

GREEN TRAVEL PLAN

PROPOSED PRIMARY SCHOOL THE INTERNATIONAL CHINESE SCHOOL 211 PACIFIC HIGHWAY ST LEONARDS

PREPARED FOR INTERNATIONAL CHINESE SCHOOL OUR REF: 19-050-2



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ATTACHMENTS

1. Transport Access Guide

1. INTRODUCTION

Stanbury Traffic Planning has been commissioned by International Chinese School to prepare a Green Travel Plan to accompany a proposal to establish a primary school at 211 Pacific Highway, St Leonards.

The proposal involves alterations and additions to an existing commercial building situated within Cemetery Trust land at 211 Pacific Highway, St Leonards, to accommodate a bilingual International Chinese School, providing the following site population capacities:

- 210 students; and
- 12 staff (including teachers and administration employees).

Pedestrian access is proposed to be retained via the existing gates connecting with the northern Pacific Highway footpath and The Avenue.

The school is proposed to be serviced by the existing basement car parking area containing 10 passenger vehicle parking spaces and one motorcycle parking space connecting with The Avenue via a single lane driveway situated in the north-eastern corner of the site.

A further 10 bicycle parking spaces are proposed to be provided within the development.

Further, it is proposed that a formal set-down / pick-up area be provided to the east of the building, being located on Cemetery Trust land.

Vehicular access to the undercroft parking area and formal student set-down / pick-up area is proposed to be obtained via a Council owned public off-street car parking area situated further to the east, which links with Pacific Highway eastbound carriageway via a driveway to the south-east of the subject building.

2. **GREEN TRAVEL PLAN**

2.1 Introduction

Transport is an unavoidable factor in modern society and a major contributor to emissions in Australia. However, the effects of transport associated with new developments can be managed through the implementation of travel plans, which provide an opportunity to reduce harmful vehicle emissions. In conjunction with striving to provide more efficient environmental outcomes, providing a range of travel choices with a focus on walking, cycling and public transport will result in major public health advantages to the International Chinese School community.

The provision of constrained passenger vehicle parking rates in conjunction with minimum bicycle parking rates enforced by Willoughby Council forms a major part of the initiatives to encourage reductions in vehicle transport use. This Green Travel Plan will however ensure that the transport infrastructure, services and policies within and outside the site are tailored to the future site users, being coordinated to achieve sustainable outcomes.

2.2 **Green Travel Plan Definition**

This Green Travel Plan provides a series of measures aimed at promoting and encouraging sustainable travel and reducing reliance on the private car. The aim of the Plan is to achieve travel behaviour change through raising awareness of alternatives to private motor vehicle use. The development of a site based Plan focuses on providing information, offering incentives and mode specific actions to optimise the use of sustainable travel (public transport, cycling and walking).

This Green Travel Plan specifically examines how future site users can travel to and from the site and what can be done to replace single occupancy motor vehicle trips with sustainable trips. As a trip generator, the site can enhance the choices available to staff and parents of the school in a way that promotes health, safety and environmentally sustainable outcomes.

The potential to change site based travel is affected by several factors including car parking provision, site user interest in changing, the provision of support for change and the availability of various forms of public transport in the immediate vicinity.

2.3 **Green Travel Plan Benefits and Objectives**

This Green Travel Plan provides a wide range of benefits to staff, the students and their parents in conjunction with the environment including:

- Decreasing vehicle emissions;
- Promoting the school and surrounding area as an innovative and environmentally aware location;

- Improving health and fitness of school users through increased cycling and walking activity;
- Improving school user moral and social interaction;
- Reducing traffic congestion and car parking problems;
- Fostering a sense of community; and
- Reducing general living expenses.

The main objectives of this Green Travel Plan are to:

- Reduce vehicle kilometres travelled (VKT) to and from the subject site, particularly single occupancy staff vehicle trips;
- Increase school community user use of sustainable transport modes (walking, cycling and public transport);
- Ensure that the school community is informed on the opportunities and benefits of using sustainable transport; and
- Promote the subject school and area as an innovative and environmentally aware location.

