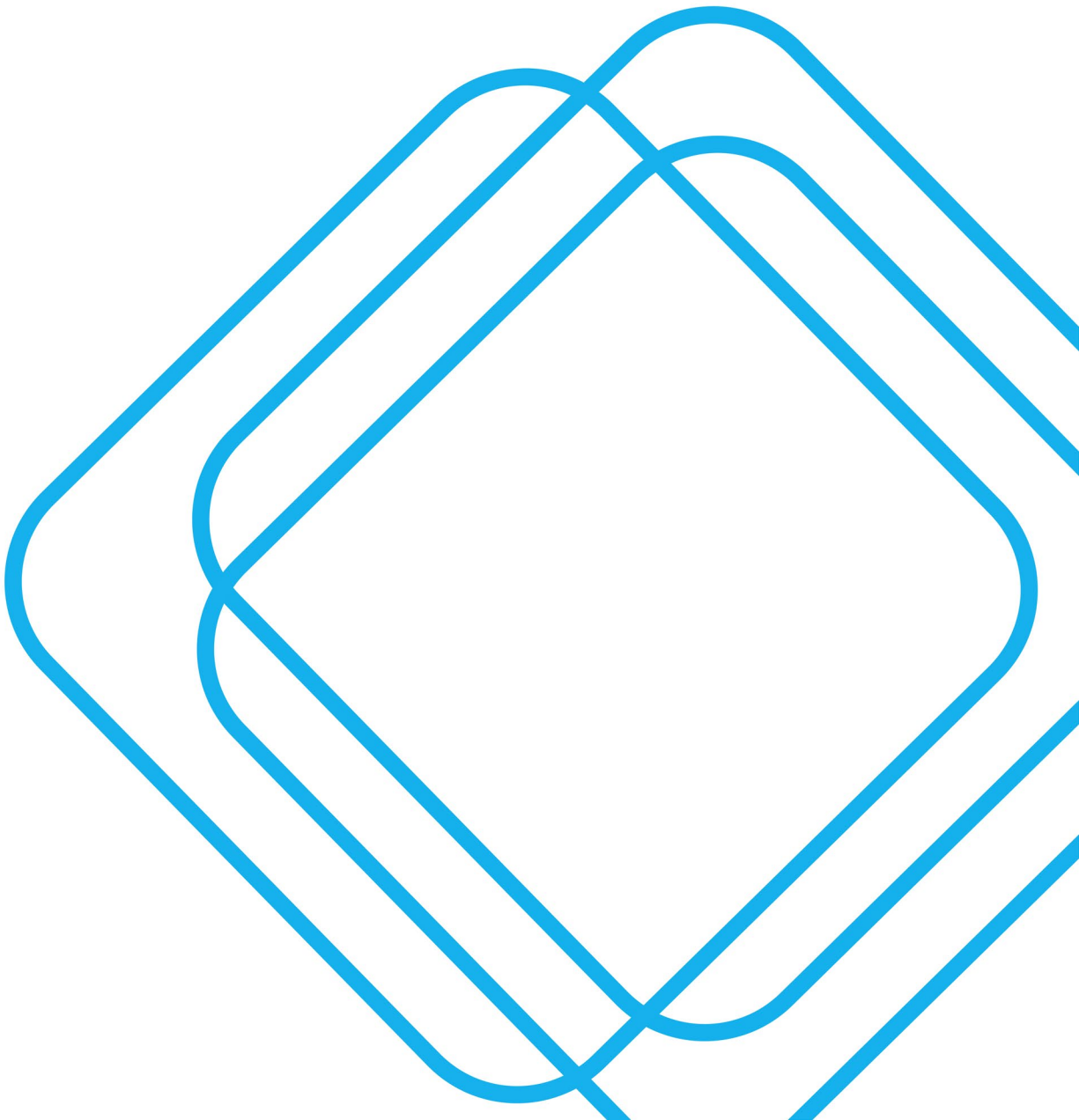
SCT Consulting

Sydney Olympic Park new high school

Transport Access Impact Assessment

16 SEPTEMBER 2021



Quality Assurance

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Proposal

The proposed development is for the construction of a school whereby the project is known as Sydney Olympic Park new high school. The school is to be developed in two stages. The SSD application will seek consent for both Stage One and Stage Two. While Stage Two is submitted as part of this proposal, construction is subject to approval of additional funding.

Stage One will provide for a Stream 5 high school, catering for up to 850 students. Stage Two will bring the school up to a stream 9 school capability catering up to 1,530 students.

The design features a six storey building. To the north of the site, a hall building (for sports and performance) is proposed.

The play space required to meet the need of students for Stage One can be generally accommodated onsite, within the 9,511sqm available. Additional play space may be required to accommodate the increased student numbers anticipated during Stage 2. The proposed adjoining play space comprises an area of around 8,800sqm, and will be subject to a Joint Use Arrangement and available for public use outside school hours. The future Wentworth Point Peninsula Park will result in an open space area of approximately 4 ha.

The remainder of the peninsula (TfNSW land) is under review and will be subject to a separate approval process. Redevelopment of this land will include the new access road proposed off Burroway Road along the eastern boundary of the subject site and is proposed to include car parking, drop-off zones and delivery zones.

Site Description

The proposed development is located within the peninsula of Wentworth Point at 7-11 Burroway Road, Wentworth Park across parts of three lots; Lot 202 DP1216628, Lot 203 DP1216628 and Lot 204 DP1216628. The site forms part of the Wentworth Point Planned Precinct, which was rezoned in 2014 for the purposes of high density residential, public recreation, school and business purposes.

The site is approximately 9,511sqm in area, with a frontage of approximately 91m to Burroway Road. It currently contains vacant land, which is cleared of all past development, and almost entirely cleared of native vegetation.

The surrounding area is generally characterised by high rise residential and mixed-use developments. The site is directly adjacent to the Wentworth Point Peninsula Park and immediately east of Wentworth Point Public School.

Figure 1 Site Aerial Map

Source: Mecone

Context

From the outset, the selection of the site for the Sydney Olympic Park new high school has been based on sustainable travel. The location of the school amidst high density, walkable residential means that the future school population will find it easier to walk than to drive.

Critically, the school presents an opportunity to reverse the current traffic leaving the peninsula and replace it with more sustainable and efficient modes. At present, high school students in the Olympic Peninsula must leave to find a school – being Strathfield South High School (as an out of area enrolment) or Concord High School (in-area). Travel to these locations would be highly dependent on private vehicle given the long travel distances and limited public

transport offerings. From Wentworth Point, for instance, travel time is about 20-30 minutes by car or 50-60 minutes by public transport. With the delivery of this school, that student would be within a less than 20-minute walk of a high school. Delivery of a High School in the peninsula will result in a net reduction of traffic leaving the Olympic Peninsula.

This report follows the layout prescribed by the Transport Assessment and School Transport Plan Guidelines (dated 22 February 2021), which is understood to have been reviewed by TfNSW.

This report responds to each of the Secretary's Environmental Assessment Requirements. A reconciliation is provided in **Appendix D**.

Existing conditions

The Sydney Olympic Park new high school is well-positioned for sustainable travel. The school is surrounded by existing and future high-density residential dwellings. The Development Control Plans guiding the delivery of the Wentworth Point peninsula ensures that there are footpaths on both sides of all roads. The existing footpath infrastructure covers all the operational streets and will in future be lengthened to the south via an extension of Wentworth Place. Analysis of the existing student population suggests that 26% of the current students are within a 1.2km walk and 52% within a 2.9km walk. By the time that future residential is delivered, SCT Consulting forecasts that 71% of the student population would be within a 2.9km walk. There are, however, limited safe crossings

The site is well served by public transport routes. Almost all the potential school catchment area (enrolment boundary) is covered within 30 minutes of travel to the school (including the walk to stop, wait at the stop, public transport journey and walk to school) and the entirety of the catchment is within 45 minutes by public transport. There are a total of nine public bus routes heading towards the school in the morning and five in the evening pick up period. It is understood that services have capacity issues, resulting in a temporary shuttle funded by Billbergia, the Baylink shuttle. This route provides an additional six services per hour in both the morning and evening peak. As this shuttle is temporary and subject to further funding and development discussions, it may not be in operation on the day of the opening of the school.

Traffic modelling of the existing conditions was undertaken in SIDRA Network and included modelling of pedestrians. The key intersections on Burroway Road were modelled from Hill Road to Wentworth Place. The modelling indicates that intersections perform at Level of Service A in both peak periods in all locations. This is indicative that the intersections themselves have spare capacity. Other on-street constraints, such as parking movements and kiss 'n drop operations contribute to slower speeds. In an urban environment such as Wentworth Point, slow traffic speeds are important for road safety.

Analysis

Analysis of confidential, anonymised student population data formed the basis of mode share forecasts. School Infrastructure supplied coordinate positions of students within the potential catchment of the High School, which was analysed against various travel contexts. For example, the number and proportion of students within a 400m walk from the school was tabulated.

This informed the preparation of a forecasted base case and stretch case mode share for the school.

Scenario	Walk	Cycle	Bus	Car	Infrastructure investment	Operational requirements
Base case	45%	15%	10%	30%	No investment	Volunteer School Transport Committee with activities organised by volunteers
Stretch case (preferred)	56%	18%	14%	11%	– Delivery of the Wentworth Point DCP – New pedestrian crossings – Additional bus services, where required, due to capacity and to achieve 30-minute coverage – Sufficient bicycle and scooter parking	– School Transport committee – Funded Travel Coordinator – Governance arrangement as per School Transport Plan – Communications to the community – At least fortnightly bicycle maintenance days – Walk and bike to school days (1 pedestrian/bike event per term) – At least fortnightly transport newsletters/comms

Infrastructure is not all required on the day of opening. For instance, bus capacity is not forecast to be an issue until Stage 2 of the school expansion. The recommended infrastructure and operational investments by school stage are:

Stretch Case Requirements	Stage 1	Stage 2 (In addition to Stage 1)	Funding / responsible party
Infrastructure / services	– 4x raised zebra crossings – 144 Bicycle/Rideables parking spaces	– 114 Bicycle/Rideables parking spaces	SINSW in collaboration with Council
	– Modification of bus services to bring Carter Street development into 30-minute transport catchment	– Increased bus service frequency to meeting demand	TfNSW
	– Delivery of the Wentworth Point DCP	– Delivery of the Wentworth Point DCP	City of Parramatta Council
Operational	– School Transport committee – Funded Travel Coordinator – Governance arrangement as per School Transport Plan – Communications to the community – At least fortnightly bicycle maintenance days – Walk and bike to school days (1 pedestrian/bike event per term) – At least fortnightly transport newsletters / comms	Operational activities to continue into Stage 2	SINSW initially then Department of Education on an ongoing basis

TfNSW regularly reviews bus servicing as part of managing the bus network. The proposals to increase the public transport 30 minute coverage and increased frequency to meet demand would be subject to this process and are therefore regarded as potential changes.

Impacts

Traffic modelling was conducted of the cumulative impacts of developments at the intersections along Burroway Road performs at a Level of Service A for all intersections reviewed.

The school is forecast to generate approximately 1,300 pedestrian trips in each peak period, requiring the introduction of the new pedestrian crossings to distribute pedestrians throughout the network. These crossings will reduce vehicle speeds, increase rates of walking, and improve pedestrian safety. A high-level review of the warrants supplied by the City of Parramatta Council indicated that the crossings would more than satisfy the pedestrian crossing numbers required.

The school is forecast to generate 112 vehicles in the peak periods based on the stretch case mode share scenario. Traffic modelling was undertaken of the additional vehicle and pedestrian/cyclist demands on the study area. It was found that all intersections operated at Level of Service A.

A sensitivity test on network performance was completed to consider the scenario if the intersection of Hill Road / Burroway Road was signalised. The signalisation of this intersection was proposed by the Urban Activation Precinct Traffic Impact Assessment commissioned by the Department of Planning and Infrastructure in 2013. Analysis showed that a signalised Hill Road / Burroway Road intersection would perform at LoS B for both AM and PM peak, while all other intersections remained at LoS A. There is no dependence on this upgrade for the school.

Draft School Transport Plan

As the school is new, there is great potential for the school to be delivered from day one, term one as a low traffic school. With a high school population, students can travel independently and less likely to be dropped off or picked up by parents. However, the governance framework and initiatives proposed in the School Travel Plan are necessary to deliver on this vision.

A Transport Coordinator is proposed as part of the means of encouraging sustainable travel behaviour.

1.0 Strategic Context

1.1 About the school project proposal

1.1.1 Proposal

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The remainder of the peninsula (TfNSW land) is under review and will be subject to a separate approval process. Redevelopment of this land will include the new access road proposed off Burroway Road along the eastern boundary of the subject site and is proposed to include car parking, drop-off zones and delivery zones.

1.1.2 Site Description

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The site is approximately 9,511sqm in area, with a frontage of approximately 91m to Burroway Road. It currently contains vacant land, which is cleared of all past development, and almost entirely cleared of native vegetation.

The surrounding area is generally characterised by high rise residential and mixed-use developments. The site is directly adjacent to the Wentworth Point Peninsula Park and immediately east of Wentworth Point Public School.

Figure 1-1 Site aerial map

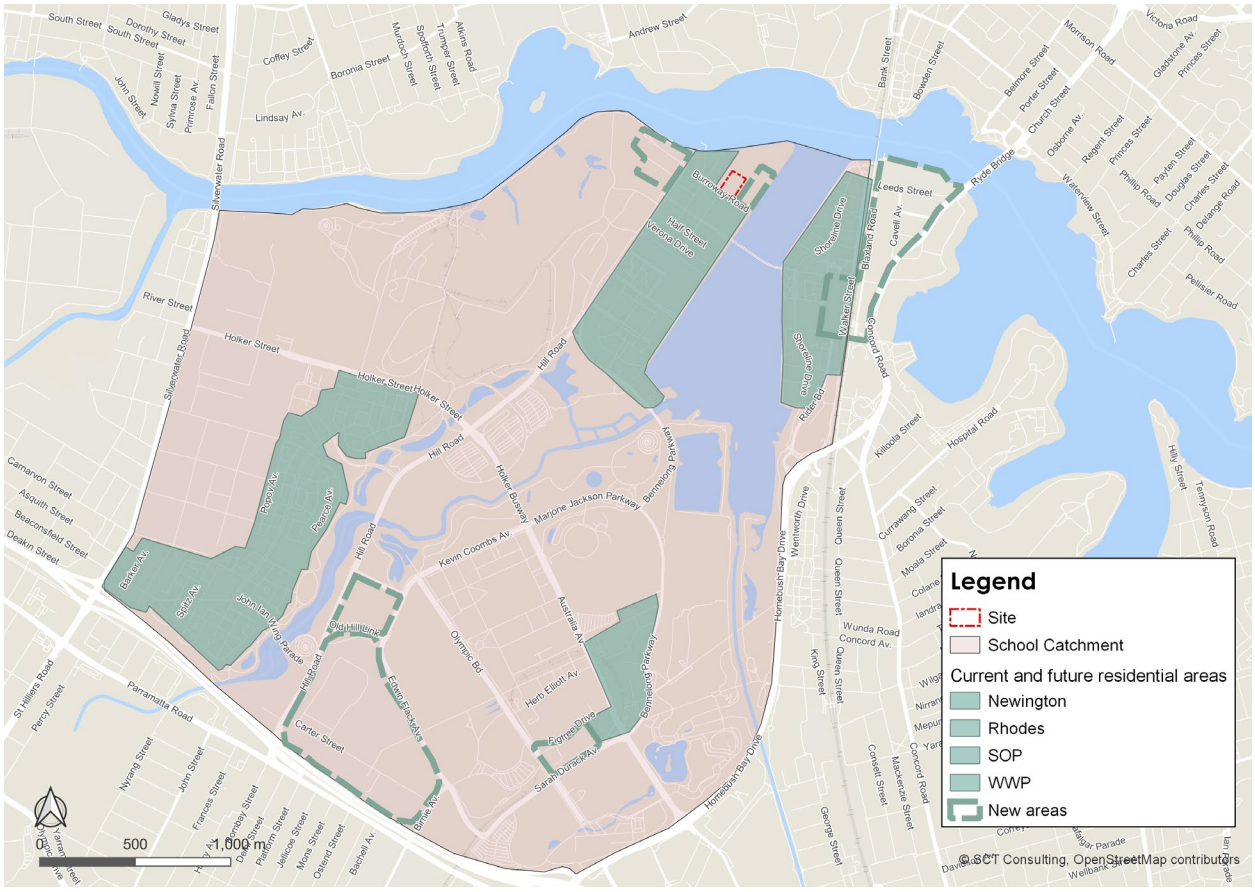
Source: Mecone

1.1.3 Potential school catchment

The potential school catchment (enrolment boundary) assumed for the purposes of this traffic assessment is shown in **Figure 1-2**. The catchment covers Rhodes, Olympic Peninsula, Newington, and Silverwater. The catchment is bound by Silverwater Road to the west, the M4 Motorway to the south, Homebush Bay Drive and the rail corridor to the east, and Parramatta River to the north.

Department of Education sets and adjusts school catchments in response to several factors including opening of new schools and school capacity. The school catchment will be confirmed closer to the school opening and will be based on the most up to date demographic data on the number of school aged children living in the local area at the time the school opens.

Figure 1-2 Proposed school catchment and residential areas



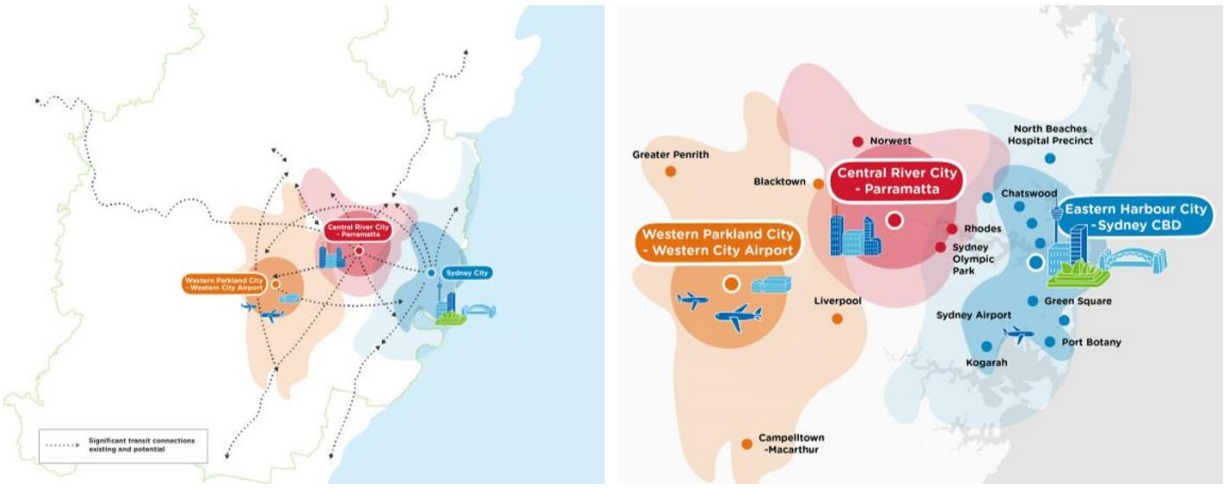
A unique feature of the areas surrounding the new high school location is that there are significant areas that are non-residential. Of the potential catchment, only of the area is 23% is residential. The remaining uses are industrial, commercial, waterways, open space, and infrastructure corridors. The areas of development (except for Newington) are all high density. This makes bus servicing a more powerful tool for the school in that the areas are residential in that services can achieve coverage with a smaller number of routes.

1.1.4 Future Transport 2056

The Future Transport Strategy 2056 (The NSW Government, 2018) is an update of NSW's Long-Term Transport Master Plan. It is a vision for how transport can support growth and the economy of New South Wales over the next 40 years. The strategy is underpinned by the Regional Services and Infrastructure Plan and the Greater Sydney Services and Infrastructure Plan, as well as several supporting plans including Road Safety and Tourism.

The strategy sets the long-term vision for Greater Sydney as a Metropolis of Three Cities, where people can access most jobs and services within 30 minutes and will require a sustained and staged investment program to protect corridors and then develop an integrated transport system that includes city-shaping, city-serving, centre-serving and strategic freight networks.

Figure 1-3 A future metropolis of three cities



Source: The NSW Government Future Transport 2056 Strategy, 2018

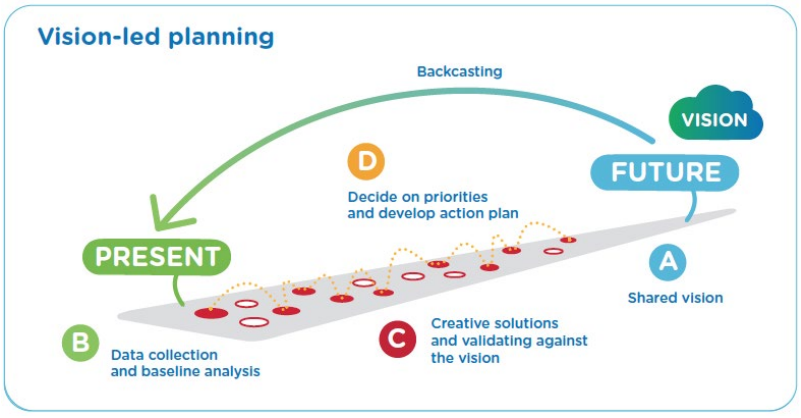
Existing and potential transit connections, together with new technology and innovation, will make the network surrounding the site more responsive to demand and better able to manage congestion in the future. For the three cities identified, more specific outcomes listed as part of the Strategy which will benefit the site's transport context, including:

- 30-minute access for customers to their nearest Centre by public transport 7-days a week
- Fast and convenient interchanging with walking times no longer than 5 minutes between services
- Walking or cycling is the most convenient option for short trips around centres and local areas, supported by a safe road environment and attractive paths
- Fully accessible transport for all customers.

Since publication in 2018, TfNSW has updated Future Transport in 2020 to acknowledge the changes arising from bushfires, COVID-19, and the ongoing delivery of the strategy.

Key new principles in the strategy include:

- Prioritising agile solutions: transport solutions need to be resilient against the backdrop of changing technology, consumer preferences and broader trends. Solutions should therefore be less focussed on capital investment and be more technology-based to be able to change to circumstances.
- Vision-led planning: planning for transport should identify the desirable future and use backcasting to decide on priorities and actions to identify what changes are required.



- Collaboration and co-design: planning should involve co-design with stakeholders to develop a shared vision and shared actions to achieve the desired result.
- Delivering for people and places: rather than just taking an efficiency lens on transport infrastructure, transport planning and delivery should support the public realm, health, and climate outcomes.

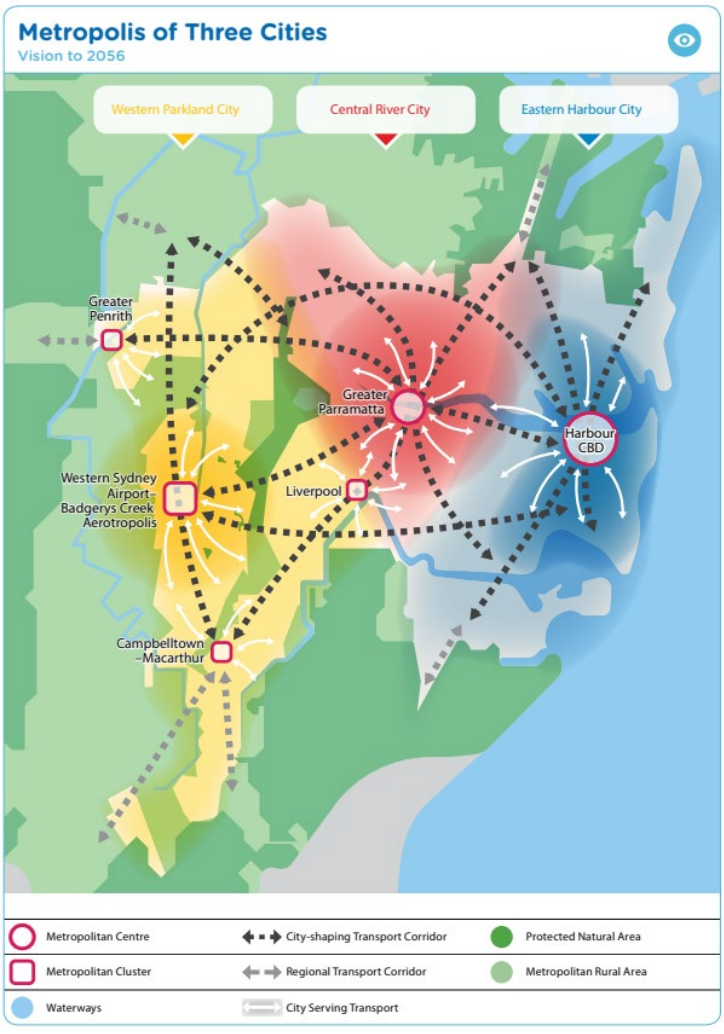
Implications for Sydney Olympic Park new high school: Future transport initiatives aimed to connect people to jobs, goods and services in our cities and regions will increase the permeability of public transport networks throughout suburbs, which benefits both students and school employees through improved accessibility. Outcomes relating to walking and cycling are particularly suitable for this site due to the existing infrastructure in place and the flat topography. The site will also benefit from public transport infrastructure investment, given its proximity to the Central River City of Parramatta and will likely see increased accessibility through the public transport network because of this strategy.

1.1.5 Central City District Plan

A Metropolis of Three Cities, the region plan for Greater Sydney is built on a vision of three cities where most residents live within 30 minutes of their jobs, education and health facilities, services, and great places – Western Parkland City, Central River City and Eastern Harbour City. This vision seeks to rebalance the economic and social opportunities and deliver a more equitable Greater Sydney. Greater Sydney's three cities reach across five districts: Western City District, Central City District, Eastern City District, North District and South District. The Central City District will grow substantially, capitalising on location as the geographic centre of Greater Sydney. Unprecedented public and private investment is contributing to new transport and other infrastructure leading to major transformation.

Greater Parramatta – the metropolitan centre – is the core of the Central River City and Central City District. Its economy is centred on world-class health, education, and research institutions as well as finance, business services and administration. Greater Parramatta and the Olympic Peninsula (GPOP) – taking in the Westmead health and education precinct; advanced technology and urban services in Camellia, Rydalmere, Silverwater, and Auburn; and the Sydney Olympic Park lifestyle precinct – will be supported by the Parramatta Light Rail and Sydney Metro West.

Figure 1-4 Vision for Greater Sydney as a metropolis of three cities



Source: Greater Sydney Commission 2018

The District's strategic and local centres provide a range of local jobs and services that support the growing population. Encouraging the growth of strategic and local centres will reduce the need for people to travel long distances to access jobs and services. Access to strategic centres and interchanges will be supported by city-serving and centre-serving public transport and an improved road network.

Key elements of the road and city-serving and centre-serving public transport network committed, or to be investigated in the next 20 years, include:

– Parramatta Light Rail Stage 1 between Westmead and Carlingford via Parramatta (currently under construction) and Stage 2 joining Stage 1 to the rapidly developing suburbs of Ermington, Melrose Park, Wentworth Point and Sydney Olympic Park,

– Joining the Liverpool–Parramatta T-Way with the Northwest T-Way via Westmead to support through-routing of buses to boost transport capacity and improve bus services between centres to the north and south of Parramatta,

– Victoria Road transport improvements to support the provision of frequent, reliable, and efficient transport to Greater Parramatta and the Harbour CBD which will integrate with, and complement, other committed and proposed initiatives within the corridor including WestConnex, Parramatta Light Rail and Sydney Metro West,

– Additional low-wash ferries for Parramatta River,

– Infrastructure to support rapid bus connections between Western Sydney Airport and Blacktown,

– Rapid bus services between Parramatta to Bankstown and Hurstville/Kogarah to support the efficiency and reliability of passenger journeys and to improve 30-minute access to Greater Parramatta,

– Parramatta Inner Ring Road improvements to existing surface roads on the outskirts of Parramatta so they function as the arterial movement corridors, which in turn will support walking and cycling in the centre.

Implications for Sydney Olympic Park new high school: The focus of investment in the central city district will greatly benefit the school site due to its proximity to the metropolitan centre. Additional city serving transport lines such as additional low-wash ferries will improve accessibility between Wentworth Point and the surrounding suburbs and strengthen connections to Parramatta CBD.

1.1.6 Wentworth Point Precinct Development Control Plan'

This Development Control Plan (DCP) provides a framework to guide development in the Wentworth Point Urban Activation Precinct (the precinct).

The vision set by the DCP states that Wentworth Point is to be a vibrant urban community, providing high-quality housing in an environment that embraces its location adjoining Homebush Bay, Parramatta River and Sydney Olympic Park, Parklands and represents contemporary, high-density sustainable living. This DCP applies to development within the area shown in **Figure 1-5** Wentworth Point Precinct below.

Figure 1-5 Wentworth Point Precinct

Source: Wentworth Point Precinct DCP 2014

Parking rates for non-residential land uses are referred to the Auburn DCP.

The Wentworth Point Precinct Indicative Structure Plan in **Figure 1-6** shows how the overall precinct may develop over time. It is intended as a guide to demonstrate how the vision, development principles and key elements for the precinct may be achieved. It is also recognised that there may be other options for the site's layout which may be as effective in achieving the above for the precinct and Council may grant consent to a proposal that differs from the Indicative Structure Plan where the variation is considered to still achieve the vision, principles, and key elements of this DCP.

Implications for Sydney Olympic Park new high school: A high school was not anticipated in the original structure plan and DCP. This SSDA involves changes to the location of the ridge road to allow for the delivery of the new high school. The view corridor is retained with no buildings occurring along the ridge road. The relocation of the ridge road retains the connectivity provided but avoids separating the primary and high school sites.

Figure 1-6 DCP Indicative Structure Plan

Source: Wentworth Point Precinct DCP 2014

Street Network and Design

The DCP states that the street network is to be generally consistent with **Figure 1-7** below. Requirements for the street network include:

– Ridge Road is to pivot north-east to directly align with Wentworth Point.

– Angle parking is to be provided on Ridge Road adjoining the peninsula park.

– Additional opportunities to provide parking within proximity to the foreshore open space are also to be explored.

– Intersection and crossing design are to favour pedestrian convenience and safety. Footpaths are to be provided on both sides of every street.

– Pavement width is to allow for comfortable walking, unimpeded by obstacles. The placement of trees, street furniture and signage are to provide for amenity without causing clutter.

Figure 1-7 DCP Street Network Plan

Source: Wentworth Point Precinct DCP 2014

Pedestrian and Cycle Network

Figure 1-8 shows the intended pedestrian and cycle network in Wentworth Point. A continuous shared pedestrian and cycle link are to be provided along the Parramatta River and Homebush Bay foreshore, providing several safe and convenient walking, and cycling routes, including shared paths, between key destinations and to the river foreshore. Upgraded pedestrian and cycle access will be available throughout the precinct. Additionally, lockable bike storage is to be provided as part of the Maritime Plaza.

Figure 1-8 DCP Pedestrian and Cycle Network

Source: Wentworth Point Precinct DCP 2014

Open Space Network

The DCP states that areas of publicly accessible open space are to be provided generally per **Figure 1-9**. Variations to the open space network are to demonstrate consistency with the above objectives, the vision, development principles and key elements for the precinct. A key objective is to locate and design the school's primary open space so that it visually (and potentially functionally) integrates with the peninsula park, including enabling informal community recreational use outside of school hours.

Figure 1-9 DCP Open Space Network

Source: Wentworth Point Precinct DCP 2014

1.1.7 Relevant City of Parramatta Council DCP

The site of the high school sits in the Auburn Local Environmental Plan 2010, which was transferred to the City of Parramatta Council in 2016. While not the applicable DCP, the City of Parramatta DCP 2011 is also reviewed for context.

Auburn DCP 2010

The Auburn DCP 2010 requires a high school to have the following parking provision:

– 1 space per 20 year 12 students

– plus 1 space per 2 staff

These parking rates are derived from the Guide to Traffic Generating Development (2002, TfNSW). The DCP notes that car parking rates will not be reduced on the basis of available on-street parking.

Parramatta DCP 2011 – Educational establishments

This section of the DCP aims to guide the design and implementation of educational establishments and places of public worship. Some objectives include:

– To limit and manage the impacts of places of public worship and educational establishments on the amenity of residential areas.

– To ensure that places of public worship and educational establishments have a scale and intensity that is suitable to the site and consistent with the prevailing and likely neighbourhood character in which the development is proposed.

– To encourage the location of larger places of public worship to lands zoned for business or industrial purposes. To ensure that the development assessment process for proposed places of public worship is consistent for all religious groups.

Concerning traffic, parking and access, a design principle suggests identifying the number of parking spaces required based on the general use of the site. Reference should be made to similar existing and operating premises in similar neighbourhoods as far as possible. For educational establishments, on-site parking must be provided for employees, student drivers (for senior-level educational establishments only), pick-up and drop-off areas and bicycle parking.

A development application to establish a new place of public worship or educational establishment must include an Operational Plan of Management. This will be used both for the assessment of the application as well to manage the ongoing operation of the proposed premises through the conditions of development consent. The Operational Plan of Management (as may be amended) will be incorporated as a condition of development consent. The information required in the Operational Plan of Management includes items such as schedule of classes, use of building outside of regular classes, number of students in attendance and anticipated growth of the educational establishment.

1.1.8 State Environmental Planning Policy 2017 (Parking Requirements)

The aim of the State Environmental Planning Policy (Educational Establishments and Child Care Facilities) 2017 is to facilitate the effective delivery of educational establishments and early childhood education and care facilities across the State. The policy includes several development standards for the development purpose of car parks:

– Must be open (unenclosed) car parking (but may include associated gates including security booths and boom gates),

– Must not reduce car parking spaces,

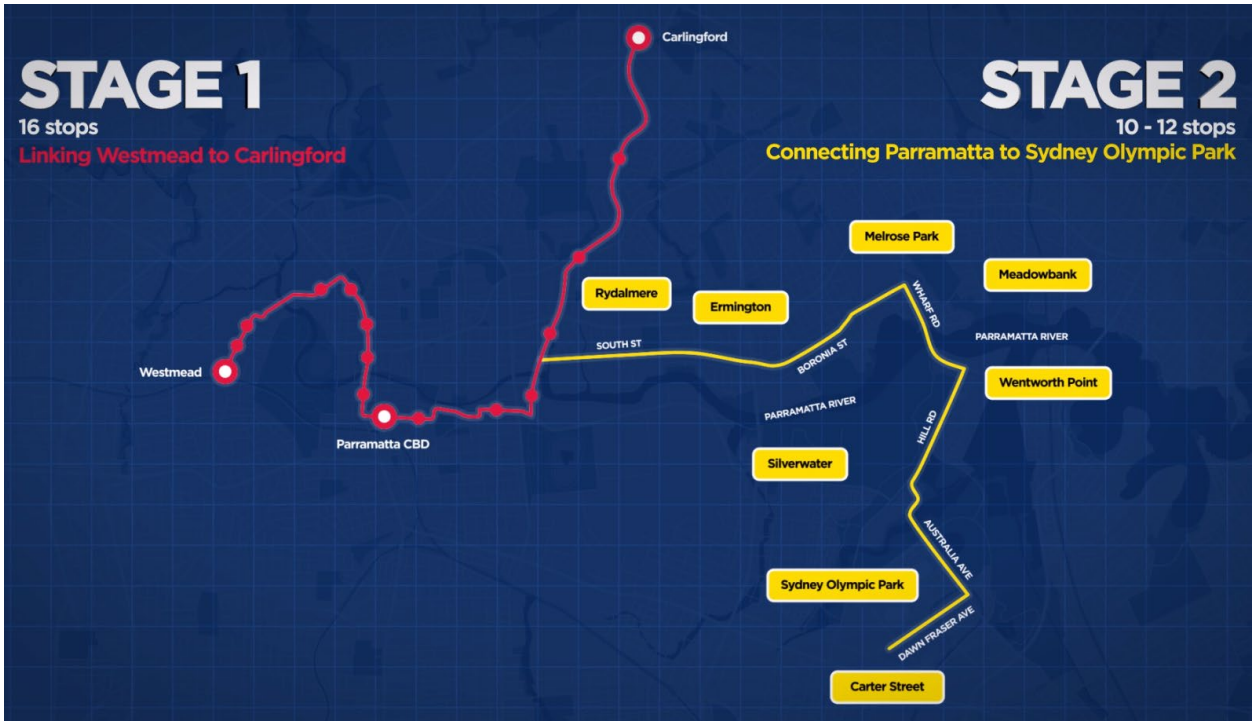
– Must be constructed or installed so that any surface water or runoff is disposed of by a drainage system that is connected to the existing stormwater drainage system,

– Must not require cut or fill more than 1m below or above ground level (existing). Must not be carried out on land within a growth centre (within the meaning of State Environmental Planning Policy (Sydney Region Growth Centres) 2006) that is not subject land within the meaning of clause 17 of Schedule 7 to the Threatened Species Conservation Act 1995,

1.1.9 Parramatta Light Rail Stage 2

In October 2017, the NSW Government announced the preferred route for the second stage of the Parramatta Light Rail, which will connect Stage 1 and Parramatta CBD to Ermington, Melrose Park, Wentworth Point and Sydney Olympic Park. It will have 10-12 stops over a ten-kilometre two-way track, with travel times of around 25 minutes from Sydney Olympic Park to Camellia, and a further eight minutes to Parramatta CBD.

Figure 1-10 Parramatta Light Rail Stage 1 and Stage 2



Source: Transport for NSW 2017

The second stage of the Parramatta Light Rail will connect to the metro and heavy rail in Parramatta and Sydney Olympic Park, and ferry services at Rydalmere and Sydney Olympic Park. Planning work is currently being further developed and informed by consultation with the community, stakeholders, other NSW Government agencies and transport projects including Sydney Metro West.

Implications for Sydney Olympic Park new high school: The Parramatta Light Rail Stage 2 would provide a direct connection to Sydney Olympic Park, enhancing the development of cultural, recreational and sports events within its precinct. If implemented, the light rail will benefit the students and staff travelling from Parramatta and other suburbs to Wentworth Point via public transport. However, the second stage of the Parramatta Light Rail is not yet confirmed by the NSW Government, thus the discussion concerning Sydney Olympic Park new high school should not rely on the implementation of the Parramatta Light Rail.

1.1.10 Sydney Metro West

Sydney Metro West will connect the Greater Parramatta to the Sydney CBD, shown in **Figure 1-11**. The locations of seven proposed metro stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock and The Bays. Further planning and design work are underway to determine the location of a new metro station in the Sydney CBD. The NSW Government is also continuing to investigate the feasibility of building a metro station in Pyrmont.

Figure 1-11 Sydney Metro West

Source: NSW Government 2020

The proposed Sydney Olympic Park metro station would be located to the south of the existing Olympic Park Station, shown in **Figure 1-12**. The station would provide easy interchange with the planned Parramatta Light Rail, the T7 Olympic Park Line, and buses.

Figure 1-12 Sydney Olympic Park Metro Station

Source: NSW Government 2020

Implications for Sydney Olympic Park new high school: Unlike the Parramatta Light Rail, the Sydney Metro West has been confirmed and it is guaranteed that there will be a Metro Station at the Sydney Olympic Park. Strengthening connections between Wentworth Point and Sydney Olympic Park Metro Station could be considered to increase the accessibility of the site via public transport.

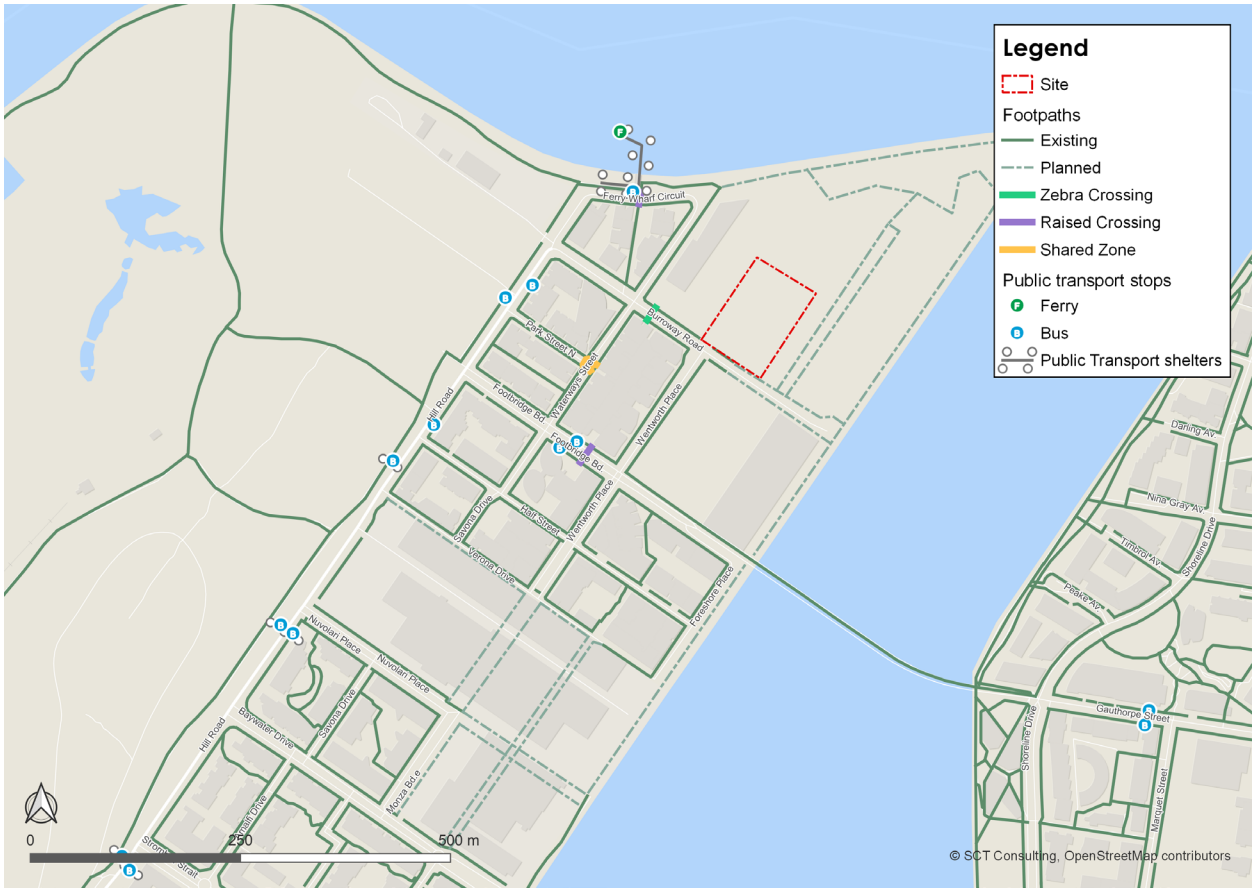
2.0 Existing Conditions

2.1 Transport networks

2.1.1 Pedestrian network

Wentworth Point has a grid-style street network, with a high density of intersections and small block sizes. Many of the developments also have through-site links which further increases permeability for pedestrians, with an intersection approximately every 100m. Footpaths are available on both sides of the street throughout the suburb, except for Verona Drive which has a footpath on the northern side. These factors make the surrounding area very suitable for pedestrians; high density and permeability, coupled with activated frontage and a relatively flat topography is a good setting for facilitating walking trips. A map of footpaths and crossing infrastructure is shown below in **Figure 2-1** below.

Figure 2-1 Pedestrian Infrastructure



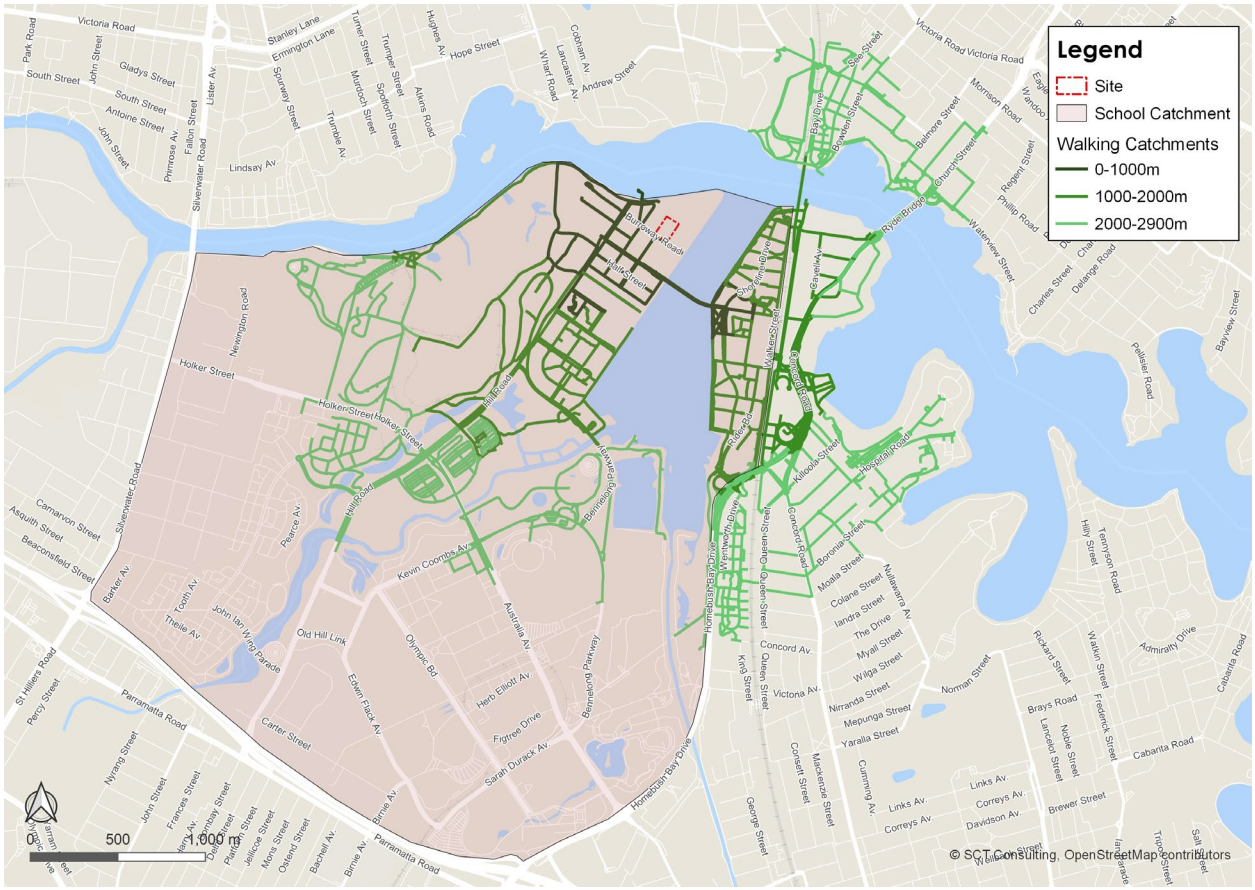
While the street setting is conducive to walking trips, pedestrian priority crossings are limited within Wentworth Point. There is a total of one zebra Crossing and one shared zone in the surrounding network. Other crossings maintain vehicle priority and include kerb ramps, refuge islands, and two raised thresholds. The southern half of Wentworth Point (past Verona Drive) also include pavement changes at crossing points, though it does not give pedestrians priority. This is like the high-density area in Rhodes, which has two zebra Crossings and one signalised crossing. However, most of the vehicle roads are narrow and therefore relatively easy for pedestrians to cross without priority, although discontinuity in pedestrian priority could still be considered a deterrent to walking.

