



STANBURY
TRAFFIC PLANNING

TRAFFIC, PARKING & TRANSPORT CONSULTANTS

GREEN TRAVEL PLAN

**PROPOSED RESOURCE RECOVERY FACILITY
30 LOFTUS ROAD
YENNORA**

**PREPARED FOR COBRA WASTE PTY. LTD.
OUR REF: 21-023-2**



OCTOBER 2021

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TABLE OF CONTENTS

| | |
|---|------------------|
| <u>1. INTRODUCTION</u> | <u>3</u> |
| <u>2. GREEN TRAVEL PLAN</u> | <u>4</u> |
| 2.1 INTRODUCTION | 4 |
| 2.2 GREEN TRAVEL PLAN DEFINITION | 4 |
| 2.3 GREEN TRAVEL PLAN BENEFITS AND OBJECTIVES | 4 |
| 2.4 GREEN TRAVEL PLAN STRUCTURE | 5 |
| 2.5 EXISTING TRANSPORT PROVISION | 5 |
| 2.5.1 BUS | 6 |
| 2.5.2 HEAVY RAIL | 8 |
| 2.5.3 PEDESTRIAN INFRASTRUCTURE | 8 |
| 2.5.4 CYCLE ROUTES | 8 |
| 2.5.5 CAR SHARE | 9 |
| <u>3. MODE SHIFT INITIATIVES</u> | <u>10</u> |
| 3.1 INTRODUCTION | 10 |
| 3.2 SITE SPECIFIC MEASURES | 10 |
| 3.2.1 DEVELOPMENT DESIGN | 10 |
| 3.2.2 INFORMATION AND ENCOURAGEMENT | 11 |
| 3.2.3 PROMOTE CYCLING | 11 |
| 3.2.4 PROMOTE WALKING | 12 |
| 3.2.5 PROMOTE PUBLIC TRANSPORT | 12 |
| 3.2.6 PROMOTE CAR POOLING / SHARING | 12 |
| <u>4. MODE SHARE TARGETS</u> | <u>13</u> |
| 4.1 EXISTING MODE SHARE DATA | 13 |
| 4.2 MODE SHARE TARGETS | 13 |
| <u>5. GREEN TRAVEL PLAN MONITORING</u> | <u>14</u> |
| <u>6. SUMMARY</u> | <u>15</u> |

ATTACHMENTS

1. Transport Access Guide

1. INTRODUCTION

Stanbury Traffic Planning has been commissioned by Cobra Waste Pty. Ltd. to prepare a Green Travel Plan to accompany an Environmental Impact Statement for State Significant Development (SSD) 9320662. The proposal seeks approval for a Resource Recovery Facility (RRF) situated at Warehouse B of 30 Loftus Road, Yennora (hereafter referred to as the 'subject site').

The subject application seeks approval for the facility to receive, handle and process Construction and Demolition (C&D) and Commercial and Industrial (C&I) waste. The amount of waste to be received and processed is estimated to be up to 150,000 tonnes per year.

The existing site contains an office, warehouse and concrete hard stand areas suitable for car parking or materials storage.

Vehicular access between the site and Loftus Road is provided via an existing driveway which has large splays. The width of the crossover at the property boundary is proposed to be increased and the size of the splays reduced.

The development is to be serviced by the following parking provision:

- The existing on-site passenger vehicle parking provision of 34 spaces (including one disabled space) is proposed;
- Up to five truck parking spaces may be required on-site with the remainder of their truck fleet being parked at their site in St Marys; and
- Four bicycle parking spaces are to be provided on-site in a secure location inside the building.

Pedestrian paths are proposed to connect the truck parking area, the car parking area and the main building. Pedestrian paths are also proposed across the roller shutters on the southern side of the building to improve the safety for pedestrians walking around the site.

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 a major public health advantages to the staff of the proposed resource recovery facility at 30 Loftus Road, Yennora.

The close proximity of the subject site to various forms of public transport including rail and various bus routes forms a major part of the initiatives to encourage reductions in vehicle transport use. The Green Travel Plan will 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 by staff of the resource recovery facility 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 the specific facility-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 staff of the facility 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 proposed resource recovery facility can enhance the choices available to staff in a way that promotes health, safety and environmentally sustainable outcomes.

