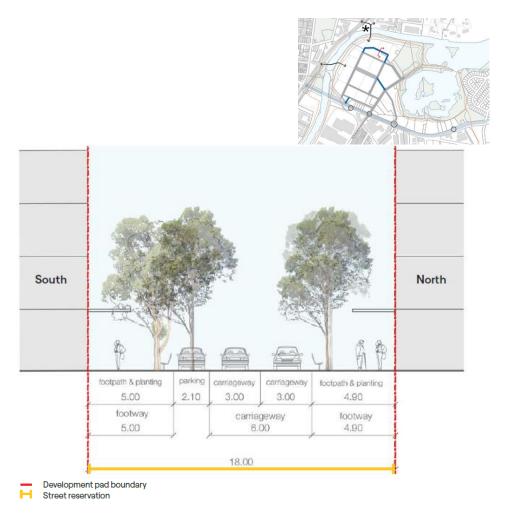
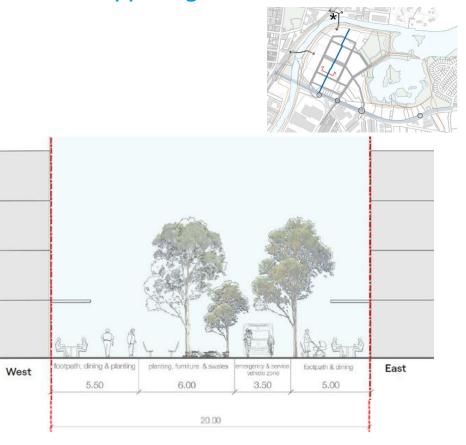


Figure 13 Secondary Street

Source: SJB Moore Point Design Report



Development pad boundary

Figure 14Figure 15Pedestrian SpineGreen Spine

Source: SJB Moore Point Design Report



Development pad boundary

Source: SJB Moore Point Design Report

[🖈] The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners. The alignment of the bridge is subject to change

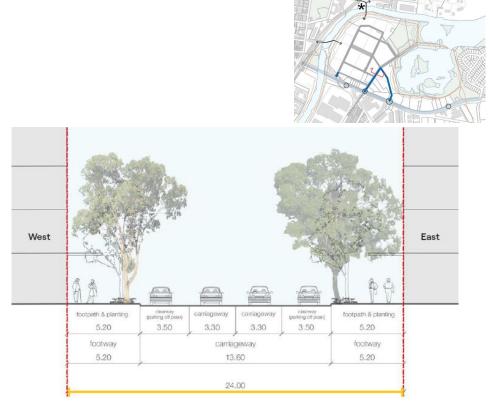




Figure 16

Entry and Exit Street (Anchor Place and Bridges Road)

Source: SJB Moore Point Design Report May 2024

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3.3 A Place for Pedestrians

3.3.1 Walking

The approach to developing the Masterplan for the Precinct has focussed on creating a vibrant neighbourhood, accessible by foot. High amenity pedestrian facilities are provided throughout the Precinct with pedestrian priority over vehicles in most instances. The form of the Precinct appreciates the role of pedestrian and active facilities in supporting the Precinct as a place for exercise, socialising and shopping, as well as enabling easy access to a range of transport options.

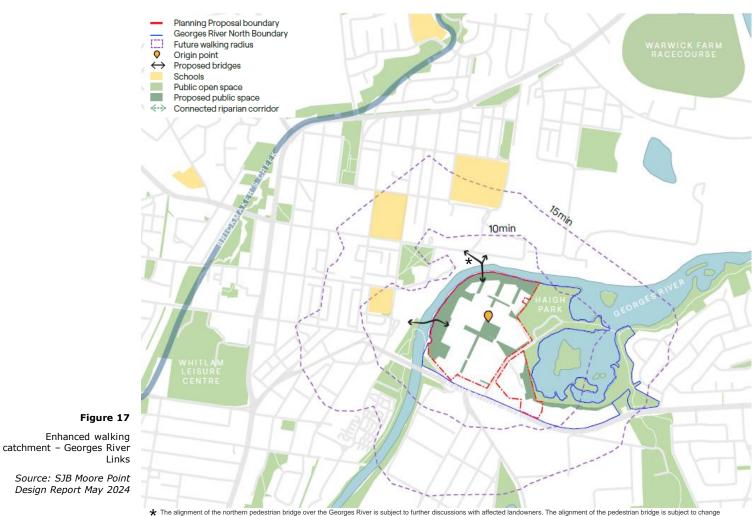
Pedestrian facilities provided will offer sufficient space for all levels of accessibility and will feature tree canopy and greening to reduce the impact of urban heat island effect, increase amenity.