Most high-density residential dwellings in the area fall within the walking catchment of the site. It is expected that 1,400m is an acceptable walking distance for high school students, which covers Wentworth Point down to Amalfi Drive, as well as a large portion of high-density residential in Rhodes, including Rhodes Station. As seen in **Figure 2-2** below, the walking catchment to the south of Wentworth Point is largely limited due to the single link on Hill Road joining North and South Wentworth Point. In contrast, the foreshore walk in Rhodes provides a high degree of

connectivity for pedestrians into the residential area, resulting in a significant transport catchment area despite the need to cross Bennelong Bridge.

Bennelong Bridge is a key connection to Rhodes for pedestrians, as a mode limited connection allowing only pedestrians, cyclists, and buses to cross over Homebush Bay. This bridge significantly increases the walking catchment from the site and gives walking an advantage over car use.

Figure 2-2 Walking Catchment



2.1.2 Cycling network

Cycling infrastructure is extensive and well connected along the Wentworth Point and Sydney Olympic Park Peninsula. As seen in **Figure 2-3**, continuous shared pedestrian/cycle paths connect Wentworth point to all surrounding suburbs including Rhodes, Meadowbank, Sydney Olympic Park, Newington, and Silverwater. The network is further connected by cycling lanes on road shoulders where shared paths are not available. This, coupled with a flat topography makes for a favourable cycling environment. As with walking, a key connection is the Bennelong Bridge, which provides a cycling link into Rhodes that cars are unable to use. This level of cycling infrastructure and connectivity is rare in Sydney and would make this school site one of the best for students who cycle.

The cycling catchment map in **Figure 2-4** shows that a significant area covering high and low-density residential dwellings can be reached by bike. 3,600m is approximately a 15-minute bicycle ride and covers the residential areas in Wentworth Point, Rhodes, Sydney Olympic Park, Meadowbank, and Newington.

While there are extensive connections between residential areas, there is a general lack of cycle infrastructure within the residential areas themselves. However, streets within residential areas tend to be low-speed low volume roads. Additionally, NSW legislation permits children under the age of 16 and accompanying adults to ride on footpaths, allowing young riders to avoid risks of conflict with vehicle traffic. As this is a high school, most students will be permitted to use footpaths where bicycle paths don't exist.

Similarly to the pedestrian network, the cycling network also lacks priority crossings. This is less of an issue due to long uninterrupted bicycle paths in the network but could still be seen as a deterrent to cycling in the area.

Figure 2-3 Cycling Network

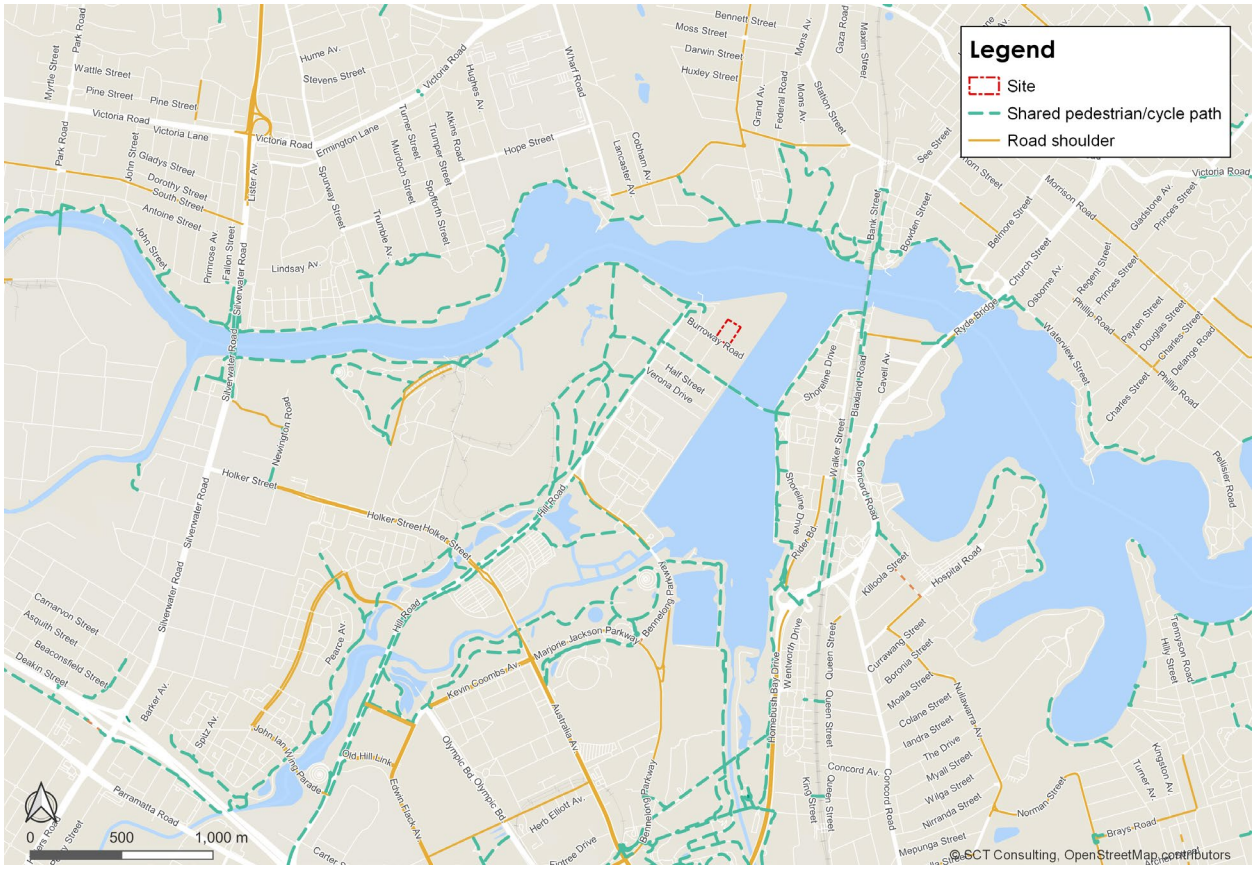
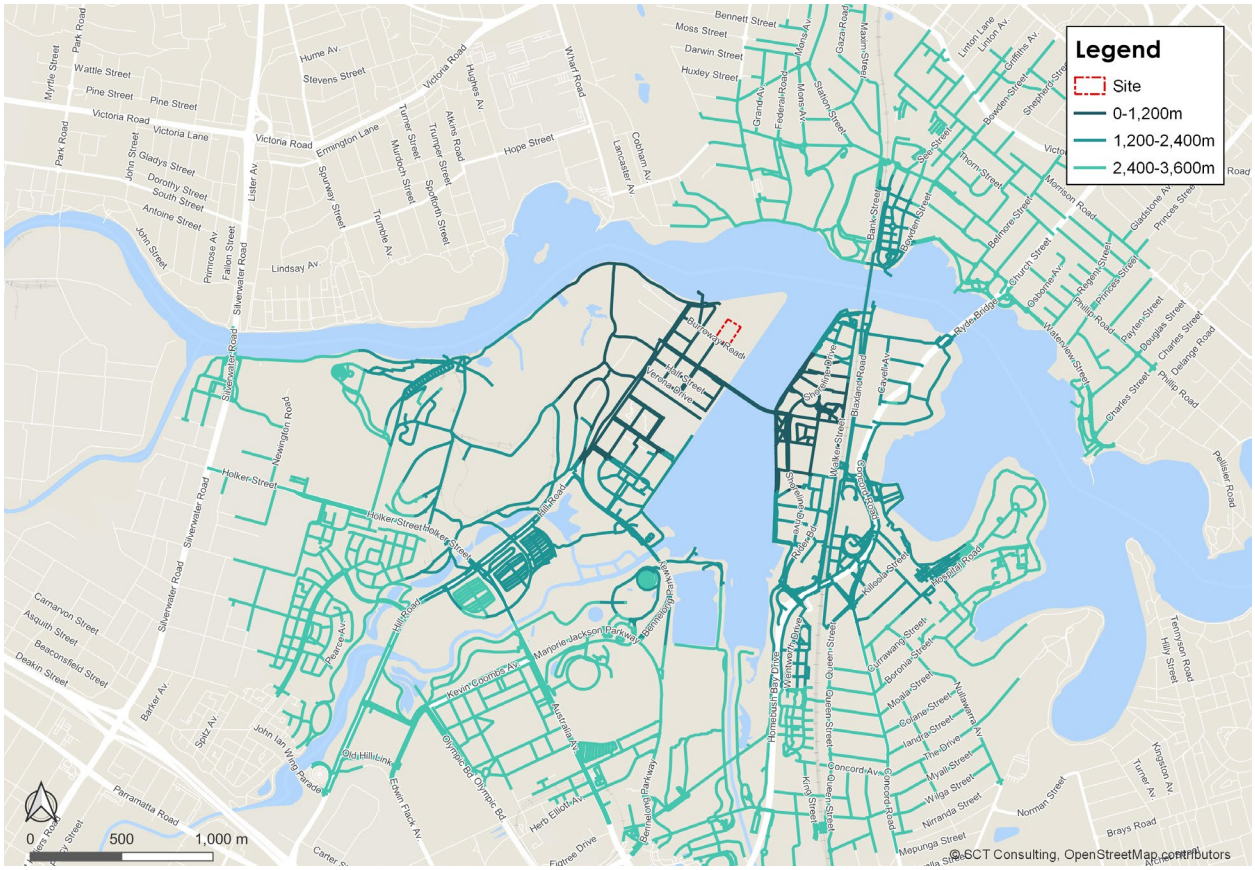


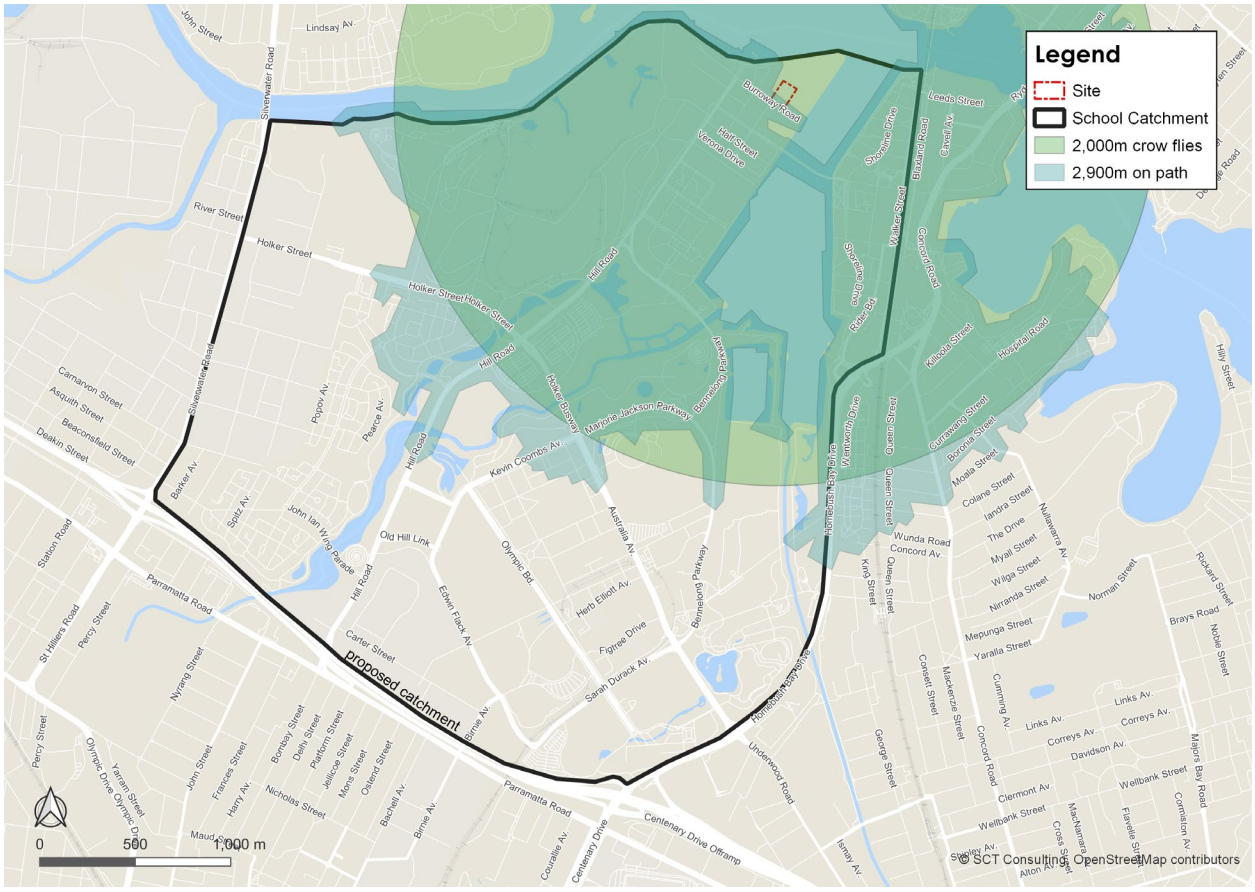
Figure 2-4 Cycling Catchment



2.1.3 Public transport network

TfNSW offers a subsidy for school travel called the School Student Travel Scheme (SSTS) which provides free travel to and from home on approved public transport services during school term. For secondary students, the eligibility criteria are that the straight line distance from their home address to school is more than 2 km or the walking distance from home to school is 2.9 km or further. This exclusion area is mapped in **Figure 2-5**.

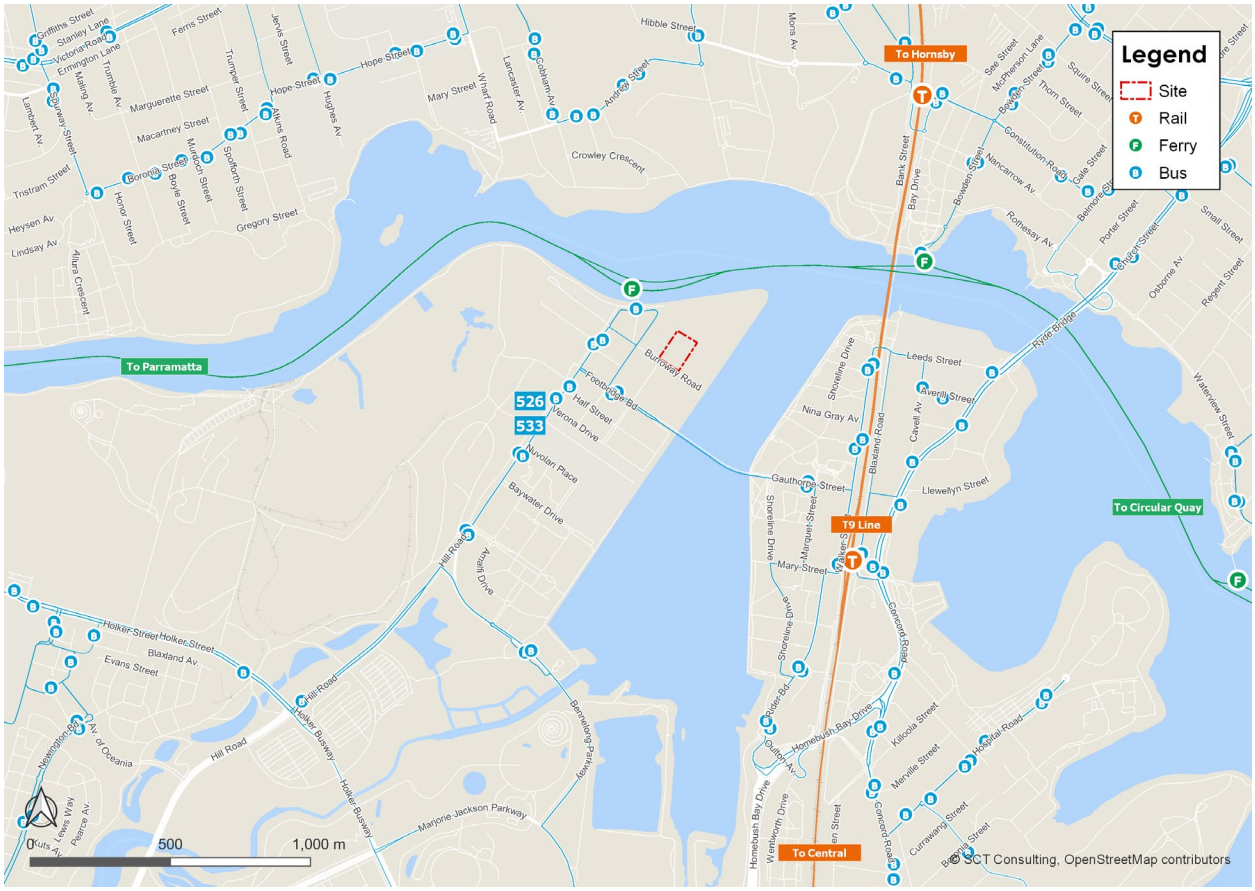
Figure 2-5 SSTS exclusion area



The SSTS exclusion area covers locations that are reasonably within walking distance of a high school student. While some students may opt to drive or take public transport due to their circumstances, the focus of this plan is to make the exclusion area walkable for these students.

Public transport infrastructure in the vicinity of the site is shown in **Figure 2-6**. Trains, Ferries and Buses are available but involve either a relatively long walk or access to limited destinations. Despite this, a 30-minute journey covers most of the potential school catchment (subject to determination by Department of Education). While a 45-minute transport catchment includes access to Parramatta and Sydney CBD's, Macquarie Park to the North and Strathfield to the south. The transport catchment is smaller to the west towards Parramatta, likely due to the lack of bus services in that direction, and the rail alignment which does not provide a direct line to the west from the two closest train stations. Parramatta Light Rail has also indicated that Stage two would join Sydney Olympic Park to Parramatta CBD via Wentworth Point and Melrose Park, though this has not been committed.

Figure 2-6 Public Transport Infrastructure



In addition, Billbergia has funded the Baylink Shuttle, which provides coverage of Wentworth Point and Rhodes.

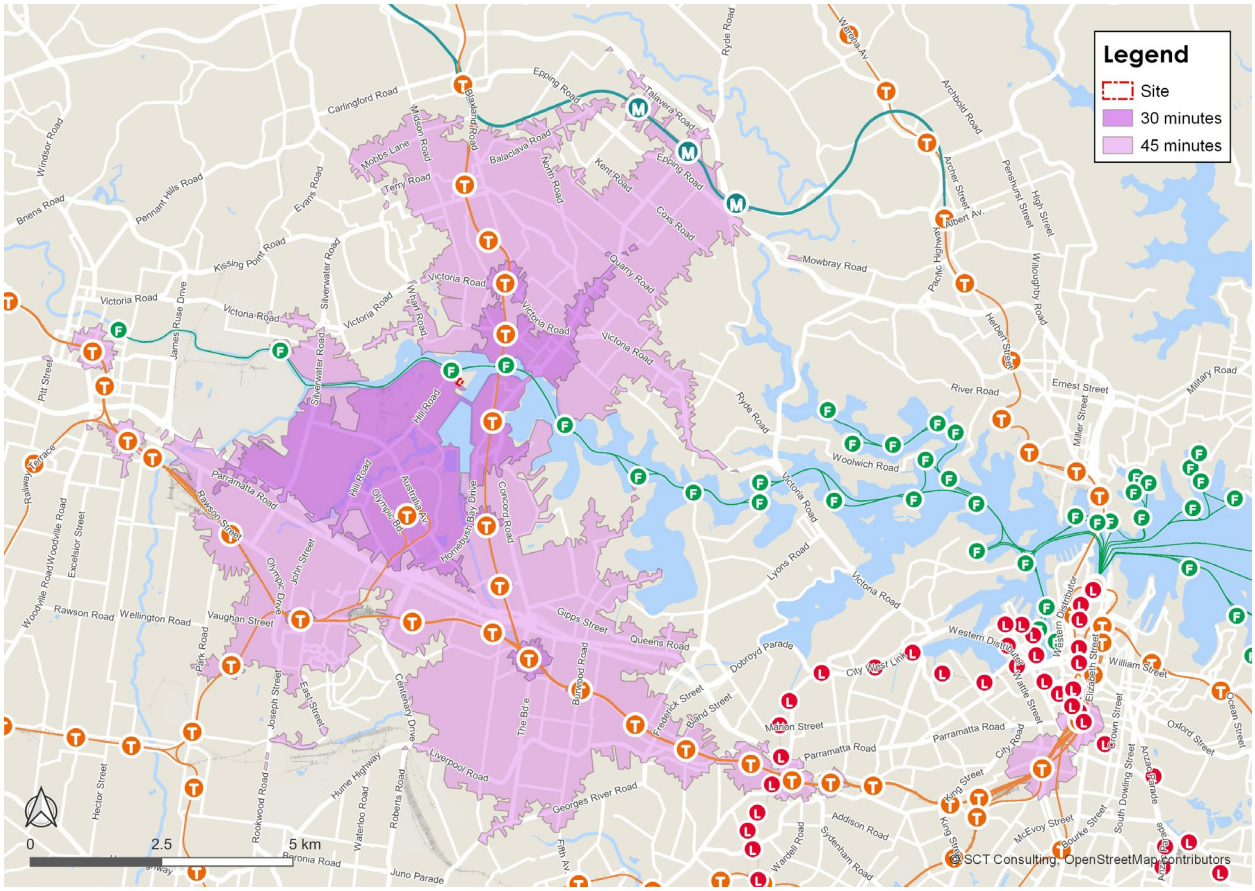
Figure 2-7 Baylink Shuttle route

It is noted that the shuttle is temporary and therefore may not be in operation when the school commences operation.

As this site is for a public high school, students are expected to travel from the local area rather than the wider region and are therefore most likely to be serviced by bus rather than rail or ferry. The public transport catchment is, therefore, more appropriate for considering the travel options of the school staff.

Sydney Metro West has confirmed that a metro station would be located at Sydney Olympic Park near the existing heavy rail station. Construction begins in 2020 and the operation of this mass transit corridor will lead to increased accessibility to surrounding areas. Currently, the 533 bus service links the site to Sydney Olympic Park station with a 12-minute bus ride. Parramatta Light Rail Stage 2 would also provide a direct connection to the Sydney Olympic Park metro should it go ahead. The public transport catchment map can be found in **Figure 2-8** below.

Figure 2-8 Public transport catchment, weekday AM Peak



Bus services

Two public bus routes service Wentworth Point, with their bus stops approximately 200m from the site:

– 533 – Sydney Olympic Park to Chatswood via Rhodes

– 526 – Burwood to Rhodes Shopping Centre

In addition to the public bus services, the developer Billbergia also provides the Baylink Shuttle service which runs between Rhodes Station, Marina Square, the Ferry Wharf, and the southern part of Wentworth Point ("Piazza"). This is a free, publicly accessible service that runs with a headway of 10 minutes during the peak periods and 15 minutes during the rest of the day.

The public bus services available during weekdays are listed in **Table 2-1**.

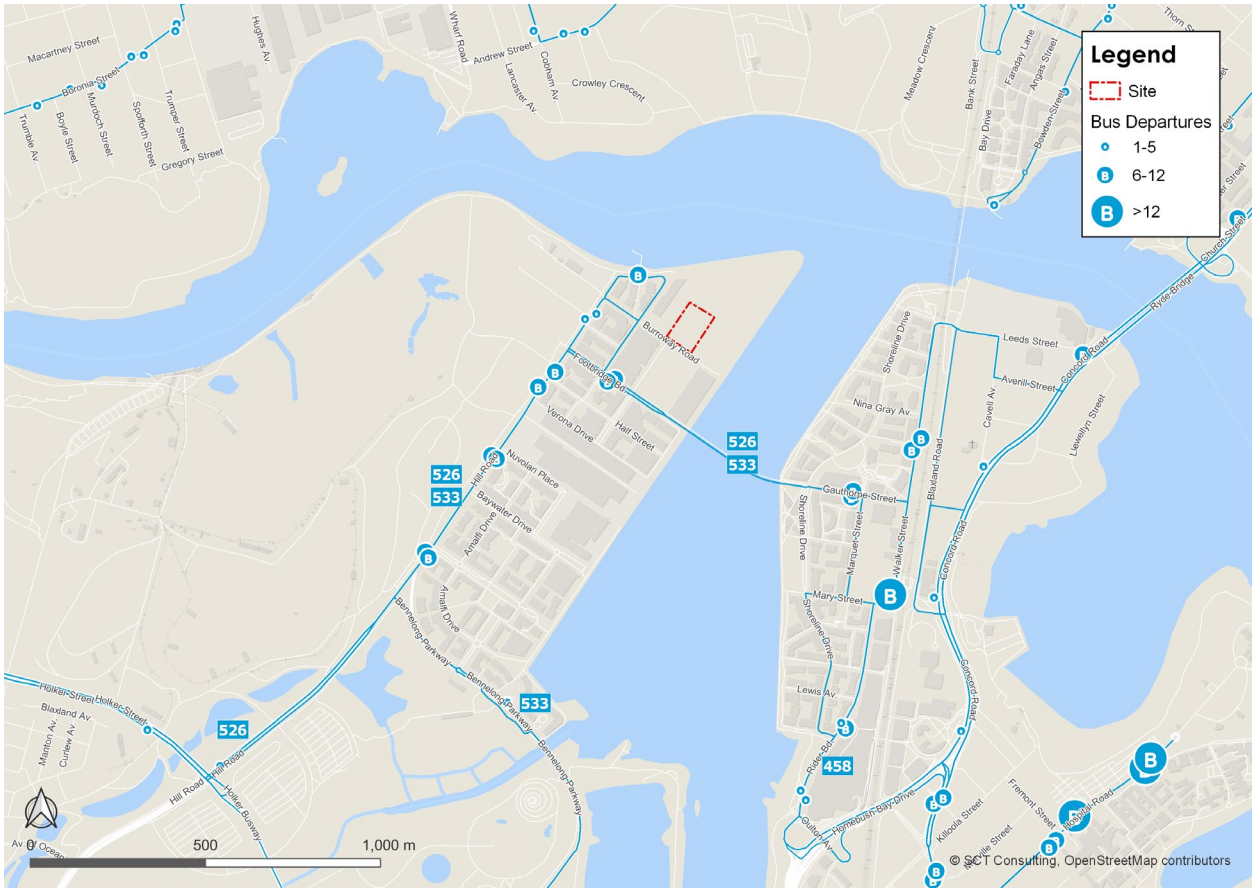
Table 2-1 Bus service frequency

Weekday service	533 to Chatswood	526 to Rhodes	533 to SOP	526 to Burwood
8-9AM Frequency	5	4	4	4
3-4PM Frequency	3	2	3	2
Closest Stop	Marina Square, Footbridge Blvd	Marina Square, Footbridge Blvd	Footbridge Blvd opp. Marina Square	Footbridge Blvd opp. Marina Square

Source: TfNSW

The frequency of public bus services at stops are mapped in **Figure 2-9**.

Figure 2-9 Bus departures at stops 8-9AM



Ferry services

The Sydney Olympic Park Wharf is approximately 300m from the site entrance and services the F3 ferry route, from Parramatta to Circular Quay. There is a ferry service every half an hour at the wharf, though routes do not always continue onto Parramatta CBD due to low tide. Ferry services are one of the most direct ways into Sydney CBD and for commuters from along Parramatta River. However, the infrequent number of services and relatively long journey time (46 minutes from Circular Quay to Sydney Olympic Park) makes this mode of transport less attractive.

The public ferry services available from Sydney Olympic Park wharf during weekdays are listed in

Table 2-2 Ferry service frequency

Weekday service	F3 to Circular Quay	F3 to Sydney Olympic Park
8-9AM Frequency	2	2
3-4PM Frequency	2	2

Source: TfNSW

Train services

Rhodes train station is the closest station from the site, with a walking distance of approximately 1,300m. This is a relatively long walk, with guidelines recommending 800m as the maximum walking distance to a high-frequency, direct public transport service (*Walking, Riding and Access to Public Transport, 2013)*. While it is still a walkable distance, access to the train station would largely depend on bus services that run between Wentworth Point and Rhodes station.

Rhodes Station is serviced by the T9 Northern line. During the AM peak between 8-9 AM there are a total of 8 services in the city-bound direction and 8 services in the region bound direction.

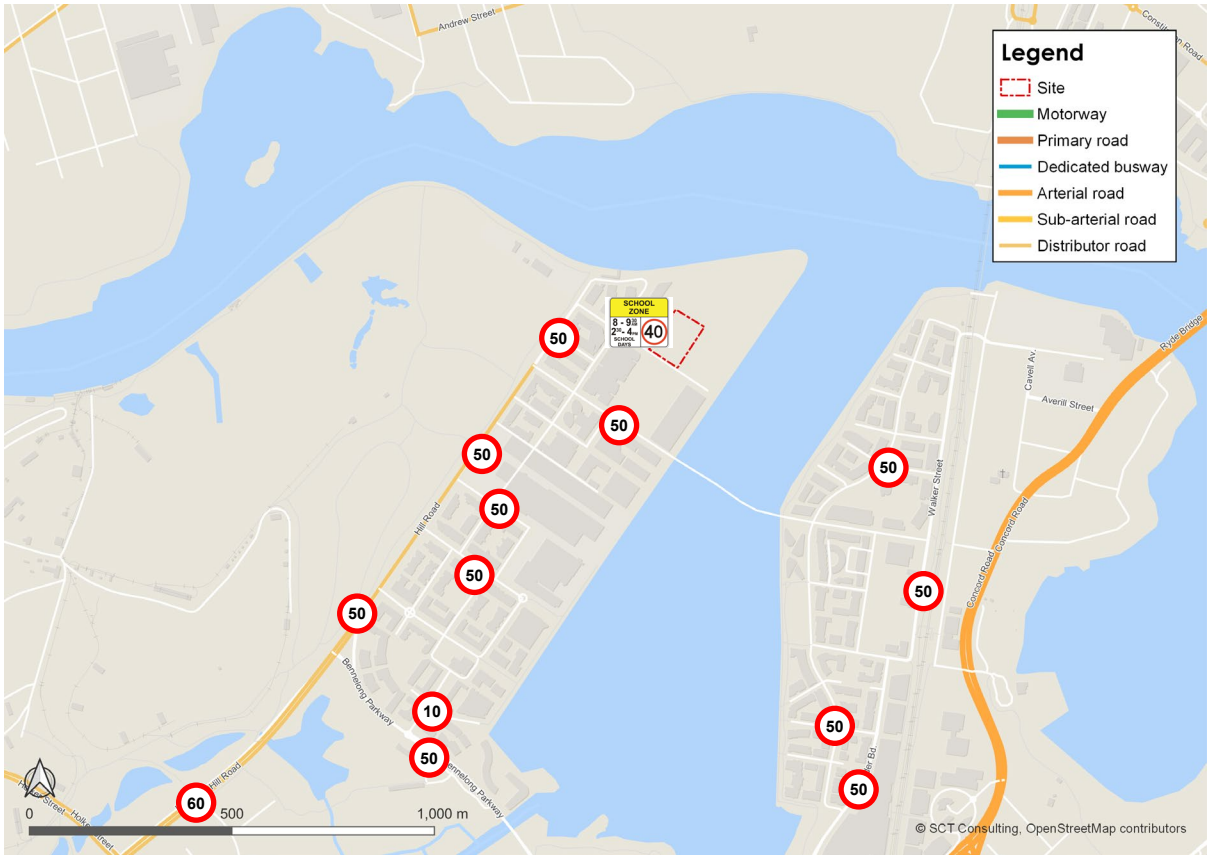
2.1.4 Road network

Key vehicle routes

The site fronts onto the eastern end of Burroway Road, a no-through-road section that will require vehicles to turn around to access the wider road network. The local road network is in a grid style and links to Hill Road, which functions as the distributor road for the suburb. As Bennelong Bridge is reserved for buses only, all other vehicles must use Hill Road to access this section of Wentworth Point. Hill Road has a single lane in either direction, parking on the southbound side and a marked median strip for turning bays in the centre. Additionally, this road is currently the preferred corridor for Parramatta Light Rail Stage 2, though this project is still in the early planning stages.

Bennelong Parkway at the southern part of Wentworth Point is used by traffic connecting to the east, and along with Hill Road form the two vehicle entries into the entire suburb. A map of the road hierarchy around Wentworth Point is provided in **Figure 2-10** below.

Figure 2-10 Road Hierarchy



In the wider context, vehicle access to the Sydney Olympic Park Peninsula is limited to four intersections:

– West: Holker Street / Silverwater Road

– South: Hill Road / Parramatta Road

– South: Birnie Avenue / Parramatta Road

– South-east: Australia Avenue / Homebush Bay Drive

These gateway intersections are situated within well-developed corridors and therefore are most likely operating at capacity. TfNSW has not indicated any plans to increase capacity further at these locations. This means traffic accessing the site is constrained by these four gateway locations into the Peninsula, and by the capacity of Hill Road.

The capacity and performance of key intersections around the site are explored in detail below.

Parking

Publicly accessible parking in the vicinity of the site is available through street parking and in the commercial car parks under Marina Square and Pierside. Pierside has indicatively 100 public paid parking spaces and Marina Square has indicatively 495.

All the street parking is time-limited throughout Wentworth Point and could not be used for parking throughout the school day. The exception to this is Burroway Road from Wentworth Place to the river where there is all-day parking available. This is likely to change once the adjacent land is redeveloped.

Existing situation network performance

The SEARs states that appropriate traffic modelling such as SIDRA Network modelling is required to determine the impacts of the delivery of the school.

Per the SEARs, a SIDRA Network model was prepared of the following intersections:

– Hill Road / Burroway Road

- Burroway Road / Wharf Circuit / Waterways Street
- Burroway Road pedestrian crossing east of Waterways Street
- Burroway Road / Wentworth Place

Intersection surveys were conducted of the above locations for pedestrians, cyclists, light vehicles, and heavy vehicles. Surveys were conducted on 30 March 2021, which was near the end of Term 1. There was no unusual weather or incidents in the area. Surveys are provided in **Appendix A**. SIDRA network models were prepared using the surveys as inputs.

The periods of 8-9 AM and 3-4 PM were selected for modelling as these represent the times of peak traffic generation for the school. They are not the network peak periods. Traffic generated by the school is highly concentrated, dropping to very low traffic outside of drop off and pick up times.

Daily traffic on Burroway Road is indicatively 800 – 2,200 vehicles per day in each direction based on the volume present in the peak periods and the assumption that daily traffic is typically 10 times peak period traffic.

The intersections layouts were developed using recent satellite imagery (**Figure 2-11**).

Vehicle turning counts extracted from the traffic surveys are shown in **Figure 2-12** and **Figure 2-13**.

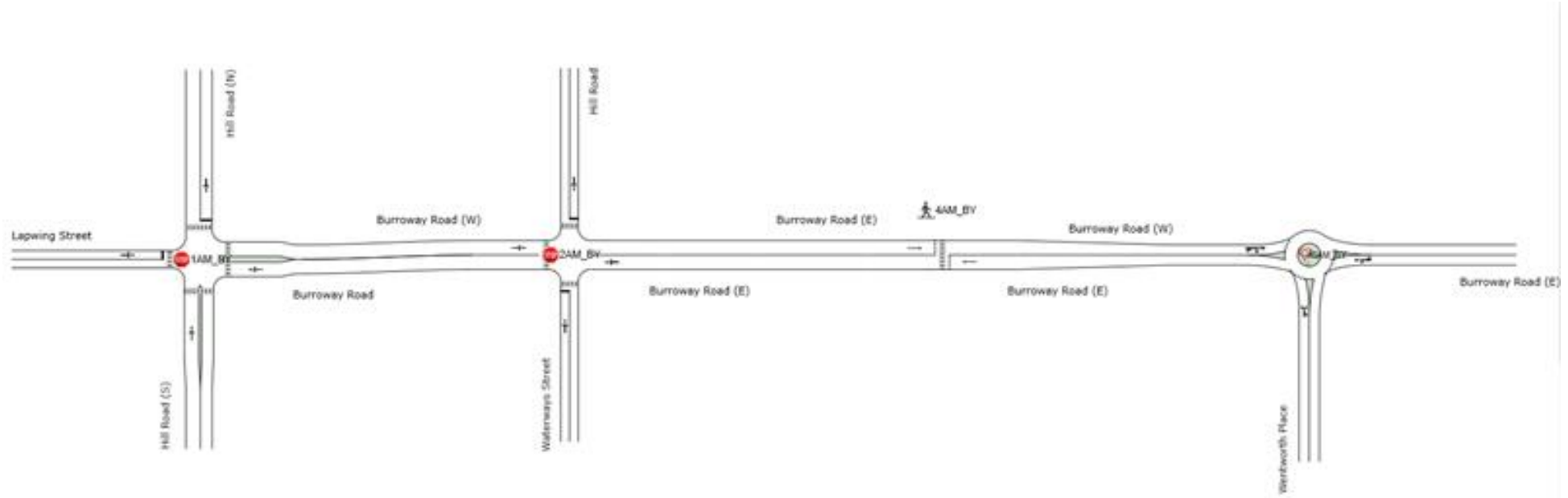
Counts across all modes of transport are provided in **Appendix A**.

Key pedestrian volumes are:

- **Burroway Road / Hill Road:** 123 pedestrians in the AM peak and 84 in the PM peak. Pedestrians use the midblock refuges or cross without a facility.
- **Burroway Road / Waterways Street:** 438 pedestrians use the zebra crossing in the AM peak and 332 in the PM peak. 294 pedestrians use the remaining midblock refuges or cross without a facility in the AM peak and 301 in the PM peak.
- **Burroway Road / Wentworth Place:** 226 pedestrians in the AM peak and 121 in the PM peak. Pedestrians use the midblock refuges.

The number of pedestrians exceeds the number of vehicles for the intersection of Burroway Road / Waterways Street and Burroway Road / Wentworth Place in the AM peak. Hence, planning for these intersections should be distinctly pedestrian-first.

Figure 2-11 Existing conditions SIDRA Network layout*



*SIDRA draws intersections schematically. It draws all crossings as a zebra crossing regardless of whether they are a zebra crossing. The only location with pedestrian priority is the zebra crossing east of Waterways Street. At all other locations, pedestrians give way to vehicles.

Figure 2-12 Existing conditions turning volumes (2021 AM peak – 8-9 AM)

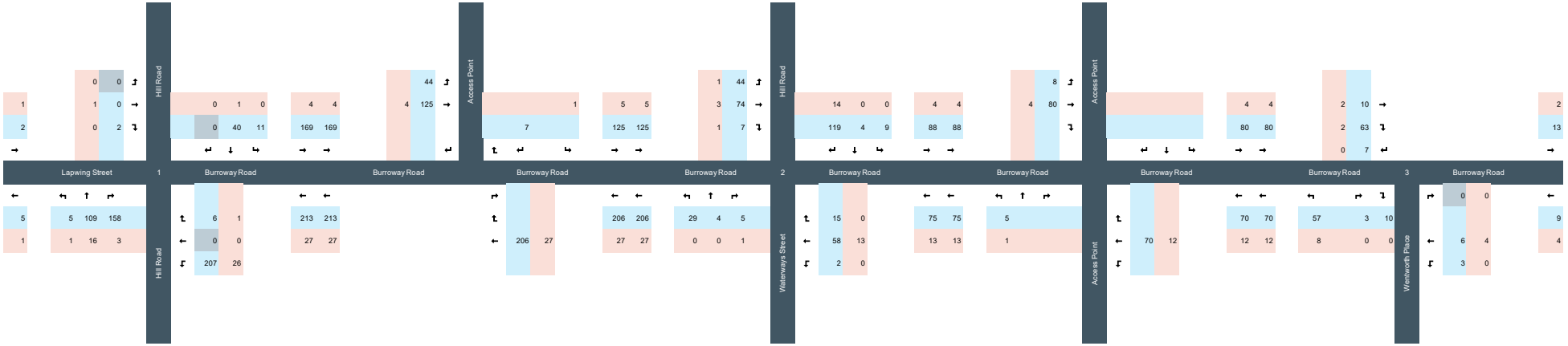
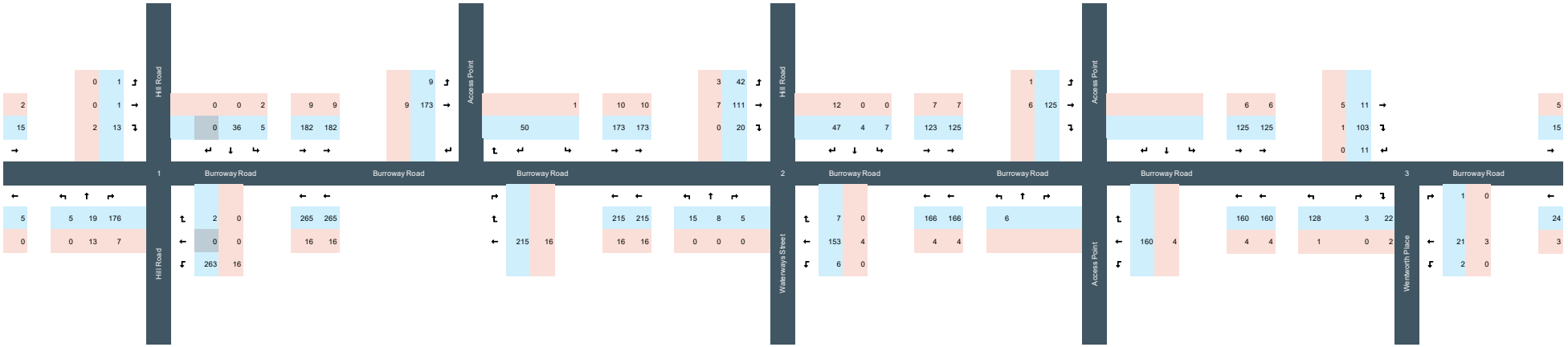


Figure 2-13 Existing conditions turning volumes (2021 PM peak – 3-4 PM)



The model was calibrated using the input data to reflect observations of traffic behaviours around the site. One of the key goals is to calibrate the models such that the degree of saturation of all movements was 1.0 or below. This is a standard procedure to ensure that the models are not over-predicting congestion under current conditions. The setting of gap acceptance follows default as stipulated in Transport for NSW's (ex-Road and Maritimes Services) modelling guideline.

Operational performance is typically measured through an assessment of the throughput of vehicles across a traffic network, with average delay per vehicle used to assess the performance of an individual intersection. The average delay per vehicle measure is linked to a Level of Service (LoS) index which characterises the intersection's operational performance. **Table 2-3** provides a summary of the LoS performance bands.

In addition, intersection performance is measured using Degree of Saturation (DoS), which is a measure of the spare capacity of each intersection.

Table 2-3 Level of Service index

Level of Service	Average Delay per Vehicles (sec/h)	Performance explanation
A	Less than 14.5	Good operation
B	14.5 to 28.4	Good with acceptable delays and spare capacity
C	28.5 to 42.4	Satisfactory
D	42.5 to 56.4	Operating near capacity
E	56.5 to 70.4	At capacity, at signals incidents will cause excessive delays. Roundabouts require other control method.
F	70.5 or greater	At capacity, at signals incidents will cause excessive delays. Roundabouts require other control method.

Source: Guide to Traffic Generating Developments; RMS; 2002

Intersection Level of Service does not capture well the performance of the transport network for pedestrians. Pedestrians are typically excluded from the Level of Service metric.

The intersection performance for the 2021 existing conditions is shown in **Table 2-4**.

Table 2-4 Intersection performance for existing conditions (2021)

Intersection	AM Peak				PM Peak			
	Delay	LoS	DoS	Volume	Delay	LoS	DoS	Volume
Lapwing Street / Hill Road	12.1s	A	0.16	621	10.0s	A	0.15	593
Burroway Road / Waterway Street	7.8s	A	0.16	424	8.7s	A	0.10	475
Burroway Road / Wentworth Place	7.2s	A	0.07	185	7.5s	A	0.12	331
Zebra Crossing at Burroway Road / Hill Road (E)	1.1s	A	0.19	189	0.9s	A	0.29	316

Source: SCT Consulting, 2021

Delay = worst movement for priority and roundabout controlled intersections and DoS = degree of saturation of worst movement

The results indicate that all intersections are operating at a satisfactory level of service from a road delay perspective.

Importantly, the level of service metric doesn't fully capture the performance of other road-based modes such as pedestrians and bus passengers. Pedestrians are provided with one crossing facility in the vicinity of the school. Consideration is recommended for additional pedestrian priority, as pedestrians experience delays when waiting for a gap in car traffic. Pedestrians are also vulnerable road users and lack of appropriate crossings can lead to safety risks.

Crash data in the area is shown in **Figure 2-14**.