2.5 Green Travel Plan Structure

The Green Travel Pan will capitalise on the availability of described sustainable transport options such that modal share which does not involve a private vehicle is expected to be relatively high.

The Plan itself takes the structure of a package of easy to understand travel information to be included in a new school community information pack.

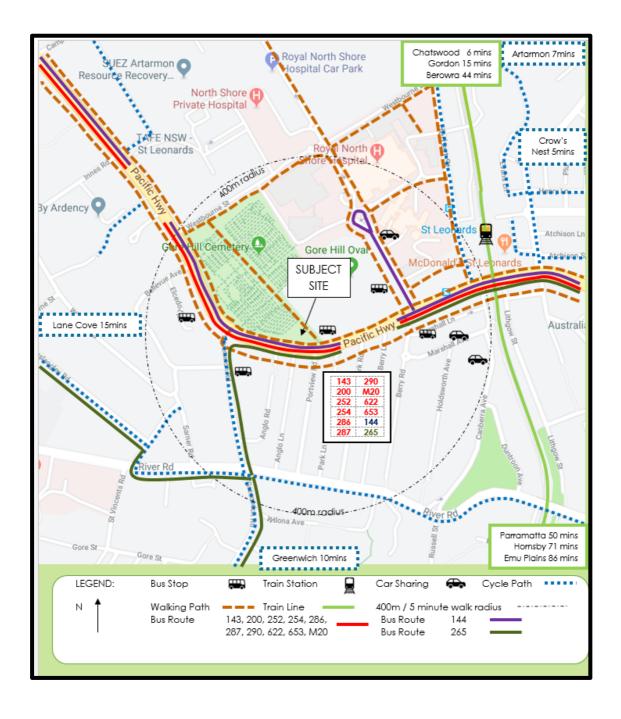
The information pack also includes a Transport Access Guide (contained within **Attachment 1**). This Guide provides a site centred customised travel information for school users with respect to sustainable forms of transport including walking, cycling and public transport. It provides a simple visual review of the subject locality containing easy to recognise relationships between the site and bus stops and routes, the nearby train station, on-road cycle routes, internal and external pedestrian links and internal and external car share pods.

2.6 Existing Transport Provision

The subject site is well serviced by a series of sustainable (or active) transport options available for future school staff, parents and students. **Figure 1** overleaf illustrates the sustainable transport options within easy walking distance of the subject site.

Subsequent sub-sections of this report provide a detailed description of each of the surrounding sustainable transport options.

FIGURE 1 TRANSPORT OPTIONS IN THE VICINITY OF THE SUBJECT SITE



2.6.1 Bus

The following bus stops are located within a five minute walk (400m) from the centre of the school site:

- A stop is located on the northern side of Pacific Highway approximately 150m walking distance to the east of the site;
- A stop is located on the western side of Reserve Road approximately 300m walking distance to north-east of the site;
- A stop is located on the southern side of Pacific Highway approximately 350m to the east of the site;
- A stop is located on the eastern side of Pacific Highway approximately 250m walking distance to the north-west of the site;
- A stop is located on the western side of Pacific Highway approximately 270m walking distance to the north-west of the site.

All stops within Pacific Highway service the following routes:

- Route 143 Manly to Chatswood via Balgowlah & St Leonards;
- Route 144 Chatswood to Manly via Royal North Shore Hospital;
- Route 252 Gladesville to City King Street Wharf via North Sydney;
- Route 254 McMahons Point to Riverview;
- Route 286 Milsons Point to Denistone East via North Sydney & St Leonards;
- Route 287 Ryde to Milsons Point via St Leonards & North Sydney;
- Route 290 Epping to City Erskine St via Macquarie University & North Sydney;
- Route M20 Botany to Gore Hill;

The stop within Reserve Road also services Route 144.

The stops within Greenwich Road Pacific Highway to the east of the site also service Route 265 between North Sydney and Lane Cove, via Greenwich.