Over time, the Precinct will deliver two new active transport / pedestrian links across the Georges River substantially expanding the pedestrian catchment of and accessibility to the Precinct. These new links will enable access to and from the neighbouring Liverpool CBD and station as well as the developing Liverpool Hospital and Innovation Precincts.

The pedestrian walking catchment unlocked by these proposed pedestrian connections is shown in Figure 17, in terms of 10- and 15-minute walking zones.

3.3.2 Permeability

In addition to the proposed street networks, a number of through site links have been identified to improve the overall connectivity and reduce the required length of journey for pedestrians. These links will be accessible and legible to the public and reduce the effective block length for pedestrians throughout the precinct.



Links Source: SJB Moore Point

Design Report May 2024

3.4 Active Transport Networks

3.4.1 Dedicated Cycling Infrastructure

All streets within the Precinct have been designed to enable safe and accessible active movement throughout. A range of different cycle facilities have been provided to provide choices and encourage active transport for all ages and abilities.

To maximise the feeling of security and attractiveness of cycling within the Precinct, the majority of streets cater for fully separated cycle movements. Where designated space has not been provided for active transport users, this has been considered in the design and operation of streets with low speed limits allowing cyclists to comfortably share these spaces with other vehicles.

Where cyclists and pedestrians are required to share spaces, these paths are required for first and last mile access only, designed to encourage low cyclist speeds and with adequate space for safe manoeuvring.

All proposed cycleways have been designed based on the guidance provided in the TfNSW cycleway design toolbox.



Dedicated cycle path

Path separated from carriageway and pedestrian path with bidirectional movement



Shared pedestrian and cyclist path

Shared footpath/space with ability for slow cyclist movement

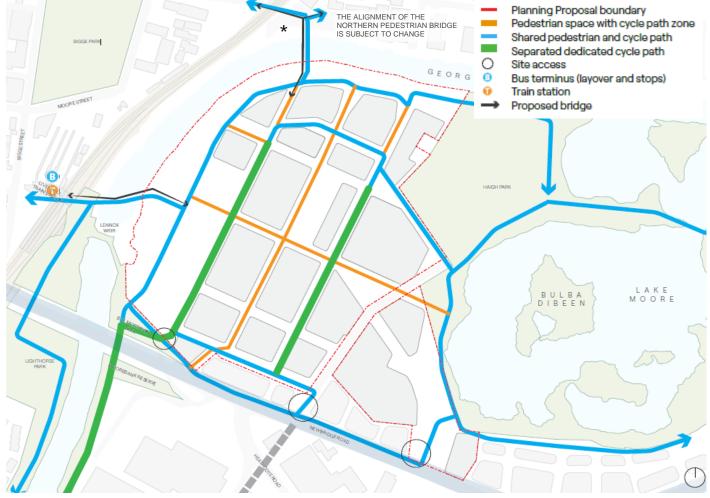


Shared pedestrian space with cycle path zone

Bidirectional flush cycle path in the street/space zoned with material difference or blisters.

Figure 18 Active Transport Networks

Source: SJB Moore Point Design Report May 2024



*The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

3.4 Active Transport Networks

3.4.2 Connectivity with to External Networks

Consideration has been given during the development of the Masterplan to the current and proposed cycle network external to the Precinct.

Although the Precinct currently has limited connectivity to regional cycleways, a number of new routes are identified for investigation and delivery in the Liverpool Bike Plan 2018-2023, developed by Liverpool City Council. The plan outlines the provision of bicycle related infrastructure, designed to promote and increase the rates of cycling in Liverpool.

The Precinct will connect to four regional cycle routes (see **Figure 19**) proposed within the plan, improving the active transport catchment substantially to the north, east and south:

- Chipping Norton Route (1a) (via new Georges River Crossing)
- · Moorebank Route (2)
- Wattle Grove Route (3) (including provision of new Georges River crossing)
- The Rail Trail (4)

In addition to providing connectivity to these routes, the precinct will also deliver two of the missing links identified within the Bike Plan, the Newbridge Road Off-Street Cycle Way and an alternative River Crossing linking to the Liverpool Railway Bridge.