Figure 2-14 Review of crash data

Degree of crash

Fatal | Serious Injury | Moderate Injury | Minor/Other Injury | Non-casualty (towaway)

Repo..	Crash ID	Degree of crash	RUM - code	RUM - description	Type of location	Natural lighting	Longitude	Lattitude	No Killed	No Injurec
2015	1090151	Minor/Other Inj..	45	Reversing	2-way undivided	Daylight	151.076521	-33.824766	-	1
2016	1112852	Non-casualty (t..	53	Overtake turning	T-junction	Daylight	151.076184	-33.825157	-	-
	1120348	Minor/Other Inj..	10	Cross traffic	X-intersection	Daylight	151.07774	-33.825183	-	1
	1125365	Moderate Injury	40	U turn	T-junction	Dawn	151.075675	-33.825747	-	2
2017	1136203	Minor/Other Inj..	32	Right rear	T-junction	Daylight	151.075675	-33.825747	-	1
	1141378	Minor/Other Inj..	45	Reversing	T-junction	Daylight	151.07667	-33.824593	-	2
2018	1186887	Minor/Other Inj..	10	Cross traffic	X-intersection	Daylight	151.07774	-33.825183	-	1

The data indicates that there are no pedestrian-related crashes in the area, which have a Road User Movement (RUM) code beginning with a zero.

2.2 Travel demand

2.2.1 Local travel behaviour

2016 Census data taken for residents of Wentworth Point provides insight into the travel behaviour of residents by analysing their mode choice when travelling to work. Census data suggests those who work in Wentworth Point and workers who live in Wentworth Point are most likely to drive in their regular commute. However, it is also important to note that the census is representative of parents and commuters rather than high school students, who can travel independently of their parents/careers. The census results may differ from actual student travel behaviour and therefore should not be over-relied on. **Table 2-5** shows the main method of travel to work for residents of Wentworth Point and a comparison to Rhodes.

Table 2-5 Main methods of travel to work, 2016 Census

The main method of travel	Wentworth Point 2016 %	Rhodes 2016 %	Greater Sydney 2016 %
Train	23%	50%	19%
Bus	3%	2%	7%
Tram or Ferry	2%	0%	1%
Taxi	0%	0%	0%
Car - as driver	63%	39%	61%
Car - as passenger	4%	3%	5%
Truck	0%	0%	1%
Motorbike	1%	0%	1%
Bicycle	1%	0%	1%
Walked only	3%	6%	5%
Other	1%	1%	1%

Source: Australian Bureau of Statistics, Census of Population and Housing 2016

Wentworth Point has a relatively high dependence on car travel, with approximately 67% travelling to work by car, like the mode share of Greater Sydney. Public transport use is also like Greater Sydney, with 28% using the transport network. A key factor in the high dependence on cars is the distance of mass transit networks, with the closest train stations of Sydney Olympic Park and Rhodes falling outside typical walking catchments.

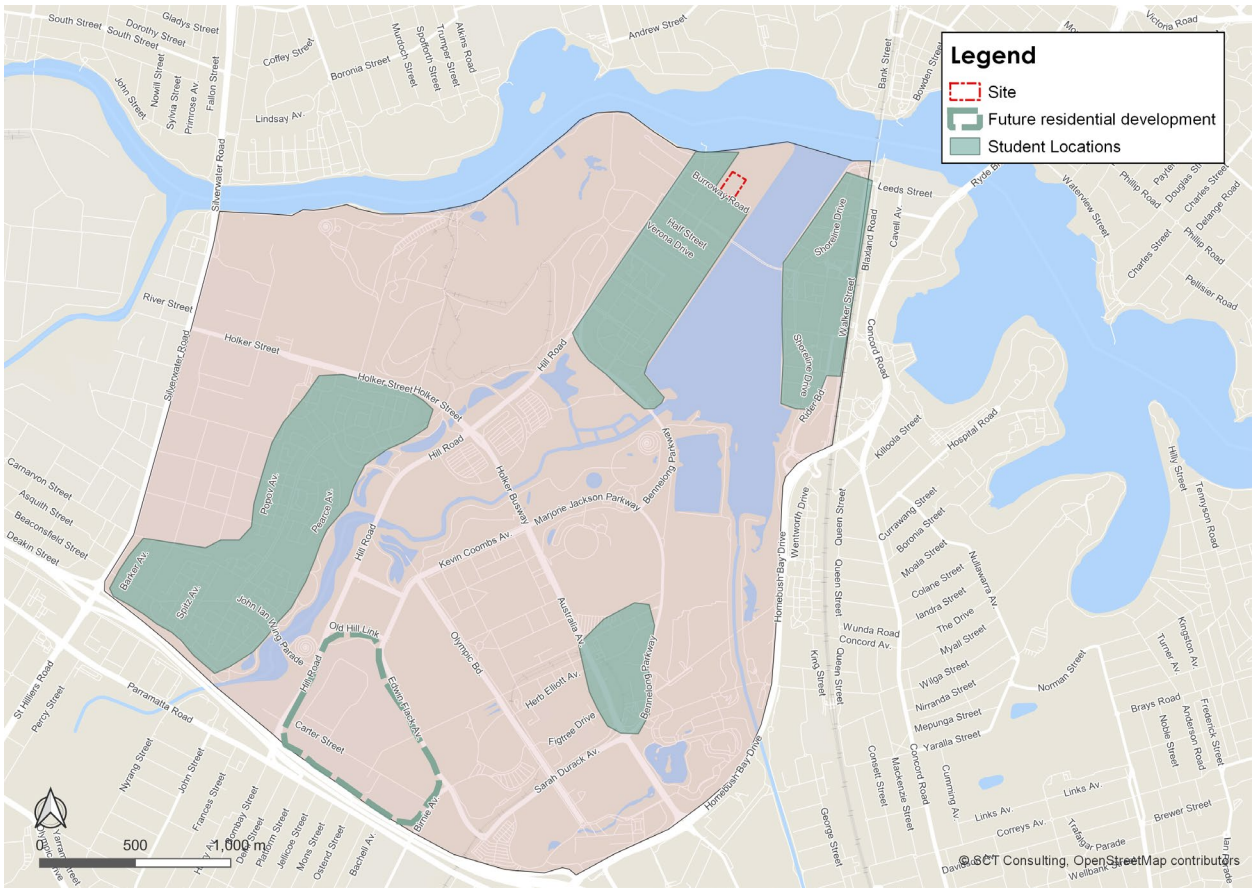
At the time of the survey (2016), the residential properties were in delivery, with less than half of the current buildings occupied. Hence while the survey is a useful starting point, it doesn't necessarily reflect the likely travel behaviours on completion of the peninsula. With significant construction activities occurring during the census period, car driver mode share would likely be higher than currently.

As the peninsula is primarily residential, workers likely leave the area for work, travelling distances that cannot be done by walking only. This results in an under-representation of the walkability of the Wentworth Point and Rhodes Area. For travel purposes other than work, it is expected that most residents within these areas would journey by walking due to a highly connected and permeable walking network and the proximity of schools, dining, and retail.

2.2.2 School travel behaviour

The residential location of existing students within the potential school catchment (subject to determination by Department of Education) was used to analyse the expected travel demand mode and mode share. The generalised location of students is mapped in **Figure 2-15**, showing how residential dwellings are concentrated in specific locations within the school catchment. This figure also illustrates expected future growth along Carter Street at the south of the peninsula.

Figure 2-15 Student location within the potential school catchment (enrolment boundary)



Student data was analysed for walking distance from school, for both the crow flies and actual on path distances, as well as journey time by public transport. The results are listed in **Table 2-6**.

Table 2-6 Student transport catchments for 2020 enrolment

Travel context	Notional (within crow flies)		Actual (on-path)	
	No. Students	Proportion	No. Students	Proportion
1-400m (5-min walk)	51	9%	28	5%
401-800m (10-min walk)	107	19%	32	6%
801-1200m (15-min walk)	87	16%	85	15%
1-1,200m	245	44%	145	26%
2000m crow flies / 2,900m on path (excl from SSTS Secondary)	247	45%	289	52%
0-20 minute PT journey	-	-	245	44%
21-30 minute PT journey	-	-	277	50%
Within 400m of public transport that brings them closer to school	532	96%	443	80%
Within 800m of public transport that brings them closer to school	554	100%	542	98%
Outside SSTS zone, with <=30 min PT travel times	247	45%	233	42%
Outside SSTS zone, with >30 minute PT travel times	32	6%	32	6%
Inside SSTS zone, with <=30 min PT travel times	275	50%	289	52%
Total students (2020) enrolments	554	100%	554	100%

Source: SCT Consulting, 2021

2.3 Transport use

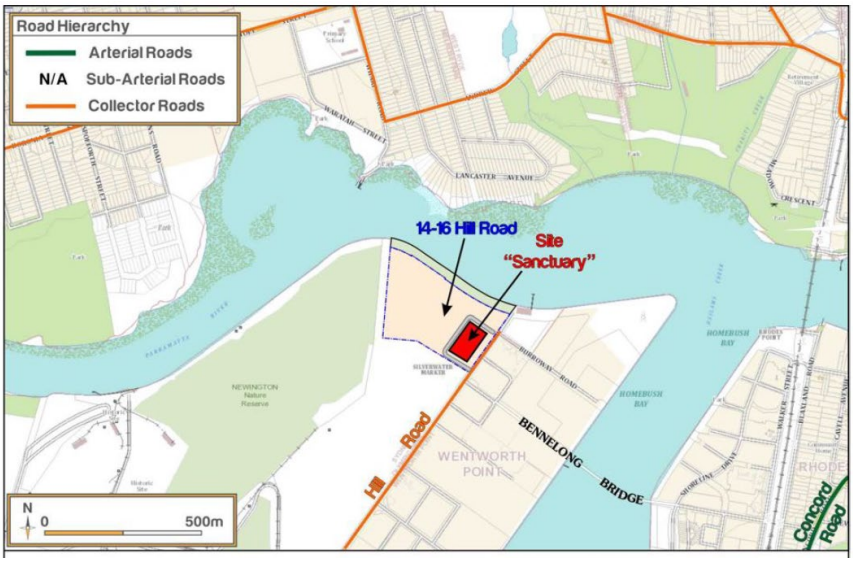
2.3.1 Cumulative background traffic growth

A review of the cumulative growth in the Wentworth Point was undertaken based on publicly available transport reports for the following parcels:

– Landcom on behalf of TfNSW is the proponent of the “Burroway Road site”, which sits to the east of the proposed high school site. The site has a mixed use yield allocation under the relevant Local Environment Plan of 51,283m^2 Gross Floor Area. This site sits within DP1216628 Lots 203 and 204. Landcom on behalf of Transport for NSW is progressing a concurrent proposal for this land that does not result in an uplift in mixed use yield but adjusts the site to retain the mixed use yield while accommodating this proposed High School.

– Sekisui is the proponent of the “Hill Road site”, which sits to the west of Hill Road. It is estimated to have a total yield of 1,780 dwellings. 364 residential units have been completed as per the Sekisui Residential Development (TIA pg. 14, Ason Group 2017) with the remainder to be developed in the future years. The Sanctuary site is SP102274. The balance of lands is DP271278 Lot 3.

Figure 2-16 Location of Hill Road site and Sanctuary site



Source: Ason Group, 2017

– The Billbergia "Block H" development to the south of the school site is one of the remaining undeveloped parcels in the Wentworth Point Precinct – located at 16 Burroway Road and part 5 Footbridge Boulevard. The current DCP Controls indicates that Block H will approximately have a total yield of 350 dwellings (City of Parramatta, 2020). There is a concurrent but unapproved proposal for an increase in residential yield. This uplift has not been considered in the analysis as the SEARs requires traffic modelling only of approved developments.

Figure 2-17 Location of Billbergia "Block H" development –DP270778 Lots 24 and 40

Source: SIX Maps, 2021

The following assumptions have been adopted for the SIDRA network models:

– 80% of development traffic from the Hill Road Land Parcel is directed to/from Wattlebird Road – as this is the primary access route into and out of the Sekisui Residential Development (Turner, 2018)

Figure 2-18 Master plan of Hill Road precinct

Source: Turner, 2018

– There are varying traffic generation rates in the peninsula. This is due to different report authors and likely mode shift within the peninsula during delivery. SCT Consulting undertook trip generation surveys of a site at Wentworth Point, which indicated a traffic generation rate of 0.207 veh/unit in the AM peak and 0.218 in the PM peak (SCT Consulting, 2018). In correspondence with TfNSW during the planning for the Burroway Road site, TfNSW agreed to a vehicle trip generation rate of 0.25 veh/unit. This trip generation rate has been adopted across all sites to ensure an appropriately consistent and conservative approach.

– Background growth is assumed to be captured by all expected developments and there will be no through traffic into the Wentworth Point peninsula.

The expected future traffic of the road network without the high school is shown in **Figure 2-19** and **Figure 2-20**.

Surveys were conducted for the existing travel behaviour of Concord High School; however, the response rate was unfortunately too low for the survey to be statistically valid.

Figure 2-19 2031 Forecast intersection turning counts due to cumulative growth (AM peak 8-9 AM)

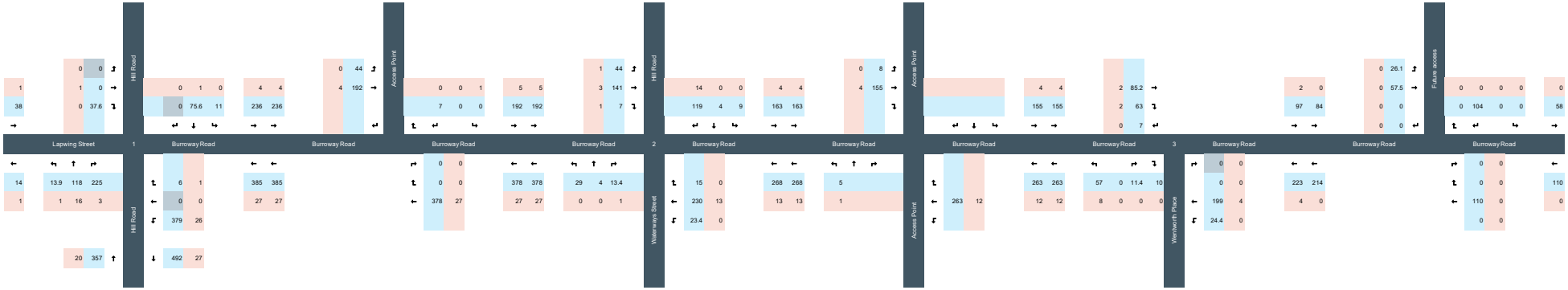
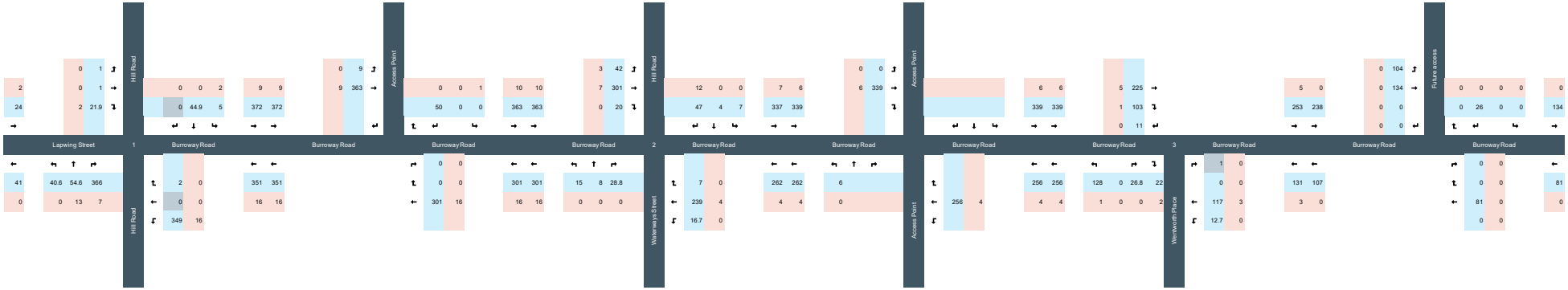


Figure 2-20 2031 Forecast intersection turning counts due to cumulative growth (PM peak 3-4 PM)



2.3.2 Growth in pedestrian demands

Pedestrian demands are assumed to grow at the rate of 2 per cent per annum compound due to the increase in density in the surrounding sites.

2.3.3 Intersection performance with cumulative background growth

The intersection with background growth and no infrastructure upgrades is provided in **Table 2-7**.

Table 2-7 Intersection performance – 2031 cumulative background growth

Intersection	AM Peak				PM Peak			
	Delay	LoS	DoS	Volume	Delay	LoS	DoS	Volume
Lapwing Street / Hill Road	13.0s	A	0.23	966	12.4s	A	0.26	977
Burroway Road / Waterway Street	9.2s	A	0.20	707	10.7s	A	0.19	802
Burroway Road / Wentworth Place	8.1s	A	0.19	499	7.8s	A	0.29	694
Zebra Crossing at Burroway Road / Hill Road (E)	4.3s	A	0.66	472	2.4s	A	0.59	643

Source: SCT Consulting, 2021

Delay = worst movement for priority and roundabout controlled intersections and DoS = degree of saturation of worst movement

The analysis indicates that intersections perform at Level of Service A despite the increase in traffic.

3.0 Analysis of Strategic Context and Existing Transport Networks / Demand

3.1 Testing school transport targets

Results of the student transport catchment analysis in **Local travel** behaviour have been used to project future transport mode shares for the expected student population. Existing student numbers were scaled proportionally to 1,500, the full capacity of the future high school, with an assumption that growth of residential dwellings is expected to be concentrated towards the Wentworth Point Peninsula and the Carter Street developments. Three scenarios have been developed; baseline and stretch mode share targets.

It is assumed that the mode share can be explained by a contribution factor, which is different for different scenarios because of the quality of infrastructure (e.g. dedicated crossing facilities) and transport encouragement programs.

3.1.1 Base case scenario

The base case scenario assumes the minimum case for infrastructure development and public transport investment. In this scenario:

– No additional infrastructure is delivered to the walking network, and the remainder of the Wentworth Point DCP is not delivered.

– No additional bus frequency/services are added to the network.

This means that Hill Road remains the only route to connect the high school with the rest of Sydney Olympic Park Peninsula, leading to longer walking distances for students in the south of Wentworth Point. More students live further away as the area closest to the high school remains undeveloped. The expected transport catchment and mode share of each distance are listed in **Table 3-1**.

Table 3-1 Base case scenario mode share analysis

Travel context	No. of Students	Contribution factor			
		Walk	Bicycle / scoot	Public Transport	Car
1-400m walk	117	100%	0%	0%	0%
401-800m walk	134	90%	10%	0%	0%
801-1,200m walk	355	65%	15%	0%	20%
1,201m - 1,800m walk	418	50%	25%	5%	20%
1,801 - 2,900m walk	44	10%	15%	20%	55%
> 2,900 walk and < 30min public transport journey	233	0%	10%	50%	40%
> 2,900 walk and > 30min public transport journey	200	0%	10%	0%	90%
Mode share					
Total No. of Students	**-**	**681**	**221**	**146**	**452**
Total mode share	**-**	**45%**	**15%**	**10%**	**30%**

The transport catchment analysis is based on multiplying the contribution factor times the number of students within each of the categories. Therefore, for students within 1-400m (being 117 students), it is expected that 100% would walk. These figures were calibrated to match the current Turramurra High School mode share.

The analysis indicates that while the car mode share may be as high as 30 per cent, the built form features of the Olympic Peninsula mean that walking and cycling account for almost half of travel. As the school is located at the tip of a peninsula, drivers are generally not able to drop their students on the way to work – the kiss ‘n drop trip is a

diversion. With the generally constrained parking environment in the peninsula, drivers will likely require longer than other schools to find a parking space.

It's important to note the constrained supply of kiss 'n drop spaces is an advantage of the school. The peninsula is provided with extensive pedestrian and cycling infrastructure (on the completion of the DCP). These constraints will naturally facilitate greater take up of walking and cycling, which would reduce congestion compared with if the school had ample parking spaces.

3.1.2 Stretch case scenario

The stretch case is based on the provision of improved crossing facilities, delivery of the Wentworth Point DCPs, better bus access, bus frequency to meet capacity requirements and funded transport encouragement (being a travel coordinator). These investments are not the sole responsibility of School Infrastructure NSW. The funding breakdown assumed is as follows:

– Improved crossing facilities funded by School Infrastructure NSW.

– Delivery of the Wentworth Point DCPs is a joint exercise between the landowners/proponents of future developments and the City of Parramatta Council. It is expected that this will be delivered over time and may not be fully present on the day of the opening of the school.

– Better bus access and bus frequency to meet demand are the responsibility of Transport for NSW. These suggestions are recommended to be included in their regular bus service planning processes. Further breakdown of the staging is provided in **Section 3.2**.

– The transport coordinator is proposed to be funded initially by School Infrastructure NSW to allow for early involvement before the day of opening. This would ensure that the coordinator can prepare relevant plans and documents so the school community start travelling to school sustainably on day one. Ongoing funding would be subject to the Department of Education funding processes for staff.

The analysis of the mode share given these investments is shown in **Table 3-2**.

Table 3-2 Stretch case scenario mode share analysis

Travel context	No. of Students	Contribution factor			
		Walk	Bicycle / scoot	Public Transport	Car
1-400m walk	117	95%	5%	0%	0%
401-800m walk	134	90%	10%	0%	0%
801-1,200m walk	355	80%	20%	0%	0%
1,201m - 1,800m walk	418	65%	30%	5%	0%
1,801 - 2,900m walk	44	10%	40%	20%	30%
> 2,900 walk and < 30min public transport journey	383	0%	15%	50%	35%
> 2,900 walk and > 30min public transport journey	50	0%	15%	0%	85%
Mode share					
Total No. of Students	-	845	258	208	190
Total mode share	-	56%	17%	14%	13%

The stretch case analysis shows that joint investment by School Infrastructure NSW, City of Parramatta Council, current landowners, and Transport for NSW will translate to the school being able to achieve a low car mode share (13 per cent).

The certainty of delivery of all these items is considered high given School Infrastructure is committing to their funding, the DCP is non-optional, and Transport for NSW will regularly review their bus program. Hence this scenario is the selected scenario for planning and traffic modelling of the school.

3.1.3 Scenario summary

Table 3-3 compares the expected mode share of the Base case and the Stretch case, detailing the respective infrastructure investments and operational requirements needed to support each scenario.

Table 3-3 Mode share scenarios

Scenario		Walk	Bicycle / scoot	Bus	Kiss 'n drop	Infrastructure investment	Operational requirements
Base case	%	45%	15%	10%	30%	– Existing infrastructure	– Volunteer school transport committee using existing budgets
	#	681	221	146	452		
Stretch case	%	56%	17%	14%	13%	– Delivery of the full Wentworth Point DCP, including footpaths on both sides of road and foreshore boulevard by Council – New zebra (wombat) style pedestrian crossings to fill critical gaps in network – Additional bus services, where required, due to capacity – Sufficient bicycle and scooter parking	– School Transport committee – Funded Travel Coordinator – Governance arrangement as per School Transport Plan – Communications to the community – At least fortnightly bicycle maintenance days – Walk and bike to school days (1 pedestrian/bike event per term) – At least fortnightly transport newsletters / comms
	#	845	258	208	190		

3.1.4 Benchmarking

Mode share analysis per the SINSW guidelines on a school by school basis using transport catchment analysis of the anonymised student population. This is because each school has a different travel context, making it difficult to compare two schools. Two benchmarks were used in the process of mode share estimation.

Surveys were conducted as part of the strategic planning process for the school, however the surveys at the only high school surveyed (Concord High School) were not a statistically significant sample with 13 respondents out of 1,000 students.

The *Roads and Maritime Services Trip Generation Surveys Schools Analysis Report* (GTA, 2014) provides survey results from public and private primary and high schools in Sydney regarding their trip generation behaviour. Of the locations surveyed, there weren't many that reflected the highly urban area and good transport connections of Wentworth Point.

The closest site available was considered Turramurra High School (**Table 3-4**), which is surrounded by low density residential but has a high quality bus network. Other sites are more suburban or have comparatively poor public transport services.

Table 3-4 Turramurra High School benchmark mode share

Mode	AM peak	PM Peak
Car into and near to site	14%	10%
Bus	44%	37%
Walk	41%	52%

Source: GTA Consultants, 2014

A survey was also extracted from the Sydney Inner City High School, which included a survey of Sydney Secondary College, Leichhardt (**Table 3-4**).

Table 3-5 Sydney Secondary College Leichhardt benchmark mode share

Mode	AM peak	PM Peak
Car into and near to site	9%	4%
Public transport	57%	54%
Walk	34%	32%

Source: Positive Traffic, 2017[1]

These two schools show that a total car mode share of 14% or less is achievable in similar transport contexts. The new high school site is, in fact, better positioned for sustainable transport due to the high density residential uses in the suburb which are a close walk to the site.

[1] https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-7610%2120190227T234518.353%20GMT

3.2 Supporting scenarios with infrastructure, operations, policies & programs

The infrastructure, public transport provision and transport encouragement programs that will help achieve the target mode share are detailed in this section.

Table 3-6 Infrastructure and operational requirements by stage

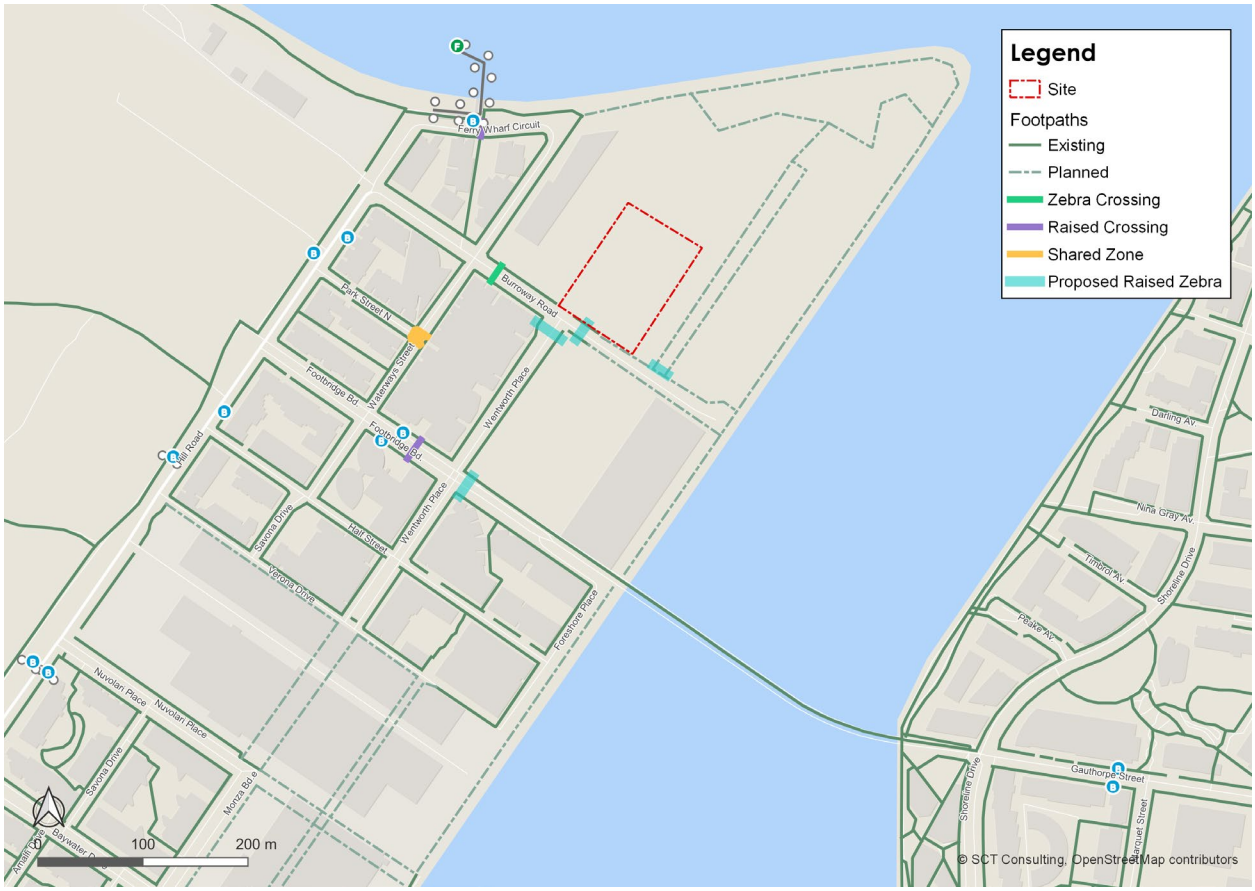
Stretch Case Requirements	Stage 1	Stage 2 (In addition to Stage 1)	Funding / responsible party
Infrastructure / services	– 4x raised zebra crossings – 144 Bicycle/Rideables parking spaces	– 114 Bicycle/Rideables parking spaces	SINSW in collaboration with Council
	– Modification of bus services to bring Carter Street development into 30-minute transport catchment	– Increased bus service frequency to meeting demand	TfNSW
	– Delivery of the Wentworth Point DCP	– Delivery of the Wentworth Point DCP	City of Parramatta Council
Operational	– School Transport committee – Funded Travel Coordinator – Governance arrangement as per School Transport Plan – Communications to the community – At least fortnightly bicycle maintenance days – Walk and bike to school days (1 pedestrian/bike event per term) – At least fortnightly transport newsletters / comms	Operational activities to continue into Stage 2	SINSW initially then Department of Education on an ongoing basis

TfNSW regularly reviews bus servicing as part of managing the bus network. The proposals to increase the public transport 30 minute coverage and increased frequency to meet demand would be subject to this process and are therefore regarded as potential changes.

3.2.1 Infrastructure

Delivery of the Wentworth Point DCP includes the construction of key pedestrian and cycling links that will further improve the walkability and rideability of the peninsula. Illustrated in **Figure 3-1**, the peninsula will have increased permeability from north Wentworth Point to south Wentworth Point (where currently Hill Road provides the only connection), as well as the completion of the Wentworth Point foreshore shared path. These new links will provide uninterrupted shared path access around Wentworth Point and to the rest of the Sydney Olympic Park Peninsula, Newington, and Rhodes, reducing active transport travel times and increasing amenity for these user groups.

Figure 3-1 Future walking and cycling infrastructure



Four additional raised zebra crossings are proposed to be delivered with Stage 1 of the new high school. This will act to further increase pedestrian priority around high activity areas around the school site. These crossings will be located on Wentworth Place and Burroway Road at their intersection, on Footbridge Boulevard at the intersection with Wentworth Place, and across the new access road at the intersection with Burroway Road. The crossings are illustrated in **Figure 3-1**.

These four crossing locations are selected to service key desire lines from the school entrance. By providing pedestrian priority on the nearest crossings in the vicinity will increase the safety of students arriving by foot or rideables while also slowing vehicle traffic passing through the area.

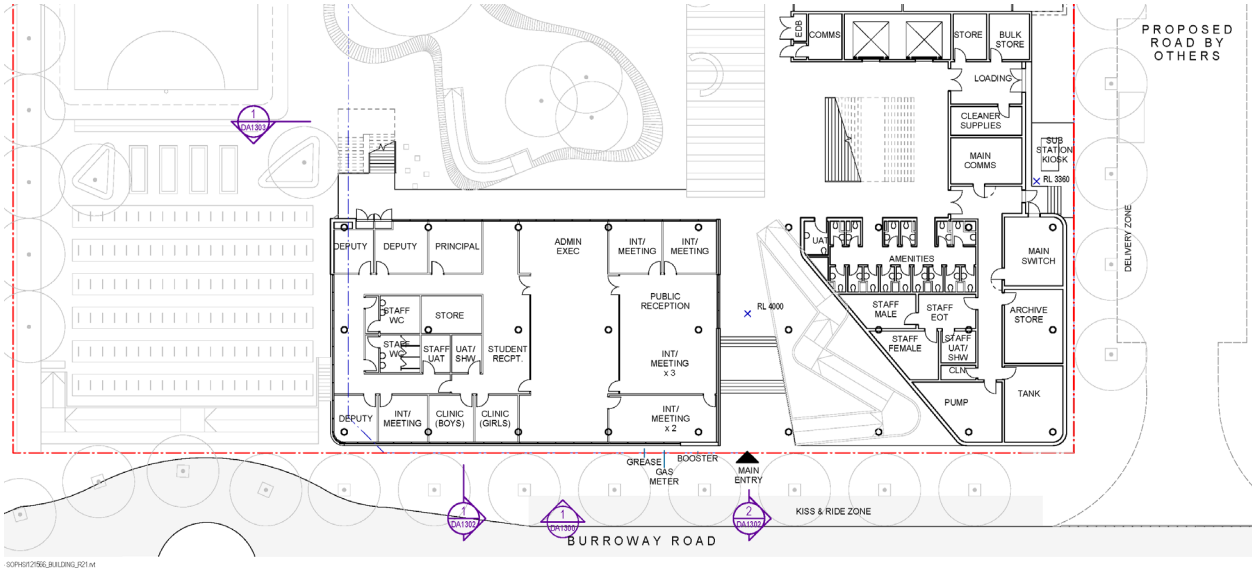
All proposed crossings are located on local roads managed by The City of Parramatta council. Council has recently proposed that on their roads, a raised zebra crossing is an acceptable intervention provided there is a pedestrian volume of 20 pedestrians per hour crossing the road. As a comparison, the existing zebra crossing on Burroway Road near Ferry Wharf Circuit has 438 movements in the AM peak and 332 movements in the PM peak on a weekday.

More than 450 students are expected to walk in Stage 1, with the number nearly doubling when the school is at full capacity in Stage 2. The total crossings on Burroway Road are expected to satisfy the pedestrian volume recommended by the City of Parramatta Council.

3.2.2 Kiss and drop provision

8 kiss ‘n drop spaces will be provided in Stage 1. The 8 spaces will be located along Burroway Road along the frontage of the site (**Figure 3-2**) between the proposed road by others and the roundabout with Wentworth Place.

Figure 3-2 Transport access and parking



Source: Woods Bagot, 2021

A future proposed road by others is planned to be delivered, which would sit east of the site, running north-south. This would provide opportunity for future kerbside uses (such as special needs kiss ‘n drop facilities).

The provision of 8 spaces is considered an appropriate balance between servicing the expected number of cars and encouraging the use of sustainable alternative modes of transport. The proportion of students being dropped off is expected to be low, at 13%, as the school location decreases the attractiveness of driving, with a constrained road network into the peninsula and the need to perform U-turn manoeuvres after students are dropped off. This is complimented by attractive alternatives, including ready access to public transport and a well-established and permeable active transport network.

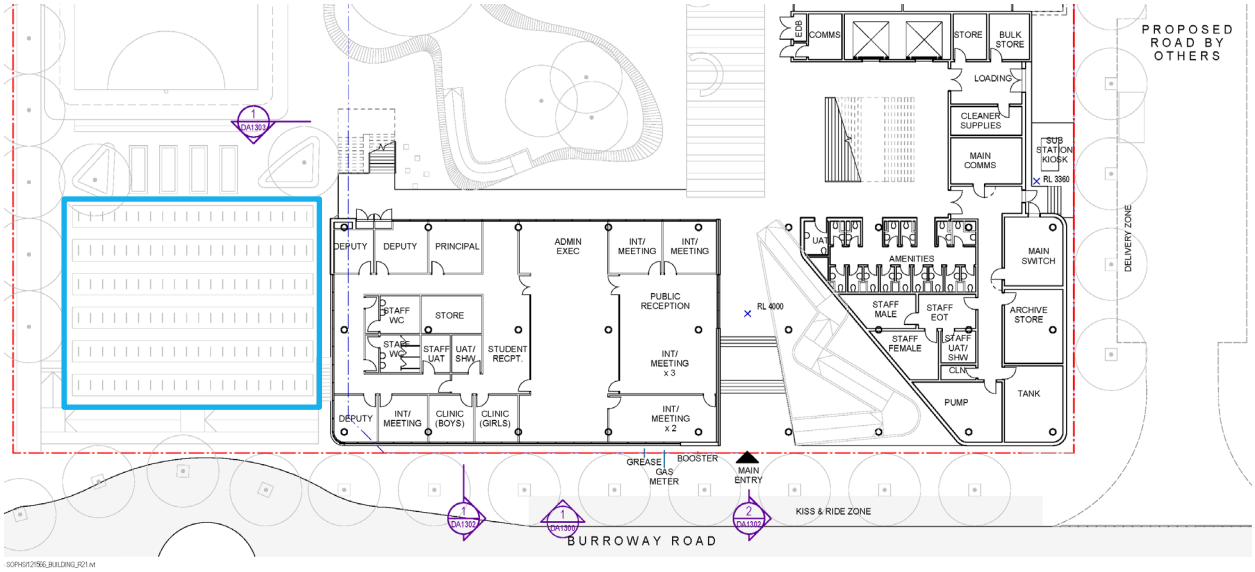
The 8 kiss ‘n drop spaces would be able to accommodate the 190 students forecast based on the mode share within the typical 30 minute window. This would require an average pick up time of 2 minutes per car, which is reasonable for a high school population for both pick up and drop off.

When the proposed road by others is delivered, it could cater for dedicated special needs kiss ‘n drop facilities.

3.2.3 Bicycle/Rideables parking and end of trip facilities

A total of 144 bicycle and rideables parking spaces will be provided in Stage 1, which will be increased to 258 in Stage 2. The parking spaces are located in the south west of the school as illustrated in **Figure 3-3**. An allocation of two-thirds of the space to bicycles and one-third to rideables is proposed to cater for different active transport modes.

Figure 3-3 Location of bicycle and rideables (blue rectangle)



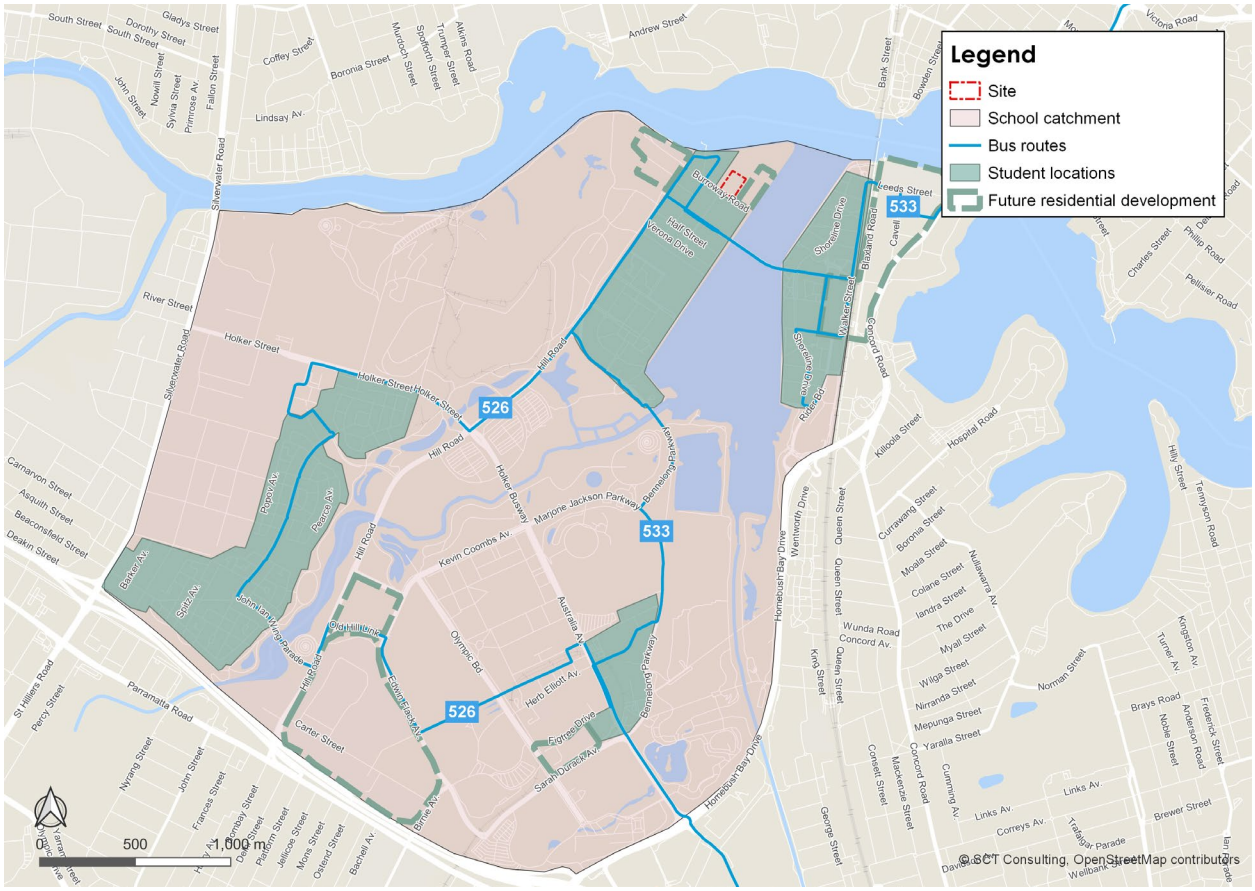
Source: Woods Bagot, annotation by SCT Consulting, 2021

Change rooms and showers for both students and staff will be provided in the design.

3.2.4 Bus access and service frequency

The bus services that currently service the Sydney Olympic Park Peninsula will be used by students to access the new high school. Both bus services link Sydney Olympic Park station to Rhodes via Wentworth Point, with the 526 also servicing the residential area of Newington. Both services stop within 250 metres of the school entrance and will have pedestrian priority access to the site with the provision of new raised zebra crossings. The bus routes and student locations are illustrated in **Figure 3-4**, showing how the existing bus route alignments service the main residential areas.

Figure 3-4 Potential catchment area bus routes with possible student locations

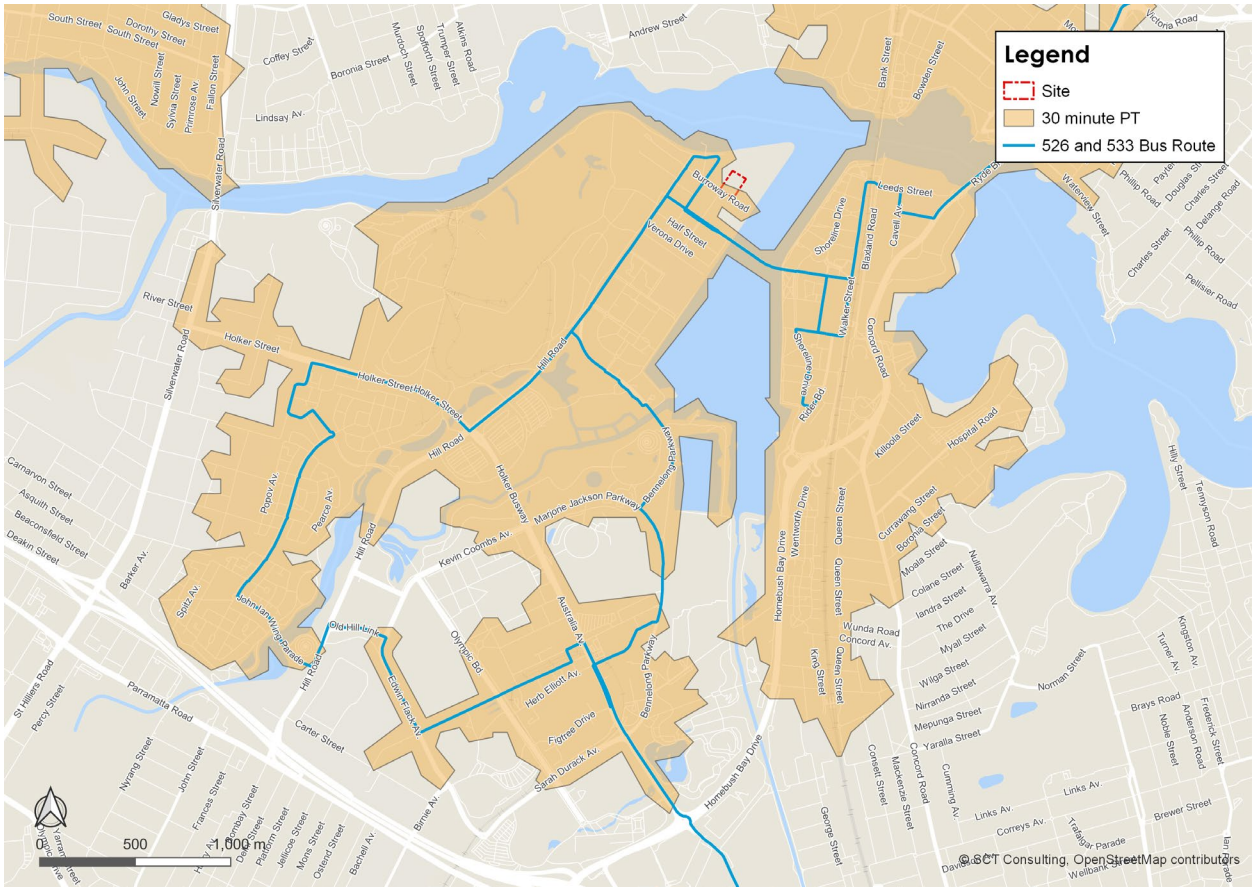


Stage 1 will require the Carter Street residential development to be brought within a 30-minute public transport journey catchment to support the proposed mode share. As shown in **Figure 3-5**, the Carter Street development is located on the edge of a 30-minute public transport catchment and a modification to the stopping pattern may be required to bring the development within 30 minutes of the school.

Stage 2 will require an increase in the frequency of bus services to meet growth in student demand. Initial estimations suggest that one additional bus on route 526 will be sufficient during the peak hours, though the final modifications to the bus services will be determined through further analysis by TfNSW.

These public bus services are supplemented by the Baylink shuttle service, a publicly accessible shuttle bus service provided by Billbergia which runs from Rhodes train station to the southern portion of Wentworth Point every quarter of an hour during peak periods. This shuttle service is not necessary to meet student travel demands but acts to increase the frequency of services to and from the new high school and will not be impacted by commuters as students would be travelling in a counter peak direction.

Figure 3-5 30-minute public transport catchment, AM peak



3.2.5 Transport coordinator

The purpose of a transport coordinator is to promote travel behaviour change in the school community, including in staff, students, and parents. In addition to providing better access, infrastructure, and public transport services, it is important to communicate the availability and benefits of more sustainable modes of transport. A transport coordinator will take responsibility for organising programs and events that promote a mode shift away from cars, and the creation and distribution of communications that raise awareness of this in the school community.

The role of the transport coordinator would include:

– Implementing transport programs to achieve travel behaviour change

– Driving communication of transport options to raise awareness of sustainable transport modes

– Monitor and evaluate the progress of the school in reaching its target mode shares

– Processing of feedback and recommendations from the school community on transport-related matters

– Coordinate initiatives and events to promote mode shift away from cars

– Working closely with the GTP Committee and PCA to identify the needs of the school community

– Reporting of data collection and evaluation to stakeholder groups

A transport coordinator is proposed to be established during the Construction Phase to be in readiness for Day 1 Term 1 2024 School Operations.