The stop on the southern side of Pacific Highway to the east of the site also service the following routes:

- Route 200 Bondi Junction to Chatswood;
- Route 622 Dural to Milsons Point;

• Route 653 – West Pennant Hills to Milsons Point

TABLE 1					
BUS SERVICE FREQUENCIES					
Route	Origin / Destination	Frequency			
No.		Weekday	Weekday	Weekend	
		Peak	Business		
143	Manly / Chatswood	15-30 mins	-	-	
144	Manly / Chatswood	5-15 mins	15 mins	15 mins	
200	Bondi Junction /	20 mins	-	-	
	Chatswood				
252	Gladesville / City	20 mins	30 mins	30 mins	
254	McMahons Pt /	20 mins	60 mins	60 mins	
	Riverview				
286	Denistone East /	30 mins	-	-	
	Milsons Pt				
287	Ryde / Milson Pt	30 mins	-	-	
290	Epping / City	60 mins	-	-	
622	Dural / Milsons Pt	30 mins	-	-	
653	West Pennant Hills /	30 mins	-	-	
	Milsons Pt				
M20	Botany / Gore Hill	10 mins	15 mins	20 mins	

Figure 1 illustrates the range of services and stop locations within a five minute walk from the site.

2.6.2 Heavy Rail

The site is located approximately 400m to the south-west of St Leonards Station. St Leonards Station provides access to train services which operate along the T1 (North Shore, Northern & Western) Line.

Services provide a peak weekday commuter period frequency of less than 10 minutes, extending to 15 minutes during other periods. Travel time to Central is approximately 20 minutes whilst travel time to Berowra is approximately 45 minutes.

Services along the T1 Line provide efficient connectivity to the remainder of the Sydney metropolitan rail network via interchanges at the Hornsby, City, Redfern, Strathfield, Lidcombe, Clyde, Granville and Blacktown.

2.6.3 Pedestrian Infrastructure

The following pedestrian access and mobility infrastructure surrounds the subject site:

• Footpaths are provided on both sides of Pacific Highway adjacent to the site;

- Signalised pedestrian crossings are provided over the northern, southern and western approaches of the intersection of Pacific Highway, Berry Road and Reserve Road to the north-east of the site;
- Signalised pedestrian crossings are provided over the southern and western approaches of the intersection of Pacific Highway and Greenwich Road to the west of the site; and
- A path is provided along The Avenue between Pacific Highway and Westbourne Street.

Figure 1 illustrates the pedestrian infrastructure within the immediate vicinity of the site.

2.6.4 Cycle Routes

Figure 1 provides a graphical representation of on and off-road cycleways within the immediate vicinity of the subject site, as follows:

- Herbert Street, Broadcast Way, Greenwich Road, River Road (east of Greenwich Road), Herbert Street, Christie Street and Atchison Street provide on-road cycle routes; and
- Off-road cycle paths are provided on River Road (to the west of Greenwich Road), Morven Gardens and a short section of Pacific Highway to the north of Broadcast Way.

2.6.5 Car Share

Car Share is a concept by which members join a car ownership club, select a rate plan and pay an annual fee. The fees cover fuel, insurances, maintenance and cleaning. The vehicles range from small hatchbacks to vans. Each vehicle has a home location, referred to as a 'pod', either in a public street, private road or off-street parking area. The number of pods within a particular area vary depending on the density of the population. Members reserve a vehicle by internet or telephone and use a key card to access and operate the vehicle.

Studies into car share use have reported that car share spaces replace a significant number (up to in excess of 20) of car parking spaces, depending on the location and surrounding community density. Car share spaces should therefore reduce the parking demand within and adjoining the site but also the traffic generated.

The GoGet car club has three pods located within five minutes walking distance of the site, and significantly more within a 10 minute walk. **Figure 1** provides a graphical illustration of the car share pods within the vicinity of the site.