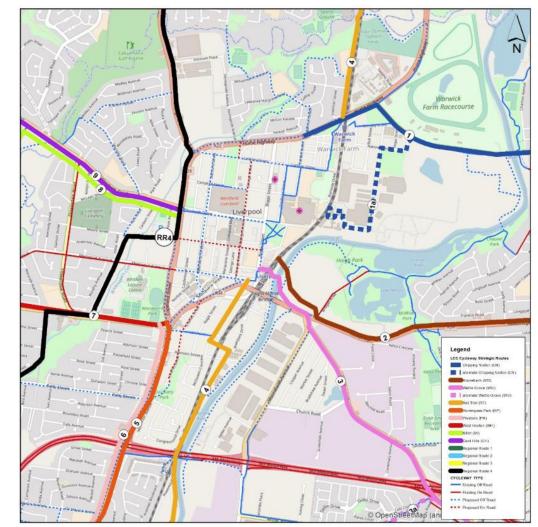


Figure 19
Proposed regional cycleways

Source: Liverpool Bike Plan 2018 - 2023

3.5 Public Transport Networks

3.5.1 A Modern transport interchange

As the Precinct develops a modern transport interchange will be provided within easy walking distance of the Liverpool CBD, and with convenient access to Newbridge Road. The interchange would initially cater for bus, ondemand, active and pedestrian interchanges with an option for further expansion if other public transport modes come online.

The capacity, timing and design of the interchange will be developed in consultation with Liverpool City Council and Transport for NSW. The proposed location of the interchange is shown in **Figure 20**.

3.5.2 Bus Network

It is proposed that the proposed interchange becomes the focal point of bus connectivity servicing high-capacity movements to Moore Point. Additional stops may be located within the precinct for local routes however it is anticipated that Express or Rapid Transit routes would terminate at the interchange and not travel through the wider precinct due to the expected travel times, low speed limits and pedestrian and cyclist priority.

The Liverpool Station's bus interchange will also be highly accessible to residents, workers and visitors via a new proposed link over the Georges River.

3.5.3 On-Demand Networks

The provision of urban mobility is changing as more accessible and flexible service offerings become available, powered by advances in technology. Considering the proposed density and street networks, for first and last mile transport access, on-demand bus services may provide a viable and desirable alternative to traditional buses.

Similar services and trials have been implemented throughout NSW proving the viability of this mode as a first / last mile transport solution.

3.5.4 Access to Rail

Enhanced connectivity will be provided with Liverpool Station with a new proposed link across the Georges River. This link will provide pedestrians and active transport users with direct access to the station, connecting them with Parramatta and Sydney's CBD's.

Proposed express services between Liverpool and these cities will bring Moore Point residents within 30 minutes of employment, education and amenity throughout Greater Sydney by public transport, reducing reliance on private vehicles for transport.

This proximity will also support the various land-uses proposed within Moore Point, enabling easy access by public transport for visitors and employees, minimising the need for private vehicles and commercial parking and increasing the available space for active movement and place.