4.0 Impacts and Mitigation for The Preferred Option

4.1 Outline of transport networks and operational impacts

This section outlines the impacts of the construction and operation of the proposed high school on the transport network and all transport users.

4.1.1 Construction

The Sydney Olympic Park new highs school is proposed to be delivered by 'Design for Manufacture and Assembly', which is a construction technique.

Design for Manufacture and Assembly

School Infrastructure NSW is committed to using innovative, sustainable, and efficient construction techniques to assist in the delivery of the school upgrade program, which includes the use of Design for Manufacture and Assembly (DfMA) for this school's construction works.

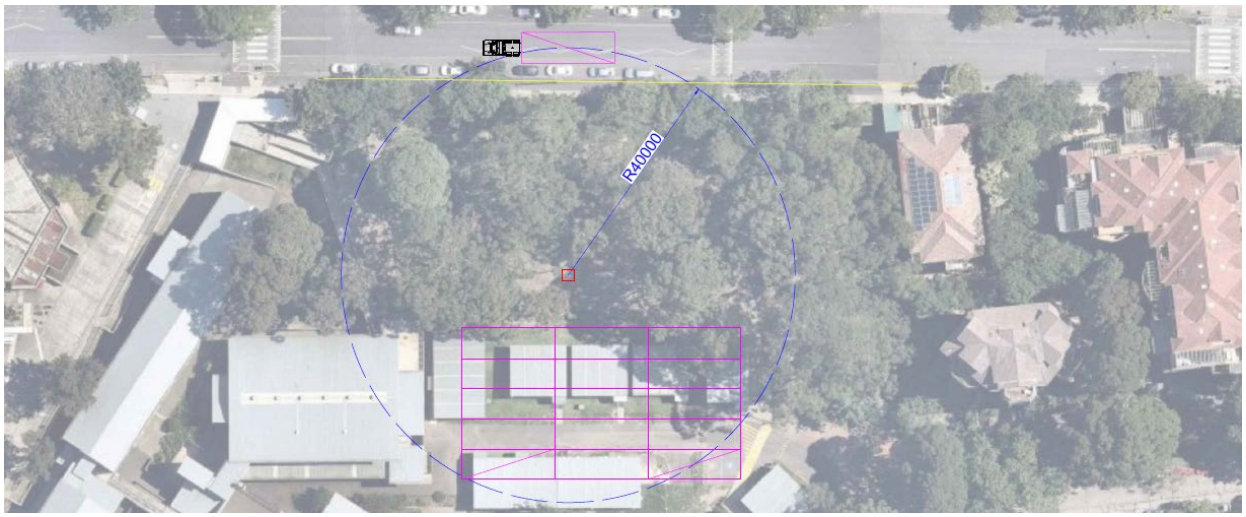
DfMA is a design and construction process that combines the manufacture of building components, such as wall systems and facades, in a factory (off-site) environment, with on-site construction assembly.

The approach has broad benefits, including cost savings, greater scalability, and reduced impacts to operational schools. DfMA relies on the scheduled delivery of building components and modules. When compared to traditional construction methods, DfMA creates less noise, less traffic, less pollution, and less dust which results in less impact to the transport network.

The approach is paired with modular building techniques that establish a grid system of between 4.5-4.9 m – a parameter that works as an optimal module size regarding materials and transport, but also as an optimal spatial requirement for teaching spaces.

Parts are transported to the site, typically in oversize vehicles, and lifted via crane into position, after which they are assembled. It may be possible to drive the vehicle on-site but in many locations with existing schools, the vehicles may need to be unloaded from the street (**Figure 4-1**). The exact location and size of the crane will be determined subject to further consultation with Council, Transport for NSW, and the community.

Figure 4-1 Example oversize vehicle placement relative to building location



Source: School Infrastructure NSW, 2020

Depending on the area available for staging at individual schools, the crane may be able to operate on-site (**Figure 4-2**) or may need to be located on street (**Figure 4-3**).

Figure 4-2 Example plan for crane location on site

Source: School Infrastructure NSW, 2020

Figure 4-3 Example plan for crane location on street

Source: School Infrastructure NSW, 2020

DfMA generally requires significant traffic management such as footpath or road closures but has the benefit of a much shorter construction window.

Preliminary construction management approach

The preliminary construction management approach is explained below. The contractor responsible for delivery will prepare a detailed construction traffic management plan (CTMP), which may need to be approved by relevant authorities before construction commences. The CTMP would usually include Temporary Traffic Management Plans (TTMPs) and a Driver's Code of Conduct.

As the vehicles delivering parts to the site are expected to be oversize, delivery will need to be outside of peak periods, both to minimise impacts to the broader road network but also to reduce the risk of damage to parts.

The haulage route from the state road network to site is proposed to be:

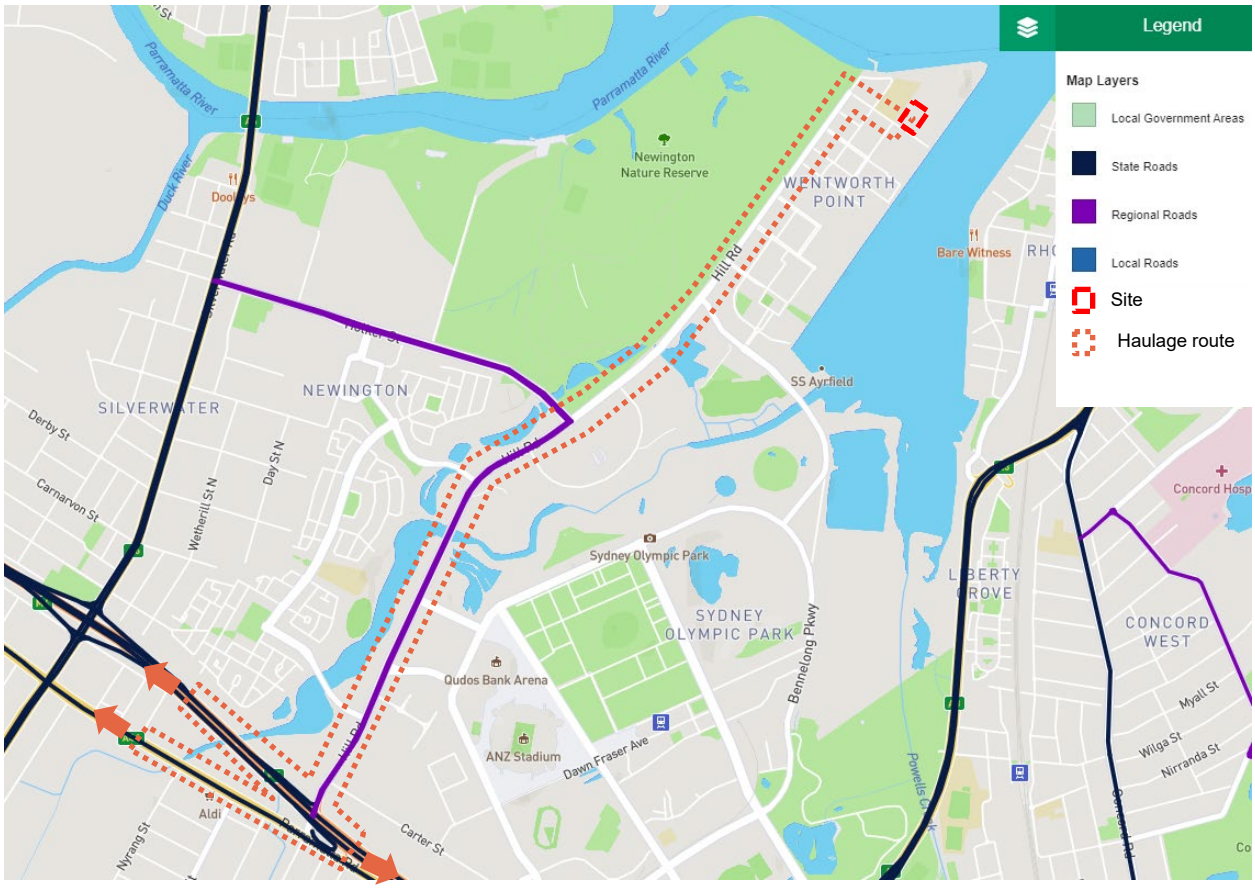
– M4 or Parramatta Road

– Hill Road

– Burroway Road

These routes are highlighted against the road classification supplied in **Figure 4-4**.

Figure 4-4 Location of state and regional roads



Source: TfNSW, 2021

Road safety considerations

Traffic management will require approval from City of Parramatta Council. It is expected that traffic management measures will only be required within the Wentworth Point suburb, which are local or community title roads (**Figure 4-4**).

The contractor will need to define traffic management requirements to ensure the safety of students, staff, parents, and all other transport network users.

Management measures need to be put in place to exclude pedestrian and vehicle conflicts with unloading including crane operations.

Delivery and unloading should avoid commuter peak periods to minimise risks to vehicles and congestion arising from deliveries.

Temporary diversions to footpaths need to provide safe crossing facilities, clear sightlines for vehicles and pedestrians, and even footpaths of at least the width of the footpath replaced. Where this is not achievable in the same corridor, diversions should be proposed in the construction traffic management plan, prepared in consultation with the school.

Construction program

The current program for the project is shown in **Table 4-1**.

Table 4-1 Estimated milestone program summary

Milestone	Estimated completion date
SSDA approval	Q2, 2022
Approval to commence construction	Q2-3, 2022
Early works completed	Mid 2022
Main works completed	Late 2023
Operational commencement	January 2024

This program may adjust over time. The Construction Traffic Management Plan will include the final proposed construction program.

Construction traffic impacts and mitigation

The peak workforce is estimated to be 300 workers on the basis that Stages 1 and 2 being built concurrently. Workers are expected to use light vehicles.

Road network impacts by worker traffic to the site will be mitigated by the construction workers generally starting earlier and finishing earlier than the commuter peak periods and would likely not coincide with the school or road network peak periods. Construction workers will be encouraged to carpool, further reducing the impact on the road network and local parking demands.

So as not to adversely impact upon on-street parking during the construction period, construction worker parking is expected to be managed as follows:

– Construction workers to be encouraged to use Marina Square and Pierside parking lots which have affordable paid parking options

– Potential to use the balance of the land in the TfNSW “Burroway Road” land, being the balance of DP1216628 Lots 203 and 204 for worker parking, subject to landowner’s consent.

These mitigations could reduce the impacts of worker parking on the availability of on-street parking spaces.

Should the TfNSW site not be available for worker parking, there is sufficient capacity in both the Pierside and Marina Square parking. A total of 595 parking spaces are available between the two shopping centres, which are between 70m and 150m from the future construction site. This is more than sufficient for the maximum number of workers on site, given that workers will share vehicles and may also be able to take public transport to site.

Final construction vehicle numbers are still being confirmed. A preliminary estimate of 20 heavy vehicle truck movements is anticipated on a typical day.

The DfMA construction approach is expected to require traffic management measures such as full/partial road closures. Closure would be short compared with traditional construction approaches.

Other mitigation measures would be adopted during the construction phase to ensure traffic movements have minimal impact on surrounding land uses and the community in general. These would include the following:

– Truck loads would be covered during transportation off-site

– Neighbouring properties would be notified of construction works and timing. Any comments would be recorded and taken into consideration when planning construction activities

– All activities, including the delivery of materials, would not impede traffic flow along local roads

– Materials would be delivered, and spoil removed during standard construction hours
– Avoidance of idling trucks alongside sensitive receivers
– Deliveries would be planned to ensure a consistent and minimal number of trucks arriving at the site at any one time.

To manage driver conduct the following measures are to be implemented:

– All truck movements will be scheduled
– Vehicles are to enter and exit the site in a forward direction along the travel path shown on delivery maps
– Drivers are to always give way to pedestrians and plant.

Traffic controllers will be used to stop traffic on the public street(s) to allow trucks to enter or leave the site. Where possible, vehicles must enter and exit the site in a forward direction. They must wait until a suitable gap in traffic allows them to assist trucks to enter or exit the site. The Roads Act does not give any special treatment to trucks leaving a construction site, the vehicles already on the road have the right-of-way. Vehicles entering, exiting, and driving around the site will be required to always give way to pedestrians.

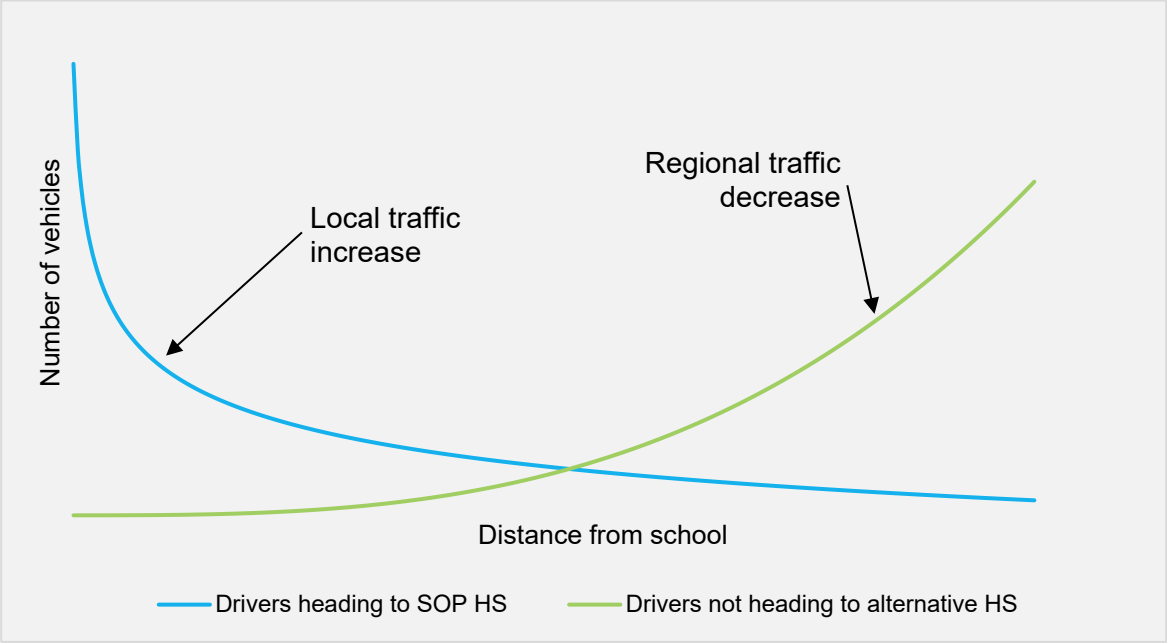
It is not expected that there will be other major concurrent construction activities. The other sites are currently undergoing further planning processes, which mean that construction is unlikely to commence soon. A further review of potential concurrent construction should occur as part of the construction traffic management plan to ensure that this remains the case or that mitigations are proposed.

4.1.2 End state

Trip generation

The school presents an opportunity to reverse the current traffic leaving the peninsula and replace it with more sustainable and efficient modes. At present, high school students in the Olympic Peninsula must leave to find a school – being Strathfield South High School (as an out of area enrolment) or Concord High School (in-area). Travel to these locations would be highly dependent on private vehicle given the long travel distances and limited public transport offerings. From Wentworth Point, for instance, travel time is about 20-30 minutes by car or 50-60 minutes by public transport. With the delivery of this school, that student would be within a less than 20-minute walk of a high school. Delivery of a High School in the peninsula will result in a net reduction of traffic leaving the Olympic Peninsula.

Figure 4-5 Trip generation relationship



It is expected that around the vicinity of the site, there will be an increase in traffic due to kiss ‘n drop movements. Further away from the site, traffic increases switch to traffic decreases. For instance, at the intersections along

Parramatta Road or Underwood Road, there would be a traffic decrease. These intersections currently cater for all of the current high school students who need to head to Concord High School and opt to drive. After the delivery of the new High School, even if these families still opt to drive, they no longer need to use Parramatta Road or Underwood Road – hence a traffic decrease.

Using this principle, vehicle trips to the high school were determined for the full capacity scenario (i.e. Stage 2 operational) to assess end-state intersection performance. As is typical for school planning, an assumption of 1.7 students per car was used, leading to a school-specific trip generation of 112 vehicles in the peak hours. Each trip was added both as inbound and outbound trips, with 80% of students arriving during the peak school hours.

It is estimated that the total traffic generation would be in the order of 300-400 vehicles per day. The Trip Generation and Parking Demand Analysis Report (TfNSW) doesn't have daily traffic generation figures, so this is estimated based on the sum of the two peak periods plus the total number of teachers.

Vehicles are expected to be at least 99% light vehicles.

No modelling was undertaken of the benefits to intersections further away from the school.

Pedestrian trips were also included in the intersection modelling due to the proximity of raised zebra crossings (both proposed and existing) to the modelled network. A total of 1,311 students are expected to use the crossings and pedestrian infrastructure, which includes students who are on active transport modes as well as those using public transport.

Trip distribution

Pedestrians are assumed to use all available access points of the school. Most students are expected to use the main entrance and cross to the south. Wentworth Place provides access to cross Bennelong Bridge and to the nearest retail, while Burroway Road and the proposed park to the north will link the school to the foreshore walk and the shared footpath network. The distribution of pedestrians is shown in **Figure 4-7**.

Figure 4-6 Pedestrian distribution diagram (assuming public park delivery)

Vehicle traffic from the school is expected to use Hill Road as the main road in and out of the peninsula, with 80% of the traffic. The remaining 20% of school traffic is distributed evenly on Wentworth Place and Waterways Street. The expected future traffic of the road network with the high school is shown in **Figure 4-8** and **Figure 4-9**.

Figure 4-7 2031 Forecast intersection turning counts with the new High School (AM peak 8-9 AM)

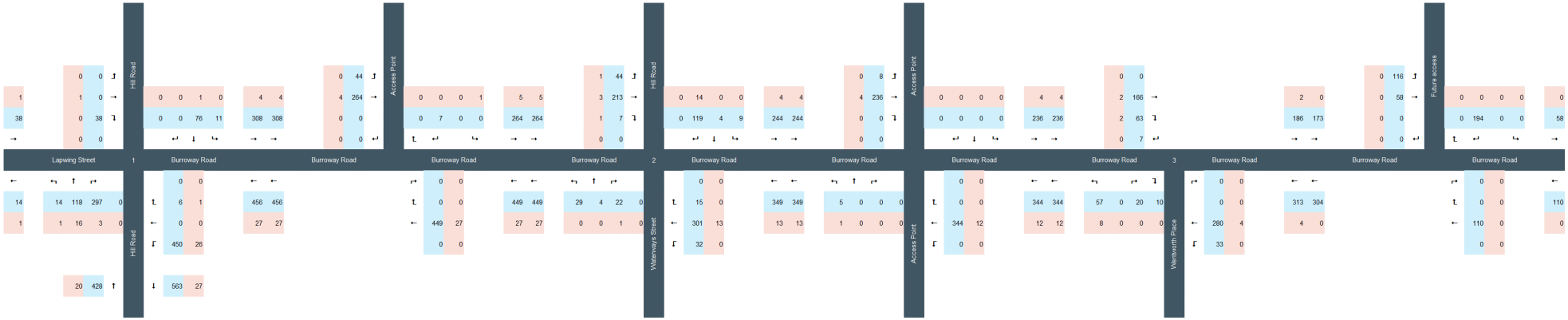
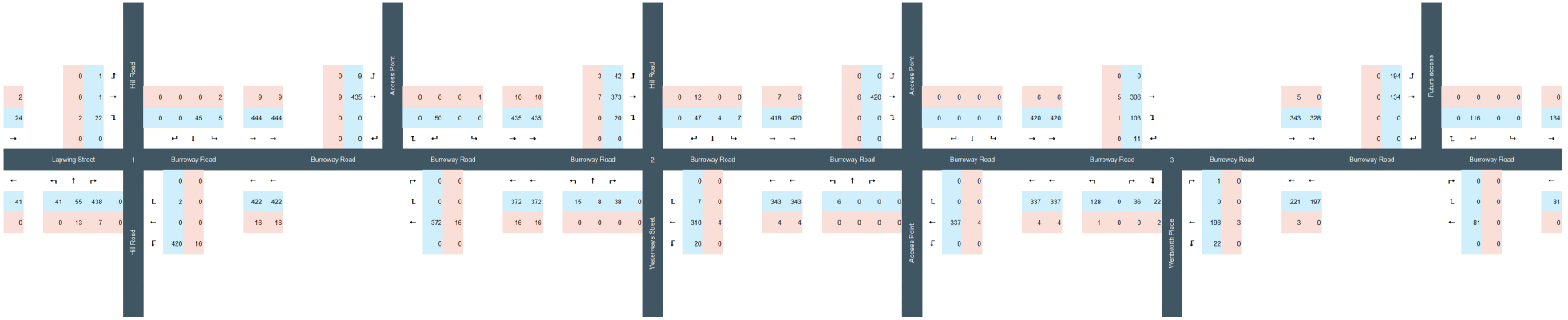


Figure 4-8 2031 Forecast intersection turning counts with the new High School (PM peak 3-4 PM)



End state intersection performance

The two proposed raised zebra crossings on Wentworth Place and Burroway Road were added to the network for analysis. The intersection performance with the new high school in full capacity operation is presented in **Table 4-2**.

Table 4-2 Intersection performance – 2031 New high school fully operational, end state

Intersection	AM Peak				PM Peak			
	Delay	LoS	DoS	Volume	Delay	LoS	DoS	Volume
Lapwing Street / Hill Road	14.0s	A	0.26	1116	12.4s	A	0.29	1128
Burroway Road / Waterway Street	10.2s	A	0.23	876	12.0s	A	0.42	971
Burroway Road / Wentworth Place	6.9s	A	0.26	688	7.1s	A	0.47	882
Zebra Crossing at Burroway Road near Hill Road (E)	10.1s	A	0.85	641	8.8s	A	0.85	813
Zebra Crossing on Wentworth Place at Burroway Road	0.6s	A	0.21	214	0.8s	A	0.47	357
Zebra Crossing on Burroway Road at Wentworth Place	5.1s	A	0.73	558	4.7s	A	0.71	602

Source: SCT Consulting, 2021
Delay = worst movement for priority and roundabout controlled intersections and DoS = degree of saturation of worst movement

All intersections and raised zebra crossing approaches operate at LoS A with the school operating at full capacity. With an increase in car and foot traffic, the new crossing on Burroway Road is necessary to spread out the pedestrian activity from the school site. A single zebra crossing on Burroway Road (as is the existing case) would experience almost continuous pedestrian flow.

A sensitivity test on network performance was completed to consider the scenario if the intersection of Hill Road / Burroway Road was signalised. The signalisation of this intersection was proposed by the Urban Activation Precinct Traffic Impact Assessment commissioned by the Department of Planning and Infrastructure in 2013. Analysis showed that a signalised Hill Road / Burroway Road intersection would perform at LoS B for both AM and PM peak, while all other intersections remained at LoS A.

4.2 Collaboration with state and local government stakeholders

School Infrastructure NSW consulted with the City of Parramatta Council and TfNSW in the preparation of this plan. There is an opportunity for School Infrastructure to fund infrastructure for delivery by the City of Parramatta Council.

5.0 Draft School Transport Plan

5.1.1 Vision and objectives

The purpose of a School Transport Plan is to promote the use of active and sustainable transport modes. It seeks to support the delivery of infrastructure, policy, and programs to meet school travel demand in a way that enhances connectedness to the neighbourhood and community, increases the safety of the journey to school, maximises the use of active and public transport, and reduces car traffic and congestion on the road networks.

The effect of a well-implemented school transport plan should empower children and young people to be safe road users, reduce the administrative burden on schools and meet the Department of Education's duty of care of students which extends beyond the school boundary.

5.1.2 Mode share target

Transport catchment analysis of the student population guided by benchmarking against other high schools in **Section 3.1** proposes the following mode share targets for students:

Table 5-1 Mode share target for students

Mode	Target
Walking	56%
Cycle / Scoot	17%
Bus	14%
Car	13%

Source: SCT Consulting, 2021

5.2 Adopted policies and procedures

5.2.1 Green Travel Plan (GTP) Committee

Green Travel Plan Committee

Overview

The Green Travel Plan Committee aims to build upon and promote sustainable transport initiatives identified in the Green Travel Plan for both staff and students.

The Green Travel Plan Committee would be composed of members of the Parent and Citizen Association and representatives from the City of Parramatta Council and the NSW Department of Education.

The Green Travel Plan Committee would liaise with both internal and external stakeholders such as TfNSW, and NSW Police to inform them of any school initiatives which require their respective expertise and/or funding.

All initiatives would be promoted through newsletters, both internal and external, on the school website and in the classroom.

Investment:

The Sydney Olympic Park new high school will need to set up a GTP Committee which meets at least once on a term basis. The roles are voluntary

Evidence:

Committees ensure multi-party input and fair distribution of allocated tasks. The Green Travel Plan Committee would be important at the inception of any new project because they provide the required leadership, resources, and attentiveness for initiatives to be realised.

5.2.2 Transport information on the website

Transport information on the website

Overview

The aim of providing transport information on the school website is to ensure all staff and parents know where transport relating to the school can be accessed.

The information would be provided either under its specific header on the school website page or found under the 'Location and Transport' sub-header. The information on the website would give an overview of all the active transport initiatives, a Travel Access Guide, and some rules and expectations regarding car parking and kiss and drop.

The information would be updated periodically by the GTP Committee so the information on the website remains topical and relevant.

Investment:

The GTP Committee would coordinate with the NSW Department of Education website team.

Evidence:

Providing clear and easily accessible information allows for wide distribution among the intended audience creating a level of understanding and acceptance.

5.2.3 Bicycle check-up

Bicycle check-up

Overview:

A bicycle check-up would involve an accredited external organisation coming into the school to show both staff and students how to best look after their bikes.

The bicycle check-up can be arranged to occur annually or more periodically in conjunction with other sustainable transport initiatives.

The GTP Committee will promote the event through the school website, newsletter, and the PCA social media. The school could choose to re-promote other active transport initiatives as part of the day to encourage and reinforce a shift away from car travel to and from the school.

These days should be supported by road safety education and could be tied in with the timing of the PDHPE curriculum content on safe walking.

Investment:

Funding for courses is available through the Sporting Schools and Premier Sports Challenge Programs. Successful funding applications could expect to receive an average of $1500-$3500 per term over three consecutive terms.

Evidence:

The implementation of cycling initiatives increased cycling from 2% to 6% at one school in the UK.

5.2.4 Walk Safely to School Day and/or National Ride Day

Walk Safely to School Day and/or National Ride Day

Overview:

Walk Safely to School Day and National Ride Day are Australia-wide coordinated efforts to encourage walking or cycling to school on one day of the year.

The Walk Safely to School Day is organised by the Pedestrian Council of Australia. Their website provides free downable resources and advice to enable schools to host successful events. The event occurs in May each year.

The National Ride Day is coordinated by the Bicycle Network in NSW, the charity encourages schools to register to join a community of other schools taking part in the event. The charity provides free downloadable resources, activities as well as advice on how best to deliver the day and what can be done to maintain momentum.

The GTP Committee will promote the event through the school website, newsletter, and the PCA social media. The school could choose to re-promote other active transport initiatives as part of the day to encourage and reinforce a shift away from car travel to and from the school.

These days should be supported by road safety education and could be tied in with the timing of the PDHPE curriculum content on safe walking.

It will be important to communicate with the City of Parramatta Council as well as the local NSW Police unit to ensure the road rules are correctly followed by cars when interacting with students riding, scooting, or walking to the site.

Investment:

Free resources and advice (potentially funding) are provided on the Bicycle Network website for hosting a National Ride. The GTP Committee would be required to coordinate with the council and police and may wish to register the school with the charity.

Evidence:

The implementation of cycling initiatives increased cycling from 2% to 6% at one school in the UK.

5.2.5 Provision of a Travel Access Guide

Provision of a Travel Access Guide

Overview:

A Travel Access Guide (TAG) is a pamphlet showing school locality and the wider area. The TAG aims to provide staff, parents, and students with useful information about how to access the school safely and efficiently.

The TAG provides an overview of the school site including the location of entrances and cycling facilities. The TAG also includes a wider view of the area including bus routes (including dedicated school services where they exist) and identified walking routes that do not require crossing major roads.

The TAG can be used to decide the location of pickup/drop-off points for the walking school bus or used in future consultation with TfNSW regarding public and school bus routes.

Investment:

The TAG has been completed as part of the GTP process. The TAG should be provided on the school website for staff and parents to easily find. The TAG can also be part of the New starter orientation and handbooks.

See **Appendix C**.

Evidence:

A Travel Access Guide is often part of a GTP to visually communicate and promote sustainable transport initiatives. A TAG also helps new starters develop a greater understanding of the area and opportunities to adopt alternative travel modes to the car.

5.2.6 NSW PDHPE syllabus

NSW PDHPE syllabus

Overview:

The NSW PDHPE syllabus includes content on “healthy, safe and active communities” (or similar) in stages 1 through 5. This includes suggested content on road safety for each stage.

In the delivery of the curriculum, teachers can emphasise safe transport network behaviours through classroom teaching, excursions, assessments, and homework.

Volunteers from the Green Travel Plan Committee will also be able to aid in the delivery of the syllabus.

Investment:

Teacher and classroom time are required to deliver curriculum content on road safety. This will differ depending on how each teacher delivers the content.

Volunteers from the GTP Committee are also able to help teachers in the delivery of the syllabus

Evidence:

As a mandatory part of the NSW primary syllabus, this program helps teach students how to navigate the transport network safely.

5.3 School transport operations

5.3.1 Site transport access

Pedestrians

The key access points to the school will be at the main entrance on Burroway Road and a northern entry point on the new access road east of the school building. **Figure 5-1** illustrates the entry points to the school building,

Figure 5-1 Key pedestrian access points

Source: Woods Bagot, 2021

A potential access gate on the north of the site that connects to the future park is also being investigated. Due to the differences in levels between the playing fields and the park, further design by TfNSW is required to confirm the feasibility and location.

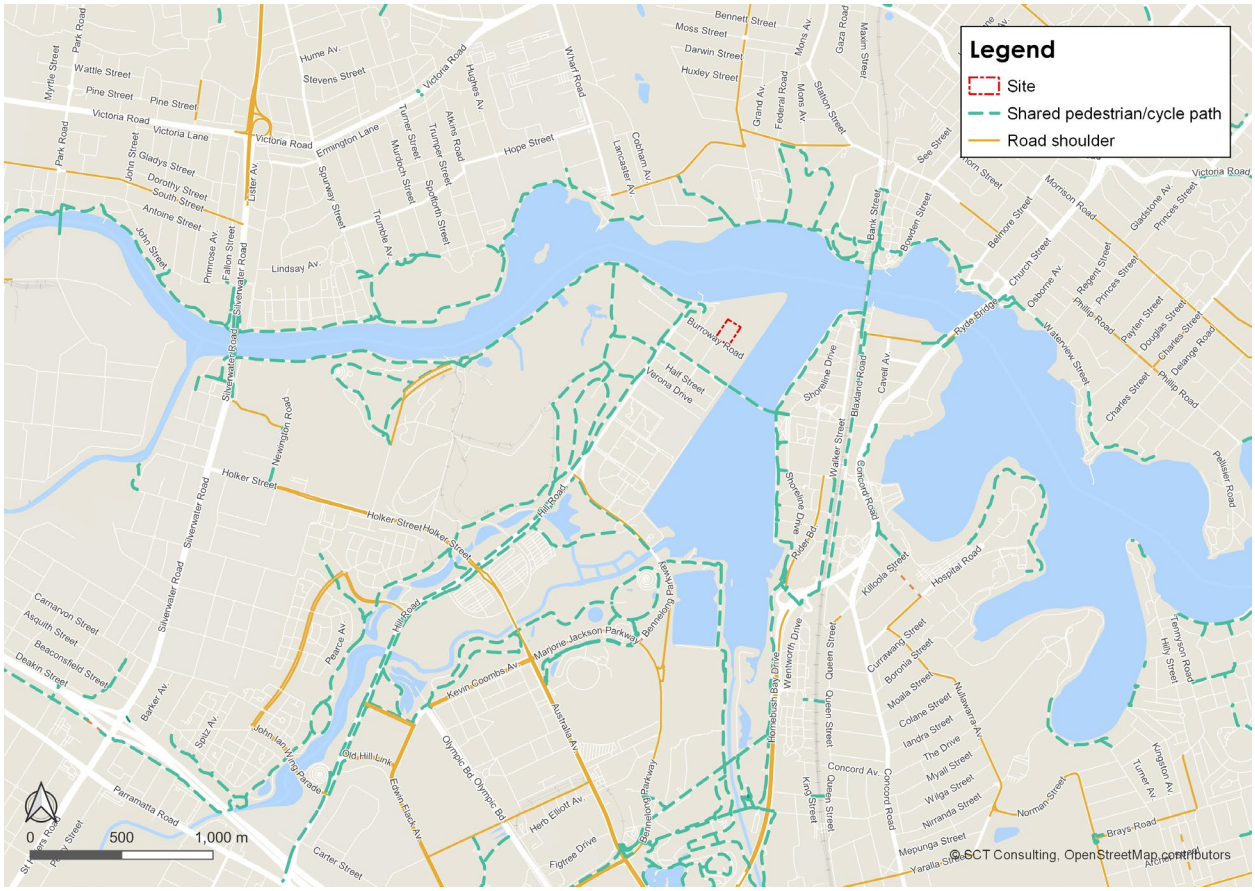
Figure 5-2 shows the surrounding pedestrian network. The pedestrian network is extensive, built on both sides of the road and highly permeable in the vicinity of the school, leading into Rhodes and the rest of Wentworth Point. Raised zebra crossings are proposed to be added to the pedestrian network across the new access road on the east of the school building, across Burroway Road, across Wentworth Place and Footbridge Boulevard.

Figure 5-2 Footpath network and crossing infrastructure

Cycling / rideable network

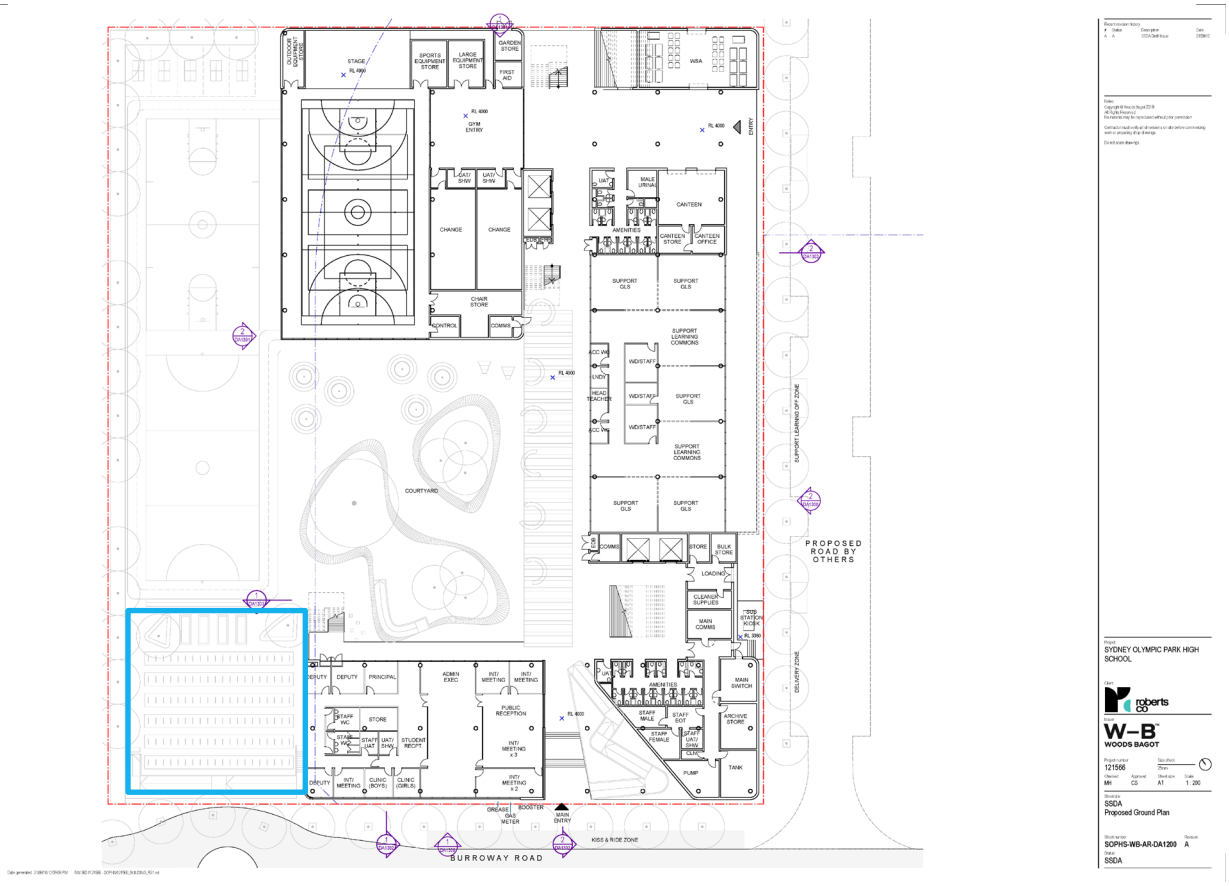
The cycling network in the vicinity consists of shared cyclist/pedestrian paths, with infrastructure connecting the site to the main residential areas in the vicinity of the school including Rhodes, Sydney Olympic Park and Newington. Riders have access to the school building from the parking area as indicated in **Figure 5-7**. According to NSW road rules, children under 16 years old can ride on a footpath for safety purposes, and older children/adults can ride alongside if supervising. This extends the network further for many school students. A map of the surrounding cycling network is provided in **Figure 5-3**.

Figure 5-3 Cycling network and access



Bicycle parking spaces are located in the south west of the site (**Figure 5-4**).

Figure 5-4 Ground floor plan including location of bicycle parking



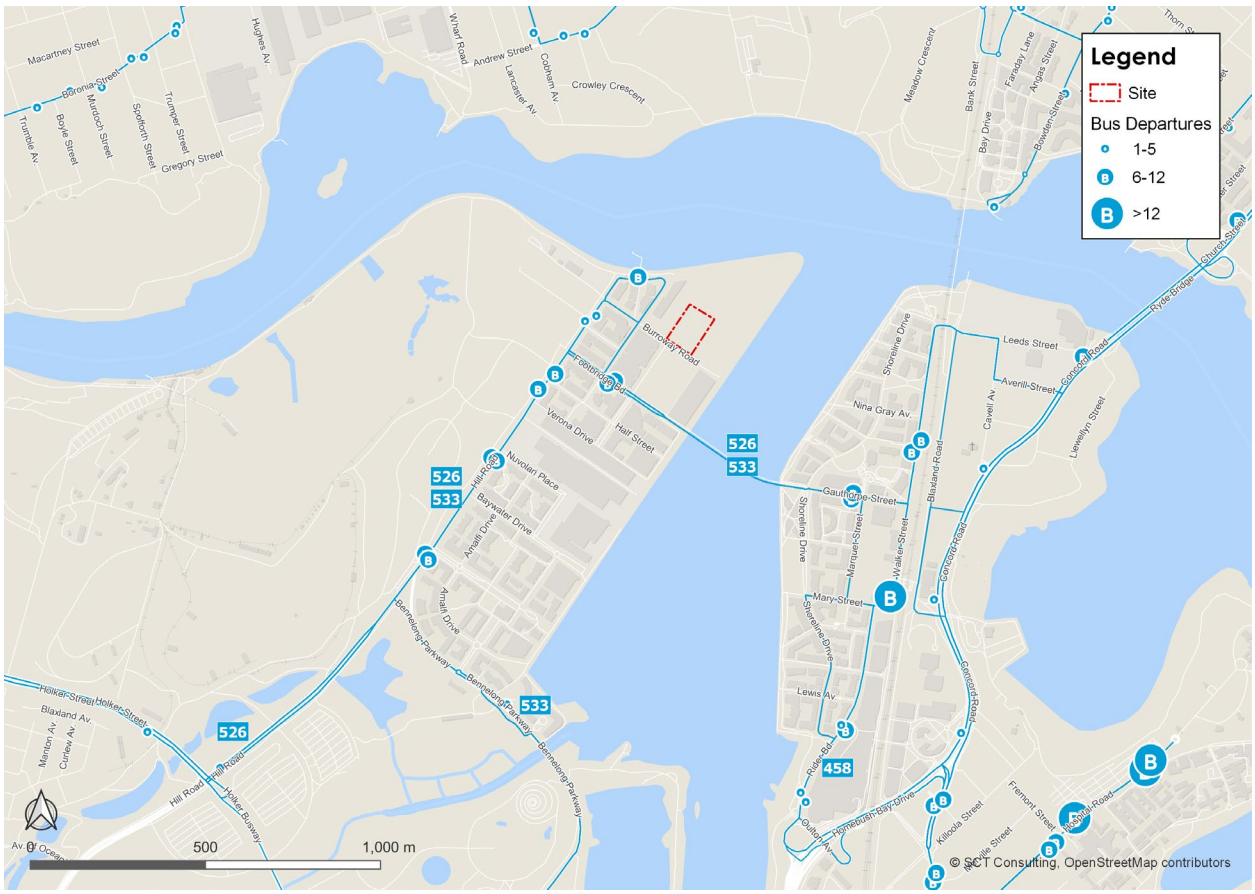
Source: Woods Bagot, annotation by SCT Consulting, 2021

Bus riders

All bus services in the area stop on Footbridge Boulevard outside of Marina Square shopping centre. The bus stop is an uninterrupted, 250m walk from the school entrance with raised pedestrian crossings over road corridors. Two public bus routes, the 526 and 533 bus routes service the area, as well as a community shuttle run by the developer Billbergia which connects Wentworth Point to Rhodes train station. The public bus routes connect the high school to key residential areas in the vicinity of the school including Newington and Sydney Olympic Park.

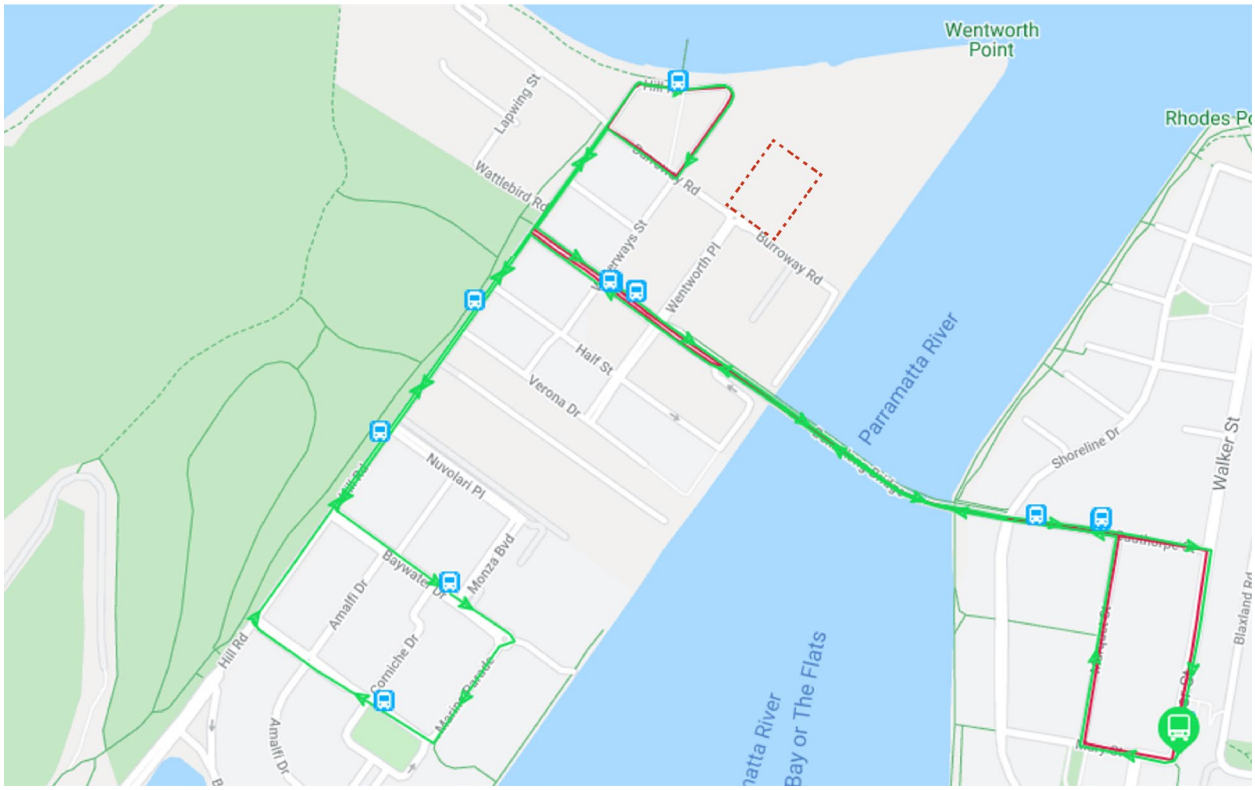
The public bus routes and service frequency at stops during the morning peak are mapped in **Figure 5-5**.

Figure 5-5 Bus routes, stops and frequencies at stops during AM Peak



In addition, Billbergia has funded the Baylink Shuttle, which provides coverage of Wentworth Point and Rhodes.

Figure 5-6 Baylink Shuttle route



As the Baylink Shuttle is temporarily funded, it may not be in operation when the high school commences operation.