2.6.6 Planned Sydney Metro

Stage 2 of Sydney Metro is planned to extend between Chatswood and Bankstown via The City by 2024, with a new station being located at Crows Nest, situated approximately 800m to the south-east of the subject site. Sydney Metro is planned to provide a 'turn up and go' facility with capacity for services to operate every two minutes during peak periods.

3. MODE SHIFT INITIATIVES

3.1 Introduction

The previously described proximity of the site to a wide range of sustainable transport modes is an important attribute in the justification of the International Chinese School development. The school will capitalise upon these links.

This Green Travel Plan involves the implementation of a series of measures to influence future site users' travel behaviours to encourage modal shift away from private cars.

A Green Travel Plan Coordinator and / or Committee is to be established by the school to implement the initiatives incorporated within this Plan and to develop further initiatives to ensure that sustainable travel modes are selected by the school community. The coordinator / committee shall facilitate the initial implementation of the Plan as well as subsequent periodic guidance in the ongoing review of the Plan.

The following sub-sections provide a summary of these measures to promote sustainable transport for the subject development. The measures are to be in place from the initial occupancy of the development as people will establish lasting habits from this time.

3.2 Site Specific Measures

3.2.1 Development Design

- Compliance with constrained car parking controls governed by Willoughby Council, whereby less than one parking space per school staff member is provided, minimising potential staff private vehicle use;
- Provision of bicycle parking infrastructure, despite not being required in accordance with Willoughby Council requirements to encourage the likelihood of cycling as a mode of transport;
- Compliance of motorcycle parking control in accordance with Willoughby Council requirements, providing an alternative to passenger vehicle use;
- Creation of clear and efficient connectivity of the site to the adjacent pedestrian public road network to encourage cycling and walking; and
- The provision of good quality, accurate and useful directional signage to promote walking and cycling, stating times and distances to surrounding destinations.

3.2.2 Information and Encouragement

Information	Provide information on travel options available to school staff, parents and students through noticeboards, newsletters, common area displays etc.		
Factsheets	Develop factsheets on the benefits of walking, cycling, public transport, car pooling and working from home (where possible).		
Access Guide	Produce a Transport Access Guide illustrating surrounding connectivity to walking and cycling routes as well as bus, train and car share pods.		
School Community Inductions	A way to encourage travel behaviour change is to promote healthy habits from the start. Ensure that new staff are provided with information on how to access the precinct using sustainable transport. • Provide new staff, parents / students information on sustainable transport to the precinct such as public transport timetables or walking and cycling routes to the site. • Include a section on sustainable transport within the staff and parent / student information packages. • Ensure that staff and parents / students are aware of the on-site bicycle storage facilities.		

3.2.3 Promote Cycling

Information	Provide:		
	Cycling maps.		
	Factsheets on the benefits of cycling.		
Cycling Infrastructure	 Ensure that cycling desire lines within the precinct are well maintained. 		
	Provide secure bicycle parking.		
Skills Development	 Increase cycle confidence by providing information on cycle skills training for students who are learning to cycle or staff who haven't ridden for a long period of time. Provide information on bicycle maintenance workshops for staff / parents. 		
Establish a staff bicycle pool			
Cycling Champions	Identify staff / students who cycle to work or recreationally and encourage them to motivate others to join them.		
 Match less confident cyclists with a 'cycl cycle trips. Organise recreational group rides for community. 			
Events	Encourage participation in:		
	 Ride to Work / School Day. 		
	Bike Week.		
	World Move for Health.		

3.2.4 Promote Walking

Information	Provide:		
	 Walking maps. 		
	 Factsheets on the benefits of walking. 		
Walking	Ensure that walking paths within the site are well		
Infrastructure	maintained with adequate lighting.		
Walking Champions	Identify staff / students who walk to school or recreationally		
	and encourage them to motivate others to join them.		
Walking Group	Establish a 'walking club' along a designated route		
	where staff / students who want to walk recreationally can meet up with others.		
Events	Encourage staff to participate in:		
	 10,000 steps program. 		
	 Walk to Walk / School Day. 		
	Diabetes Day.		