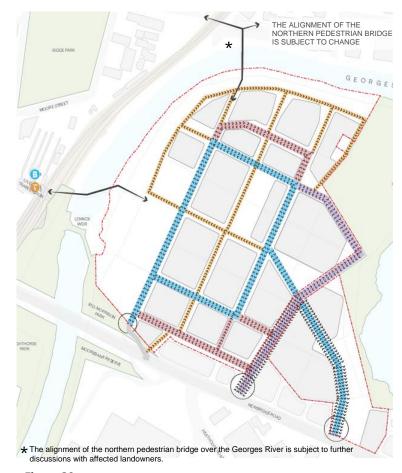


Figure 20

Connectivity to Liverpool train station and bus interchange

Source: SJB Moore Point Design Report May 2024

3.6 Vehicular Access and Circulation

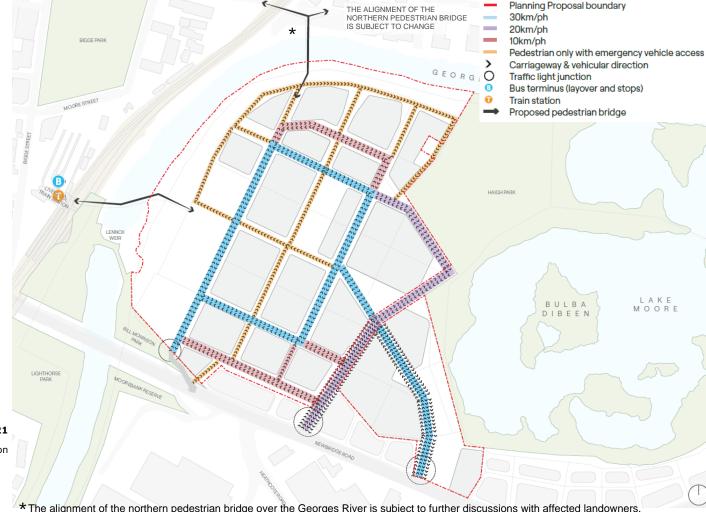
3.6.1 Access

Four proposed access points are proposed for vehicular access to the Precinct in the ultimate scenario. These access points will become available and evolve throughout the development and delivery of the Precinct. All vehicular access to and from the precinct is proposed via Newbridge Road or Haigh Avenue. Vehicular access is proposed via:

- 1. Haigh Avenue (accessed via intersection with Newbridge Road and utilising existing underpass arrangement)
- 2. Newbridge Road | Bridges Road (Future signalisation as part of the proposed long-term realignment of Moorebank Avenue to create a four-way junction with Newbridge Road)
- 3. Newbridge Road | Anchor Place (New signalised access to be developed at 361 Newbridge Road)
- 4. Newbridge Road | New Access Road (Priority controlled access point / emergency vehicle access only)

3.6.2 Circulation

Figure 21 illustrates the proposed circulation with the Precinct, with a combination of one and two-way streets offering access for private vehicles, public transport, service vehicles and emergency services.



*The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Figure 21 Proposed vehicle circulation

Source: SJB Moore Point Design Report May 2024

3.7 Parking

3.7.1 Evolving parking provision

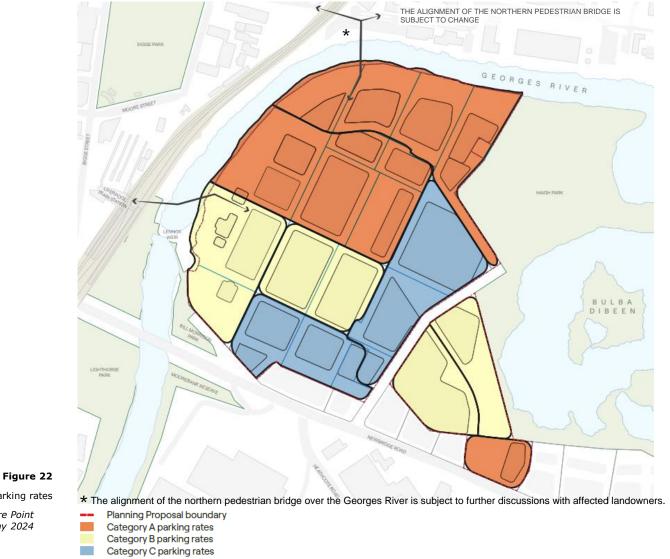
The when, how and why we travel is changing and with those changes comes a reduced reliance on private vehicles. The Precinct is designed to enable healthy, active lifestyles within easy access to public transport and a reduced need for private vehicles.

These behavioural changes will occur over time, meaning that the future demand for parking within the Precinct will reduce over time, with later developments, residents and workers expecting fewer parking spaces. We will also see the transition of space dedicated to private vehicle parking within the Precinct be adapted for alternative uses during this period.

However, in the short-term the Precinct must accommodate the expectations and travel behaviour of future residents, visitors and workers. The Masterplan proposes that three distinct parking rates are employed within the precinct, aligning with the three stages of development and reducing over time.

- In <u>Stage 1</u> it is proposed to provide parking consistent with the rates outlined in the Liverpool City Centre LEP / DCP.
- In <u>Stage 2</u> it is proposed to reduce rates to be consistent with the City of Sydney LEP / DCP Category C.
- In <u>Stage 3</u> the proposal adopts a further reduction in rates, aligning with the rates proposed in the Parramatta CBD Planning Proposal.

Note: Vehicular parking rates will be contained within the Place Framework plan.