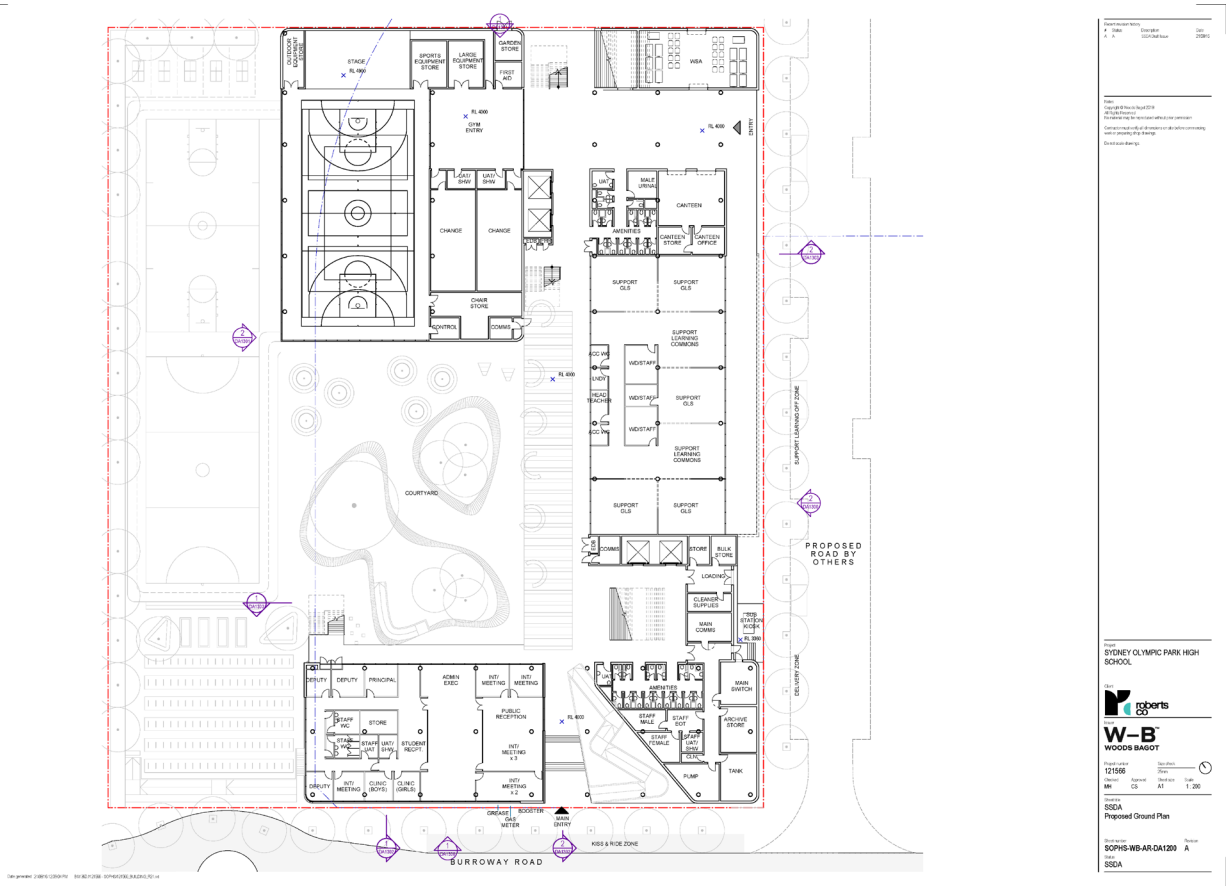
Ferry riders

Ferry riders have unbroken pedestrian priority from Sydney Olympic Park Wharf to the pedestrian access points of the new High School. Ferry services link Wentworth Point to Circular Quay via Parramatta River and provide two services in each direction per hour. With the potential school catchment (enrolment boundary), there is no benefit for student to catch ferries. It is expected that most ferry riders will be staff.

Kiss ‘n drop

All students that arrive by car are expected to be passengers, with no student parking on site. Eight regular Kiss ‘n drop spaces are located on Burroway Road and two special needs drop off spaces on the new access road. This is expected to adequately cater for drop off and pick up demands as the school has a relatively low car mode share. Kiss ‘n drop will occur along the frontage of the school on Burroway Road as shown **Figure 5-7**.

Figure 5-7 Transport and parking locations



Source: Woods Bagot, 2021

Staff car parking

On-site parking – long term

In the long term, 30 off-street shared use parking spaces are provided next to the new access road, east of the playing field will be subject to a Joint Use Arrangement and available for public use outside school hours. These spaces would be used by staff during the day and the public outside of school hours. This gives a staff to car park ratio of 1 staff to 0.25 parking spaces.

The Auburn DCP requires a total of 74 parking spaces, being 13 spaces for Year 12 students and 61 parking spaces for teachers.

Restricted parking supply is one of the strategies employed to encourage the use of more sustainable transport modes available for the school. The carparking attached to the adjacent playing field is intended to be delivered by others for the stage 2 school operations. This means that the DCP rate for teachers is almost satisfied during Stage 1 for teachers (30 spaces provided vs 34 spaces required). As Sydney Metro West is delivered, the additional benefit of that transit frequency will dilute the need for teachers to drive to school, enabling a greater reduction in parking rate provision. The abundance of paid parking options available in the nearby multi-storey retail car parks can supply any deficit in capacity.

In the potential school catchment area, families almost exclusively live in high density residential apartments. Unlike a lower density suburb this will translate to lower car ownership. It is not necessary that parking be supplied for Year 12 students as they are unlikely to have access to vehicles. The abundance of public transport services means that there is no need for students to drive to school.

This transition from a higher to lower parking ratio is appropriate with the delivery of Sydney Metro West. Although the timing is not committed, it is expected that the Metro will be in operation around the time that the school is in the Stage 2 expansion. The Metro will supply a significant increase in public transport access in conjunction with the likely bus operations that would be delivered around any station precinct.

Short term parking

In the short term, prior to the delivery of the 30 parking spaces for Stage 2 school operation, staff will need to use the off-street parking available in nearby commercial car parks. These car parks offer three hours of free parking, providing an alternative for visitor parking to the school and will also provide extra parking capacity for staff during weekdays. These options include:

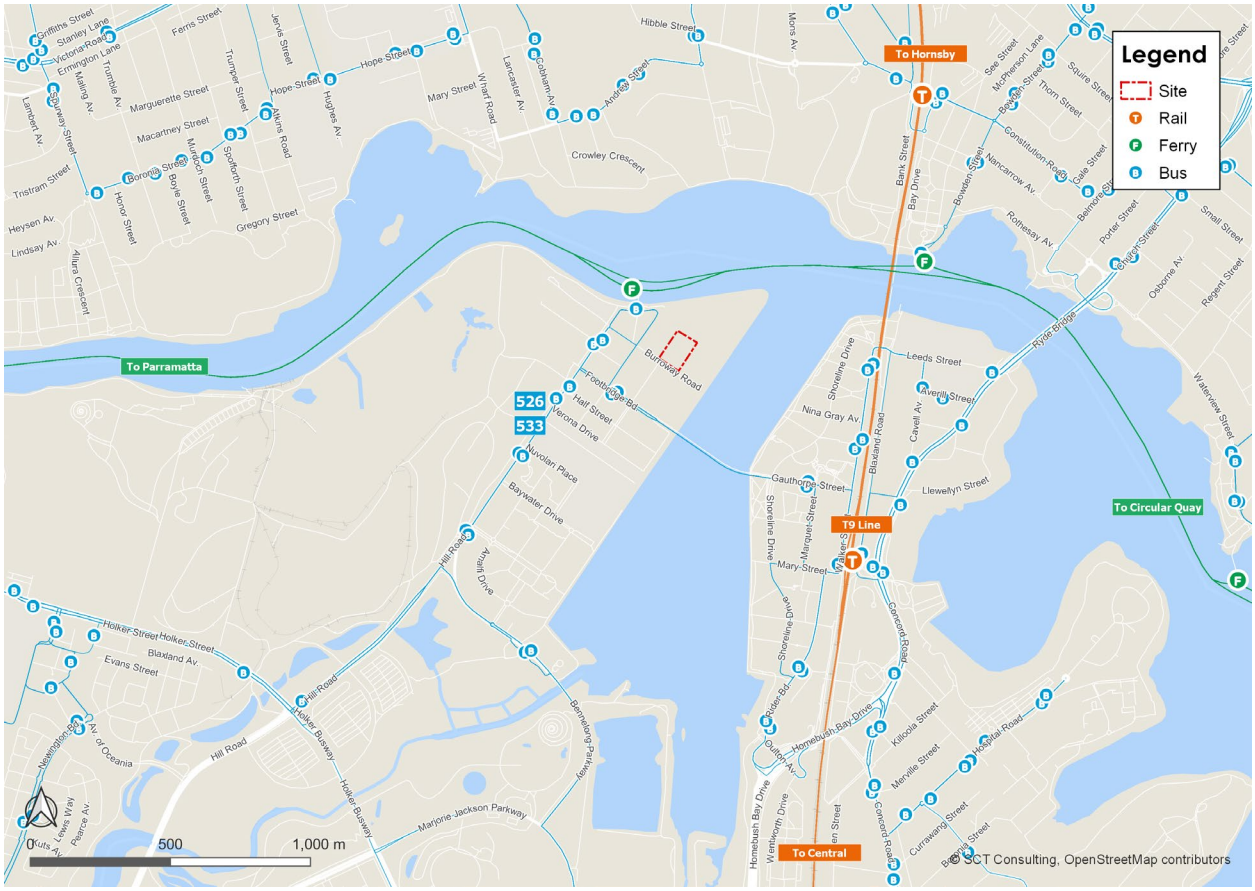
– Pierside: 100 parking spaces 150m from the site, and all-day parking is available for three dollars when booked ahead of time

– Marina Square: 495 parking spaces 70m from the site

Staff access from public transport nodes

Public transport options around the new High School are illustrated in **Figure 5-8**. Bus and ferry services are both within a short walk of the high school with pedestrian priority connections. Staff travelling to the school by train have the option of transferring to the public bus routes, the free community shuttle or walking from Rhodes train station.

Figure 5-8 Public transport around site

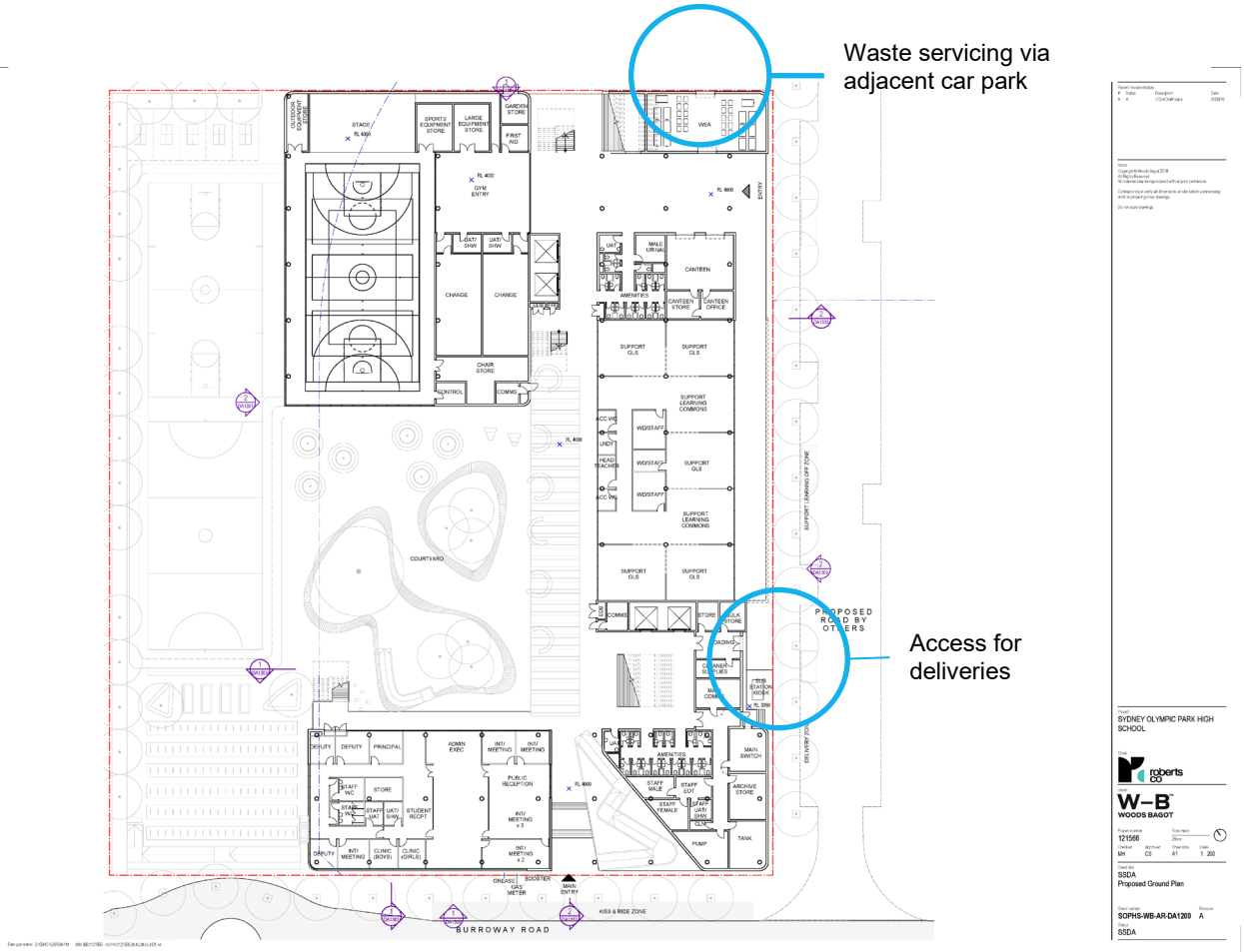


Waste management

The new high school will be serviced via the kerbside from a delivery zone located on the new access road close to lifts and stores. The waste storage is at the northern end of the site, with waste servicing expected to occur off-road from the carpark adjacent to the playing field.

Waste servicing is the car park to be delivered by others per **Figure 5-9**.

Figure 5-9 Waste access



Source: Woods Bagot, 2021

The delivery of the proposed road by others is expected to be completed in time for school operations to commence in 2024.

Department of Education as the future school operator will need to engage a waste contractor who is willing to access the waste in the storage location nominated within the site and transport as required to the collection point (anticipated to be in the carpark adjacent to the playing field)..

Emergency vehicles

Both Burroway Road and the new access road have kerbside parking and access into the school building. No additional docks or parking locations have been reserved for emergency vehicles.

5.3.2 Day-to-day operations

Day to day operations and policies are laid out in **Table 5-2**.

Table 5-2 Day to day operations by mode

Mode	Where provided	Parents / Carers	School
Walking and riding	Onsite: refer to **Figure 5-1** Offsite: footpaths and crossing facilities	**Walking** – Parents/carers are responsible for the student's safety travelling to and from school. **Riding** – For children who wish to ride to school, a helmet should always be worn and should stay away from the road. – Children under 16 years of age can ride on a footpath. An adult rider who is supervising a bicycle rider under 16 may also ride with the young rider on the footpath. Children aged 16 or 17 can ride on the footpath when accompanied by a child under 16 and a supervising adult. Children aged 16 or 17 can ride on the footpath when accompanied by a child under 16 and a supervising adult.	– For the school, learning activities that reinforce being a safe pedestrian are part of the NSW 7-12 PDHPE syllabus. – The school will also publish a Travel Access Guide (**Appendix C**) which is a visual guide advising staff and parents/carers which are the safer routes to the school and the location of road crossings.
Public transport	Offsite bus stops in the locations shown in **Figure 5-8**	– Parents/carers are responsible for the student's safety travelling to and from school.	– The school should provide links to the NSW Department of Education's 'Safe Travel' page on their website to inform and advise parents/carers what is expected of them. – **Appendix C** is a Travel Access Guide indicating the location of bus stops and routes close to the school site.
Driving and Kiss and drop	Offsite in the areas shown in **Figure 5-7**.	– Parents/carers are responsible for the student's safety travelling to and from school. – Parents/carers are advised by NSW DoE and TfNSW to drive cautiously around schools, park legally, and not perform U-turns or three-point turns next to a school. – Parents/carers will be expected to follow the school's instruction regarding kiss and drop.	– The Council will impose time limits on the duration of car parking to prevent congestion around the school which could potentially lead to unsafe parking. – Provide a diagram to illustrate how to use the kiss and drop spaces along Burroway Road before opening. – Staff will supervise the kiss and drop to ensure students safely enter the school and to discourage unsafe driving practices. – Staggered start and end times may be necessary depending on whether the mode shift is achieved. This policy initiative should be periodically reviewed as part of monitoring school transport operations. – The school should provide links to the NSW Department of Education's 'Safe Travel' page on their website to inform and advise

Mode	Where provided	Parents / Carers	School
			parents/carers what is expected of them.
Shared use car park	Staff parking of 30 spaces provided, one of which is a disabled space during school hours and use for playing fields outside of school hours	N/A	– Development of policy to manage the allocation of parking spaces appropriately in partnership with Council. – Policies to be developed to encourage staff to carpool and use public transport.
Deliveries and service vehicles	Waste servicing is provided from the northern end of the site, in the carpark adjacent to the playing field off the new road.	N/A	– Waste collection to occur outside of school morning and evening peaks to minimise conflict with pedestrians.

5.3.3 Event transport operations for Share our Space, hall hire and excursions

The largest event types expected at the school would be events where visitors are invited – such as school gala nights, performances, and speech nights. With the limited parking onsite, it would not be possible to park all the visitors on site. Given the potential school catchment area is expected to be within is within a walking and public transport distance, caretakers should be encouraged to arrive by sustainable means of transport and car-pool where possible. The Transport Access Guide could be provided as a reminder of other ways to access the school than use of private car for drop off.

A location for buses to park is subject to consultation after SSDA lodgement. Potential sites include the bus interchange on Ferry Wharf Circuit and Footbridge Boulevard.

5.4 Communications Plan

5.4.1 Channels

Good communication of the available transport modes, infrastructure and the benefits of sustainable transport options is critical for building uptake of walking, cycling and public transport. The following are suggested channels and strategies to communicate transport information.

Transport information on the website

The aim of providing transport information on the school website is to ensure all staff and parents know where transport relating to the school can be accessed. The information would be provided either under a specific header on the school website page or found under the ‘Location and Transport’ sub-header. The information on the website would give an overview of all the active transport initiatives, a Travel Access Guide, and some rules and expectations regarding car parking and kiss and drop.

The information would be updated periodically by the travel coordinator so the information on the website remains topical and relevant.

New starter orientation

The new starter orientation will provide new staff, students, and parents of students with information regarding public transport routes and times, safe working routes to the school, and expectations surrounding parking on site. The Transport Access Guide provided in **Appendix C** could assist with this requirement.

New starters will be directed to the transport information on the school website and be provided with a physical copy of transport information in the staff handbook. The new starter orientation will also have a guided tour of the school site which will include the location of bicycle parking and end of trip facilities.

Parent and Community Association (PCA) social media

Buy-in from the Parent and Community Association is a major factor in encouraging more sustainable modes of transport, particularly as the travel mode of a student is often the decision of their parents or carers.

Using their social media channels to promote active and public transport modes will raise awareness of these alternatives to car use, influence parents in their decision making of how to send students to school while also increasing the safety of these modes by increasing awareness of these user groups.

School Newsletters / official communication from the principal

Schools often have regular newsletter updates to parents and staff of the various events and highlights occurring during the school year. Newsletter articles that promote and detail the benefits, provision and safety of active and public transport modes would be drafted by the travel coordinator for inclusion in regular newsletter updates.

This should also be implemented on any official social media channels that the school decides to adopt. This channel will help reach parents and staff who may not have been exposed to the content on the school website or PCA social media efforts.

Classroom content

The NSW PDHPE syllabus includes content on “healthy, safe and active communities” (or similar) in stages 1 through 5. This includes suggested content on road safety for each stage.

In the delivery of the curriculum, teachers can emphasise safe transport network behaviours and encourage active transport through classroom teaching, excursions, assessments, and homework.

Awareness days and initiatives

Special days during the school year can be set aside to host and participate in activities that encourage walking or cycling to school. Events such as National Ride or Walk to School Day, or Bicycle check-up days will raise awareness of active transport alternatives and encourage mode shift away from car travel to and from the school.

The school can further extend this initiative by setting aside a short period during the school day for all students to complete a “Journey to School” survey to collect travel data for planning and monitoring purposes.

Assemblies

School assemblies are a core part of school-wide communications and occur regularly in the school timetable. This is a great forum to present information on the benefits of active and public transport options. Assembly segments could include interviewing students or teachers who walk or ride to school.

Provision of a Transport Access Guide

A Travel Access Guide (TAG) is a pamphlet showing school locality and the wider area. The TAG aims to provide staff, parents, and students with useful information about how to access the school safely and efficiently. The TAG is described in more detail in **Section 5.4.3**.

5.4.2 Messages

Messages issued by the travel coordinator role should aim to inform students, parents, and staff about the active and public transport options available to them and their associated benefits. To this end, the following are suggested examples that can be followed.

Goals and expectations of the school community

The target mode share of the school should be shared with students, parents and staff as a goal and expectation that can be worked towards as a community. Each year, the results of the journey to school questionnaire will also be shared as an indication of school performance and compared with the school target.

To further this, the performance of other neighbouring schools can be listed as a competitive comparison to incentivise the school community.

Health and academic benefits of active transport

Maintaining an adequate level of physical activity has a multitude of health benefits that are recognised in studies and academic research. Physical exercise has also been shown to increase academic performance through the improvement of cognitive function such as attention, working memory and executive functions.

Reducing the number of cars on the road also benefits health by reducing toxic emissions that are released by vehicle exhaust.

Active transport infrastructure and journey times

Messages should help raise awareness of the available walking, cycling and rideable infrastructure provided. This can include information and photos of end of trip facilities, parking, the quality of the active transport network and the extent of coverage. Confidence in the quality of the infrastructure available should encourage the school community to take up these transport modes.

To further support this, estimated journey times by active transport modes can be communicated to assist those who are considering these alternatives.

Public transport services and journey times

The available train, bus and ferry services should be presented to the school community. This information will include frequency of services, walking distance of stations and stops from the school site, and journey times to major destinations that the public transport services provide access to.

Environmental benefits of sustainable transport modes

Awareness of the positive externalities of active and public transport modes should be propagated through the school messages on transport alternatives. Benefits include reduced emissions, congestion, and noise, and return of space for recreation, parks and placemaking.

Safety benefits of reducing driving mode share

Children are a vulnerable road user group and are particularly susceptible to collision with vehicle traffic when crossing roads. This causes many parents to choose to drive due to the perceived danger to the child. This further exacerbates the issue for students who may be walking or riding to school.

Messages should encourage parents and carers to refrain from driving to school to reduce the amount of vehicle traffic around the school site and hence decreasing the risk to students arriving by walking or riding.

Contacts for reporting transport issues

A clear channel for complaints, suggestions and enquiries is an important factor in demonstrating a commitment to walking and riding user groups, as well as improving the perceived safety of these modes. School messages should regularly remind parents/carers, students, and staff of the available channels to submit feedback.

5.4.3 Travel Access Guide

A transport access guide is provided in **Appendix C**.

5.5 Data collection and monitoring

5.5.1 Data collection

Data collection is important in monitoring the successful implementation of sustainable transport targets. Data collection ambitions mustn't be overly burdensome or complex to ensure that it can be run by volunteers in the case where a travel coordinator is no longer funded in the long run. An annual Journey to School questionnaire that is sent out to staff and parents (or students) will be organised by the travel coordinator, and should include questions on:

– Mode of transport used to get to school

– What would encourage mode shift to public transport or walking and cycling

– Any suggestions on how to improve the journey to school

– Participation and feedback on specific transport awareness events if applicable

Ideally, the questionnaire would also identify the student so that, if necessary, the data can be paired with student location data for transport catchment and demographic analysis. The survey could be implemented on a set day (such as National walk/ride to school day) to encourage participation and raise awareness of sustainable transport modes.

If funding is available, more detailed data collection can be engaged, such as occupancy checks, audits, site observations, communication strategy hit-rate analysis and the like. This type of data collection should not be expected from a volunteering group.

5.5.2 Program evaluation

The effectiveness of the transport plan will be monitored by the travel coordinator or the Green Travel Plan Committee as well as the PCA. The travel coordinator will monitor how the initiatives are progressing and if any changes are required. The findings of the evaluation should be published on the school website so members of the wider school community can assess progress for themselves.

Results from the annual Journey to School questionnaire will be analysed to produce an annual school mode share. This mode share will be compared to the school target as a measure of performance, and recommendations will be produced from the feedback received in the questionnaire.

Evaluations that require more in-depth data and analysis such as transport catchment analysis, parking occupancy and parking spill over will only be engaged if funding is available.

5.5.3 Report findings

The travel coordinator will report the findings of the School Transport Plan evaluation to the school and will also make it available for SINSW. Recommendations that can be implemented internally, such as improvements to events and communication will be actioned internally, while recommendations that require additional funding or state intervention will be presented to SINSW for consideration. The responsibilities of each stakeholder group are presented in **Table 5-3**.

Table 5-3 Reporting responsibilities by stakeholder group

School Administration	Students / parents	SINSW	State / local government
– Annual update of Journey to School mode share – Consideration of suggestions and recommendations from the annual questionnaire – Evaluate the performance of School Transport Plan in achieving target mode share – Implement or refer to recommended actions because of the evaluation	– Reporting of transport-related issues to travel coordinator / GTP Committee – Reporting of Journey to School data and suggestions during annual questionnaire	– Receive future Green Travel Plans including survey results	– Consideration of issues – Review school and public transport network and service

5.6 Governance framework

The proposed governance framework for the GTP Committee and the initiatives identified in this plan is outlined in **Table 5-4**.

Table 5-4 Internal and external governance

Green Travel Plan Committee	State government	Local government	SINSW/ Department of Education
– Travel coordinator – Parents and Community Association volunteers – City of Parramatta Council representative – Department of Education representative	– Bus operator – TfNSW – Active Travel to Schools – Bus Service Planning – Bus contract manager – Assisted School Transport Program – Subsidised School Transport Scheme	– Manager, Transport Planning – Active Travel – Road Safety Officer – LGA Travel Coordinator – Sustainability	– Principal – Road Safety Education Officer

5.6.1 Travel Coordinator roles and responsibilities

The role of the travel coordinator will be as follows:

– Implementing transport programs to achieve travel behaviour change, as listed in **Section 5.2**.

– Driving communication of transport options to raise awareness of sustainable transport modes

– Monitor and evaluate the progress of the school in reaching its target mode shares

– Processing of feedback and recommendations from the school community on transport-related matters

– Coordinate initiatives and events to promote mode shift away from cars

– Working closely with the GTP Committee and PCA to identify the needs of the school community

– Reporting of data collection and evaluation to stakeholder groups

If funding is not available in the long run for a dedicated travel coordinator, it is suggested that the GTP Committee take on the role of travel coordinator.

5.6.2 Internal school

The travel coordinator and the GTP committee provides insight into all these different types of matters. Representatives from the local council and Department of Education should consult internally regularly to inform the travel coordinator and GTP committee accordingly.

5.6.3 External state and local transport

External state and local transport organisations will be invited where appropriate to help facilitate planning around the school site.

APPENDIX A

Turning count surveys

EST. 1983 austraffic TRAFFIC & TRANSPORT DATA SPECIALISTS

experience
expertise
excellence . . . you can count on

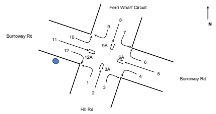
Wentworth Point

Tuesday, 30 March 2021

JOB NUMBER	9285
JOB NAME	Wentworth Point
CLIENT	SCT
SURVEY LOCATIONS	1. Hill Rd and Burroway Rd 2. Burroway Rd and Waterways St 3. Burroway Rd and Wentworth Place
SURVEY TYPE	Intersection Count
SURVEY DATE	Tuesday, 30 March 2021
SURVEY PERIOD	6:00am - 10:00am 2:30pm - 6:30pm
WEATHER	Fine

EST.1983 austraffic TRAFFIC & TRANSPORT DATA SPECIALISTS

Client : SCT
Job : Wentworth Point
Day/Date : Tuesday, 30 March 2021
Survey Location : Hill Rd & Burroway Rd
Weather : Fine



AM

Time Period	Movement 1				Movement 2				Movement 3				Movement 3A				Movement 4				Movement 5				Movement 6				Movement 6A			
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
6:00 - 6:15	1	1	0	2	0	2	0	2	12	2	0	14	0	0	0	0	15	2	0	17	0	0	0	0	0	0	0	0	0	0	0	0
6:15 - 6:30	4	1	0	5	4	1	0	5	13	3	2	18	1	0	0	1	18	4	0	22	0	0	0	0	0	0	0	0	0	0	0	0
6:30 - 6:45	1	0	0	1	7	3	2	12	17	3	2	22	0	0	0	0	15	8	0	23	0	0	0	0	1	0	1	2	0	0	0	0
6:45 - 7:00	4	1	0	5	2	3	0	5	15	1	0	16	0	0	0	0	23	7	0	30	0	0	0	0	0	0	0	0	0	0	0	0
7:00 - 7:15	3	1	0	4	2	2	1	5	18	2	0	20	0	0	0	0	20	8	0	28	0	0	0	0	0	0	0	0	0	0	0	0
7:15 - 7:30	0	0	0	0	7	4	1	12	14	0	0	14	0	0	0	0	29	6	0	35	0	0	0	0	0	0	0	0	0	0	0	0
7:30 - 7:45	0	0	0	0	8	6	0	14	27	1	0	28	0	0	0	0	32	7	1	40	0	0	0	0	2	0	1	3	0	0	0	0
7:45 - 8:00	1	0	0	1	10	2	0	12	27	3	0	30	0	0	0	0	36	5	0	41	0	0	0	0	0	0	1	1	0	0	0	0
8:00 - 8:15	2	0	0	2	9	3	0	12	34	0	0	34	1	0	0	1	35	7	0	42	0	0	0	0	0	0	0	0	0	0	0	0
8:15 - 8:30	1	0	0	1	19	6	1	26	34	2	0	36	0	0	0	0	38	6	0	44	0	0	0	0	1	0	0	1	0	0	0	0
8:30 - 8:45	1	1	0	2	43	5	1	49	33	1	0	34	0	0	0	0	65	4	0	69	0	0	0	0	2	1	0	3	0	0	0	0
8:45 - 9:00	1	0	0	1	38	2	0	40	57	0	0	57	0	0	0	0	69	9	0	78	0	0	0	0	3	0	0	3	1	0	0	1
9:00 - 9:15	1	3	0	4	9	4	0	13	45	2	0	47	0	0	0	0	47	4	0	51	1	0	1	2	0	0	0	0	0	0	0	0
9:15 - 9:30	1	0	0	1	9	2	1	12	34	1	1	36	0	1	0	1	42	5	1	48	1	0	0	1	0	0	0	0	1	0	0	1
9:30 - 9:45	0	1	0	1	5	2	0	7	33	1	1	35	0	0	0	0	38	2	1	41	0	0	0	0	2	0	1	3	0	0	0	0
9:45 - 10:00	2	1	0	3	5	2	0	7	54	4	0	58	0	1	0	1	44	3	0	47	0	0	0	0	1	0	0	1	0	0	0	0
Total	23	10	0	33	177	49	7	233	467	26	6	499	2	2	0	4	566	87	3	656	2	0	1	3	12	1	4	17	2	0	0	2
AM Peak	4	4	0	8	109	17	2	128	169	5	0	174	0	0	0	0	219	23	0	242	1	0	1	2	6	1	0	7	1	0	0	1

Time Period	Movement 7				Movement 8				Movement 9				Movement 9A				Movement 10				Movement 11				Movement 12				Movement 12A				Total of all Movements	Peak Hour Volume Determination	
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total			
6:00 - 6:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	36	6:00 - 7:00	210
6:15 - 6:30	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	6:15 - 7:15	240
6:30 - 6:45	1	0	0	1	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	6:30 - 7:30	255
6:45 - 7:00	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	6:45 - 7:45	281
7:00 - 7:15	1	0	0	1	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	66	7:00 - 8:00	315
7:15 - 7:30	0	0	0	0	1	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3	0	0	0	0	67	7:15 - 8:15	346
7:30 - 7:45	0	0	1	1	2	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	90	7:30 - 8:30	400
7:45 - 8:00	0	0	0	0	5	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	92	7:45 - 8:45	486
8:00 - 8:15	1	0	0	1	2	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	97	8:00 - 9:00	596
8:15 - 8:30	2	0	0	2	10	0	1	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	121	8:15 - 9:15	632
8:30 - 8:45	4	0	0	4	14	1	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	176	8:30 - 9:30	624
8:45 - 9:00	4	0	0	4	14	0	2	16	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	0	0	0	0	202	8:45 - 9:45	548
9:00 - 9:15	4	0	0	4	9	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	133	9:00 - 10:00	465
9:15 - 9:30	0	2	0	2	6	1	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	4	0	0	0	0	113	AM Peak	632
9:30 - 9:45	2	4	0	6	6	0	1	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100		
9:45 - 10:00	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	119		
Total	19	6	1	26	77	5	10	92	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	9	11	0	20	0	0	0	0	1586		
AM Peak	14	0	0	14	47	1	3	51	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	1	0	4	0	0	0	0	632		

PM

Time Period	Movement 1				Movement 2				Movement 3				Movement 3A				Movement 4				Movement 5				Movement 6				Movement 6A			
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
14:30 - 14:45	0	0	0	0	13	5	1	19	50	1	0	51	0	0	0	0	45	8	0	53	0	0	0	0	0	0	0	0	0	0	0	0
14:45 - 15:00	0	3	0	3	19	2	0	21	66	1	0	67	1	0	0	1	56	5	0	61	0	0	0	0	3	0	0	3	0	0	0	0
15:00 - 15:15	1	0	0	1	4	4	0	8	48	1	0	49	0	0	0	0	110	5	0	115	0	0	0	0	1	0	0	1	0	0	0	0
15:15 - 15:30	3	0	0	3	1	1	0	2	51	2	0	53	1	0	0	1	43	2	1	46	0	0	0	0	1	0	1	2	0	0	0	0
15:30 - 15:45	1	0	0	1	6	3	0	9	39	2	0	41	0	0	0	0	55	5	0	60	0	0	0	0	0	0	0	0	0	0	0	0
15:45 - 16:00	0	0	0	0	8	5	1	14	38	2	0	40	0	0	0	0	55	4	0	59	0	0	1	1	0	0	0	0	1	0	0	1
16:00 - 16:15	0	0	0	0	5	3	0	8	42	2	0	44	0	0	0	0	48	2	0	50	0	0	0	0	0	0	0	0	0	0	0	0
16:15 - 16:30	0	0	0	0	6	3	0	9	49	2	0	51	0	0	0	0	44	7	0	51	0	0	0	0	0	0	0	0	0	0	0	0
16:30 - 16:45	0	0	0	0	15	3	1	19	61	1	0	62	2	0	0	2	55	4	0	59	0	0	0	0	1	0	0	1	0	0	0	0
16:45 - 17:00	0	0	0	0	10	4	0	14	53	0	0	53	1	0	0	1	54	3	0	57	0	0	1	1	0	0	0	0	0	0	0	0
17:00 - 17:15	0	0	0	0	18	1	0	19	59	0	0	59	0	0	0	0	68	6	0	74	0	0	0	0	0	0	0	0	0	0	0	0
17:15 - 17:30	1	0	0	1	12	6	0	18	73	1	1	75	0	0	0	0	61	3	0	64	0	0	0	0	0	0	0	0	0	0	0	0
17:30 - 17:45	2	0	0	2	16	4	1	21	62	3	0	65	0	0	0	0	54	4	0	58	0	0	0	0	1	1	0	2	0	0	0	0
17:45 - 18:00	0	0	0	0	13	4	1	18	64	3	0	67	0	0	0	0	69	4	0	73	0	0	1	1	3	0	0	3	0	0	0	0
18:00 - 18:15	2	0	0	2	12	4	1	17	56	0	0	56	0	0	0	0	75	9	0	84	0	0	0	0	1	0	0	1	0	0	0	0
18:15 - 18:30	0	0	0	0	18	4	0	22	73	2	0	75	0	0	0	0	68	5	0	73	0	0	0	0	2	0	0	2	0	0	0	0
Total	10	3	0	13	176	56	6	238	884	23	1	908	5	0	0	5	960	76	1	1037	0	0	3	3	13	1	1	15	1	0	0	1
PM Peak	4	0	0	4	59	16	3	78	255	8	0	263	0	0	0	0	266	22	0	288	0	0	1	1	7	1	0	8	0	0	0	0

Time Period	Movement 7				Movement 8				Movement 9				Movement 9A				Movement 10				Movement 11				Movement 12				Movement 12A				Total of all Movements	Peak Hour Volume Determination	
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total			
14:30 - 14:45	8	0	0	8	6	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	138	14:30 - 15:30	626
14:45 - 15:00	2	0	0	2	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	166	14:45 - 15:45	614
15:00 - 15:15	1	0	0	1	22	0	2	24	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	2	0	4	0	0	0	0	204	15:00 - 16:00	571
15:15 - 15:30	0	0	0	0	6	0	1	7	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	3	0	0	3	0	0	0	0	118	15:15 - 16:15	474
15:30 - 15:45	3	2	0	5	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	126	15:30 - 16:30	474
15:45 - 16:00	1	0	0	1	3	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	123	15:45 - 16:45	505
16:00 - 16:15	3	0	0	3	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	107	16:00 - 17:00	522
16:15 - 16:30	2	0	0	2	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	118	16:15 - 17:15	580
16:30 - 16:45	2	0	0	2	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	157	16:30 - 17:30	637
16:45 - 17:00	6	0	0	6	7	0	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	140	16:45 - 17:45	638
17:00 - 17:15	4	0	0	4	8	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	165	17:00 - 18:00	677
17:15 - 17:30	7	0	0	7	7	0	2	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	175	17:15 - 18:15	691
17:30 - 17:45	2	0	0	2	5	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	158	17:30 - 18:30	693
17:45 - 18:00	6	0	0	6	7	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	0	0	3	0	0	0	0	179	PM Peak	693
18:00 - 18:15	6	0	0	6	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	179		
18:15 - 18:30	2	0	0	2	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	177		
Total	55	2	0	57	113	0	8	121	0	0	0	0	0	0	0	0	1	0	0	1	2	0	3	5	23	3	0	26	0	0	0	0	2430		
PM Peak	16	0	0	16	25	0	1	26	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	7	0	0	7	0	0	0	0	693		

HOURLY FLOW

TIME PERIOD	Movement 1				Movement 2				Movement 3				Movement 3A				Movement 4				Movement 5				Movement 6				Movement 6A			
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
6:00 - 7:00	10	3	0	13	13	9	2	24	57	9	4	70	1	0	0	1	71	21	0	92	0	0	0	0	1	0	1	2	0	0	0	0
6:15 - 7:15	12	3	0	15	15	9	3	27	63	9	4	76	1	0	0	1	76	27	0	103	0	0	0	0	1	0	1	2	0	0	0	0
6:30 - 7:30	8	2	0	10	18	12	4	34	64	6	2	72	0	0	0	0	87	29	0	116	0	0	0	0	1	0	1	2	0	0	0	0
6:45 - 7:45	7	2	0	9	19	15	2	36	74	4	0	78	0	0	0	0	104	28	1	133	0	0	0	0	2	0	1	3	0	0	0	0
7:00 - 8:00	4	1	0	5	27	14	2	43	86	6	0	92	0	0	0	0	117	26	1	144	0	0	0	0	2	0	2	4	0	0	0	0
7:15 - 8:15	3	0	0	3	34	15	1	50	102	4	0	106	1	0	0	1	132	25	1	158	0	0	0	0	2	0	2	4	0	0	0	0
7:30 - 8:30	4	0	0	4	46	17	1	64	122	6	0	128	1	0	0	1	141	25	1	167	0	0	0	0	3	0	2	5	0	0	0	0
7:45 - 8:45	5	1	0	6	81	16	2	99	128	6	0	134	1	0	0	1	174	22	0	196	0	0	0	0	3	1	1	5	0	0	0	0
8:00 - 9:00	5	1	0	6	109	16	2	127	158	3	0	161	1	0	0	1	207	26	0	233	0	0	0	0	6	1	0	7	1	0	0	1
8:15 - 9:15	4	4	0	8	109	17	2	128	169	5	0	174	0	0	0	0	219	23	0	242	1	0	1	2	6	1	0	7	1	0	0	1
8:30 - 9:30	4	4	0	8	99	13	2	114	169	4	1	174	0	1	0	1	223	22	1	246	2	0	1	3	5	1	0	6	2	0	0	2
8:45 - 9:45	3	4	0	7	61	10	1	72	169	4	2	175	0	1	0	1	196	20	2	218	2	0	1	3	5	0	1	6	2	0	0	2
9:00 - 10:00	4	5	0	9	28	10	1	39	166	8	2	176	0	2	0	2	171	14	2	187	2	0	1	3	3	0	1	4	1	0	0	1

TIME PERIOD	Movement 7				Movement 8				Movement 9				Movement 9A				Movement 10				Movement 11				Movement 12				Movement 12A				Grand Total			
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
6:00 - 7:00	1	0	0	1	5	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	160	43	7	210
6:15 - 7:15	2	0	0	2	7	2	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	0	0	0	0	177	55	8	240
6:30 - 7:30	2	0	0	2	7	2	2	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	0	8	0	0	0	0	188	58	9	255
6:45 - 7:45	1	0	1	2	7	1	4	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	7	0	8	0	0	0	0	215	57	9	281
7:00 - 8:00	1	0	1	2	10	2	4	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	0	9	0	0	0	0	249	56	10	315
7:15 - 8:15	1	0	1	2	10	1	6	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	5	0	0	0	0	288	47	11	346
7:30 - 8:30	3	0	1	4	19	1	5	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	341	49	10	400
7:45 - 8:45	7	0	0	7	31	2	3	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	432	48	6	486
8:00 - 9:00	11	0	0	11	40	1	5	46	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	2	0	0	0	0	540	49	7	596
8:15 - 9:15	14	0	0	14	47	1	3	51	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3	1	0	4	0	0	0	0	573	53	6	632
8:30 - 9:30	12	2	0	14	43	2	2	47	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5	3	0	8	0	0	0	0	564	53	7	624
8:45 - 9:45	10	6	0	16	35	1	3	39	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5	3	0	8	0	0	0	0	488	50	10	548
9:00 - 10:00	6	6	0	12	22	1	1	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	0	8	0	0	0	0	407	50	8	465

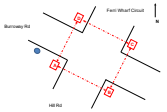
HOURLY FLOW

TIME PERIOD	Movement 1				Movement 2				Movement 3				Movement 3A				Movement 4				Movement 5				Movement 6				Movement 6A			
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
14:30 - 15:30	4	3	0	7	37	12	1	50	215	5	0	220	2	0	0	2	254	20	1	275	0	0	0	0	5	0	1	6	0	0	0	0
14:45 - 15:45	5	3	0	8	30	10	0	40	204	6	0	210	2	0	0	2	264	17	1	282	0	0	0	0	5	0	1	6	0	0	0	0
15:00 - 16:00	5	0	0	5	19	13	1	33	176	7	0	183	1	0	0	1	263	16	1	280	0	0	1	1	2	0	1	3	1	0	0	1
15:15 - 16:15	4	0	0	4	20	12	1	33	170	8	0	178	1	0	0	1	201	13	1	215	0	0	1	1	1	0	1	2	1	0	0	1
15:30 - 16:30	1	0	0	1	25	14	1	40	168	8	0	176	0	0	0	0	202	18	0	220	0	0	1	1	0	0	0	0	1	0	0	1
15:45 - 16:45	0	0	0	0	34	14	2	50	190	7	0	197	2	0	0	2	202	17	0	219	0	0	1	1	1	0	0	1	1	0	0	1
16:00 - 17:00	0	0	0	0	36	13	1	50	205	5	0	210	3	0	0	3	201	16	0	217	0	0	1	1	1	0	0	1	0	0	0	0
16:15 - 17:15	0	0	0	0	49	11	1	61	222	3	0	225	3	0	0	3	221	20	0	241	0	0	1	1	1	0	0	1	0	0	0	0
16:30 - 17:30	1	0	0	1	55	14	1	70	246	2	1	249	3	0	0	3	238	16	0	254	0	0	1	1	1	0	0	1	0	0	0	0
16:45 - 17:45	3	0	0	3	56	15	1	72	247	4	1	252	1	0	0	1	237	16	0	253	0	0	1	1	1	1	0	2	0	0	0	0
17:00 - 18:00	3	0	0	3	59	15	2	76	258	7	1	266	0	0	0	0	252	17	0	269	0	0	1	1	4	1	0	5	0	0	0	0
17:15 - 18:15	5	0	0	5	53	18	3	74	255	7	1	263	0	0	0	0	259	20	0	279	0	0	1	1	5	1	0	6	0	0	0	0
17:30 - 18:30	4	0	0	4	59	16	3	78	255	8	0	263	0	0	0	0	266	22	0	288	0	0	1	1	7	1	0	8	0	0	0	0

TIME PERIOD	Movement 7				Movement 8				Movement 9				Movement 9A				Movement 10				Movement 11				Movement 12				Movement 12A				Grand Total			
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
14:30 - 15:30	11	0	0	11	41	0	3	44	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	6	3	0	9	0	0	0	0	577	43	6	626
14:45 - 15:45	6	2	0	8	40	0	3	43	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	10	3	0	13	0	0	0	0	568	41	5	614
15:00 - 16:00	5	2	0	7	36	0	4	40	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	13	2	0	15	0	0	0	0	523	40	8	571
15:15 - 16:15	7	2	0	9	16	0	2	18	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	11	0	0	11	0	0	0	0	433	35	6	474
15:30 - 16:30	9	2	0	11	15	0	1	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	0	0	0	0	429	42	3	474
15:45 - 16:45	8	0	0	8	20	0	1	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	4	0	0	4	0	0	0	0	462	38	5	505
16:00 - 17:00	13	0	0	13	24	0	1	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	484	34	4	522
16:15 - 17:15	14	0	0	14	30	0	1	31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	2	0	0	0	0	542	34	4	580
16:30 - 17:30	19	0	0	19	32	0	3	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	2	0	0	0	0	597	32	8	637
16:45 - 17:45	19	0	0	19	27	0	4	31	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	2	0	0	2	0	0	0	0	594	36	8	638
17:00 - 18:00	19	0	0	19	27	0	3	30	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	5	0	0	5	0	0	0	0	628	40	9	677
17:15 - 18:15	21	0	0	21	29	0	3	32	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3	7	0	0	7	0	0	0	0	635	46	10	691
17:30 - 18:30	16	0	0	16	25	0	1	26	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	7	0	0	7	0	0	0	0	640	47	6	693

austraffic
TRAFFIC & TRANSPORT DATA SPECIALISTS

Client : SCT
Site : Wentworth Point
Day/Date : Tuesday, 30 March 2021
Survey Location : Hill Rd & Burroway Rd
Weather : Fine