The potential to change the resource recovery facility based travel is affected by several factors including car parking provision, facility staff 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 of the facility in conjunction with the environment including:

- Decreasing vehicle emissions;
- Promoting the resource recovery facility as an innovative and environmentally aware location;

- Improving health and fitness of the staff of the resource recovery facility through increased cycling and walking activity;
- 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 resource recovery facility, particularly single occupancy vehicle trips;
- Increase staff use of sustainable transport modes (walking, cycling and public transport);
- Ensure that the staff of the facility are informed on the opportunities and benefits of using sustainable transport; and
- Promote the subject site and area as an innovative and environmentally aware location.

2.4 Green Travel Plan Structure

The Green Travel Plan 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 staff information pack.

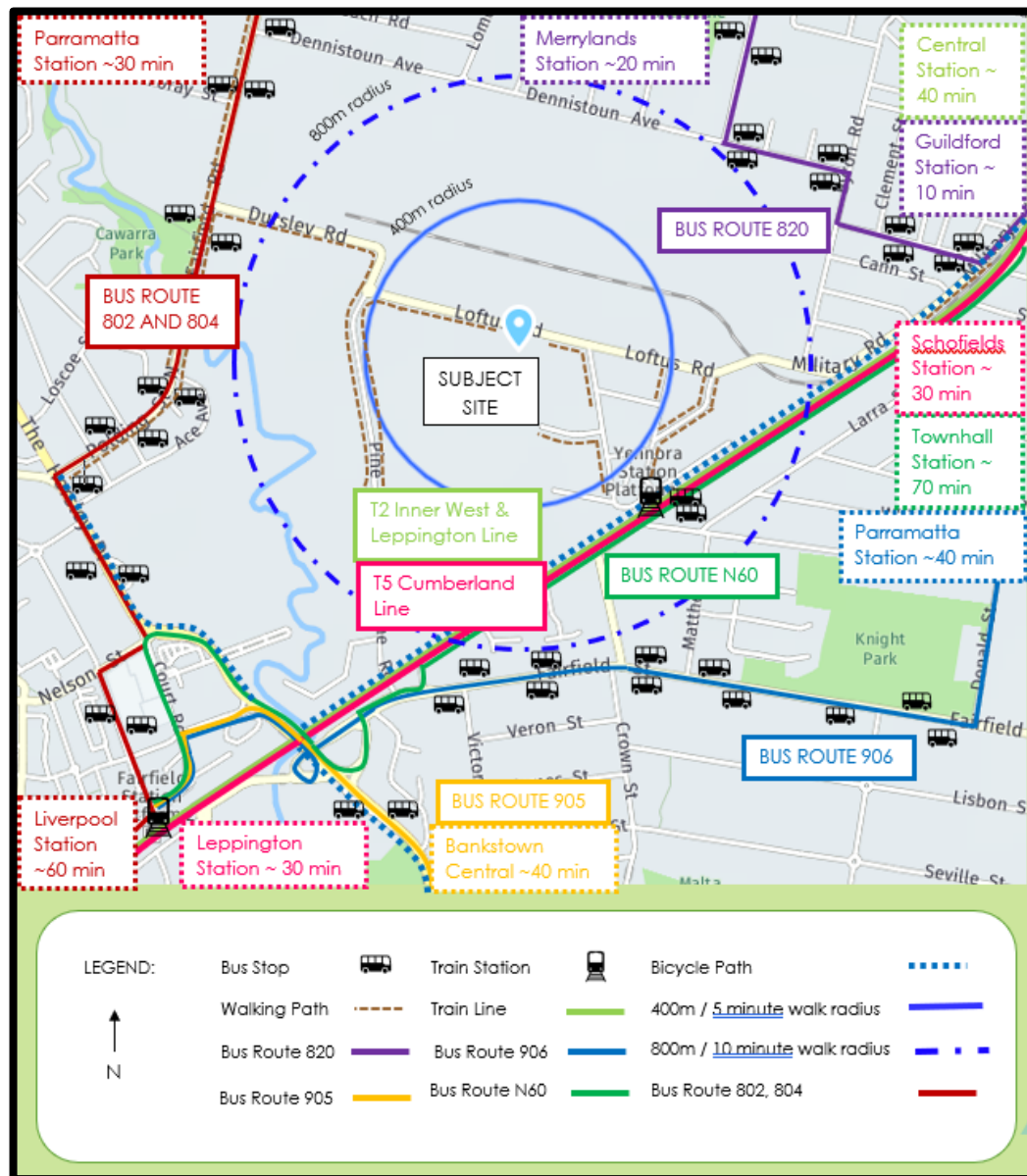
The information pack also includes a Transport Access Guide (contained within **Attachment 1**). This Guide provides a site centred customised travel information for staff of the facility with respect to sustainable forms of transport including walking, cycling and public transport. It provides a simple 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.