3.2.5 Promote Public Transport

Information		Provide: Bus / train timetables. Display maps detailing public transport to / from the subject site. Provision of Opal cards within the staff induction pack with some pre-paid credits. Staff to supervise the walking of students between the school and nearby bus stops and St Leonards train station.
Public Champions	Transport	Identify staff / students that use public transport and encourage them, to motivate others to join them.
Events		Host a site Public Transport Month.World Environment Day

3.2.6 Promote Car Pooling / Sharing

Information		Provide:		
		Guidelines on car-pooling.		
		 Factsheets on the benefits of car-pooling. 		
		 Display maps of surrounding car share pods. 		
Car	Pooling	Identify staff and students / families who car pool / share and		
Champions	ask them to write a story for school noticeboards about the			
		advantages of car-pooling / sharing.		
Events		 Establish a staff / family car pool register. 		
		 To facilitate car-pool matching, host regular 		
		breakfast / afternoon teas at the school.		

4. MODE SHARE TARGETS

4.1 Existing Mode Share Data

Table 2 below provides a comparison of St Leonards journey to work data between 2006 and 2011 as published by the Australian Bureau of Statistics.

TABLE 2 2016 JOURNEY TO WORK DATA			
Travel Mode	Number	Percentage	
Car as Driver	759	21.3	
Car as passenger	122	3.4	
Train	1470	41.2	
Bus	203	5.7	
Walk	473	13.3	
Cycle / Other	541	15.1	
TOTAL	3568	100	

4.2 Mode Share Targets

It is the intention that the implementation of the package of measures provided within this Green Travel Plan and the excellent connections to existing sustainable transport links will assist towards a higher non-car use by the school community.

Table 3 provides a summary of the mode share targets for the International Chinese School community, split into staff and students.

TABLE 3 JOURNEY TO SITE TARGETS			
Travel Mode	Percentage of Total		
	Staff	Students	
Car as Driver	40	-	
Car as Passenger	10	50	
Public Transport	30	30	
Walk	10	10	
Cycle / Other	10	10	
TOTAL	100	100	

5. GREEN TRAVEL PLAN MONITORING

A Green Travel Plan is a dynamic document which will change over time depending on the environment and circumstances of the subject development. Accordingly, monitoring, evaluating and reviewing the Plan is important as it will guide ongoing efforts to reduce vehicle kilometres travelled and encourage the use of sustainable transport.

Monitoring and evaluation is an ongoing process which involves fine tuning. There is no standard methodology for the monitoring of a Green Travel Plan however, generally speaking, staff and parents / students should be regularly surveyed as to their travel behaviour to ascertain the areas in which the Travel Plan is successful and those which require altered or improved initiatives. It is therefore proposed that the school community will be surveyed 6 months after occupation with the main focus of the surveys to establish travel patterns including mode share of trips to and from the site. This information will also help inform the Plan for subsequent stages of the development, as necessary.

It is important to understand people's reasons for travelling the way they do, any barriers to changing their behaviour and their propensity to change. This will enable the most effective initiatives to be identified, and conversely less effective initiatives to be modified or replaced to ensure the best outcomes are achieved.

It will be necessary to provide feedback to residents to ensure that they can see the benefits of sustainable transport. It is proposed that this occur through the provision of survey results within the internal school community noticeboards.