AM

Time Period	A - B			M - A			M - C			C - M			C - B			B - C			M - A			A - M			Total of all Movements	Peak Hour Volume Determination	
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total			
6:00 - 6:15	0	0	0	0	0	0	2	0	2	1	0	1	0	0	0	1	0	1	0	0	0	1	0	1	6	6:00 - 7:00	45
6:15 - 6:30	0	0	0	0	0	0	7	0	7	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0	12	6:15 - 7:15	55
6:30 - 6:45	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	2	3	6:30 - 7:30	66
6:45 - 7:00	0	0	0	0	0	0	13	0	13	0	0	0	15	0	15	0	0	0	0	0	0	1	0	1	24	6:45 - 7:45	87
7:00 - 7:15	0	1	1	0	0	0	2	0	2	0	0	0	3	0	3	1	0	1	0	2	2	1	0	7	16	7:00 - 8:00	84
7:15 - 7:30	1	0	1	0	0	0	6	0	6	1	0	1	0	0	0	0	0	0	2	0	2	6	7	13	29	7:15 - 8:15	84
7:30 - 7:45	2	0	2	0	0	0	6	0	6	0	0	0	0	0	0	1	0	1	2	0	2	7	4	11	22	7:30 - 8:30	89
7:45 - 8:00	1	0	1	0	0	0	12	0	12	0	0	0	0	0	0	4	0	4	1	0	1	9	1	10	31	7:45 - 8:45	111
8:00 - 8:15	0	0	0	0	0	0	4	0	4	0	0	0	3	0	3	3	0	3	2	1	3	4	0	4	17	8:00 - 9:00	122
8:15 - 8:30	0	0	0	0	0	0	5	0	5	0	0	0	4	0	4	0	0	0	9	0	9	2	0	11	29	8:15 - 9:15	124
8:30 - 8:45	0	0	0	0	0	0	6	0	6	2	0	2	4	0	4	1	0	1	2	1	3	8	3	11	34	8:30 - 9:30	114
8:45 - 9:00	2	0	2	0	0	0	5	1	6	0	0	0	3	0	3	11	1	12	2	1	3	13	1	14	43	8:45 - 9:45	100
9:00 - 9:15	0	0	0	0	0	0	3	0	3	3	1	4	2	0	2	2	1	3	2	0	2	5	1	6	25	9:00 - 10:00	70
9:15 - 9:30	0	0	0	0	1	1	4	0	4	1	0	1	0	0	0	2	0	2	0	4	4	5	0	5	17	AM Peak	126
9:30 - 9:45	0	0	0	0	0	0	4	0	4	2	0	2	1	0	1	1	0	1	3	2	5	2	0	2	20		
9:45 - 10:00	0	0	0	1	0	1	1	0	1	4	0	4	2	0	2	2	0	2	2	0	2	3	0	5	18		
Total	6	1	10	1	1	2	81	1	82	26	1	27	33	0	33	33	3	39	30	11	41	77	29	106	327		
AM Peak	3	0	3	0	0	0	19	1	20	6	1	7	13	0	13	17	3	20	15	2	17	30	7	42	126		

PM

Time Period	A - B			M - A			M - C			C - M			C - B			B - C			M - A			A - M			Total of all Movements	Peak Hour Volume Determination	
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total			
14:30 - 14:45	0	0	0	0	0	0	6	0	6	1	0	1	3	1	4	3	0	3	2	2	4	9	1	10	28	14:30 - 15:30	112
14:45 - 15:00	0	0	0	1	0	1	8	0	8	1	0	1	1	0	1	4	0	4	0	1	1	7	1	8	28	14:45 - 15:45	84
15:00 - 15:15	1	0	1	0	0	0	1	0	1	0	0	0	7	1	8	0	0	0	6	0	6	5	0	5	34	15:00 - 16:00	84
15:15 - 15:30	1	0	1	3	0	3	2	0	2	0	0	0	2	0	2	1	0	1	8	1	9	3	1	4	22	15:15 - 16:15	72
15:30 - 15:45	1	0	1	0	0	0	1	0	1	0	0	0	2	0	2	0	1	1	4	0	4	2	1	3	12	15:30 - 16:30	70
15:45 - 16:00	1	0	1	1	0	1	2	1	3	0	0	0	1	1	2	0	0	0	2	1	3	3	1	4	16	15:45 - 16:45	87
16:00 - 16:15	0	0	0	1	0	1	3	3	7	2	0	2	1	0	2	2	1	3	1	0	1	4	1	5	22	16:00 - 17:00	110
16:15 - 16:30	0	0	0	1	0	1	6	0	6	3	0	3	2	0	2	0	0	0	2	1	3	1	1	2	20	16:15 - 17:15	133
16:30 - 16:45	0	0	0	0	0	0	4	2	6	7	0	7	10	0	10	2	1	3	7	1	8	3	2	5	39	16:30 - 17:30	144
16:45 - 17:00	0	0	0	0	0	0	9	0	9	3	0	3	9	0	9	4	0	4	7	0	7	5	1	6	37	16:45 - 17:45	145
17:00 - 17:15	1	0	1	0	0	0	5	2	7	4	0	4	6	0	6	0	1	1	9	0	9	5	4	9	37	17:00 - 18:00	162
17:15 - 17:30	1	0	1	1	0	1	5	0	5	4	0	4	2	1	3	4	0	4	4	1	5	5	1	9	32	17:15 - 18:15	162
17:30 - 17:45	0	0	0	0	0	0	6	0	6	3	1	4	7	1	8	3	2	5	4	3	7	3	1	4	29	17:30 - 18:30	166
17:45 - 18:00	1	0	1	0	0	0	7	0	7	8	3	11	7	0	7	5	3	8	6	3	9	10	2	12	55	PM Peak	166
18:00 - 18:15	1	0	1	2	0	2	7	0	7	5	0	5	4	0	4	4	0	4	5	0	5	4	1	5	36		
18:15 - 18:30	0	0	0	0	0	0	12	0	12	6	0	6	10	0	10	6	0	6	13	4	17	11	4	15	69		
Total	10	0	10	10	0	10	88	7	92	56	4	62	74	7	81	50	9	59	86	21	101	83	23	106	526		
PM Peak	4	0	4	2	0	2	32	0	32	26	4	30	28	1	29	21	5	26	28	10	38	28	8	36	166		

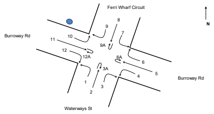
GOLDEN T FLOW

TIME PERIOD	A - B			M - A			M - C			C - M			C - B			B - C			M - A			A - M			Grand Total		
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total
6:00 - 7:00	0	0	0	0	0	0	23	0	23	2	0	2	11	0	11	2	0	2	3	0	3	3	1	4	44	1	45
6:15 - 7:15	0	1	1	0	0	0	22	0	22	1	0	1	14	0	14	2	0	2	3	2	5	3	7	10	45	10	55
6:30 - 7:30	1	1	2	0	0	0	21	0	21	2	0	2	13	0	13	1	0	1	2	2	4	11	15	26	51	17	68
6:45 - 7:45	1	1	2	0	0	0	27	0	27	1	0	1	13	0	13	2	0	2	4	2	6	17	17	34	67	20	87
7:00 - 8:00	1	1	2	0	0	0	26	0	26	1	0	1	3	0	3	5	0	5	5	2	7	25	18	43	73	21	94
7:15 - 8:15	1	0	1	0	0	0	26	0	26	1	0	1	3	0	3	5	0	5	7	1	8	26	13	40	82	13	95
7:30 - 8:30	1	0	1	0	0	0	27	0	27	3	0	3	7	0	7	5	0	5	14	1	15	29	7	36	91	8	99
7:45 - 8:45	0	0	0	0	0	0	27	0	27	0	0	0	11	0	11	11	1	12	14	2	16	30	6	36	102	9	111
8:00 - 9:00	0	0	0	0	0	0	20	1	21	0	0	0	14	0	14	16	2	20	13	3	16	34	6	40	111	12	123
8:15 - 9:15	0	0	0	0	0	0	19	1	20	0	1	1	13	0	13	17	3	20	13	2	15	30	7	42	112	14	126
8:30 - 9:30	0	0	0	0	1	1	16	1	19	0	1	10	8	0	8	19	3	22	6	6	12	31	5	36	97	17	114
8:45 - 9:45	2	0	2	0	1	1	16	1	17	10	1	10	6	0	6	16	2	18	7	7	14	20	7	27	99	14	106
9:00 - 10:00	1	0	1	1	1	2	12	0	12	10	1	10	3	0	3	1	1	2	7	6	13	15	4	19	62	13	75

GOLDEN T FLOW

TIME PERIOD	A - B			M - A			M - C			C - M			C - B			B - C			M - A			A - M			Grand Total		
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total
14:30 - 15:30	2	0	2	4	0	4	17	0	17	7	0	7	13	2	15	17	0	17	19	7	22	24	3	27	130	12	112
14:45 - 15:45	3	0	3	4	0	4	12	0	12	6	0	6	12	1	13	14	1	15	19	3	22	17	3	20	86	10	96
15:00 - 16:00	4	0	4	4	0	4	6	1	7	5	0	5	12	2	14	5	1	6	20	5	25	13	3	16	72	12	84
15:15 - 16:15	3	0	3	5	0	5	10	3	13	2	0	2	6	3	9	5	2	7	15	2	17	12	4	16	58	14	72
15:30 - 16:30	2	0	2	3	0	3	14	3	17	5	0	5	6	3	9	7	2	9	9	2	11	10	4	14	56	14	70
15:45 - 16:45	1	0	1	3	0	3	17	5	22	13	0	13	14	3	17	5	2	11	12	3	15	11	5	16	79	18	97
16:00 - 17:00	0	0	0	2	0	2	23	4	27	15	0	15	22	2	24	11	2	13	17	2	19	13	5	18	103	15	118
16:15 - 17:15	1	0	1	1	0	1	23	4	27	17	0	17	27	0	27	9	2	11	20	2	22	16	6	22	117	16	133
16:30 - 17:30	2	0	2	1	0	1	22	4	26	18	0	18	27	1	28	10	2	12	27	2	29	21	8	29	128	17	145
16:45 - 17:45	2	0	2	1	0	1	24	2	26	19	1	20	24	0	24	11	3	14	24	4	28	21	7	28	126	19	145
17:00 - 18:00	3	0	3	1	0	1	23	2	25	26	4	30	22	2	24	12	4	16	23	7	30	26	8	34	134	29	163
17:15 - 18:15	3	0	3	3	0	3	25	0	25	26	4	30	20	2	22	16	5	21	19	7	26	25	5	30	139	23	162
17:30 - 18:30	4	0	4	2	0	2	32	0	32	26	4	30	28	1	29	21	5	26	28	10	38	28	8	36	171	28	199

EST.1983 austraffic TRAFFIC & TRANSPORT DATA SPECIALISTS



Client	: SCT
Job	: Wentworth Point
Day/Date	: Tuesday, 30 March 2021
Survey Location	: Burroway Rd & Waterways St
Weather	: Fine

AM

Time	Movement 1				Movement 2				Movement 3				Movement 3A				Movement 4				Movement 5				Movement 6				Movement 6A			
Period	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
6:00 - 6:15	1	0	0	1	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	0	0	0
6:15 - 6:30	2	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	3	3	0	6	0	0	0	0	0	0	0	0
6:30 - 6:45	2	0	0	2	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	5	2	1	8	2	0	0	2	0	0	0	0
6:45 - 7:00	5	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4	4	0	8	0	0	1	1	0	0	0	0
7:00 - 7:15	2	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	9	6	0	15	1	0	0	1	0	0	0	0
7:15 - 7:30	2	0	2	4	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	9	2	0	11	1	0	5	6	0	0	0	0
7:30 - 7:45	1	0	0	1	0	0	0	0	2	0	0	2	0	0	0	0	5	0	0	5	11	2	0	13	1	0	2	3	0	0	0	0
7:45 - 8:00	4	0	0	4	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	13	2	2	17	1	0	3	4	0	0	0	0
8:00 - 8:15	5	0	0	5	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	10	4	0	14	2	0	1	3	0	0	0	0
8:15 - 8:30	12	0	0	12	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	15	3	0	18	2	0	6	8	0	0	0	0
8:30 - 8:45	6	0	0	6	2	0	0	2	1	0	0	1	0	0	0	0	2	0	0	2	9	1	0	10	5	0	0	5	0	0	0	0
8:45 - 9:00	6	0	0	6	1	0	1	2	3	0	0	3	0	0	0	0	0	0	0	0	24	5	0	29	6	0	3	9	0	0	0	0
9:00 - 9:15	4	0	0	4	0	0	0	0	2	0	0	2	0	0	0	0	2	0	0	2	14	0	1	15	1	0	0	1	0	0	0	0
9:15 - 9:30	6	0	0	6	3	1	0	4	1	0	0	1	0	0	0	0	1	0	0	1	26	1	0	27	2	0	1	3	0	0	0	0
9:30 - 9:45	4	0	0	4	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	19	0	2	21	1	2	1	4	0	0	0	0
9:45 - 10:00	7	0	0	7	1	0	0	1	3	2	0	5	0	0	0	0	3	0	0	3	27	0	0	27	0	0	1	1	0	0	0	0
Total	69	0	2	71	9	1	1	11	21	3	0	24	1	0	0	1	16	0	0	16	203	36	6	245	25	2	24	51	0	0	0	0
AM Peak	22	0	0	22	6	1	1	8	7	0	0	7	0	0	0	0	5	0	0	5	73	7	1	81	14	0	4	18	0	0	0	0

Time	Movement 7				Movement 8				Movement 9				Movement 9A				Movement 10				Movement 11				Movement 12				Movement 12A				Total of all Movements	Peak Hour Volume Determination	
Period	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total			
6:00 - 6:15	0	0	0	0	0	0	0	0	9	1	0	10	0	0	0	0	1	0	0	1	9	2	0	11	0	0	0	0	0	0	0	0	31	6:00 - 7:00	163
6:15 - 6:30	0	0	1	1	0	0	0	0	9	2	0	11	0	0	0	0	2	0	0	2	8	0	0	8	0	0	2	2	1	0	0	1	34	6:15 - 7:15	182
6:30 - 6:45	3	0	0	3	1	0	1	2	10	2	0	12	0	0	0	0	5	2	0	7	10	2	0	12	1	0	2	3	1	0	0	1	53	6:30 - 7:30	203
6:45 - 7:00	1	1	0	2	1	0	0	1	10	3	0	13	0	0	0	0	1	0	0	1	11	1	0	12	1	0	0	1	0	0	0	0	45	6:45 - 7:45	226
7:00 - 7:15	1	0	2	3	0	0	0	0	7	2	0	9	0	0	0	0	2	0	0	2	13	2	0	15	1	0	0	1	0	0	0	0	50	7:00 - 8:00	255
7:15 - 7:30	0	0	2	2	0	0	0	0	16	4	0	20	0	0	0	0	1	0	0	1	6	0	0	6	2	0	0	2	0	0	0	0	55	7:15 - 8:15	277
7:30 - 7:45	0	0	1	1	1	0	1	2	20	5	0	25	0	0	0	0	2	0	0	2	18	0	1	19	2	0	0	2	1	0	0	1	76	7:30 - 8:30	313
7:45 - 8:00	1	1	0	2	0	0	0	0	17	3	1	21	0	0	0	0	2	1	0	3	18	2	1	21	0	0	0	0	0	0	0	0	74	7:45 - 8:45	348
8:00 - 8:15	1	0	2	3	1	0	0	1	19	3	0	22	0	0	0	0	8	0	0	8	10	0	0	10	2	0	0	2	2	0	0	2	72	8:00 - 9:00	425
8:15 - 8:30	3	0	0	3	0	0	0	0	13	3	0	16	0	0	0	0	6	0	0	6	23	0	0	23	3	1	0	4	0	0	0	0	91	8:15 - 9:15	448
8:30 - 8:45	2	0	3	5	1	0	0	1	44	4	0	48	1	0	0	1	10	1	0	11	16	2	0	18	1	0	0	1	0	0	0	0	111	8:30 - 9:30	449
8:45 - 9:00	3	0	1	4	2	0	0	2	43	4	0	47	0	0	0	0	20	0	1	21	25	1	0	26	1	0	0	1	1	0	0	1	151	8:45 - 9:45	437
9:00 - 9:15	3	0	1	4	2	0	4	6	16	4	0	20	0	0	0	0	4	1	0	5	32	1	0	33	2	0	0	2	1	0	0	1	95	9:00 - 10:00	389
9:15 - 9:30	1	0	0	1	1	1	1	3	7	3	0	10	0	0	0	0	6	2	0	8	23	0	1	24	0	1	0	1	3	0	0	3	92	AM Peak	449
9:30 - 9:45	2	0	8	10	1	0	2	3	12	3	0	15	0	0	0	0	7	4	1	12	22	1	0	23	3	1	0	4	2	0	0	2	99		
9:45 - 10:00	1	0	4	5	0	0	0	0	8	3	0	11	0	0	0	0	6	0	0	6	34	1	0	35	1	0	0	1	1	0	0	1	103		
Total	22	2	25	49	11	1	9	21	260	49	1	310	1	0	0	1	83	11	2	96	278	15	3	296	20	3	4	27	13	0	0	13	1232		
AM Peak	9	0	5	14	6	1	5	12	110	15	0	125	1	0	0	1	40	4	1	45	96	4	1	101	4	1	0	5	5	0	0	5	449		

PM

Time	Movement 1				Movement 2				Movement 3				Movement 3A				Movement 4				Movement 5				Movement 6				Movement 6A			
Period	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
14:30 - 14:45	6	0	0	6	1	0	0	1	3	0	0	3	0	0	0	0	1	0	0	1	23	2	0	25	3	0	3	6	0	0	0	0
14:45 - 15:00	3	0	0	3	0	0	1	1	3	0	0	3	0	0	0	0	3	0	0	3	34	2	0	36	3	0	1	4	0	0	0	0
15:00 - 15:15	6	0	1	7	2	0	1	3	1	0	0	1	0	0	0	0	0	0	0	0	42	1	0	43	1	0	0	1	0	0	0	0
15:15 - 15:30	1	0	0	1	0	0	1	1	3	0	0	3	0	0	0	0	1	0	0	1	31	0	1	32	0	0	1	1	0	0	0	0
15:30 - 15:45	4	0	0	4	1	0	0	1	1	0	0	1	0	0	0	0	2	0	0	2	43	3	0	46	4	0	0	4	0	0	0	0
15:45 - 16:00	4	0	0	4	5	0	0	5	0	0	0	0	0	0	0	0	3	0	0	3	37	0	1	38	2	0	3	5	0	0	0	0
16:00 - 16:15	5	0	0	5	0	0	0	0	2	0	0	2	0	0	0	0	1	0	0	1	31	0	0	31	0	0	2	2	0	0	0	0
16:15 - 16:30	3	0	0	3	0	0	0	0	4	0	0	4	0	0	0	0	5	0	0	5	32	3	0	35	5	0	3	8	0	0	0	0
16:30 - 16:45	3	0	1	4	0	0	0	0	2	0	0	2	0	0	0	0	1	0	0	1	38	0	0	38	1	0	1	2	0	0	0	0
16:45 - 17:00	9	0	1	10	4	0	0	4	5	0	0	5	0	0	0	0	0	0	0	0	34	1	1	36	1	0	0	1	0	0	0	0
17:00 - 17:15	7	0	0	7	1	0	0	1	6	0	0	6	0	0	0	0	2	0	0	2	34	2	0	36	2	0	5	7	0	0	0	0
17:15 - 17:30	3	0	0	3	1	0	0	1	6	0	0	6	0	0	0	0	5	0	0	5	43	0	0	43	5	0	2	7	1	0	0	1
17:30 - 17:45	3	0	1	4	1	0	0	1	3	0	0	3	0	0	0	0	2	0	0	2	34	0	0	34	2	0	7	9	0	0	0	0
17:45 - 18:00	9	0	0	9	0	0	0	0	4	0	0	4	0	0	0	0	7	0	0	7	47	1	1	49	6	0	1	7	0	0	0	0
18:00 - 18:15	7	0	1	8	4	0	1	5	7	0	0	7	0	0	0	0	6	0	0	6	44	4	0	48	1	0	5	6	0	0	0	0
18:15 - 18:30	7	0	0	7	3	0	1	4	2	0	0	2	0	0	0	0	1	0	0	1	43	0	0	43	0	0	1	1	0	0	0	0
Total	80	0	5	85	23	0	5	28	52	0	0	52	0	0	0	0	40	0	0	40	590	19	4	613	36	0	35	71	1	0	0	1
PM Peak	22	0	2	24	6	0	1	7	20	0	0	20	0	0	0	0	20	0	0	20	168	5	1	174	14	0	15	29	1	0	0	1

Time	Movement 7				Movement 8				Movement 9				Movement 9A				Movement 10				Movement 11				Movement 12				Movement 12A				Total of all Movements	Peak Hour Volume Determination	
Period	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total			
14:30 - 14:45	1	0	0	1	3	0	2	5	12	7	0	19	0	0	0	0	15	0	0	15	24	1	0	25	4	0	0	4	2	0	0	2	113	14:30 - 15:30	469
14:45 - 15:00	2	0	2	4	2	0	0	2	13	3	0	16	1	0	0	1	8	0	0	8	27	0	0	27	6	0	3	9	0	0	0	0	117	14:45 - 15:45	473
15:00 - 15:15	1	0	0	1	1	0	0	1	27	4	0	31	0	0	0	0	11	0	0	11	38	2	1	41	5	0	0	5	2	0	0	2	147	15:00 - 16:00	469
15:15 - 15:30	2	0	0	2	0	0	0	0	6	1	0	7	0	0	0	0	11	0	0	11	26	2	0	28	5	0	0	5	0	0	0	0	92	15:15 - 16:15	420
15:30 - 15:45	2	0	1	3	1	0	0	1	8	3	0	11	0	0	0	0	13	2	0	15	23	1	1	25	4	0	0	4	0	0	0	0	117	15:30 - 16:30	455
15:45 - 16:00	2	0	1	3	2	0	0	2	6	4	0	10	0	0	0	0	7	1	0	8	24	2	0	26	6	0	0	6	3	0	0	3	113	15:45 - 16:45	463
16:00 - 16:15	2	0	2	4	3	0	0	3	5	2	0	7	0	0	0	0	10	0	0	10	23	1	0	24	7	0	2	9	0	0	0	0	98	16:00 - 17:00	473
16:15 - 16:30	4	0	0	4	1	0	0	1	7	4	0	11	0	0	0	0	18	1	0	19	32	1	0	33	4	0	0	4	0	0	0	0	127	16:15 - 17:15	521
16:30 - 16:45	2	1	0	3	2	0	0	2	10	4	0	14	0	0	0	0	14	1	0	15	30	1	0	31	9	0	3	12	1	0	0	1	125	16:30 - 17:30	561
16:45 - 17:00	3	0	0	3	3	0	0	3	6	1	0	7	0	0	0	0	10	0	0	10	38	0	0	38	4	0	2	6	0	0	0	0	123	16:45 - 17:45	580
17:00 - 17:15	5	0	1	6	1	0	0	1	16	4	0	20	0	0	0	0	14	0	0	14	31	0	1	32	14	0	0	14	0	0	0	0	146	17:00 - 18:00	619
17:15 - 17:30	4	1	0	5	5	0	0	5	12	3	0	15	0	0	0	0	25	0	1	26	44	1	1	46	4	0	0	4	0	0	0	0	167	17:15 - 18:15	644
17:30 - 17:45	3	1	1	5	6	0	1	7	11	5	0	16	0	0	0	0	14	2	0	16	40	1	0	41	6	0	0	6	0	0	0	0	144	17:30 - 18:30	625
17:45 - 18:00	2	0	3	5	4	0	1	5	13	3	0	16	0	0	0	0	14	0	0	14	32	3	2	37	9	0	0	9	0	0	0	0	162	PM Peak	644
18:00 - 18:15	3	0	0	3	1	0	0	1	18	5	0	23	0	0	0	0	14	0	0	14	43	0	0	43	4	0	3	7	0	0	0	0	171		
18:15 - 18:30	5	0	0	5	5	0	1	6	11	5	0	16	0	0	0	0	15	0	0	15	38	1	2	41	7	0	0	7	0	0	0	0	148		
Total	43	3	11	57	40	0	5	45	181	58	0	239	1	0	0	1	213	7	1	221	513	17	8	538	98	0	13	111	8	0	0	8	2110		
PM Peak	12	2	4	18	16	0	2	18	54	16	0	70	0	0	0	0	67	2	1	70	159	5	3	167	23	0	3	26	0	0	0	0	644		

HOURLY FLOW

TIME PERIOD	Movement 1				Movement 2				Movement 3				Movement 3A				Movement 4				Movement 5				Movement 6				Movement 6A			
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
6:00 - 7:00	10	0	0	10	0	0	0	0	3	0	0	3	1	0	0	1	1	0	0	1	17	10	1	28	2	0	1	3	0	0	0	0
6:15 - 7:15	11	0	0	11	0	0	0	0	3	0	0	3	1	0	0	1	1	0	0	1	21	15	1	37	3	0	1	4	0	0	0	0
6:30 - 7:30	11	0	2	13	1	0	0	1	3	0	0	3	0	0	0	0	3	0	0	3	27	14	1	42	4	0	6	10	0	0	0	0
6:45 - 7:45	10	0	2	12	1	0	0	1	4	0	0	4	0	0	0	0	8	0	0	8	33	14	0	47	3	0	8	11	0	0	0	0
7:00 - 8:00	9	0	2	11	1	0	0	1	6	0	0	6	0	0	0	0	7	0	0	7	42	12	2	56	4	0	10	14	0	0	0	0
7:15 - 8:15	12	0	2	14	1	0	0	1	5	1	0	6	0	0	0	0	7	0	0	7	43	10	2	55	5	0	11	16	0	0	0	0
7:30 - 8:30	22	0	0	22	1	0	0	1	5	1	0	6	0	0	0	0	5	0	0	5	49	11	2	62	6	0	12	18	0	0	0	0
7:45 - 8:45	27	0	0	27	3	0	0	3	4	1	0	5	0	0	0	0	2	0	0	2	47	10	2	59	10	0	10	20	0	0	0	0
8:00 - 9:00	29	0	0	29	4	0	1	5	5	1	0	6	0	0	0	0	2	0	0	2	58	13	0	71	15	0	10	25	0	0	0	0
8:15 - 9:15	28	0	0	28	4	0	1	5	6	0	0	6	0	0	0	0	4	0	0	4	62	9	1	72	14	0	9	23	0	0	0	0
8:30 - 9:30	22	0	0	22	6	1	1	8	7	0	0	7	0	0	0	0	5	0	0	5	73	7	1	81	14	0	4	18	0	0	0	0
8:45 - 9:45	20	0	0	20	4	1	1	6	7	0	0	7	0	0	0	0	3	0	0	3	83	6	3	92	10	2	5	17	0	0	0	0
9:00 - 10:00	21	0	0	21	4	1	0	5	7	2	0	9	0	0	0	0	6	0	0	6	86	1	3	90	4	2	3	9	0	0	0	0

TIME PERIOD	Movement 7				Movement 8				Movement 9				Movement 9A				Movement 10				Movement 11				Movement 12				Movement 12A				Grand Total			
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
6:00 - 7:00	4	1	1	6	2	0	1	3	38	8	0	46	0	0	0	0	9	2	0	11	38	5	0	43	2	0	4	6	2	0	0	2	129	26	8	163
6:15 - 7:15	5	1	3	9	2	0	1	3	36	9	0	45	0	0	0	0	10	2	0	12	42	5	0	47	3	0	4	7	2	0	0	2	140	32	10	182
6:30 - 7:30	5	1	4	10	2	0	1	3	43	11	0	54	0	0	0	0	9	2	0	11	40	5	0	45	5	0	2	7	1	0	0	1	154	33	16	203
6:45 - 7:45	2	1	5	8	2	0	1	3	53	14	0	67	0	0	0	0	6	0	0	6	48	3	1	52	6	0	0	6	1	0	0	1	177	32	17	226
7:00 - 8:00	2	1	5	8	1	0	1	2	60	14	1	75	0	0	0	0	7	1	0	8	55	4	2	61	5	0	0	5	1	0	0	1	200	32	23	255
7:15 - 8:15	2	1	5	8	2	0	1	3	72	15	1	88	0	0	0	0	13	1	0	14	52	2	2	56	6	0	0	6	3	0	0	3	223	30	24	277
7:30 - 8:30	5	1	3	9	2	0	1	3	69	14	1	84	0	0	0	0	18	1	0	19	69	2	2	73	7	1	0	8	3	0	0	3	261	31	21	313
7:45 - 8:45	7	1	5	13	2	0	0	2	93	13	1	107	1	0	0	1	26	2	0	28	67	4	1	72	6	1	0	7	2	0	0	2	297	32	19	348
8:00 - 9:00	9	0	6	15	4	0	0	4	119	14	0	133	1	0	0	1	44	1	1	46	74	3	0	77	7	1	0	8	3	0	0	3	374	33	18	425
8:15 - 9:15	11	0	5	16	5	0	4	9	116	15	0	131	1	0	0	1	40	2	1	43	96	4	0	100	7	1	0	8	2	0	0	2	396	31	21	448
8:30 - 9:30	9	0	5	14	6	1	5	12	110	15	0	125	1	0	0	1	40	4	1	45	96	4	1	101	4	1	0	5	5	0	0	5	398	33	18	449
8:45 - 9:45	9	0	10	19	6	1	7	14	78	14	0	92	0	0	0	0	37	7	2	46	102	3	1	106	6	2	0	8	7	0	0	7	372	36	29	437
9:00 - 10:00	7	0	13	20	4	1	7	12	43	13	0	56	0	0	0	0	23	7	1	31	111	3	1	115	6	2	0	8	7	0	0	7	329	32	28	389

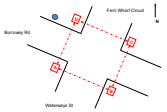
HOURLY FLOW

TIME PERIOD	Movement 1				Movement 2				Movement 3				Movement 3A				Movement 4				Movement 5				Movement 6				Movement 6A			
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
14:30 - 15:30	16	0	1	17	3	0	3	6	10	0	0	10	0	0	0	0	5	0	0	5	130	5	1	136	7	0	5	12	0	0	0	0
14:45 - 15:45	14	0	1	15	3	0	3	6	8	0	0	8	0	0	0	0	6	0	0	6	150	6	1	157	8	0	2	10	0	0	0	0
15:00 - 16:00	15	0	1	16	8	0	2	10	5	0	0	5	0	0	0	0	6	0	0	6	153	4	2	159	7	0	4	11	0	0	0	0
15:15 - 16:15	14	0	0	14	6	0	1	7	6	0	0	6	0	0	0	0	7	0	0	7	142	3	2	147	6	0	6	12	0	0	0	0
15:30 - 16:30	16	0	0	16	6	0	0	6	7	0	0	7	0	0	0	0	11	0	0	11	143	6	1	150	11	0	8	19	0	0	0	0
15:45 - 16:45	15	0	1	16	5	0	0	5	8	0	0	8	0	0	0	0	10	0	0	10	138	3	1	142	8	0	9	17	0	0	0	0
16:00 - 17:00	20	0	2	22	4	0	0	4	13	0	0	13	0	0	0	0	7	0	0	7	135	4	1	140	7	0	6	13	0	0	0	0
16:15 - 17:15	22	0	2	24	5	0	0	5	17	0	0	17	0	0	0	0	8	0	0	8	138	6	1	145	9	0	9	18	0	0	0	0
16:30 - 17:30	22	0	2	24	6	0	0	6	19	0	0	19	0	0	0	0	8	0	0	8	149	3	1	153	9	0	8	17	1	0	0	1
16:45 - 17:45	22	0	2	24	7	0	0	7	20	0	0	20	0	0	0	0	9	0	0	9	145	3	1	149	10	0	14	24	1	0	0	1
17:00 - 18:00	22	0	1	23	3	0	0	3	19	0	0	19	0	0	0	0	16	0	0	16	158	3	1	162	15	0	15	30	1	0	0	1
17:15 - 18:15	22	0	2	24	6	0	1	7	20	0	0	20	0	0	0	0	20	0	0	20	168	5	1	174	14	0	15	29	1	0	0	1
17:30 - 18:30	26	0	2	28	8	0	2	10	16	0	0	16	0	0	0	0	16	0	0	16	168	5	1	174	9	0	14	23	0	0	0	0

TIME PERIOD	Movement 7				Movement 8				Movement 9				Movement 9A				Movement 10				Movement 11				Movement 12				Movement 12A				Grand Total			
	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total	Light	Heavy	Cyc	Total
14:30 - 15:30	6	0	2	8	6	0	2	8	58	15	0	73	1	0	0	1	45	0	0	45	115	5	1	121	20	0	3	23	4	0	0	4	426	25	18	469
14:45 - 15:45	7	0	3	10	4	0	0	4	54	11	0	65	1	0	0	1	43	2	0	45	114	5	2	121	20	0	3	23	2	0	0	2	434	24	15	473
15:00 - 16:00	7	0	2	9	4	0	0	4	47	12	0	59	0	0	0	0	42	3	0	45	111	7	2	120	20	0	0	20	5	0	0	5	430	26	13	469
15:15 - 16:15	8	0	4	12	6	0	0	6	25	10	0	35	0	0	0	0	41	3	0	44	96	6	1	103	22	0	2	24	3	0	0	3	382	22	16	420
15:30 - 16:30	10	0	4	14	7	0	0	7	26	13	0	39	0	0	0	0	48	4	0	52	102	5	1	108	21	0	2	23	3	0	0	3	411	28	16	455
15:45 - 16:45	10	1	3	14	8	0	0	8	28	14	0	42	0	0	0	0	49	3	0	52	109	5	0	114	26	0	5	31	4	0	0	4	418	26	19	463
16:00 - 17:00	11	1	2	14	9	0	0	9	28	11	0	39	0	0	0	0	52	2	0	54	123	3	0	126	24	0	7	31	1	0	0	1	434	21	18	473
16:15 - 17:15	14	1	1	16	7	0	0	7	39	13	0	52	0	0	0	0	56	2	0	58	131	2	1	134	31	0	5	36	1	0	0	1	478	24	19	521
16:30 - 17:30	14	2	1	17	11	0	0	11	44	12	0	56	0	0	0	0	63	1	1	65	143	2	2	147	31	0	5	36	1	0	0	1	521	20	20	561
16:45 - 17:45	15	2	2	19	15	0	1	16	45	13	0	58	0	0	0	0	63	2	1	66	153	2	2	157	28	0	2	30	0	0	0	0	533	22	25	580
17:00 - 18:00	14	2	5	21	16	0	2	18	52	15	0	67	0	0	0	0	67	2	1	70	147	5	4	156	33	0	0	33	0	0	0	0	563	27	29	619
17:15 - 18:15	12	2	4	18	16	0	2	18	54	16	0	70	0	0	0	0	67	2	1	70	159	5	3	167	23	0	3	26	0	0	0	0	582	30	32	644
17:30 - 18:30	13	1	4	18	16	0	3	19	53	18	0	71	0	0	0	0	57	2	0	59	153	5	4	162	26	0	3	29	0	0	0	0	561	31	33	625

austraffic
TRAFFIC & TRANSPORT DATA SPECIALISTS

Client : SCT
Site : Wentworth Point
Day/Date : Tuesday, 30 March 2021
Survey Location : Burroway Rd & Waterways St
Weather : Fine



AM

Time Period	A - B			B - A			B - C			C - B			C - D			D - C			D - A			A - D			Total of all Movements	Peak Hour Volume Determination	
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total			
6:00 - 6:15	1	0	1	0	0	0	2	0	2	1	0	1	1	0	1	0	0	0	1	0	1	0	0	0	6	6:00 - 7:00	43
6:15 - 6:30	1	0	1	0	0	0	2	0	2	2	0	2	0	0	0	2	0	2	1	0	1	2	0	2	10	6:15 - 7:15	66
6:30 - 6:45	1	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	3	0	3	6	6:30 - 7:30	77
6:45 - 7:00	1	0	1	0	0	0	2	0	2	2	0	2	0	0	0	2	0	2	1	0	1	2	0	2	10	6:45 - 7:45	131
7:00 - 7:15	1	0	1	0	0	0	2	0	2	1	0	1	2	0	2	0	0	0	3	0	3	4	0	4	13	7:00 - 8:00	191
7:15 - 7:30	1	0	1	0	0	0	6	0	6	2	0	2	7	0	7	0	0	0	7	0	7	6	0	6	42	7:15 - 8:15	239
7:30 - 7:45	5	0	5	1	0	1	13	0	13	13	0	13	12	1	13	6	0	6	2	0	2	6	0	6	69	7:30 - 8:30	279
7:45 - 8:00	5	0	5	3	0	3	17	0	17	9	0	9	22	0	22	4	0	4	1	0	1	14	0	14	75	7:45 - 8:45	460
8:00 - 8:15	5	0	5	0	0	0	14	0	14	9	2	11	14	0	14	10	2	12	7	0	7	6	0	6	69	8:00 - 9:00	732
8:15 - 8:30	5	0	5	3	0	3	34	0	34	5	0	5	14	0	14	5	0	5	6	0	6	5	0	5	85	8:15 - 9:15	772
8:30 - 8:45	39	1	40	5	0	5	110	1	111	45	0	45	30	0	30	14	1	15	4	0	4	4	0	4	244	8:30 - 9:30	768
8:45 - 9:00	59	0	59	17	0	17	155	0	155	65	0	65	25	1	26	6	1	9	4	0	4	2	0	2	335	8:45 - 9:45	660
9:00 - 9:15	5	0	5	2	0	2	27	0	27	24	1	25	18	1	19	10	1	11	10	0	10	8	0	8	106	9:00 - 10:00	391
9:15 - 9:30	4	0	4	2	0	2	16	1	17	13	1	14	14	1	15	11	1	12	10	0	10	7	0	7	81	AM Peak	772
9:30 - 9:45	5	0	5	4	0	4	12	0	12	13	0	13	13	0	13	14	0	14	8	0	8	9	0	9	78		
9:45 - 10:00	4	0	4	5	0	5	26	0	26	12	0	12	24	0	24	13	0	13	3	0	3	9	0	9	96		
Total	134	1	135	42	0	42	426	2	441	309	4	313	237	4	241	118	6	118	67	0	67	82	0	82	1237		
AM Peak	108	1	107	27	0	27	309	1	327	107	1	108	67	2	69	47	3	47	34	0	34	22	0	22	772		

PM

Time Period	A - B			B - A			B - C			C - B			C - D			D - C			D - A			A - D			Total of all Movements	Peak Hour Volume Determination	
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total			
14:30 - 14:45	4	0	4	7	0	7	21	0	21	25	0	25	6	0	6	16	1	16	7	0	7	9	1	10	98	14:30 - 15:30	393
14:45 - 15:00	24	0	24	11	0	11	80	1	81	79	0	79	21	1	22	21	1	22	11	0	11	29	0	29	276	14:45 - 15:45	630
15:00 - 15:15	9	0	9	42	0	42	32	0	32	211	1	212	17	1	28	23	2	25	19	0	19	6	0	6	393	15:00 - 16:00	633
15:15 - 15:30	7	0	7	4	0	4	18	0	18	20	0	20	15	0	15	17	0	17	16	0	16	14	0	14	111	15:15 - 16:15	384
15:30 - 15:45	5	0	5	3	0	3	12	0	12	13	0	13	11	0	11	16	0	16	10	0	10	8	0	8	78	15:30 - 16:30	339
15:45 - 16:00	11	0	11	1	0	1	14	0	14	10	1	11	12	1	13	6	0	6	16	0	16	7	0	7	79	15:45 - 16:45	367
16:00 - 16:15	10	0	10	3	0	3	7	0	7	27	0	27	6	0	6	21	0	21	15	0	15	9	0	9	98	16:00 - 17:00	402
16:15 - 16:30	10	0	10	9	0	9	17	0	17	19	0	19	8	0	8	11	0	11	10	0	10	6	0	6	90	16:15 - 17:15	420
16:30 - 16:45	9	0	9	6	0	6	20	0	20	19	2	19	23	0	23	6	3	11	8	1	9	17	0	17	106	16:30 - 17:30	470
16:45 - 17:00	11	0	11	3	0	3	24	0	24	19	0	19	20	3	23	19	0	19	8	0	8	10	0	10	116	16:45 - 17:45	539
17:00 - 17:15	7	1	8	5	1	6	29	0	29	19	0	19	17	0	17	20	3	23	12	0	12	7	0	7	121	17:00 - 18:00	582
17:15 - 17:30	6	0	6	6	1	7	22	1	23	31	3	34	19	0	19	16	1	17	9	0	9	12	0	12	129	17:15 - 18:15	642
17:30 - 17:45	11	0	11	10	0	10	36	0	36	31	0	31	32	1	33	25	1	26	21	0	21	6	1	7	175	17:30 - 18:30	627
17:45 - 18:00	6	0	6	8	0	8	26	0	26	28	2	40	29	1	30	24	3	27	15	0	15	5	0	5	157	PM Peak	598
18:00 - 18:15	10	0	10	8	0	8	33	2	35	36	1	39	26	1	27	30	0	30	15	1	15	15	1	16	181		
18:15 - 18:30	10	1	10	8	0	8	8	0	8	12	0	12	20	0	20	32	1	33	15	0	15	10	0	10	114		
Total	163	2	163	134	2	136	395	4	403	393	10	403	282	11	293	284	16	226	197	2	198	167	3	170	2284		
PM Peak	40	0	40	62	0	62	107	1	108	110	1	111	87	2	87	79	4	82	62	0	62	55	1	56	598		

HOURLY FLOW TIME PERIOD

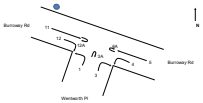
	A - B			B - A			B - C			C - B			C - D			D - C			D - A			A - D			Grand Total		
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total
6:00 - 7:00	4	0	4	0	0	0	7	0	7	5	0	5	12	0	12	4	0	4	4	0	4	7	0	7	43	0	43
6:15 - 7:15	3	0	4	0	0	0	7	0	7	5	0	5	13	0	13	4	0	4	6	0	6	11	0	11	66	0	66
6:30 - 7:30	10	0	10	0	0	0	11	0	11	5	0	5	15	0	15	7	0	7	12	0	12	17	0	17	77	0	77
6:45 - 7:45	14	0	14	1	0	1	23	0	23	17	0	17	27	1	28	10	0	10	13	0	13	20	0	20	135	1	135
7:00 - 8:00	10	0	10	4	0	4	39	0	39	20	0	20	43	1	44	17	0	17	13	0	13	32	0	32	180	1	181
7:15 - 8:15	19	0	19	4	0	4	55	0	55	28	2	30	55	1	56	27	2	29	17	0	17	34	0	34	231	5	236
7:30 - 8:30	19	0	19	7	0	7	79	0	79	31	2	33	62	1	63	31	2	33	19	0	19	34	0	34	274	5	279
7:45 - 8:45	50	1	49	11	0	11	175	1	176	66	2	68	90	0	90	37	3	40	19	0	19	32	0	32	456	7	463
8:00 - 9:00	50	1	50	25	0	25	312	1	314	122	2	124	83	1	84	41	4	45	21	0	21	20	0	20	723	9	732
8:15 - 9:15	103	1	101	27	0	27	326	1	327	131	1	132	87	2	89	41	3	44	28	0	28	22	0	22	764	8	772
8:30 - 9:30	90	1	89	26	0	26	308	2	310	105	2	107	87	0	90	43	4	47	29	0	29	21	0	21	709	12	768
8:45 - 9:45	72	0	74	25	0	25	210	1	211	113	2	115	70	0	73	43	3	46	30	0	30	29	0	29	591	9	600
9:00 - 10:00	19	0	19	13	0	13	81	1	82	60	2	62	68	1	71	49	3	52	28	0	28	33	0	33	344	7	351

HOURLY FLOW TIME PERIOD

	A - B			B - A			B - C			C - B			C - D			D - C			D - A			A - D			Grand Total		
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total
14:30 - 15:30	39	0	40	64	0	64	151	1	152	103	1	221	59	4	63	79	4	83	53	0	52	53	1	54	839	11	850
14:45 - 15:45	40	0	40	63	0	63	143	1	143	223	1	224	64	4	68	77	3	80	58	0	58	64	0	64	821	9	830
15:00 - 16:00	32	0	32	53	0	53	79	0	79	264	2	266	55	4	59	63	2	64	61	0	61	35	0	35	625	6	633
15:15 - 16:15	33	0	33	11	0	11	51	0	51	75	1	77	44	1	45	63	0	63	57	0	57	39	0	39	364	2	366
15:30 - 16:30	36	0	36	16	0	16	60	0	60	53	1	54	37	1	38	64	0	64	51	0	51	30	0	30	337	2	339
15:45 - 16:45	37	0	37	19	0	19	68	0	68	52	3	55	49	1	50	49	3	49	49	1	50	39	0	39	339	6	345
16:00 - 17:00	37	0	37	21	0	21	66	0	66	71	2	73	57	3	60	64	3	66	41	1	42	42	0	42	393	9	402
16:15 - 17:15	34	1	35	23	1	24	90	0	90	65	2	65	68	3	71	53	6	61	38	1	39	40	0	40	411	14	425
16:30 - 17:30	32	1	33	20	2	22	95	1	96	91	3	95	79	3	82	60	7	67	37	1	38	45	0	45	450	20	470
16:45 - 17:45	37	1	38	24	2	26	111	1	112	105	3	103	88	4	92	77	5	82	55	0	55	35	1	36	522	17	539
17:00 - 18:00	32	1	33	29	2	31	113	1	114	119	5	124	97	3	99	93	6	93	57	0	57	30	1	31	562	20	582
17:15 - 18:15	40	0	40	32	1	33	117	3	120	139	6	144	106	3	109	93	5	100	55	1	56	36	2	40	621	21	642
17:30 - 18:30	44	1	45	34	3	36	103	2	105	119	3	122	107	3	110	111	5	116	56	1	57	36	2	38	610	17	627

austraffic
TRAFFIC & TRANSPORT DATA SPECIALISTS

Client : NTF
Site : Wentworth Point
Day/Date : Tuesday, 30 March 2021
Survey Location : Burroway Rd & Wentworth Pl
Weather : Fine