2.5 Existing Transport Provision

The site within which the resource recovery facility is proposed is serviced by a series of sustainable (or active) transport options available for future staff of the facility. **Figure 1** overleaf illustrates the sustainable transport options within easy walking distance of the subject site.

Subsequent 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



2.5.1 Bus

There are no bus stops situated within a five-minute walk from the site. However, the following bus stops are located in relatively close proximity to the site:

- Multiple bus stops are situated along Railway Street with the closest stop being situated adjacent to Yennora Railway Station at approximately 600m to the south-east of the site;
- Multiple bus stops are situated along Fairfield Road with the closest stops being situated at approximately 1km walking distance to the west of the site;

- Multiple bus stops are situated along Fairfield Street with the closest stops being situated at approximately 1km walking distance to the south of the site; and
- Multiple bus stops are located along Carrington Road and Dennistoun Avenue with the closest stops being situated at approximately 1.2km walking distance to the north of the site.

The bus stops within Railway Street service the following route:

- Route N60 – Fairfield to City Town Hall (Night Service).

The bus stops within Fairfield Road service the following routes:

- Route 802 – Liverpool to Parramatta via Green Valley; and
- Route 804 – Liverpool to Parramatta via Hinchinbrook.

The bus stops within Fairfield Street service the following route:

- Route 906 – Fairfield to Parramatta.

The bus stops within Dennistoun Avenue service the following route:

- Route 820 – Guildford to Merrylands.

Table 1 below provides a summary of the frequencies of the above bus routes.

| TABLE 1 BUS SERVICE FREQUENCIES | | | | | |
|------------------------------------|---|--------------|------------------|------------|---|
| Route No. | Origin / Destination | Frequency | | | |
| | | Weekday Peak | Weekday Business | Weekend | Night |
| N60 | Fairfield / City Town Hall | - | - | - | 30 minutes on Thursday – Saturday; and 60 minutes on Sunday – Wednesday |
| 802 | Liverpool / Parramatta via Green Valley | 30 minutes | 30 minutes | 30 minutes | - |
| 804 | Liverpool / Parramatta via Hinchinbrook | 15 minutes | 30 minutes | 30 minutes | - |
| 906 | Fairfield / Parramatta | 30 minutes | 60 minutes | 60 minutes | - |
| 820 | Guildford / Merrylands | 30 minutes | 60 minutes | 60 minutes | - |

Figure 1 illustrates the range of services and stop locations within close proximity to the site.

2.5.2 Heavy Rail

The nearest train station to the subject site is Yennora Station which is situated at approximately 700m walking distance (an 8-minute walk) to the south-east of the site. Access to Yennora Station is via Loftus Road, Norrie Road and Nelson Road.

Yennora Station is on the T2, Inner West and Leppington Line which and on the T5 Cumberland Line. Trains from Yennora Station provide access to Leppington, Campbelltown, Parramatta, Richmond and the Sydney CBD.

2.5.3 Pedestrian Infrastructure

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

- A footpath is provided along the southern kerb alignment of Loftus Road;
- A footpath is provided along the southern and western kerb alignments of Dursley Road / Pine Road;
- Footpaths are provided along both kerb alignments of Fairfield Road / Polding Street North;
- Signalised pedestrian crossings are provided over all approaches at the junction of Dursley Road and Fairfield Road, approximately 1km to the north-west of the site; and
- Signalised pedestrian crossings are provided over the southern and eastern approaches of the junction of Railway Street and Orchardleigh Street.

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

2.5.4 Cycle Routes

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

- An off-road bicycle path is provided along the north-western side of the heavy rail line, to the south-east of the site, providing access between Military Road in the north and Fairfield Street in the south; and
- The Horsley Drive forms an on-road bicycle friendly route to the south of the site.

2.5.5 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 does not have any car share pods within walking distance of the site. The nearest car share pod is situated at approximately 6km to the east of the site at Berala Rail Station.