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Proposed parking rates

Source: SJB Moore Point Design Report May 2024

3.7 Parking

3.7.2 Parking Rates

The parking rates in **Tables 1, 2** and **3** have been adopted in the development of this planning proposal based on an assumed dwelling mix.

Liverpool City Council DCP Rates (Stage 1)				
Residential				
Studio (20%)	0.5	per unit		
1 Bed (30%)	1	per unit		
2 Bed (40%)	1	per unit		
3 Bed (10%)	1.5	per unit		
Visitor	0.1	per unit		
Commercial				
1 Space per	100	m² GFA		

Table	1			
Stage	1	Proposed	Parking	Rates

City of Sydney Category C Rates (Stage 2)				
Residential				
Studio	0.4	per unit		
1 Bed	0.5	per unit		
2 Bed	1	per unit		
3 Bed	1.2	per unit		
Visitor	0	per unit		
Commercial				
1 Space per	175	m² GFA		

Table 2Stage 2 Proposed Parking Rates

Parramatta CBD PP Rates (Stage 3)				
Residential				
Studio	0.1	per unit		
1 Bed	0.3	per unit		
2 Bed	0.7	per unit		
3 Bed	1	per unit		
Visitor	0	per unit		
Commercial				
For FSR <=3.5:1, 1 space per	175	m² GFA		
For FSR >3.5:1, 1 space per	(COMMERCIAL GFA x SITE AREA) % (50 x TOTAL SITE GFA)			

Table 3Stage 3 Proposed Parking Rates

3.7 Parking

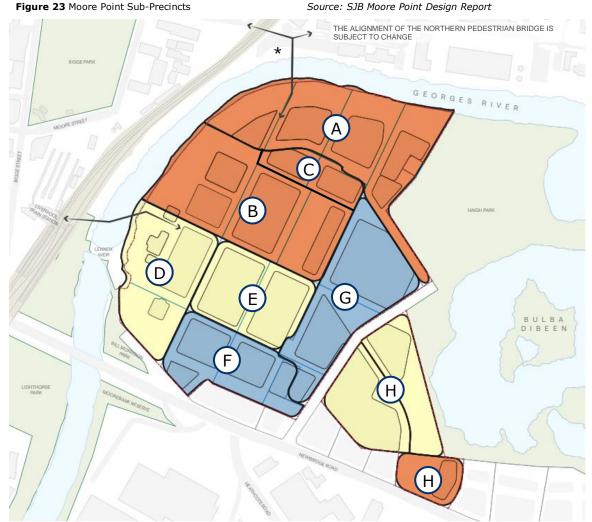
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3.7.3 Proposed Parking Provision

Parking provision in the precinct has been developed based on the subprecinct designations shown in **Figure 23**.

A total of 10,500 residential spaces are proposed within the Precinct, excluding on-street parking across all stages of development. In line with active transport measures described previously, the opportunity to utilise the commercial and retail spaces for residential visitor spaces would be explored. The proposed parking provision for each sub-precinct is shown in **Table 4**.

p. op oo oo	parking provisio		p. 000t .0 00	
Sub Precinct	Delivery Stage	Commercial GFA (m²)	Dwellings	Parking Provision
A	1	42,471	1,992	2,250
В	1	34,505	1,581	1,439
С	1	30,897	326	786
D	2	6,459	0	0
D	3	2,843	0	0
Е	2	52,495	1,988	2,054
F	3	48,094	1,601	1,043
G	3	67,515	1,593	1,239
Н	1	1,605	338	387
	2	41,632	1,323	1,302
I	Not included wi	-		
J	Not included within scope of current planning proposal -			
K	Not included within scope of current planning proposal			-
Totals		328,516	10,742	10,500



^{*}The alignment of the northern pedestrian bridge over the Georges River is subject to further discussions with affected landowners.

Table 4

Next Steps

This chapter provides an outline of the key next steps in the development of the transport management and access plan for Moore Point.

4.1 Next Steps and Way Forward

The JLG will continue to engage and work with TfNSW, Liverpool City Council and the TIWG in the further development of the Stage 2 – Transport Management and Access Plan as set out in August 2021. Key next steps in Stage 2 include:

- Discussions and alignment with TfNSW in relation to the Draft TMAP outcomes.
- Updating of the Stage 2 TMAP modelling following the revised Moore Point Master Plan subject to the Gateway Conditions.
- Finalise the updated Stage 2 TMAP for approval and endorsement by the TIWG.