AM

Time Period	Movement 1				Movement 2				Movement 3A				Movement 4				Movement 9				Movement 9A				Movement 11				Movement 12				Movement 12A				Total of all Movements
	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	
6:00 - 6:15	2	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	4	0	0	4	8	1	0	9	0	0	0	0	18
6:15 - 6:30	3	1	1	5	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	0	0	0	0	2	0	0	2	5	0	0	5	0	0	0	0	13
6:30 - 6:45	5	1	1	7	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	8	0	0	8	4	0	0	4	0	0	0	0	21
6:45 - 7:00	3	2	1	6	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	4	1	0	5	8	1	0	9	2	0	0	2	23
7:00 - 7:15	5	3	0	8	0	0	0	0	1	0	0	1	0	1	0	1	4	1	0	5	0	0	0	0	5	1	0	7	5	0	2	7	1	0	0	1	30
7:15 - 7:30	7	2	0	10	0	0	0	0	2	1	0	3	0	0	0	0	3	0	0	3	0	0	0	0	7	0	0	7	5	0	4	9	1	0	0	1	31
7:30 - 7:45	11	1	2	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	9	0	2	11	2	0	0	2	29
7:45 - 8:00	9	2	0	11	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	2	0	0	0	0	3	0	0	3	9	3	1	12	2	0	0	2	36
8:00 - 8:15	9	3	2	14	2	0	0	2	3	0	0	3	1	0	0	1	1	1	0	2	0	0	0	0	3	1	0	4	9	0	2	10	0	0	0	0	36
8:15 - 8:30	13	2	5	20	0	0	0	0	1	0	0	1	2	0	0	2	3	0	0	3	0	0	0	0	3	0	0	3	10	0	0	10	2	0	0	2	47
8:30 - 8:45	14	1	0	15	1	0	0	1	2	0	0	2	0	0	0	0	1	0	0	1	0	0	0	0	2	0	0	2	14	1	0	20	0	0	0	0	41
8:45 - 9:00	21	2	1	24	0	0	0	0	4	0	0	4	0	0	0	0	2	0	0	2	0	0	0	0	2	1	0	3	23	1	1	25	0	0	0	0	58
9:00 - 9:15	13	0	1	14	2	0	0	2	4	1	0	5	0	0	0	0	2	0	0	2	0	0	0	0	3	0	0	3	27	0	2	29	3	0	0	3	58
9:15 - 9:30	20	0	2	27	0	0	0	0	1	1	0	2	1	0	1	2	1	0	0	1	0	0	0	0	1	0	0	1	22	0	2	24	2	0	0	2	59
9:30 - 9:45	16	2	3	21	2	0	0	2	3	0	0	3	2	0	0	2	4	0	0	4	0	0	0	0	6	0	0	6	20	0	0	20	0	0	0	0	58
9:45 - 10:00	20	1	1	22	1	0	0	1	3	0	0	3	4	0	0	4	4	0	0	4	0	0	0	0	3	0	0	3	29	1	3	33	6	0	0	6	76
Total	174	23	20	227	9	0	0	9	25	3	0	28	12	1	1	14	32	3	0	37	0	0	0	0	66	4	3	69	208	8	22	249	20	0	0	20	649
AM Peak	72	3	7	84	0	0	0	0	11	2	0	13	7	1	1	9	10	0	0	11	0	0	0	0	14	0	2	16	97	1	10	114	11	0	0	11	261

Peak Hour Volume Determination	
6:00 - 7:00	73
6:15 - 7:15	84
6:30 - 7:30	105
6:45 - 7:45	112
7:00 - 8:00	126
7:15 - 8:15	132
7:30 - 8:30	148
7:45 - 8:45	160
8:00 - 9:00	169
8:15 - 9:15	211
8:30 - 9:30	223
8:45 - 9:45	250
9:00 - 10:00	261
AM Peak	261

PM

Time Period	Movement 1				Movement 2				Movement 3A				Movement 4				Movement 9				Movement 9A				Movement 11				Movement 12				Movement 12A				Total of all Movements
	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	
14:30 - 14:45	27	0	1	28	0	0	0	0	3	0	0	3	1	0	1	2	1	1	0	2	0	0	0	0	1	0	0	1	23	0	0	23	1	1	0	2	63
14:45 - 15:00	30	0	2	34	1	0	0	1	1	1	0	2	0	0	0	0	0	0	0	0	1	0	0	1	23	0	2	25	5	0	0	5	0	0	0	0	69
15:00 - 15:15	30	1	0	33	1	0	0	1	5	1	0	6	0	0	0	0	5	0	0	5	0	0	0	0	5	1	0	7	32	1	0	33	4	0	0	4	89
15:15 - 15:30	35	0	2	37	0	0	0	0	6	0	0	6	1	0	0	1	4	0	0	4	0	0	0	0	1	2	0	3	24	0	0	25	1	0	0	1	72
15:30 - 15:45	37	0	0	37	1	0	0	1	6	0	0	6	0	0	0	0	8	0	0	11	0	0	0	0	0	1	1	2	23	0	0	23	3	0	0	3	83
15:45 - 16:00	34	0	3	37	1	0	0	1	3	1	0	4	1	0	0	1	4	0	0	4	1	0	0	1	0	1	0	1	19	0	0	20	3	0	0	3	76
16:00 - 16:15	29	0	1	29	1	0	0	1	4	0	0	4	1	0	0	1	4	0	0	4	0	0	0	0	1	0	0	1	29	0	2	27	1	0	0	1	68
16:15 - 16:30	30	0	3	33	1	0	0	1	4	0	0	4	3	0	0	3	4	1	0	5	1	0	0	1	0	1	0	1	34	0	0	31	4	0	0	4	90
16:30 - 16:45	30	0	1	31	2	0	0	2	3	0	0	3	2	0	0	2	3	0	0	3	0	0	0	0	0	0	0	4	29	0	0	28	2	1	0	3	76
16:45 - 17:00	33	0	2	35	0	0	0	0	7	0	0	7	3	0	0	3	6	0	0	6	0	0	0	0	0	0	0	2	42	0	0	42	3	0	0	3	88
17:00 - 17:15	29	1	3	33	0	0	0	0	4	0	0	4	2	0	0	2	6	0	0	6	0	0	0	0	10	0	0	10	39	0	1	38	2	0	0	2	87
17:15 - 17:30	40	0	2	42	1	0	0	1	4	0	0	4	2	0	0	2	4	0	0	4	0	0	0	0	6	0	0	6	43	1	0	44	5	0	0	5	108
17:30 - 17:45	32	0	7	39	0	0	0	0	6	0	0	6	0	0	0	0	3	0	0	3	0	0	0	0	1	1	0	2	49	0	0	46	1	0	0	1	97
17:45 - 18:00	47	0	3	50	3	0	0	3	9	0	0	9	1	0	0	1	3	0	0	3	0	0	0	0	3	0	4	7	33	1	1	35	5	0	0	5	113
18:00 - 18:15	41	1	5	50	2	0	0	2	9	0	0	9	2	0	1	3	5	0	0	5	0	0	0	0	3	0	0	3	43	0	1	46	3	0	0	3	121
18:15 - 18:30	41	0	1	42	1	0	0	1	8	0	0	8	1	0	1	2	2	0	0	2	0	0	0	0	0	0	0	2	42	0	0	44	0	0	0	0	102
Total	533	3	39	572	15	0	0	15	84	3	0	87	20	0	3	23	64	2	0	69	2	0	0	2	61	7	5	63	518	3	9	525	43	2	0	45	1434
PM Peak	160	1	22	191	4	0	0	4	28	0	0	28	5	0	1	6	17	0	0	17	0	0	0	0	13	1	2	16	167	2	2	171	14	0	0	14	441

Peak Hour Volume Determination	
14:30 - 15:30	263
14:45 - 15:45	313
15:00 - 16:00	320
15:15 - 16:15	289
15:30 - 16:30	317
15:45 - 16:45	310
16:00 - 17:00	322
16:15 - 17:15	341
16:30 - 17:30	359
16:45 - 17:45	380
17:00 - 18:00	407
17:15 - 18:15	441
17:30 - 18:30	439
PM Peak	441

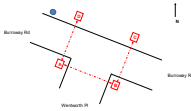
HOURLY FLOW

TIME PERIOD	Movement 1				Movement 2				Movement 3A				Movement 4				Movement 9				Movement 9A				Movement 11				Movement 12				Movement 12A				Grand Total			
	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total
6:00 - 7:00	11	4	2	17	1	0	0	1	1	0	0	1	1	0	0	1	6	0	0	6	0	0	0	0	10	1	0	19	22	2	2	26	2	0	0	2	62	7	4	73
6:15 - 7:15	15	7	2	22	0	0	0	0	2	0	0	2	0	1	0	1	8	1	0	9	0	0	0	0	20	2	0	22	19	1	4	24	3	0	0	3	66	12	6	84
6:30 - 7:30	26	8	4	36	0	0	0	0	4	1	0	5	0	1	0	1	10	1	0	11	0	0	0	0	19	2	0	21	29	1	6	27	4	0	0	4	77	14	14	105
6:45 - 7:45	28	8	5	42	0	0	0	0	4	1	0	5	0	1	0	1	8	1	0	9	0	0	0	0	12	2	0	14	29	1	5	34	5	0	0	5	81	14	17	112
7:00 - 8:00	32	8	13	53	0	0	0	0	3	1	0	4	1	1	0	2	9	1	0	10	0	0	0	0	12	1	0	13	29	3	5	38	6	0	0	6	69	15	22	126
7:15 - 8:15	36	8	10	54	0	0	0	0	5	1	0	6	2	0	0	2	6	1	0	7	0	0	0	0	9	1	0	10	29	3	5	41	5	0	0	5	96	14	24	132
7:30 - 8:30	50	8	14	64	0	0	0	0	4	0	0	4	4	0	0	4	5	2	0	7	0	0	0	0	11	1	0	12	37	3	5	45	5	0	0	5	115	14	19	148
7:45 - 8:45	60	8	12	80	0	0	0	0	6	0	0	6	4	0	0	4	6	2	0	8	0	0	0	0	11	1	0	12	50	4	6	58	6	0	0	6	142	15	18	160
8:00 - 9:00	57	8	8	73	0	0	0	0	10	0	0	10	3	0	0	3	6	0	0	6	0	0	0	0	10	2	0	12	53	2	6	71	7	0	0	7	108	16	14	138
8:15 - 9:15	67	9	7	73	0	0	0	0	11	1	0	12	2	0	0	2	7	3	0	10	0	0	0	0	10	1	0	11	52	2	6	60	10	0	0	10	166	12	13	211
8:30 - 9:30	72	3	4	80	0	0	0	0	11	2	0	13	1	0	1	2	6	2	0	8	0	0	0	0	9	1	0	9	59	2	8	69	10	0	0	10	200	10	13	223
8:45 - 9:45	75	4	7	86	0	0	0	0	12	2	0	14	3	0	1	4	9	2	0	11	0	0	0	0	14	1	0	15	62	1	13	76	10	0	0	10	219	10	21	250
9:00 - 10:00	74	3	7	84	0	0	0	0	11	2	0	13	7	0	1	8	11	0	0	11	0	0	0	0	14	0	0	14	92	1	13	114	11	0	0	11	232	9	23	261

HOURLY FLOW

TIME PERIOD	Movement 1				Movement 2				Movement 3A				Movement 4				Movement 9				Movement 9A				Movement 11				Movement 12				Movement 12A				Grand Total			
	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total	Light	Heavy	Cyc.	Total
14:30 - 15:30	116	1	3	122	2	0	0	2	17	2	0	19	2	0	1	3	10	1	0	11	0	0	0	0	9	3	0	12	109	1	2	112	11	1	0	12	276	9	8	293
14:45 - 15:45	126	1	4	131	3	0	0	3	20	2	0	22	1	0	0	1	17	3	0	20	0	0	0	0	8	4	1	13	107	1	3	110	13	0	0	13	295	11	7	313
15:00 - 16:00	128	1	5	134	3	0	0	3	22	2	0	24	2	0	0	2	21	3	0	24	1	0	0	1	11	6	1	17	103	1	0	104	11	0	0	11	302	12	6	320
15:15 - 16:15	134	0	4	138	2	0	0	2	21	1	0	22	3	0	0	3	20	3	0	23	1	0	0	1	8	4	1	11	96	0	2	98	8	0	0	8	292	8	9	309
15:30 - 16:30	131	0	7	138	4	0	0	4	17	1	0	18	5	0	0	5	20	4	0	24	2	0	0	2	13	3	1	14	99	0	2	101	11	0	0	11	299	8	10	317
15:45 - 16:45	130	0	5	135	5	0	0	5	14	1	0	15	7	0	0	7	15	1	0	16	2	0	0	2	15	2	0	16	104	0	2	106	10	1	0	11	295	5	10	310
16:00 - 17:00	113	0	7	120	4	0	0	4	16	0	0	16	9	0	0	9	17	1	0	18	1	0	0	1	12	1	0	13	106	0	2	108	10	1	0	11	310	3	9	322
16:15 - 17:15	116	1	9	126	3	0	0	3	18	0	0	18	10	0	0	10	19	1	0	20	1	0	0	1	21	1	0	22	100	0	1	101	11	1	0	12	327	4	10	341
16:30 - 17:30	122	1	8	131	3	0	0	3	18	0	0	18	9	0	0	9	19	0	0	19	0	0	0	0	22	0	0	22	102	1	1	104	12	1	0	13	347	3	9	359
16:45 - 17:45	109	1	13	123	1	0	0	1	21	0	0	21	7	0	0	7	19	0	0	19	0	0	0	0	19	1	0	20	100	1	1	102	11	0	0	11	352	3	15	380
17:00 - 18:00	109	1	15	125	4	0	0	4	23	0	0	23	5	0	0	5	18	0	0	18	0	0	0	0	20	1	0	20	101	2	2	105	13	0	0	13	352	4	21	407
17:15 - 18:15	102	1	20	101	6	0	0	6	26	0	0	26	5	0	1	6	17	0	0	17	0	0	0	0	13	1	2	16	107	2	2	111	13	0	0	13	410	4	27	441
17:30 - 18:30	101	1	19	101	6	0	0	6	32	0	0	32	4	0	2	6	15	0	0	15	0	0	0	0	11	1	1	13	109	1	1	111	9	0	0	9	403	3	29	439

Client	: MCC
Site	: Wentworth Point
Day/Date	: Tuesday, 30 March 2021
Survey Location	: Burroway Rd & Wentworth Pl
Weather	: Fine



AM

Time Period	A - B			M - A			M - C			C - M			D - A			A - D			Total of all Movements	Peak Hour Volume Determination	
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total			
6:00 - 6:15	1	0	1	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	6:00 - 7:00	21
6:15 - 6:30	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2	0	2	3	6:15 - 7:15	31
6:30 - 6:45	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	2	0	2	4	6:30 - 7:30	53
6:45 - 7:00	1	0	1	2	0	2	0	0	0	1	0	1	0	0	0	4	0	4	12	6:45 - 7:45	93
7:00 - 7:15	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	7:00 - 8:00	93
7:15 - 7:30	2	0	2	2	0	2	0	0	0	0	0	0	1	0	1	16	0	16	19	7:15 - 8:15	68
7:30 - 7:45	1	0	1	1	0	1	0	0	0	0	0	0	1	0	1	4	1	5	8	7:30 - 8:30	62
7:45 - 8:00	0	0	0	1	0	1	1	0	1	0	0	0	0	0	0	5	0	5	7	7:45 - 8:45	99
8:00 - 8:15	1	0	1	2	0	2	1	1	2	1	0	1	1	0	1	5	0	5	16	8:00 - 9:00	226
8:15 - 8:30	0	0	0	0	0	0	1	0	1	0	0	0	1	0	1	12	0	12	14	8:15 - 9:15	228
8:30 - 8:45	2	0	2	2	0	2	1	0	1	4	0	4	6	1	9	42	2	44	62	8:30 - 9:30	227
8:45 - 9:00	0	0	0	5	0	5	2	0	2	1	0	1	26	1	27	94	1	95	130	8:45 - 9:45	176
9:00 - 9:15	1	1	2	2	0	2	0	0	0	0	0	0	7	0	7	7	0	7	18	9:00 - 10:00	92
9:15 - 9:30	1	0	1	4	0	4	1	0	1	2	0	2	1	0	1	2	1	3	13	AM Peak	228
9:30 - 9:45	3	0	3	2	0	2	2	0	2	4	0	4	1	0	1	1	0	1	13		
9:45 - 10:00	0	0	0	1	0	1	4	0	4	0	0	0	2	0	2	1	0	1	8		
Total	17	1	18	27	1	28	13	1	14	13	0	13	50	2	52	169	5	234	329		
AM Peak	7	1	8	9	0	9	4	0	4	6	0	6	42	2	44	130	3	196	228		

PM

Time Period	A - B			M - A			M - C			C - M			D - A			A - D			Total of all Movements	Peak Hour Volume Determination	
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total			
14:30 - 14:45	2	0	2	3	0	3	0	0	0	0	0	0	1	0	1	2	0	2	8	14:30 - 15:30	147
14:45 - 15:00	2	0	2	0	0	0	1	0	1	0	1	1	6	0	6	21	0	21	31	14:45 - 15:45	147
15:00 - 15:15	1	0	1	1	1	2	1	0	1	3	0	3	52	0	52	9	1	10	69	15:00 - 16:00	121
15:15 - 15:30	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	15:15 - 16:15	27
15:30 - 15:45	1	0	1	4	0	4	0	0	0	0	0	0	2	0	2	2	0	2	9	15:30 - 16:30	30
15:45 - 16:00	2	0	2	3	0	3	2	1	3	0	0	0	1	0	1	1	1	2	11	15:45 - 16:45	39
16:00 - 16:15	0	0	0	1	0	1	1	0	1	1	0	1	0	0	0	0	0	0	3	16:00 - 17:00	39
16:15 - 16:30	0	0	0	2	0	2	0	0	0	2	0	2	1	0	1	0	0	0	5	16:15 - 17:15	59
16:30 - 16:45	0	0	0	1	1	2	4	0	4	1	1	2	0	0	0	0	1	1	9	16:30 - 17:30	79
16:45 - 17:00	0	0	0	5	1	6	1	2	3	1	0	1	1	1	2	0	0	0	17	16:45 - 17:45	91
17:00 - 17:15	1	0	1	6	0	10	2	0	2	1	2	3	1	1	2	0	3	3	27	17:00 - 18:00	87
17:15 - 17:30	0	1	1	9	1	10	1	0	1	2	1	3	3	2	5	1	0	1	25	17:15 - 18:15	73
17:30 - 17:45	2	0	2	6	0	6	1	2	3	0	1	1	1	0	1	4	0	4	22	17:30 - 18:30	63
17:45 - 18:00	2	0	2	1	0	1	3	1	4	0	2	2	1	0	1	3	0	3	13	PM Peak	147
18:00 - 18:15	1	0	1	3	0	3	1	0	1	1	0	1	1	0	1	4	0	4	13		
18:15 - 18:30	1	0	1	2	0	2	1	1	2	0	0	0	0	0	0	6	0	6	10		
Total	16	1	20	53	5	61	19	7	26	13	8	22	101	4	105	59	6	65	319		
PM Peak	7	0	7	10	1	11	2	0	2	3	1	4	58	2	60	32	1	33	147		

HOURLY FLOW

Time Period	A - B			M - A			M - C			C - M			D - A			A - D			Grand Total		
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total
6:00 - 7:00	1	0	1	5	0	5	0	0	0	1	0	1	1	0	1	13	0	13	21	0	21
6:15 - 7:15	2	0	2	3	0	3	0	0	0	1	0	1	1	0	1	14	0	14	21	0	21
6:30 - 7:30	3	0	3	5	0	5	0	0	0	1	0	1	1	0	1	22	0	22	33	0	33
6:45 - 7:45	3	0	3	5	0	5	0	0	0	1	0	1	2	0	2	21	1	22	34	1	35
7:00 - 8:00	4	0	4	4	0	4	1	0	1	0	0	0	2	0	2	18	1	19	29	1	30
7:15 - 8:15	5	0	5	6	0	6	2	1	3	1	0	1	3	0	3	30	1	31	42	2	44
7:30 - 8:30	5	0	5	4	0	4	3	1	4	1	0	1	3	0	3	30	1	31	41	2	43
7:45 - 8:45	5	0	5	5	0	5	4	1	5	0	0	0	10	1	11	80	2	82	95	4	99
8:00 - 9:00	7	0	7	9	0	9	5	1	6	0	0	0	39	2	39	157	3	160	220	6	226
8:15 - 9:15	7	1	8	9	0	9	4	0	4	0	0	0	42	2	44	180	3	184	222	6	228
8:30 - 9:30	6	1	8	13	1	14	4	0	4	7	0	7	42	2	44	140	4	144	216	8	227
8:45 - 9:45	6	1	10	13	1	14	5	0	5	7	0	7	35	1	36	104	2	106	173	5	178
9:00 - 10:00	4	1	4	9	1	10	7	0	7	0	0	0	11	0	11	11	1	12	49	3	52

HOURLY FLOW

Time Period	A - B			M - A			M - C			C - M			D - A			A - D			Grand Total		
	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total	Ped	Cyc	Total
14:30 - 15:30	5	0	5	10	1	11	2	0	2	3	1	4	89	0	89	52	1	53	144	3	147
14:45 - 15:45	5	0	5	11	1	12	2	0	2	3	1	4	90	0	90	52	1	53	144	3	147
15:00 - 16:00	5	0	5	9	1	10	2	1	4	3	0	3	85	0	85	10	2	14	117	4	121
15:15 - 16:15	5	0	5	9	0	9	2	1	4	1	0	1	3	0	3	3	1	4	25	2	27
15:30 - 16:30	5	0	5	13	0	13	3	1	4	3	0	3	4	0	4	3	1	4	29	2	33
15:45 - 16:45	5	0	4	7	1	8	7	1	8	4	1	5	2	0	2	1	2	3	25	5	30
16:00 - 17:00	7	0	7	9	2	11	6	2	8	3	1	4	2	1	3	5	1	1	29	7	36
16:15 - 17:15	5	0	5	14	5	20	7	2	9	3	3	6	3	2	5	5	4	10	41	17	58
16:30 - 17:30	10	1	11	21	7	28	8	2	10	3	4	6	5	4	9	7	4	11	56	22	78
16:45 - 17:45	12	1	13	26	5	32	5	4	9	4	4	8	6	4	10	11	3	14	69	22	91
17:00 - 18:00	14	1	15	22	5	27	7	3	10	3	6	9	6	3	9	10	3	13	66	21	87
17:15 - 18:15	10	1	11	19	1	20	6	3	9	3	4	7	6	2	8	10	2	12	62	11	73
17:30 - 18:30	10	0	10	12	0	12	6	4	10	3	3	6	3	0	3	11	0	11	56	7	63

APPENDIX B

SIDRA outputs

MOVEMENT SUMMARY

Site: 1AM_BY [BUR_LAP_21_AM_BY (Site Folder: AM BY)]

Network: N101 [AM BY (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hill Road (S)														
1	L2	6	16.7	6	16.7	0.156	3.6	LOS A	0.0	0.0	0.00	0.27	0.00	39.5
2	T1	132	12.8	132	12.8	0.156	0.1	LOS A	0.0	0.0	0.00	0.27	0.00	39.8
3	R2	169	1.9	169	1.9	0.156	3.6	LOS A	0.0	0.0	0.00	0.27	0.00	39.3
Approach		307	6.8	307	6.8	0.156	2.1	NA	0.0	0.0	0.00	0.27	0.00	39.5
East: Burroway Road														
4	L2	245	11.2	245	11.2	0.136	4.7	LOS A	0.0	0.2	0.04	0.50	0.04	46.8
5	T1	1	0.0	1	0.0	0.136	1.6	LOS A	0.0	0.2	0.04	0.50	0.04	43.8
6	R2	7	14.3	7	14.3	0.136	4.5	LOS A	0.0	0.2	0.04	0.50	0.04	35.8
Approach		254	11.2	254	11.2	0.136	4.7	NA	0.0	0.2	0.04	0.50	0.04	46.7
North: Hill Road (N)														
7	L2	12	0.0	12	0.0	0.052	7.4	LOS A	0.1	0.5	0.31	0.91	0.31	27.3
8	T1	43	2.4	43	2.4	0.052	8.5	LOS A	0.1	0.5	0.31	0.91	0.31	45.1
9	R2	1	0.0	1	0.0	0.052	8.3	LOS A	0.1	0.5	0.31	0.91	0.31	39.5
Approach		56	1.9	56	1.9	0.052	8.2	LOS A	0.1	0.5	0.31	0.91	0.31	44.2
West: Lapwing Street														
10	L2	1	0.0	1	0.0	0.005	7.2	LOS A	0.0	0.1	0.31	0.93	0.31	35.8
11	T1	1	100.0	1	100.0	0.005	12.1	LOS A	0.0	0.1	0.31	0.93	0.31	34.2
12	R2	2	0.0	2	0.0	0.005	9.3	LOS A	0.0	0.1	0.31	0.93	0.31	44.2
Approach		4	25.0	4	25.0	0.005	9.5	LOS A	0.0	0.1	0.31	0.93	0.31	41.7
All Vehicles		621	8.3	621	8.3	0.156	3.8	NA	0.1	0.5	0.04	0.43	0.04	42.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 2AM_BY [BUR_WAT_21_AM_BY (Site Folder: AM BY)]

Network: N101 [AM BY (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Waterways Street														
1	L2	31	0.0	31	0.0	0.028	6.9	LOS A	0.0	0.3	0.17	0.90	0.17	21.4
2	T1	4	0.0	4	0.0	0.028	7.0	LOS A	0.0	0.3	0.17	0.90	0.17	31.9
3	R2	6	16.7	6	16.7	0.028	7.8	LOS A	0.0	0.3	0.17	0.90	0.17	21.4
Approach		41	2.6	41	2.6	0.028	7.1	LOS A	0.0	0.3	0.17	0.90	0.17	23.6
East: Burroway Road (E)														
4	L2	2	0.0	2	0.0	0.047	1.2	LOS A	0.0	0.3	0.09	0.05	0.09	33.7
5	T1	75	18.3	75	18.3	0.047	0.1	LOS A	0.0	0.3	0.09	0.05	0.09	21.6
6	R2	16	0.0	16	0.0	0.047	1.4	LOS A	0.0	0.3	0.09	0.05	0.09	36.4
Approach		93	14.8	93	14.8	0.047	0.3	NA	0.0	0.3	0.09	0.05	0.09	29.5
North: Hill Road														
7	L2	9	0.0	9	0.0	0.158	7.0	LOS A	0.2	1.5	0.26	0.94	0.26	29.4
8	T1	4	0.0	4	0.0	0.158	7.0	LOS A	0.2	1.5	0.26	0.94	0.26	31.6
9	R2	140	10.5	140	10.5	0.158	7.8	LOS A	0.2	1.5	0.26	0.94	0.26	29.4
Approach		154	9.6	154	9.6	0.158	7.7	LOS A	0.2	1.5	0.26	0.94	0.26	29.5
West: Burroway Road (W)														
10	L2	47	2.2	47	2.2	0.067	3.5	LOS A	0.0	0.2	0.04	0.39	0.04	36.8
11	T1	81	3.9	81	3.9	0.067	2.1	LOS A	0.0	0.2	0.04	0.39	0.04	31.4
12	R2	8	12.5	8	12.5	0.067	3.8	LOS A	0.0	0.2	0.04	0.39	0.04	33.3
Approach		137	3.8	137	3.8	0.067	2.7	NA	0.0	0.2	0.04	0.39	0.04	34.5
All Vehicles		424	8.2	424	8.2	0.158	4.4	NA	0.2	1.5	0.14	0.56	0.14	30.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3AM_BY [BUR_WEN_21_AM_BY (Site Folder: AM BY)]

Network: N101 [AM BY (Network Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Wentworth Place														
1	L2	68	12.3	68	12.3	0.063	2.9	LOS A	0.1	1.0	0.11	0.44	0.11	32.3
3	R2	3	0.0	3	0.0	0.063	5.5	LOS A	0.1	1.0	0.11	0.44	0.11	36.9
3u	U	11	0.0	11	0.0	0.063	6.8	LOS A	0.1	1.0	0.11	0.44	0.11	38.1
Approach		82	10.3	82	10.3	0.063	3.5	LOS A	0.1	1.0	0.11	0.44	0.11	33.6
East: Burroway Road (E)														
4	L2	3	0.0	3	0.0	0.014	3.2	LOS A	0.0	0.2	0.26	0.38	0.26	35.4
5	T1	11	40.0	11	40.0	0.014	3.2	LOS A	0.0	0.2	0.26	0.38	0.26	32.3
6u	U	1	0.0	1	0.0	0.014	7.2	LOS A	0.0	0.2	0.26	0.38	0.26	37.9
Approach		15	28.6	15	28.6	0.014	3.5	LOS A	0.0	0.2	0.26	0.38	0.26	33.8
West: Burroway Road (W)														
11	T1	13	16.7	13	16.7	0.069	2.5	LOS A	0.1	1.0	0.09	0.54	0.09	34.0
12	R2	68	3.1	68	3.1	0.069	5.5	LOS A	0.1	1.0	0.09	0.54	0.09	33.8
12u	U	7	0.0	7	0.0	0.069	6.8	LOS A	0.1	1.0	0.09	0.54	0.09	24.7
Approach		88	4.8	88	4.8	0.069	5.2	LOS A	0.1	1.0	0.09	0.54	0.09	33.4
All Vehicles		185	9.1	185	9.1	0.069	4.3	LOS A	0.1	1.0	0.11	0.48	0.11	33.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4AM_BY [BUR_ZEB_21_AM_BY (Site Folder: AM BY)]

Network: N101 [AM BY (Network Folder: General)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Burroway Road (E)														
2	T1	93	14.8	93	14.8	0.194	1.1	LOS A	0.1	0.9	0.40	0.30	0.40	22.2
Approach		93	14.8	93	14.8	0.194	1.1	LOS A	0.1	0.9	0.40	0.30	0.40	22.2
West: Burroway Road (E)														
8	T1	97	4.3	97	4.3	0.187	1.1	LOS A	0.1	0.8	0.40	0.31	0.40	18.1
Approach		97	4.3	97	4.3	0.187	1.1	LOS A	0.1	0.8	0.40	0.31	0.40	18.1
All Vehicles		189	9.4	189	9.4	0.194	1.1	NA	0.1	0.9	0.40	0.31	0.40	21.0

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: Akçelik M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1AM_FY [BUR_LAP_21_AM_FY (Site Folder: AM FY)]

Network: N101 [AM FY (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hill Road (S)														
1	L2	16	6.7	16	6.7	0.199	3.6	LOS A	0.0	0.0	0.00	0.31	0.00	39.6
2	T1	141	12.0	141	12.0	0.199	0.2	LOS A	0.0	0.0	0.00	0.31	0.00	39.8
3	R2	240	1.3	240	1.3	0.199	3.6	LOS A	0.0	0.0	0.00	0.31	0.00	39.3
Approach		396	5.3	396	5.3	0.199	2.4	NA	0.0	0.0	0.00	0.31	0.00	39.5
East: Burroway Road														
4	L2	426	6.4	426	6.4	0.226	4.7	LOS A	0.0	0.3	0.03	0.51	0.03	46.8
5	T1	1	0.0	1	0.0	0.226	2.5	LOS A	0.0	0.3	0.03	0.51	0.03	43.8
6	R2	7	14.3	7	14.3	0.226	5.1	LOS A	0.0	0.3	0.03	0.51	0.03	35.8
Approach		434	6.5	434	6.5	0.226	4.7	NA	0.0	0.3	0.03	0.51	0.03	46.8
North: Hill Road (N)														
7	L2	12	0.0	12	0.0	0.108	7.7	LOS A	0.1	0.9	0.42	0.97	0.42	26.3
8	T1	81	1.3	81	1.3	0.108	9.5	LOS A	0.1	0.9	0.42	0.97	0.42	44.9
9	R2	1	0.0	1	0.0	0.108	8.9	LOS A	0.1	0.9	0.42	0.97	0.42	39.0
Approach		93	1.1	93	1.1	0.108	9.3	LOS A	0.1	0.9	0.42	0.97	0.42	44.3
West: Lapwing Street														
10	L2	1	0.0	1	0.0	0.077	7.3	LOS A	0.1	0.6	0.55	1.00	0.55	36.7
11	T1	1	100.0	1	100.0	0.077	13.0	LOS A	0.1	0.6	0.55	1.00	0.55	35.4
12	R2	40	0.0	40	0.0	0.077	11.5	LOS A	0.1	0.6	0.55	1.00	0.55	44.7
Approach		42	2.5	42	2.5	0.077	11.4	LOS A	0.1	0.6	0.55	1.00	0.55	44.5
All Vehicles		966	5.3	966	5.3	0.226	4.5	NA	0.1	0.9	0.08	0.49	0.08	43.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 2AM_FY [BUR_WAT_21_AM_FY (Site Folder: AM FY)]

Network: N101 [AM FY (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Waterways Street														
1	L2	31	0.0	31	0.0	0.045	7.5	LOS A	0.1	0.5	0.34	0.88	0.34	20.8
2	T1	4	0.0	4	0.0	0.045	7.8	LOS A	0.1	0.5	0.34	0.88	0.34	31.5
3	R2	15	7.0	15	7.0	0.045	8.5	LOS A	0.1	0.5	0.34	0.88	0.34	20.8
Approach		50	2.1	50	2.1	0.045	7.8	LOS A	0.1	0.5	0.34	0.88	0.34	22.6
East: Burroway Road (E)														
4	L2	25	0.0	25	0.0	0.145	1.2	LOS A	0.1	0.4	0.05	0.03	0.05	34.5
5	T1	255	5.4	255	5.4	0.145	0.0	LOS A	0.1	0.4	0.05	0.03	0.05	22.9
6	R2	16	0.0	16	0.0	0.145	1.7	LOS A	0.1	0.4	0.05	0.03	0.05	36.8
Approach		296	4.6	296	4.6	0.145	0.2	NA	0.1	0.4	0.05	0.03	0.05	27.7
North: Hill Road														
7	L2	9	0.0	9	0.0	0.197	7.2	LOS A	0.2	1.8	0.40	0.98	0.40	28.3
8	T1	4	0.0	4	0.0	0.197	8.0	LOS A	0.2	1.8	0.40	0.98	0.40	30.6
9	R2	140	10.5	140	10.5	0.197	9.2	LOS A	0.2	1.8	0.40	0.98	0.40	28.3
Approach		154	9.6	154	9.6	0.197	9.0	LOS A	0.2	1.8	0.40	0.98	0.40	28.4
West: Burroway Road (W)														
10	L2	47	2.2	47	2.2	0.101	3.6	LOS A	0.0	0.3	0.06	0.37	0.06	36.9
11	T1	151	2.1	151	2.1	0.101	2.1	LOS A	0.0	0.3	0.06	0.37	0.06	31.7
12	R2	8	12.5	8	12.5	0.101	4.4	LOS A	0.0	0.3	0.06	0.37	0.06	33.5
Approach		207	2.5	207	2.5	0.101	2.6	NA	0.0	0.3	0.06	0.37	0.06	33.9
All Vehicles		707	4.9	707	4.9	0.197	3.4	NA	0.2	1.8	0.15	0.40	0.15	29.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3AM_FY [BUR_WEN_21_AM_FY (Site Folder: AM FY)]

Network: N101 [AM FY (Network Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Wentworth Place														
1	L2	68	12.3	68	12.3	0.093	4.3	LOS A	0.2	1.5	0.44	0.54	0.44	30.1
3	R2	12	0.0	12	0.0	0.093	6.8	LOS A	0.2	1.5	0.44	0.54	0.44	35.5
3u	U	11	0.0	11	0.0	0.093	8.1	LOS A	0.2	1.5	0.44	0.54	0.44	36.4
Approach		91	9.3	91	9.3	0.093	5.1	LOS A	0.2	1.5	0.44	0.54	0.44	32.1
East: Burroway Road (E)														
4	L2	26	0.0	26	0.0	0.193	3.2	LOS A	0.5	3.3	0.28	0.37	0.28	35.6
5	T1	214	2.0	214	2.0	0.193	3.0	LOS A	0.5	3.3	0.28	0.37	0.28	32.7
6u	U	1	0.0	1	0.0	0.193	7.2	LOS A	0.5	3.3	0.28	0.37	0.28	38.2
Approach		240	1.8	240	1.8	0.193	3.0	LOS A	0.5	3.3	0.28	0.37	0.28	33.2
West: Burroway Road (W)														
11	T1	92	2.3	92	2.3	0.129	2.5	LOS A	0.3	2.1	0.13	0.45	0.13	35.4
12	R2	68	3.1	68	3.1	0.129	5.6	LOS A	0.3	2.1	0.13	0.45	0.13	35.2
12u	U	7	0.0	7	0.0	0.129	6.8	LOS A	0.3	2.1	0.13	0.45	0.13	26.5
Approach		168	2.5	168	2.5	0.129	3.9	LOS A	0.3	2.1	0.13	0.45	0.13	35.1
All Vehicles		499	3.4	499	3.4	0.193	3.7	LOS A	0.5	3.3	0.26	0.43	0.26	33.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4AM_FY [BUR_ZEB_21_AM_FY (Site Folder: AM FY)]

Network: N101 [AM FY (Network Folder: General)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Burroway Road (E)														
2	T1	296	4.6	296	4.6	0.572	2.8	LOS A	0.6	4.5	0.45	0.55	0.63	20.1
Approach		296	4.6	296	4.6	0.572	2.8	LOS A	0.6	4.5	0.45	0.55	0.63	20.1
West: Burroway Road (E)														
8	T1	176	2.4	176	2.4	0.334	1.3	LOS A	0.2	1.6	0.42	0.35	0.43	17.9
Approach		176	2.4	176	2.4	0.334	1.3	LOS A	0.2	1.6	0.42	0.35	0.43	17.9
All Vehicles		472	3.8	472	3.8	0.572	2.2	NA	0.6	4.5	0.44	0.47	0.55	19.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: Akçelik M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1AM_FYS [BUR_LAP_21_AM_FYS (Site Folder: AM FY SOP HS)]

Network: N101 [AM FYS (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hill Road (S)														
1	L2	16	6.7	16	6.7	0.237	3.6	LOS A	0.0	0.0	0.00	0.33	0.00	39.5
2	T1	141	12.0	141	12.0	0.237	0.2	LOS A	0.0	0.0	0.00	0.33	0.00	39.7
3	R2	315	1.0	315	1.0	0.237	3.6	LOS A	0.0	0.0	0.00	0.33	0.00	39.1
Approach		472	4.5	472	4.5	0.237	2.6	NA	0.0	0.0	0.00	0.33	0.00	39.3
East: Burroway Road														
4	L2	501	5.5	501	5.5	0.264	4.7	LOS A	0.0	0.3	0.03	0.51	0.03	46.9
5	T1	1	0.0	1	0.0	0.264	3.4	LOS A	0.0	0.3	0.03	0.51	0.03	43.8
6	R2	7	14.3	7	14.3	0.264	5.6	LOS A	0.0	0.3	0.03	0.51	0.03	35.8
Approach		510	5.6	510	5.6	0.264	4.7	NA	0.0	0.3	0.03	0.51	0.03	46.8
North: Hill Road (N)														
7	L2	12	0.0	12	0.0	0.123	8.1	LOS A	0.2	1.1	0.48	0.99	0.48	25.5
8	T1	81	1.3	81	1.3	0.123	10.3	LOS A	0.2	1.1	0.48	0.99	0.48	44.6
9	R2	1	0.0	1	0.0	0.123	9.3	LOS A	0.2	1.1	0.48	0.99	0.48	38.4
Approach		93	1.1	93	1.1	0.123	10.0	LOS A	0.2	1.1	0.48	0.99	0.48	44.0
West: Lapwing Street														
10	L2	1	0.0	1	0.0	0.092	7.3	LOS A	0.1	0.7	0.62	1.00	0.62	35.8
11	T1	1	100.0	1	100.0	0.092	13.8	LOS A	0.1	0.7	0.62	1.00	0.62	34.2
12	R2	40	0.0	40	0.0	0.092	12.9	LOS A	0.1	0.7	0.62	1.00	0.62	44.2
Approach		42	2.5	42	2.5	0.092	12.8	LOS A	0.1	0.7	0.62	1.00	0.62	44.0
All Vehicles		1116	4.6	1116	4.6	0.264	4.6	NA	0.2	1.1	0.08	0.49	0.08	43.1

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 2AM_FYS [BUR_WAT_21_AM_FYS (Site Folder: AM FY SOP HS)]

Network: N101 [AM FYS (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Waterways Street														
1	L2	31	0.0	31	0.0	0.064	7.8	LOS A	0.1	0.6	0.41	0.91	0.41	20.0
2	T1	4	0.0	4	0.0	0.064	8.5	LOS A	0.1	0.6	0.41	0.91	0.41	31.0
3	R2	25	4.3	25	4.3	0.064	9.2	LOS A	0.1	0.6	0.41	0.91	0.41	20.0
Approach		59	1.8	59	1.8	0.064	8.5	LOS A	0.1	0.6	0.41	0.91	0.41	21.6
East: Burroway Road (E)														
4	L2	34	0.0	34	0.0	0.185	1.2	LOS A	0.1	0.4	0.05	0.03	0.05	34.5
5	T1	331	4.1	331	4.1	0.185	0.1	LOS A	0.1	0.4	0.05	0.03	0.05	23.0
6	R2	16	0.0	16	0.0	0.185	2.0	LOS A	0.1	0.4	0.05	0.03	0.05	36.8
Approach		381	3.6	381	3.6	0.185	0.2	NA	0.1	0.4	0.05	0.03	0.05	27.3
North: Hill Road														
7	L2	9	0.0	9	0.0	0.229	7.6	LOS A	0.3	2.2	0.47	1.01	0.49	27.4
8	T1	4	0.0	4	0.0	0.229	8.8	LOS A	0.3	2.2	0.47	1.01	0.49	29.8
9	R2	140	10.5	140	10.5	0.229	10.2	LOS A	0.3	2.2	0.47	1.01	0.49	27.4
Approach		154	9.6	154	9.6	0.229	10.0	LOS A	0.3	2.2	0.47	1.01	0.49	27.5
West: Burroway Road (W)														
10	L2	47	2.2	47	2.2	0.137	3.6	LOS A	0.0	0.3	0.05	0.36	0.05	37.1
11	T1	227	1.4	227	1.4	0.137	2.1	LOS A	0.0	0.3	0.05	0.36	0.05	31.9
12	R2	8	12.5	8	12.5	0.137	4.8	LOS A	0.0	0.3	0.05	0.36	0.05	33.7
Approach		283	1.9	283	1.9	0.137	2.5	NA	0.0	0.3	0.05	0.36	0.05	33.7
All Vehicles		876	4.0	876	4.0	0.229	3.2	NA	0.3	2.2	0.15	0.37	0.15	29.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3AM_FYS [BUR_WEN_21_AM_FYS (Site Folder: AM FY SOP HS)]

Network: N101 [AM FYS (Network Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Wentworth Place														
1	L2	68	12.3	68	12.3	0.111	3.2	LOS A	0.2	1.9	0.52	0.58	0.52	13.3
3	R2	21	0.0	21	0.0	0.111	5.4	LOS A	0.2	1.9	0.52	0.58	0.52	13.3
3u	U	11	0.0	11	0.0	0.111	6.7	LOS A	0.2	1.9	0.52	0.58	0.52	13.3
Approach		100	8.4	100	8.4	0.111	4.0	LOS A	0.2	1.9	0.52	0.58	0.52	13.3
East: Burroway Road (E)														
4	L2	35	0.0	35	0.0	0.263	1.8	LOS A	0.7	4.8	0.30	0.35	0.30	22.0
5	T1	299	1.4	299	1.4	0.263	1.9	LOS A	0.7	4.8	0.30	0.35	0.30	22.0
6u	U	1	0.0	1	0.0	0.263	5.5	LOS A	0.7	4.8	0.30	0.35	0.30	22.0
Approach		335	1.3	335	1.3	0.263	1.9	LOS A	0.7	4.8	0.30	0.35	0.30	22.0
West: Burroway Road (W)														
11	T1	177	1.2	177	1.2	0.195	2.6	LOS A	0.5	3.4	0.17	0.41	0.17	26.9
12	R2	68	3.1	68	3.1	0.195	5.6	LOS A	0.5	3.4	0.17	0.41	0.17	26.9
12u	U	7	0.0	7	0.0	0.195	6.9	LOS A	0.5	3.4	0.17	0.41	0.17	26.9
Approach		253	1.7	253	1.7	0.195	3.5	LOS A	0.5	3.4	0.17	0.41	0.17	26.9
All Vehicles		688	2.4	688	2.4	0.263	2.8	LOS A	0.7	4.8	0.29	0.41	0.29	23.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4AM_FYS [BUR_ZEB_21_AM_FYS (Site Folder: AM FY SOP HS)]

Network: N101 [AM FYS (Network Folder: General)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Burroway Road (E)														
2	T1	380	3.6	380	3.6	0.852	10.1	LOS A	1.7	12.5	0.54	1.30	1.49	13.3
Approach		380	3.6	380	3.6	0.852	10.1	LOS A	1.7	12.5	0.54	1.30	1.49	13.3
West: Burroway Road (E)														
8	T1	261	1.6	261	1.6	0.575	3.5	LOS A	0.6	4.0	0.49	0.64	0.72	12.7
Approach		261	1.6	261	1.6	0.575	3.5	LOS A	0.6	4.0	0.49	0.64	0.72	12.7
All Vehicles		641	2.8	641	2.8	0.852	7.4	NA	1.7	12.5	0.52	1.03	1.17	13.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: Akçelik M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 5AM_FYS [WEN_SOU_21_AM_FYS (Site Folder: AM FY SOP HS)]

Network: N101 [AM FYS (Network Folder: General)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Wentworth Place														
2	T1	100	8.4	100	8.4	0.195	0.5	LOS A	0.1	0.8	0.28	0.15	0.28	23.9
Approach		100	8.4	100	8.4	0.195	0.5	LOS A	0.1	0.8	0.28	0.15	0.28	23.9
North: Wentworth Place														
8	T1	114	1.9	114	1.9	0.207	0.6	LOS A	0.1	0.8	0.29	0.18	0.29	37.2
Approach		114	1.9	114	1.9	0.207	0.6	LOS A	0.1	0.8	0.29	0.18	0.29	37.2
All Vehicles		214	4.9	214	4.9	0.207	0.6	NA	0.1	0.8	0.29	0.16	0.29	29.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: Akçelik M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6AM_FYS [BUR_EAS_21_AM_FYS (Site Folder: AM FY SOP HS)]