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 proposed resource recovery facility. The staff of this facility are expected to capitalise upon these links.

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

The resource recovery facility head manager is proposed to serve as the Green Travel Plan Coordinator to implement the initiatives incorporated within this Plan and to develop further initiatives to ensure that sustainable travel modes are selected by staff. The coordinator 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 staff of the subject development. The measures are to be in place from the initial occupancy of the facility and are expected to establish lasting habits from this time.

3.2 Site Specific Measures

3.2.1 Development Design

- Provision of bicycle parking infrastructure in accordance with that required in accordance with The Draft Cumberland DCP Part G Miscellaneous Development Controls to encourage the likelihood of cycling as a mode of transport;
- 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 internal development directional signage to promote walking and cycling, stating times and distances to surrounding destinations.

3.2.2 Information and Encouragement

| | |
|------------------------------------|---|
| <i>Information</i> | Provide information on travel options available to staff of the facility through noticeboards, newsletters, common area displays etc. |
| <i>Factsheets</i> | Develop factsheets on the benefits of walking, cycling, public transport and carpooling. |
| <i>Access Guide</i> | Produce a Transport Access Guide illustrating surrounding connectivity to walking and cycling routes as well as bus, train and car share pods. |
| <i>School Community Inductions</i> | <p>A way to encourage travel behaviour change is to promote healthy habits from the start. Ensure that staff are provided with information on how to access the precinct using sustainable transport.</p> <ul style="list-style-type: none"> • Provide staff 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 new staff-hire information packages. • Ensure that staff are aware of the on-site bicycle storage facilities. |

3.2.3 Promote Cycling

| | |
|---------------------------------|---|
| <i>Information</i> | <p>Provide:</p> <ul style="list-style-type: none"> • Cycling maps. • Factsheets on the benefits of cycling. |
| <i>Cycling Infrastructure</i> | <ul style="list-style-type: none"> • Provide secure bicycle parking. |
| <i>Skills Development</i> | <ul style="list-style-type: none"> • Increase cycle confidence by providing information on cycle skills training for staff who are learning to cycle or who haven't ridden for a long period of time. • Provide information on bicycle maintenance workshops. |
| <i>Establish a bicycle pool</i> | <ul style="list-style-type: none"> • Provide factsheets on the benefits of cycling. |
| <i>Cycling Champions</i> | <ul style="list-style-type: none"> • Organise recreational staff group rides. • Identify staff who cycle to work or recreationally and encourage them to motivate others to join them. |
| <i>Bicycle Group</i> | <ul style="list-style-type: none"> • Match less confident cyclists with a 'cycle buddy' for cycle trips. • Organise recreational group rides for the staff of the facility and surrounding community. |
| <i>Events</i> | <p>Encourage participation in:</p> <ul style="list-style-type: none"> • Ride to Work Day. • Bike Week. • World Move for Health. |

3.2.4 Promote Walking

| | |
|-------------------------------|--|
| <i>Information</i> | Provide: <ul style="list-style-type: none"> Walking maps. Factsheets on the benefits of walking. |
| <i>Walking Infrastructure</i> | <ul style="list-style-type: none"> Ensure that walking paths within the site are well maintained with adequate lighting. |
| <i>Walking Champions</i> | <ul style="list-style-type: none"> Identify staff who walk to work or recreationally and encourage them to motivate others to join them. |
| <i>Walking Group</i> | <ul style="list-style-type: none"> Establish a 'walking club' along a designated route where staff who walk to work or want to walk recreationally can meet up with others. |
| <i>Events</i> | Encourage staff to participate in: <ul style="list-style-type: none"> 10,000 steps program. Walk to Work Day Diabetes Day. |

3.2.5 Promote Public Transport

| | |
|-----------------------------------|---|
| <i>Information</i> | Provide: <ul style="list-style-type: none"> Bus / train timetables. Display maps detailing public transport to / from the subject site. Provision of Opal cards to staff with some pre-paid credits. |
| <i>Public Transport Champions</i> | <ul style="list-style-type: none"> Identify staff that use public transport and encourage them to motivate others to join them. |
| <i>Events</i> | <ul style="list-style-type: none"> Host a site Public Transport Month. World Environment Day |