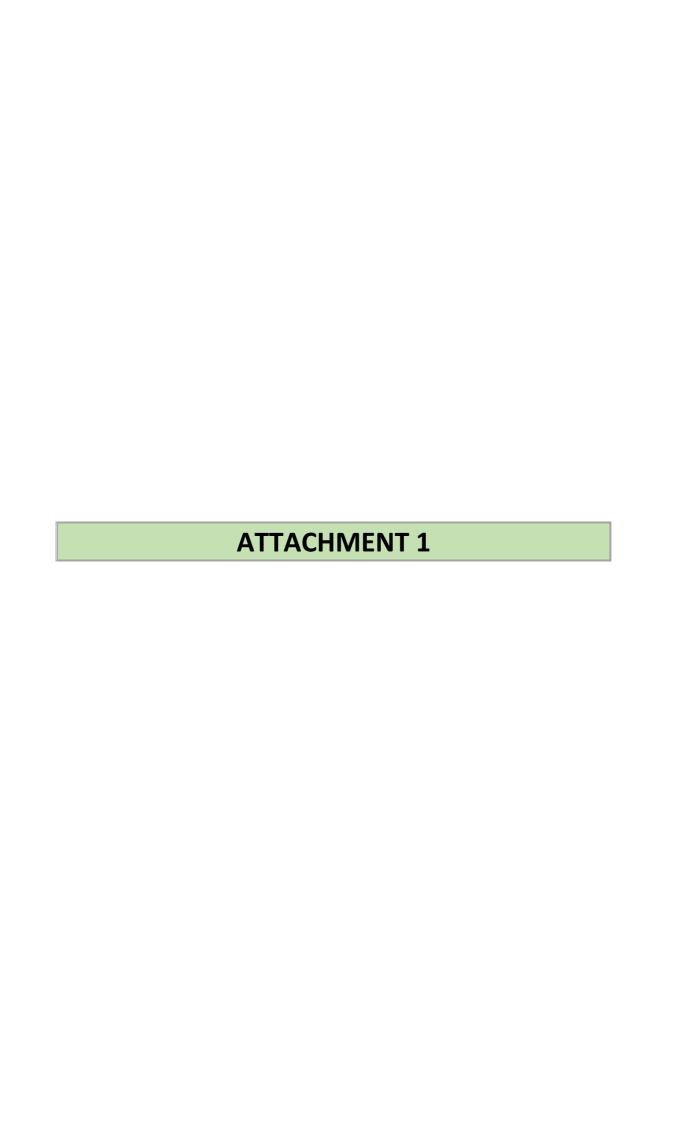
6. SUMMARY

A Green Travel Plan is proposed to be implemented at the International Chinese School site at 211 Pacific Highway, St Leonards. The Plan aims to encourage the use of alternative transport choices to single car use and encourage a shift towards public transport, cycling and / or walking through the implementation of the measures contained within Section 3.2 of this Plan, including:

- The implementation of development design initiatives such as the limiting of private car parking spaces, the provision of bicycle parking facilities in conjunction with clear and efficient internal pedestrian and cycle networks and signage;
- The provision of clear and concise information to the school community detailing the surrounding available sustainable transport infrastructure and encouraging the use of transport modes other than the private car, including a Transport Access Guide; and
- The promotion of non-car travel through the provision of pre-paid Opal cards and occasional car share memberships to new school staff.

The school community is to be provided with information with respect to the Green Travel Plan within a welcome pack and up-to-date information with respect to the initiatives of the Plan are to be displayed within school noticeboards.

Monitoring of the implementation of the Green Travel Plan is to be undertaken six months following the occupation of site through the undertaking of travel mode surveys of residents. The results of these surveys and details with respect to whether or not the mode share targets contained within this Plan are being met are to be made available to the school community.





TRANSPORT ACCESS GUIDE

Your guide for accessing: International Chinese School 211 Pacific Highway, St Leonards

Getting To and From the Site



Walking

Footpaths are provided along both sides of Pacific Highway in the immediate vicinity of the site.

Signalised pedestrian crossings are provided at the Pacific Highway intersections of Greenwich Road and Berry Road / Reserve Road.

A pedestrian footpath is provided along The Avenue between Pacific Highway and Westbourne Street.



Cycling

On and off-road cycleways are provided within the immediate vicinity of the site at the following locations:

On - Road

 Herbert Street, Broadcast Way, Greenwich Road, River Road (east of Greenwich Road), Herbert Street, Christie Street and Atchison Street

Off - Road

 River Road (to the west of Greenwich Road), Morven Gardens and a short section of Pacific Highway to the north of the Broadcast Way.