Network: N101 [AM FYS (Network Folder: General)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Burroway Road (E)														
2	T1	335	1.3	335	1.3	0.729	5.1	LOS A	1.0	6.9	0.48	0.77	0.87	20.6
Approach		335	1.3	335	1.3	0.729	5.1	LOS A	1.0	6.9	0.48	0.77	0.87	20.6
West: Burroway Road (E)														
8	T1	223	0.9	223	0.9	0.433	1.9	LOS A	0.4	2.6	0.44	0.45	0.52	34.1
Approach		223	0.9	223	0.9	0.433	1.9	LOS A	0.4	2.6	0.44	0.45	0.52	34.1
All Vehicles		558	1.1	558	1.1	0.729	3.9	NA	1.0	6.9	0.46	0.64	0.73	24.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: Akçelik M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1PM_BY [BUR_LAP_21_PM_BY (Site Folder: PM BY)]

Network: N101 [PM BY (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hill Road (S)														
1	L2	5	0.0	5	0.0	0.121	3.5	LOS A	0.0	0.0	0.00	0.40	0.00	39.3
2	T1	34	40.6	34	40.6	0.121	0.1	LOS A	0.0	0.0	0.00	0.40	0.00	39.4
3	R2	193	3.8	193	3.8	0.121	3.6	LOS A	0.0	0.0	0.00	0.40	0.00	38.8
Approach		232	9.1	232	9.1	0.121	3.1	NA	0.0	0.0	0.00	0.40	0.00	38.9
East: Burroway Road														
4	L2	294	5.7	294	5.7	0.153	4.6	LOS A	0.0	0.1	0.01	0.52	0.01	46.9
5	T1	1	0.0	1	0.0	0.153	1.2	LOS A	0.0	0.1	0.01	0.52	0.01	43.9
6	R2	2	0.0	2	0.0	0.153	4.1	LOS A	0.0	0.1	0.01	0.52	0.01	36.1
Approach		297	5.7	297	5.7	0.153	4.6	NA	0.0	0.1	0.01	0.52	0.01	46.9
North: Hill Road (N)														
7	L2	7	28.6	7	28.6	0.046	8.7	LOS A	0.1	0.4	0.34	0.92	0.34	27.3
8	T1	38	0.0	38	0.0	0.046	8.5	LOS A	0.1	0.4	0.34	0.92	0.34	45.2
9	R2	1	0.0	1	0.0	0.046	8.0	LOS A	0.1	0.4	0.34	0.92	0.34	39.6
Approach		46	4.5	46	4.5	0.046	8.5	LOS A	0.1	0.4	0.34	0.92	0.34	44.5
West: Lapwing Street														
10	L2	1	0.0	1	0.0	0.025	6.8	LOS A	0.0	0.2	0.30	0.95	0.30	37.6
11	T1	1	0.0	1	0.0	0.025	6.9	LOS A	0.0	0.2	0.30	0.95	0.30	36.5
12	R2	16	13.3	16	13.3	0.025	10.0	LOS A	0.0	0.2	0.30	0.95	0.30	45.0
Approach		18	11.8	18	11.8	0.025	9.7	LOS A	0.0	0.2	0.30	0.95	0.30	44.6
All Vehicles		593	7.1	593	7.1	0.153	4.5	NA	0.1	0.4	0.04	0.52	0.04	43.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 2PM_BY [BUR_WAT_21_PM_BY (Site Folder: PM BY)]

Network: N101 [PM BY (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Waterways Street														
1	L2	16	0.0	16	0.0	0.023	7.2	LOS A	0.0	0.2	0.26	0.88	0.26	21.2
2	T1	8	0.0	8	0.0	0.023	7.4	LOS A	0.0	0.2	0.26	0.88	0.26	31.7
3	R2	5	0.0	5	0.0	0.023	7.6	LOS A	0.0	0.2	0.26	0.88	0.26	21.2
Approach		29	0.0	29	0.0	0.023	7.3	LOS A	0.0	0.2	0.26	0.88	0.26	26.2
East: Burroway Road (E)														
4	L2	6	0.0	6	0.0	0.086	1.2	LOS A	0.0	0.2	0.04	0.02	0.04	35.0
5	T1	165	2.5	165	2.5	0.086	0.0	LOS A	0.0	0.2	0.04	0.02	0.04	23.7
6	R2	7	0.0	7	0.0	0.086	1.6	LOS A	0.0	0.2	0.04	0.02	0.04	37.0
Approach		179	2.4	179	2.4	0.086	0.1	NA	0.0	0.2	0.04	0.02	0.04	27.0
North: Hill Road														
7	L2	7	0.0	7	0.0	0.087	7.1	LOS A	0.1	0.8	0.31	0.95	0.31	29.0
8	T1	4	0.0	4	0.0	0.087	7.4	LOS A	0.1	0.8	0.31	0.95	0.31	31.2
9	R2	62	20.3	62	20.3	0.087	8.7	LOS A	0.1	0.8	0.31	0.95	0.31	29.0
Approach		74	17.1	74	17.1	0.087	8.5	LOS A	0.1	0.8	0.31	0.95	0.31	29.1
West: Burroway Road (W)														
10	L2	47	6.7	47	6.7	0.095	3.6	LOS A	0.1	0.5	0.09	0.36	0.09	36.6
11	T1	124	5.9	124	5.9	0.095	2.2	LOS A	0.1	0.5	0.09	0.36	0.09	31.0
12	R2	21	0.0	21	0.0	0.095	3.9	LOS A	0.1	0.5	0.09	0.36	0.09	33.9
Approach		193	5.5	193	5.5	0.095	2.7	NA	0.1	0.5	0.09	0.36	0.09	33.7
All Vehicles		475	5.8	475	5.8	0.095	2.9	NA	0.1	0.8	0.12	0.36	0.12	30.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3PM_BY [BUR_WEN_21_PM_BY (Site Folder: PM BY)]

Network: N101 [PM BY (Network Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Wentworth Place														
1	L2	136	0.8	136	0.8	0.123	2.9	LOS A	0.3	2.0	0.17	0.44	0.17	32.0
3	R2	3	0.0	3	0.0	0.123	5.6	LOS A	0.3	2.0	0.17	0.44	0.17	36.8
3u	U	25	8.3	25	8.3	0.123	7.0	LOS A	0.3	2.0	0.17	0.44	0.17	37.8
Approach		164	1.9	164	1.9	0.123	3.6	LOS A	0.3	2.0	0.17	0.44	0.17	33.4
East: Burroway Road (E)														
4	L2	2	0.0	2	0.0	0.027	3.5	LOS A	0.1	0.4	0.34	0.39	0.34	35.2
5	T1	25	12.5	25	12.5	0.027	3.4	LOS A	0.1	0.4	0.34	0.39	0.34	32.1
6u	U	1	0.0	1	0.0	0.027	7.5	LOS A	0.1	0.4	0.34	0.39	0.34	37.7
Approach		28	11.1	28	11.1	0.027	3.5	LOS A	0.1	0.4	0.34	0.39	0.34	32.8
West: Burroway Road (W)														
11	T1	17	31.3	17	31.3	0.104	2.7	LOS A	0.2	1.7	0.14	0.54	0.14	33.5
12	R2	109	1.0	109	1.0	0.104	5.6	LOS A	0.2	1.7	0.14	0.54	0.14	33.4
12u	U	12	0.0	12	0.0	0.104	6.9	LOS A	0.2	1.7	0.14	0.54	0.14	24.2
Approach		138	4.6	138	4.6	0.104	5.3	LOS A	0.2	1.7	0.14	0.54	0.14	33.0
All Vehicles		331	3.8	331	3.8	0.123	4.3	LOS A	0.3	2.0	0.18	0.48	0.18	33.2

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4PM_BY [BUR_ZEB_21_PM_BY (Site Folder: PM BY)]

Network: N101 [PM BY (Network Folder: General)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Burroway Road (E)														
2	T1	179	2.4	179	2.4	0.293	0.9	LOS A	0.2	1.5	0.36	0.24	0.36	22.4
Approach		179	2.4	179	2.4	0.293	0.9	LOS A	0.2	1.5	0.36	0.24	0.36	22.4
West: Burroway Road (E)														
8	T1	137	5.4	137	5.4	0.229	0.8	LOS A	0.2	1.1	0.35	0.25	0.35	18.7
Approach		137	5.4	137	5.4	0.229	0.8	LOS A	0.2	1.1	0.35	0.25	0.35	18.7
All Vehicles		316	3.7	316	3.7	0.293	0.9	NA	0.2	1.5	0.36	0.24	0.36	21.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: Akçelik M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1PM_FY [BUR_LAP_21_PM_FY (Site Folder: PM FY)]

Network: N101 [PM FY (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hill Road (S)														
1	L2	43	0.0	43	0.0	0.256	3.7	LOS A	0.0	0.0	0.00	0.41	0.00	39.7
2	T1	71	19.2	71	19.2	0.256	0.3	LOS A	0.0	0.0	0.00	0.41	0.00	39.9
3	R2	393	1.9	393	1.9	0.256	3.7	LOS A	0.0	0.0	0.00	0.41	0.00	39.3
Approach		507	4.2	507	4.2	0.256	3.2	NA	0.0	0.0	0.00	0.41	0.00	39.4
East: Burroway Road														
4	L2	384	4.4	384	4.4	0.198	4.6	LOS A	0.0	0.1	0.01	0.52	0.01	46.9
5	T1	1	0.0	1	0.0	0.198	3.4	LOS A	0.0	0.1	0.01	0.52	0.01	43.9
6	R2	2	0.0	2	0.0	0.198	5.1	LOS A	0.0	0.1	0.01	0.52	0.01	36.1
Approach		387	4.4	387	4.4	0.198	4.6	NA	0.0	0.1	0.01	0.52	0.01	46.9
North: Hill Road (N)														
7	L2	7	28.6	7	28.6	0.071	10.2	LOS A	0.1	0.6	0.47	0.97	0.47	25.9
8	T1	47	0.0	47	0.0	0.071	9.7	LOS A	0.1	0.6	0.47	0.97	0.47	44.7
9	R2	1	0.0	1	0.0	0.071	9.4	LOS A	0.1	0.6	0.47	0.97	0.47	38.7
Approach		56	3.8	56	3.8	0.071	9.8	LOS A	0.1	0.6	0.47	0.97	0.47	44.1
West: Lapwing Street														
10	L2	1	0.0	1	0.0	0.055	7.0	LOS A	0.1	0.5	0.52	0.99	0.52	36.2
11	T1	1	0.0	1	0.0	0.055	7.8	LOS A	0.1	0.5	0.52	0.99	0.52	34.8
12	R2	25	8.4	25	8.4	0.055	12.4	LOS A	0.1	0.5	0.52	0.99	0.52	44.4
Approach		27	7.7	27	7.7	0.055	12.0	LOS A	0.1	0.5	0.52	0.99	0.52	44.1
All Vehicles		977	4.3	977	4.3	0.256	4.4	NA	0.1	0.6	0.05	0.50	0.05	42.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 2PM_FY [BUR_WAT_21_PM_FY (Site Folder: PM FY)]

Network: N101 [PM FY (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Waterways Street														
1	L2	16	0.0	16	0.0	0.065	7.5	LOS A	0.1	0.6	0.38	0.93	0.38	19.8
2	T1	8	0.0	8	0.0	0.065	8.5	LOS A	0.1	0.6	0.38	0.93	0.38	30.8
3	R2	30	0.0	30	0.0	0.065	9.0	LOS A	0.1	0.6	0.38	0.93	0.38	19.8
Approach		55	0.0	55	0.0	0.065	8.5	LOS A	0.1	0.6	0.38	0.93	0.38	22.9
East: Burroway Road (E)														
4	L2	18	0.0	18	0.0	0.135	1.3	LOS A	0.0	0.2	0.04	0.02	0.04	34.9
5	T1	255	1.6	255	1.6	0.135	0.0	LOS A	0.0	0.2	0.04	0.02	0.04	23.5
6	R2	7	0.0	7	0.0	0.135	2.3	LOS A	0.0	0.2	0.04	0.02	0.04	37.0
Approach		280	1.5	280	1.5	0.135	0.2	NA	0.0	0.2	0.04	0.02	0.04	26.6
North: Hill Road														
7	L2	7	0.0	7	0.0	0.117	7.8	LOS A	0.1	1.1	0.47	1.00	0.47	27.4
8	T1	4	0.0	4	0.0	0.117	8.5	LOS A	0.1	1.1	0.47	1.00	0.47	29.8
9	R2	62	20.3	62	20.3	0.117	10.7	LOS A	0.1	1.1	0.47	1.00	0.47	27.4
Approach		74	17.1	74	17.1	0.117	10.3	LOS A	0.1	1.1	0.47	1.00	0.47	27.6
West: Burroway Road (W)														
10	L2	47	6.7	47	6.7	0.194	3.7	LOS A	0.1	0.6	0.07	0.35	0.07	37.0
11	T1	325	2.3	325	2.3	0.194	2.2	LOS A	0.1	0.6	0.07	0.35	0.07	31.8
12	R2	21	0.0	21	0.0	0.194	4.3	LOS A	0.1	0.6	0.07	0.35	0.07	34.5
Approach		393	2.7	393	2.7	0.194	2.5	NA	0.1	0.6	0.07	0.35	0.07	33.3
All Vehicles		802	3.4	802	3.4	0.194	2.8	NA	0.1	1.1	0.12	0.34	0.12	30.3

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3PM_FY [BUR_WEN_21_PM_FY (Site Folder: PM FY)]

Network: N101 [PM FY (Network Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Wentworth Place														
1	L2	136	0.8	136	0.8	0.169	3.6	LOS A	0.4	2.9	0.37	0.51	0.37	30.5
3	R2	28	0.0	28	0.0	0.169	6.4	LOS A	0.4	2.9	0.37	0.51	0.37	35.7
3u	U	25	8.3	25	8.3	0.169	7.8	LOS A	0.4	2.9	0.37	0.51	0.37	36.7
Approach		189	1.7	189	1.7	0.169	4.6	LOS A	0.4	2.9	0.37	0.51	0.37	32.7
East: Burroway Road (E)														
4	L2	13	0.0	13	0.0	0.128	3.6	LOS A	0.3	2.1	0.36	0.41	0.36	35.2
5	T1	127	2.5	127	2.5	0.128	3.4	LOS A	0.3	2.1	0.36	0.41	0.36	32.0
6u	U	1	0.0	1	0.0	0.128	7.6	LOS A	0.3	2.1	0.36	0.41	0.36	37.7
Approach		141	2.2	141	2.2	0.128	3.4	LOS A	0.3	2.1	0.36	0.41	0.36	32.6
West: Burroway Road (W)														
11	T1	242	2.2	242	2.2	0.289	2.7	LOS A	0.8	5.3	0.25	0.43	0.25	35.2
12	R2	109	1.0	109	1.0	0.289	5.8	LOS A	0.8	5.3	0.25	0.43	0.25	35.0
12u	U	12	0.0	12	0.0	0.289	7.0	LOS A	0.8	5.3	0.25	0.43	0.25	26.1
Approach		363	1.7	363	1.7	0.289	3.8	LOS A	0.8	5.3	0.25	0.43	0.25	35.0
All Vehicles		694	1.8	694	1.8	0.289	3.9	LOS A	0.8	5.3	0.31	0.45	0.31	33.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4PM_FY [BUR_ZEB_21_PM_FY (Site Folder: PM FY)]

Network: N101 [PM FY (Network Folder: General)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Burroway Road (E)														
2	T1	281	1.5	281	1.5	0.458	1.4	LOS A	0.4	3.1	0.39	0.35	0.44	22.2
Approach		281	1.5	281	1.5	0.458	1.4	LOS A	0.4	3.1	0.39	0.35	0.44	22.2
West: Burroway Road (E)														
8	T1	362	2.0	362	2.0	0.592	2.4	LOS A	0.8	5.4	0.41	0.46	0.55	15.1
Approach		362	2.0	362	2.0	0.592	2.4	LOS A	0.8	5.4	0.41	0.46	0.55	15.1
All Vehicles		643	1.8	643	1.8	0.592	2.0	NA	0.8	5.4	0.40	0.41	0.50	19.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: Akçelik M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 1PM_FYS [BUR_LAP_21_PM_FYS (Site Folder: PM FY SOP HS)]

Network: N101 [PM FYS (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Hill Road (S)														
1	L2	43	0.0	43	0.0	0.293	3.7	LOS A	0.0	0.0	0.00	0.41	0.00	39.6
2	T1	71	19.2	71	19.2	0.293	0.3	LOS A	0.0	0.0	0.00	0.41	0.00	39.7
3	R2	468	1.6	468	1.6	0.293	3.7	LOS A	0.0	0.0	0.00	0.41	0.00	39.2
Approach		582	3.6	582	3.6	0.293	3.3	NA	0.0	0.0	0.00	0.41	0.00	39.3
East: Burroway Road														
4	L2	459	3.7	459	3.7	0.236	4.6	LOS A	0.0	0.1	0.01	0.52	0.01	46.9
5	T1	1	0.0	1	0.0	0.236	4.5	LOS A	0.0	0.1	0.01	0.52	0.01	43.9
6	R2	2	0.0	2	0.0	0.236	5.6	LOS A	0.0	0.1	0.01	0.52	0.01	36.1
Approach		462	3.6	462	3.6	0.236	4.6	NA	0.0	0.1	0.01	0.52	0.01	46.9
North: Hill Road (N)														
7	L2	7	28.6	7	28.6	0.082	10.9	LOS A	0.1	0.7	0.53	1.00	0.53	25.0
8	T1	47	0.0	47	0.0	0.082	10.5	LOS A	0.1	0.7	0.53	1.00	0.53	44.4
9	R2	1	0.0	1	0.0	0.082	9.8	LOS A	0.1	0.7	0.53	1.00	0.53	38.2
Approach		56	3.8	56	3.8	0.082	10.6	LOS A	0.1	0.7	0.53	1.00	0.53	43.8
West: Lapwing Street														
10	L2	1	0.0	1	0.0	0.066	7.0	LOS A	0.1	0.5	0.59	0.99	0.59	35.2
11	T1	1	0.0	1	0.0	0.066	8.1	LOS A	0.1	0.5	0.59	0.99	0.59	33.5
12	R2	25	8.4	25	8.4	0.066	14.0	LOS A	0.1	0.5	0.59	0.99	0.59	43.8
Approach		27	7.7	27	7.7	0.066	13.5	LOS A	0.1	0.5	0.59	0.99	0.59	43.5
All Vehicles		1128	3.7	1128	3.7	0.293	4.5	NA	0.1	0.7	0.05	0.50	0.05	42.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 2PM_FYS [BUR_WAT_21_PM_FYS (Site Folder: PM FY SOP HS)]

Network: N101 [PM FYS (Network Folder: General)]

New Site
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Waterways Street														
1	L2	16	0.0	16	0.0	0.144	7.8	LOS A	0.1	0.8	0.46	0.97	0.46	18.8
2	T1	8	0.0	8	0.0	0.144	9.3	LOS A	0.1	0.8	0.46	0.97	0.46	30.1
3	R2	40	0.0	40	0.0	0.144	10.0	LOS A	0.1	0.8	0.46	0.97	0.46	18.8
Approach		64	0.0	64	0.0	0.144	9.4	LOS A	0.1	0.8	0.46	0.97	0.46	21.5
East: Burroway Road (E)														
4	L2	27	0.0	27	0.0	0.175	1.3	LOS A	0.0	0.3	0.04	0.02	0.04	34.9
5	T1	331	1.3	331	1.3	0.175	0.1	LOS A	0.0	0.3	0.04	0.02	0.04	23.6
6	R2	7	0.0	7	0.0	0.175	2.7	LOS A	0.0	0.3	0.04	0.02	0.04	37.0
Approach		365	1.2	365	1.2	0.175	0.2	NA	0.0	0.3	0.04	0.02	0.04	26.6
North: Hill Road														
7	L2	7	0.0	7	0.0	0.152	8.2	LOS A	0.2	1.3	0.56	1.00	0.56	26.5
8	T1	4	0.0	4	0.0	0.152	9.3	LOS A	0.2	1.3	0.56	1.00	0.56	29.0
9	R2	62	20.3	62	20.3	0.152	12.0	LOS A	0.2	1.3	0.56	1.00	0.56	26.5
Approach		74	17.1	74	17.1	0.152	11.5	LOS A	0.2	1.3	0.56	1.00	0.56	26.6
West: Burroway Road (W)														
10	L2	47	6.7	47	6.7	0.418	3.9	LOS A	0.1	0.7	0.07	0.35	0.08	37.0
11	T1	400	1.8	400	1.8	0.418	2.2	LOS A	0.1	0.7	0.07	0.35	0.08	31.9
12	R2	21	0.0	21	0.0	0.418	4.7	LOS A	0.1	0.7	0.07	0.35	0.08	34.5
Approach		468	2.2	468	2.2	0.418	2.5	NA	0.1	0.7	0.07	0.35	0.08	33.1
All Vehicles		971	2.8	971	2.8	0.418	2.8	NA	0.2	1.3	0.12	0.32	0.12	29.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 3PM_FYS [BUR_WEN_21_PM_FYS (Site Folder: PM FY SOP HS)]

Network: N101 [PM FYS (Network Folder: General)]

New Site
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Wentworth Place														
1	L2	136	0.8	136	0.8	0.210	2.6	LOS A	0.5	3.4	0.48	0.56	0.48	14.5
3	R2	38	0.0	38	0.0	0.210	5.0	LOS A	0.5	3.4	0.48	0.56	0.48	14.5
3u	U	25	8.3	25	8.3	0.210	6.4	LOS A	0.5	3.4	0.48	0.56	0.48	14.5
Approach		199	1.6	199	1.6	0.210	3.5	LOS A	0.5	3.4	0.48	0.56	0.48	14.5
East: Burroway Road (E)														
4	L2	23	0.0	23	0.0	0.209	2.2	LOS A	0.5	3.6	0.39	0.41	0.39	20.8
5	T1	212	1.5	212	1.5	0.209	2.3	LOS A	0.5	3.6	0.39	0.41	0.39	20.8
6u	U	1	0.0	1	0.0	0.209	6.0	LOS A	0.5	3.6	0.39	0.41	0.39	20.8
Approach		235	1.3	235	1.3	0.209	2.3	LOS A	0.5	3.6	0.39	0.41	0.39	20.8
West: Burroway Road (W)														
11	T1	327	1.6	327	1.6	0.465	2.8	LOS A	1.0	7.3	0.29	0.43	0.29	26.0
12	R2	109	1.0	109	1.0	0.465	5.9	LOS A	1.0	7.3	0.29	0.43	0.29	26.0
12u	U	12	0.0	12	0.0	0.465	7.1	LOS A	1.0	7.3	0.29	0.43	0.29	26.0
Approach		448	1.4	448	1.4	0.465	3.7	LOS A	1.0	7.3	0.29	0.43	0.29	26.0
All Vehicles		882	1.4	882	1.4	0.465	3.3	LOS A	1.0	7.3	0.36	0.45	0.36	23.6

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 4PM_FYS [BUR_ZEB_21_PM_FYS (Site Folder: PM FY SOP HS)]

Network: N101 [PM FYS (Network Folder: General)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Burroway Road (E)														
2	T1	365	1.2	365	1.2	0.691	4.2	LOS A	1.0	7.1	0.48	0.71	0.81	18.3
Approach		365	1.2	365	1.2	0.691	4.2	LOS A	1.0	7.1	0.48	0.71	0.81	18.3
West: Burroway Road (E)														
8	T1	447	1.6	447	1.6	0.850	8.8	LOS A	2.1	14.9	0.51	1.19	1.34	7.2
Approach		447	1.6	447	1.6	0.850	8.8	LOS A	2.1	14.9	0.51	1.19	1.34	7.2
All Vehicles		813	1.4	813	1.4	0.850	6.8	NA	2.1	14.9	0.49	0.98	1.10	12.9

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: Akçelik M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 5PM_FYS [WEN_SOU_21_PM_FYS (Site Folder: PM FY SOP HS)]

Network: N101 [PM FYS (Network Folder: General)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
South: Wentworth Place														
2	T1	199	1.6	199	1.6	0.472	0.8	LOS A	0.2	1.7	0.30	0.21	0.31	23.9
Approach		199	1.6	199	1.6	0.472	0.8	LOS A	0.2	1.7	0.30	0.21	0.31	23.9
North: Wentworth Place														
8	T1	158	2.0	158	2.0	0.287	0.6	LOS A	0.2	1.2	0.29	0.19	0.29	37.2
Approach		158	2.0	158	2.0	0.287	0.6	LOS A	0.2	1.2	0.29	0.19	0.29	37.2
All Vehicles		357	1.8	357	1.8	0.472	0.7	NA	0.2	1.7	0.30	0.20	0.30	28.5

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: Akçelik M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6PM_FYS [BUR_EAS_21_PM_FYS (Site Folder: PM FY SOP HS)]

Network: N101 [PM FYS (Network Folder: General)]

New Site
Site Category: (None)
Pedestrian Crossing (Unsignalised)

Vehicle Movement Performance

Mov ID	Turn	DEMAND FLOWS [Total veh/h	HV] %	ARRIVAL FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	AVERAGE BACK OF QUEUE [Veh. veh	Dist] m	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed km/h
East: Burroway Road (E)														
2	T1	236	1.3	236	1.3	0.468	2.2	LOS A	0.4	2.9	0.45	0.47	0.55	22.9
Approach		236	1.3	236	1.3	0.468	2.2	LOS A	0.4	2.9	0.45	0.47	0.55	22.9
West: Burroway Road (E)														
8	T1	366	1.4	366	1.4	0.714	4.7	LOS A	1.1	7.5	0.49	0.77	0.87	29.7
Approach		366	1.4	366	1.4	0.714	4.7	LOS A	1.1	7.5	0.49	0.77	0.87	29.7
All Vehicles		602	1.4	602	1.4	0.714	3.7	NA	1.1	7.5	0.47	0.65	0.74	26.7

Site Level of Service (LOS) Method: Delay (RTA NSW). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Delay Model: SIDRA Standard (Geometric Delay is included).
Gap-Acceptance Capacity: Akçelik M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

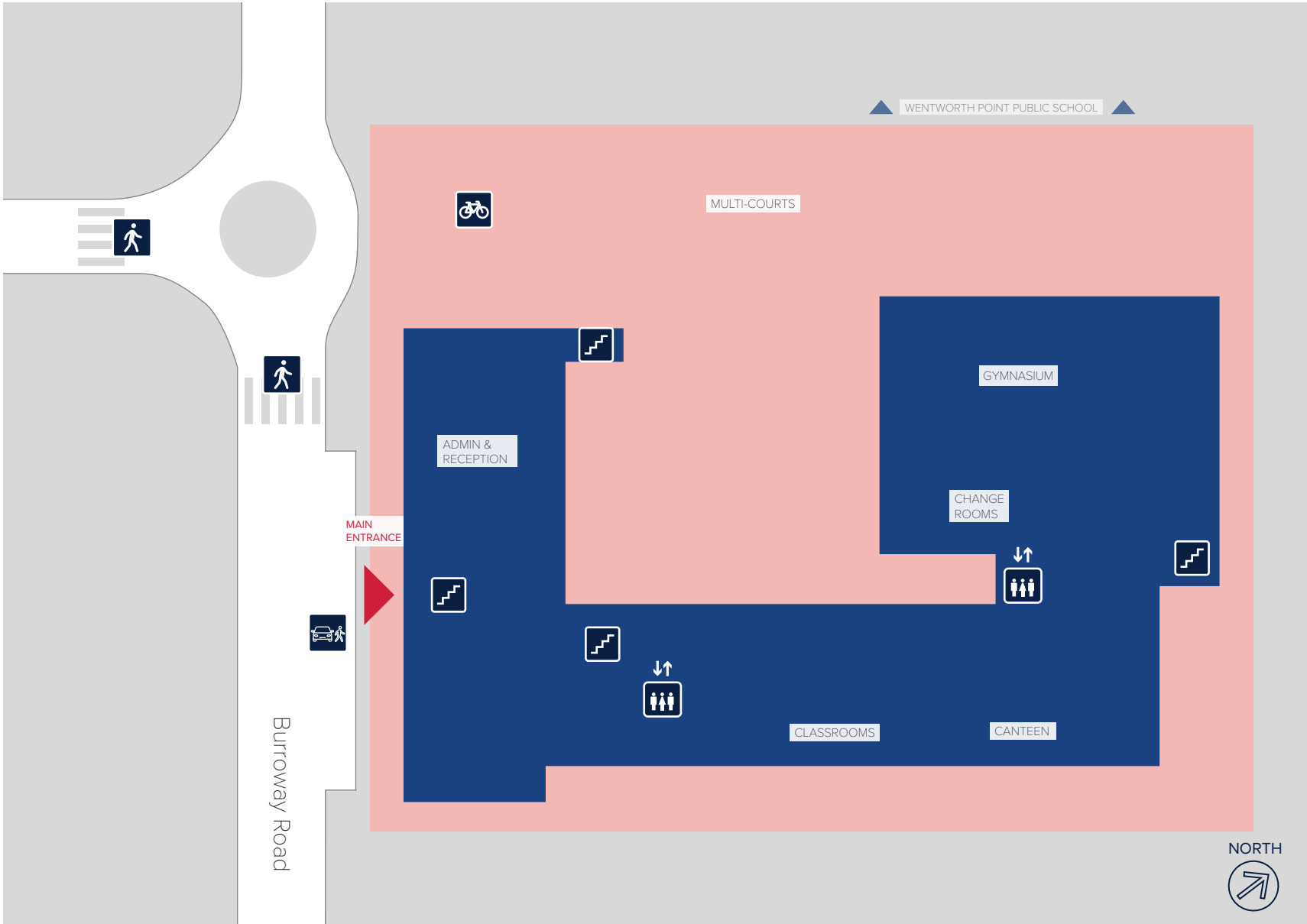
APPENDIX C

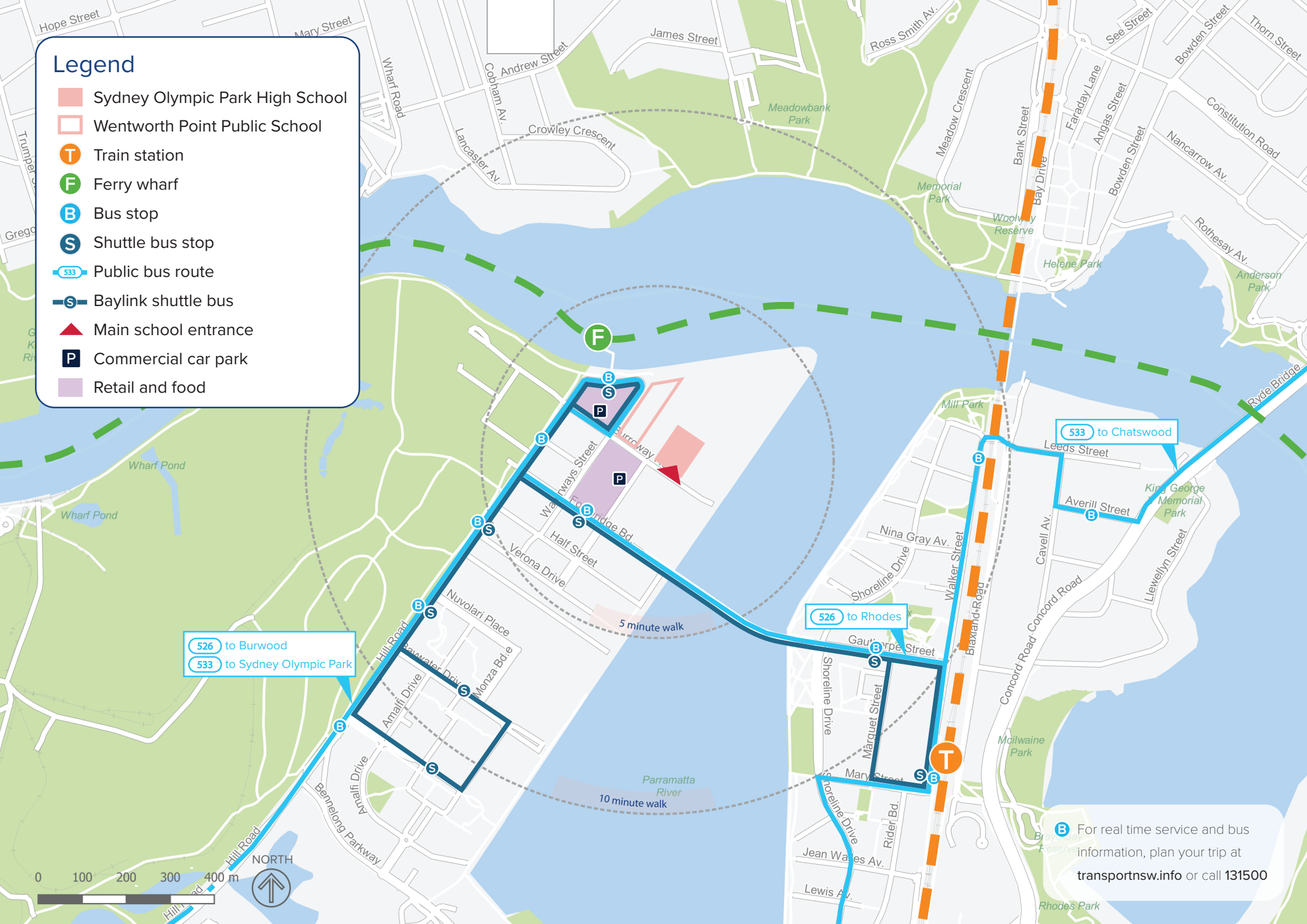
Transport Access Guide

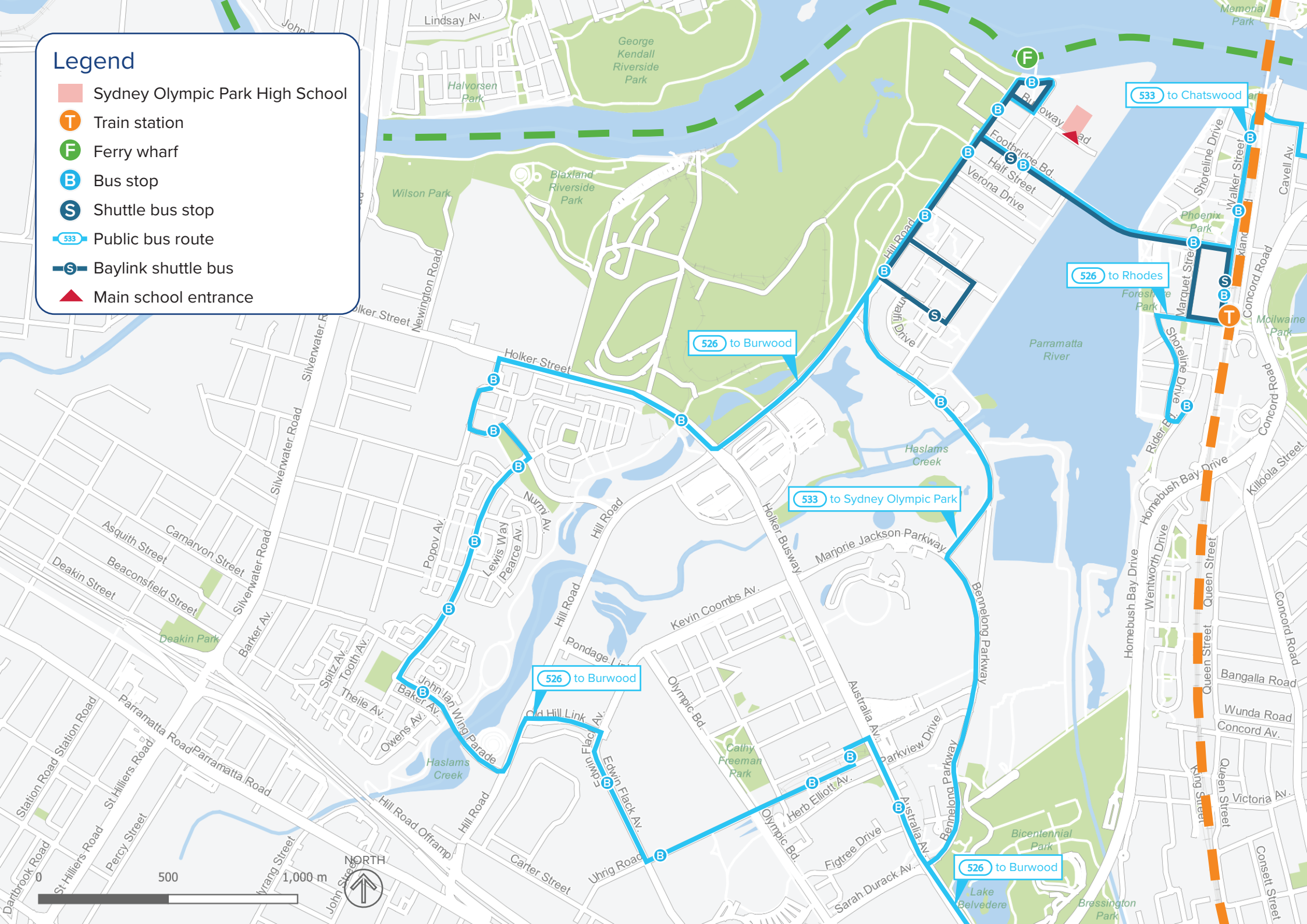
Sydney Olympic Park High School

Transport Access Guide

- Shared Parking
- Kiss and Drop
- Zebra Crossing
- Lifts
- Bicycle / Rideables parking
- Stairs
- School Entrance




Legend
Sydney Olympic Park High School
Wentworth Point Public School
Train station
Ferry wharf
Bus stop
Shuttle bus stop
533 Public bus route
Baylink shuttle bus
Main school entrance
Commercial car park
Retail and food
526 to Burwood
533 to Sydney Olympic Park
526 to Rhodes
533 to Chatswood
5 minute walk
10 minute walk
Parramatta River
Wharf Pond
Meadowbank Park
Memorial Park
Mill Park
Helene Park
Anderson Park
King George Memorial Park
Mcilwaine Park
Rhodes Park
Hope Street
Mary Street
James Street
Andrew Street
Cobham Av.
Wharf Road
Crowley Crescent
Lancaster Av.
Ross Smith Av.
See Street
Bowden Street
Thorn Street
Meadow Crescent
Bank Street
Bay Drive
Faraday Lane
Angas Street
Constitution Road
Nancarrow Av.
Rothesay Av.
Ryde Bridge
Leeds Street
Averill Street
Cavell Av.
Llewellyn Street
Concord Road
Nina Gray Av.
Shoreline Drive
Walker Street
Braxland Road
Marquet Street
Rider Bd.
Jean Wallace Av.
Lewis Av.
Half Street
Verona Drive
Nuvolari Place
Monza Bd.e
Amalfi Drive
Bennelong Parkway
Hill Road
Gauthorpe Street
Mary Street
0 100 200 300 400 m
NORTH
For real time service and bus information, plan your trip at transportnsw.info or call 131500


Legend
Sydney Olympic Park High School
Train station
Ferry wharf
Bus stop
Shuttle bus stop
Public bus route
Baylink shuttle bus
Main school entrance
533 to Chatswood
526 to Rhodes
526 to Burwood
533 to Sydney Olympic Park
526 to Burwood
526 to Burwood
Lindsay Av.
George Kendall Riverside Park
Halvorsen Park
Blaxland Riverside Park
Wilson Park
Memorial Park
Footbridge Rd.
Half Street
Verona Drive
Hill Road
Shoreline Drive
Walker Street
Cavell Av.
Phoenix Park
Marquet Street
Foreshore Park
Concord Road
Moilwaine Park
Parramatta River
Shoreline Drive
Rider Blvd
Homebush Bay Drive
Killoola Street
Wentworth Drive
Queen Street
Bangalla Road
Wunda Road
Concord Av.
Victoria Av.
King Street
Consett Street
Holker Street
Newington Road
Silverwater Road
Asquith Street
Carnarvon Street
Deakin Street
Beaconsfield Street
Deakin Park
Barker Av.
Popov Av.
Nurmi Av.
Lewis Way
Pearce Av.
Haslams Creek
Holker Busway
Marjorie Jackson Parkway
Bennelong Parkway
Kevin Coombs Av.
Pondage Link
Old Hill Link
Edwin Flack Av.
Olympic Bd.
Cathy Freeman Park
Australia Av.
Parkview Drive
Herb Elliott Av.
Figtree Drive
Sarah Durack Av.
Bicentennial Park
Lake Belvedere
Bressington Park
Johnstan Wing Parade
Spitz Av.
Tooth Av.
Theile Av.
Baker Av.
Owens Av.
Parramatta Road
Station Road
St Hilliers Road
Percy Street
Dartbrook Road
Hill Road Offramp
Carter Street
Uhrig Road
John Street
Wyrang Street
0
500
1,000 m
NORTH

APPENDIX D

SEARs Response Table

SEARs requirement	Location in report
Provide a transport and accessibility impact assessment, which includes, but is not limited to the following:	This entire report is a TAIA and fulfills this requirement
Analysis of the existing transport network to at least the existing or proposed enrolment boundary, including:	Section 2.0
Road hierarchy.	Section 2.1.4
Pedestrian, cycle, and public transport infrastructure.	Section 2.1.1, 2.1.2, 2.1.3
Details of current daily and peak hour vehicle movements based on traffic surveys and/or existing traffic studies relevant to the locality.	Section 2.1.4
Existing transport operation for 1 hr before and after (existing or proposed) bell times such as span of service, frequency for public transport and school buses, pedestrian phasing for signals.	Section 2.1.3, 2.1.4
Existing performance levels of nearby intersections utilised appropriate traffic modelling methods (such as SIDRA network modelling).	Section 2.1.4
Detailed of the proposed development, including:	Section 1.1.1, 1.1.2,
A map of the proposed access which identifies public roads, bust routs, footpaths and cycleways.	Section 2.1.1, 2.1.2, 2.1.3, 2.1.4
Pedestrian site access and vehicular access arrangements, including for service and emergency vehicles and loading/unloading, including swept path analysis demonstrating the largest design vehicle entering and leaving the site and moving in each direction through intersections along the proposed transport routes.	Section 5.3.1 No vehicles enter or exit the site, so a swept path analysis has not been conducted
Car and motorcycle parking, bicycle parking and end of trip facilities.	Section 5.3.1
Drop-off/pick-zone(s) and arrival/departure bus bay(s).	Section 5.3.1
Pedestrian, public transport or road infrastructure improvements or safety measures.	Section 3.2
Analysis of the impacts due to the operation of the proposed development including:	Section 4.0
Proposed modal split for all users of the development including vehicle, pedestrian, bicycle riders, public transport, school buses and other sustainable travel modes.	Section 3.1
Estimated total daily and peak hour vehicular trip generation.	Section 4.1.2
A clear explanation and justification of the:	Section 4.1.2
Assumed growth rate applied	Section 2.3.1
Volume and distribution of proposed trips to be generated	Section 4.1.2
Type and frequency of design vehicles accessing the site	Section 4.1.2
Details of performance of nearby intersections with the additional traffic generated by the development both at the commencement of operation and in a 10-year time period (using SIDRA network modelling).	Section 4.1.2
Cumulative traffic impacts from any surrounding approved development(s).	Section 2.3, 4.1.2

SEARs requirement	Location in report
Adequacy of pedestrian, bicycle and public transport infrastructure and operations to accommodate the development.	Section 3.1, 3.2, 4.1.2
Adequacy of car and motorcycle parking and bicycle parking provisions when assessed against the relevant car/bicycle parking codes and standards.	Section 5.3.1
Adequacy of the drop-off/pick-up zone(s) and bus bay(s), including assessment of any related queuing during peak-hour access.	Section 3.2.2, 3.2.4
Adequacy of the existing/proposed pedestrian infrastructure to enable convenient and safe access to and from the site for all users.	Section 3.2
Measures to ameliorate any adverse traffic and transport impacts due to the development based on the above analysis, including:	Section 3.2
Travel demand management programs to increase sustainable transport (such as a School Transport Plan).	Section 5.0
Arrangements for the Travel Coordinator roles.	Section 3.2.5
Governance arrangements or relationships with state and local government transport providers to update roads safety.	Section 5.6
Infrastructure improvements, including details of timing and method of delivery.	Section 3.2
A preliminary school transport plan detailing an operational traffic and access management plan for the site, pedestrian entries, the drop-off/pick-up zone(s) and bus bay(s)	Section 5.0, 5.3.1
Analysis of the impacts of the traffic generated during construction of the proposed development, including:	Section 4.1.1
Construction vehicle routes, types and volumes.	Section 4.1.1
Construction vehicle routes, types and volumes.	Section 4.1.1
Construction program (duration and milestones).	Section 4.1.1
On-site car parking and access arrangements for construction, emergency and construction worker vehicles.	Section 4.1.1
Cumulative impacts associated with other construction activities in the locality (if any).	Section 4.1.1
Road safety at identified intersections near the site due to conflicts between construction vehicles and existing traffic in the locality.	Section 4.1.1
Measures to mitigate impacts, including to ensure the safety of pedestrian and cyclists during construction	Section 4.1.1
A preliminary Construction Traffic and Pedestrian Management Plan	Section 4.1.1

As part of the consistency review process, Department of Planning, Industry and Environment provided two comments on the report as a request for further information. These requests have been addressed in this amended report version:

DPIE Consistency Review comment	SCT Consulting response
The potential use of TfNSW land for construction worker parking requires further investigation to provide more surety. Given previous issues with this project and getting access onto TfNSW land, detailed consideration needs to be identified in the scenario this access is not provided during construction.	Refer **Section 4.1.1**, which has been updated to broaden the focus on other sites – not just the TfNSW site for worker parking. There are two other shopping centres with substantial parking available should the TfNSW site be unavailable.
For the data derived for the mode share, the traffic report identifies that this was derived from a catchment analysis. Was an assessment on similar or comparative schools undertaken to establish this mode share? If so, further discussion to this effect is required.	Refer **Section 3.1.4**, which contains benchmarking of two additional sites. The transport catchment analysis is also explained a bit further in **Section 3.1.1**. Each of the **Table 3-1** and **Table 3-2** show the calculations applied in the mode share analysis for each of the transport catchments.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