Bus Routes

The previously described pedestrian and cyclist infrastructure provide connectivity to the following bus stops, located within a 5 minute walk from the site:

 Multiple stops are located on both sides of Pacific Highway;
 Stops are also located along Greenwich Road and on the western side of Reserve Road.

All stops within Pacific Highway service the following routes:

- Route 143 Linking Manly with Chatswood via Balgowlah & St Leonards;
- Route 144 Linking Chatswood with Manly via Royal North Shore Hospital;
- Route 252 Linking Gladesville to City King Street Wharf via North Sydney;
- Route 254 Linking McMahons Point to Riverview:
- Route 286 Linking Milsons Point to Denistone East via North Sydney & St Leonards:
- Route 287 Linking Ryde to Milsons Point via St Leonards & North Sydney.
- Route 290 Linking Epping to City Erskine Street via Macquarie University & North Sydney;
- Route M20 Linking Botany to Gore Hill.

The stops within Greenwich Road also services Route 265 between North Sydney and Lane Cove.

Further services are provided at the stop on the southern side of Pacific Highway to the east of the site:

- Route 200 Linking Bondi Junction to Chatswood;
- Route 622 Linking Dural to Milsons Point;
- Route 653 Linking West Pennant Hills to Milsons Point.

Reserve Road also services Route 144.



Wheelchair Accessibility

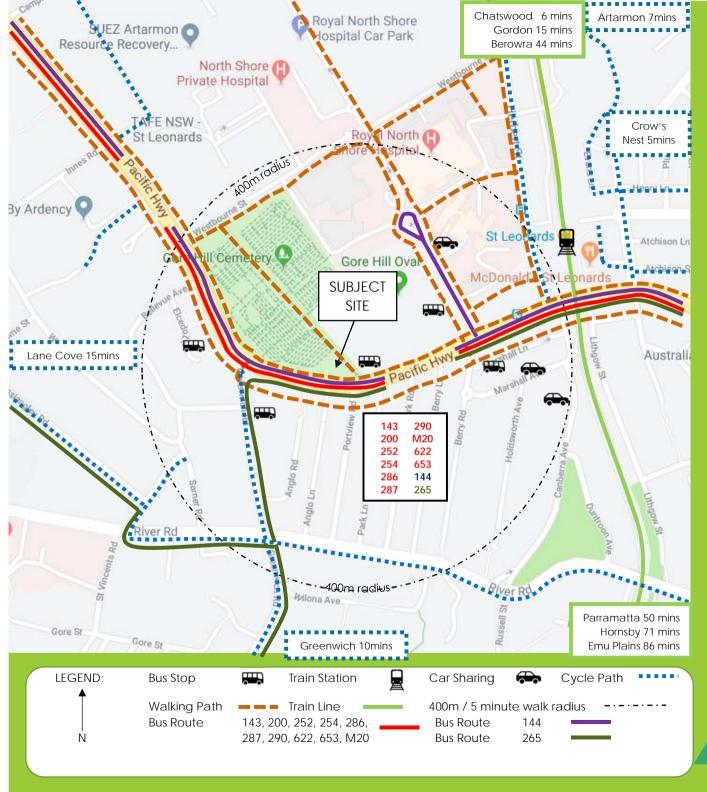
Sydney Buses offer wheelchair accessible services at limited times. Look for the accessibility symbol on the bus operator's timetable to identify these services.



Heavy Rail

St Leonards Station is located within a 5 minute walk from the site.

Services along the T1 (North Shore & Western Line) provides connectivity to the remainder of the Sydney metropolitan rail network via interchanges at locations such as Hornsby, City, Granville and Blacktown.





Planning your Trip

It is recommended that you contact the Transport Information Line to plan your trip and get the latest timetable, fare and wheelchair accessible information.



Other useful references:

- www.sydneybuses.info
- http://www.transdevsydney.com.au
- www.cityofsydney.nsw.gov.au
- http://www.innerwest.nsw.gov.au
- www.sydneycycleways.net

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