3.2.6 Promote Car Pooling / Sharing

| | |
|------------------------------|--|
| <i>Information</i> | Provide: <ul style="list-style-type: none"> Guidelines on car-pooling. Factsheets on the benefits of car-pooling. Display maps of surrounding car share pods. Provision of Go-Get membership cards within the new staff information pack with some pre-paid credits. |
| <i>Car Pooling Champions</i> | <ul style="list-style-type: none"> Identify staff who car pool / share and encourage them to motivate others to join them. |
| <i>Events</i> | <ul style="list-style-type: none"> Establish a facility pool register for staff to reference. |

4. MODE SHARE TARGETS

4.1 Existing Mode Share Data

Table 2 below provides journey to work data of 2016 of Fairfield City as published by the Australian Bureau of Statistics.

| TABLE 2 2016 JOURNEY TO WORK DATA | | |
|---|---------------|-------------------|
| Travel Mode | Number | Percentage |
| Car as Driver | 45,946 | 64 |
| Car as passenger | 4,929 | 7 |
| Train | 9,217 | 13 |
| Bus | 1,389 | 2 |
| Walk | 1,201 | 2 |
| Motorcycle | 158 | 0.2 |
| Bicycle | 146 | 0.2 |
| Other | 2,135 | 3 |
| Worked from Home / Did not go to Work / Not Stated | 6,784 | 9 |
| TOTAL | 71,905 | 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 staff of the facility.

The proposed resource recovery facility provides 34 vehicular parking spaces for staff of the facility. The facility also provides four bicycle parking spaces. It has further been presented that the site is located within close proximity to a series of public transport infrastructure and walking and cycle routes. The mode share targets should accordingly be targeted appropriately on this basis.

Table 3 provides a summary of the mode share targets for staff of the proposed resource recovery facility.

| TABLE 3 JOURNEY TO SITE TARGETS | |
|--|----------------------------|
| Travel Mode | Percentage of Total |
| | Staff |
| Car as Driver | 65 |
| Car as Passenger (Car Pool / Share) | 5 |
| Public Transport | 15 |
| Walk | 5 |
| Bicycle | 10 |
| TOTAL | 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 of the facility 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 staff of the facility will be surveyed 6 months after occupation of the development 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 staff 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 facility noticeboards.

6. SUMMARY

A Green Travel Plan is to be implemented within the proposed resource recovery facility at 30 Loftus Road, Yennora. The Plan aims to encourage the use of alternative transport choices to single car use and encourage a shift towards public transport, car share, 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 staff of the facility 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 staff of the facility.

Staff of the facility are 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 the facility noticeboards.

Monitoring of the implementation of the Green Travel Plan is to be undertaken six months following the occupation of development through the undertaking of travel mode surveys of the staff. 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 staff of the facility.

APPENDIX 1



TRANSPORT ACCESS GUIDE

Your guide for accessing:

**Cobra Waste Solutions Resource
Recovery Facility**

30 LOFTUS ROAD

YENNORA

Getting To and From the Site:



Walking

A footpath is provided along the southern kerb alignment of Loftus Road.

A footpath is provided along the southern and western kerb alignments of Dursley Road / Pine Road.

Footpaths are provided along both kerb alignments of Fairfield Road / Polding Street N.

Signalised pedestrian crossings are provided over all approaches at the junction of Dursley Road and Fairfield Road, approximately 1km to the north-west of the site.

Signalised pedestrian crossings are provided over the southern and eastern approaches of the junction of Railway Street and Orchardleigh Street.



Cycling

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

On – Road

- The Horsley Drive forms an on-road bicycle friendly route to the south of the site.

Off – Road

- An off-road bicycle path is provided along the north-western side of the heavy rail line, to the south-east of the site, providing access between Military Road in the north and Fairfield Street in the south.



Bus Routes

The previously described pedestrian and cyclist infrastructure provide connectivity to the following bus stops, located in close proximity to the site:

- Multiple bus stops are located on both sides of Railway Street, Fairfield Road, Fairfield Street and Dennistoun Avenue to the south-east, west, south and north of the site, respectively.

All stops within Railway Street service Route N60 providing a night service between Fairfield and the City Town Hall.

All stops within Fairfield Road service Route 802 and 804 providing services between Liverpool and Parramatta.

All stops within Fairfield Street service Route 906 providing service between Fairfield and Parramatta.

All stops within Dennistoun Avenue service Route 820 providing service between Guildford and Merrylands.



Wheelchair Accessibility

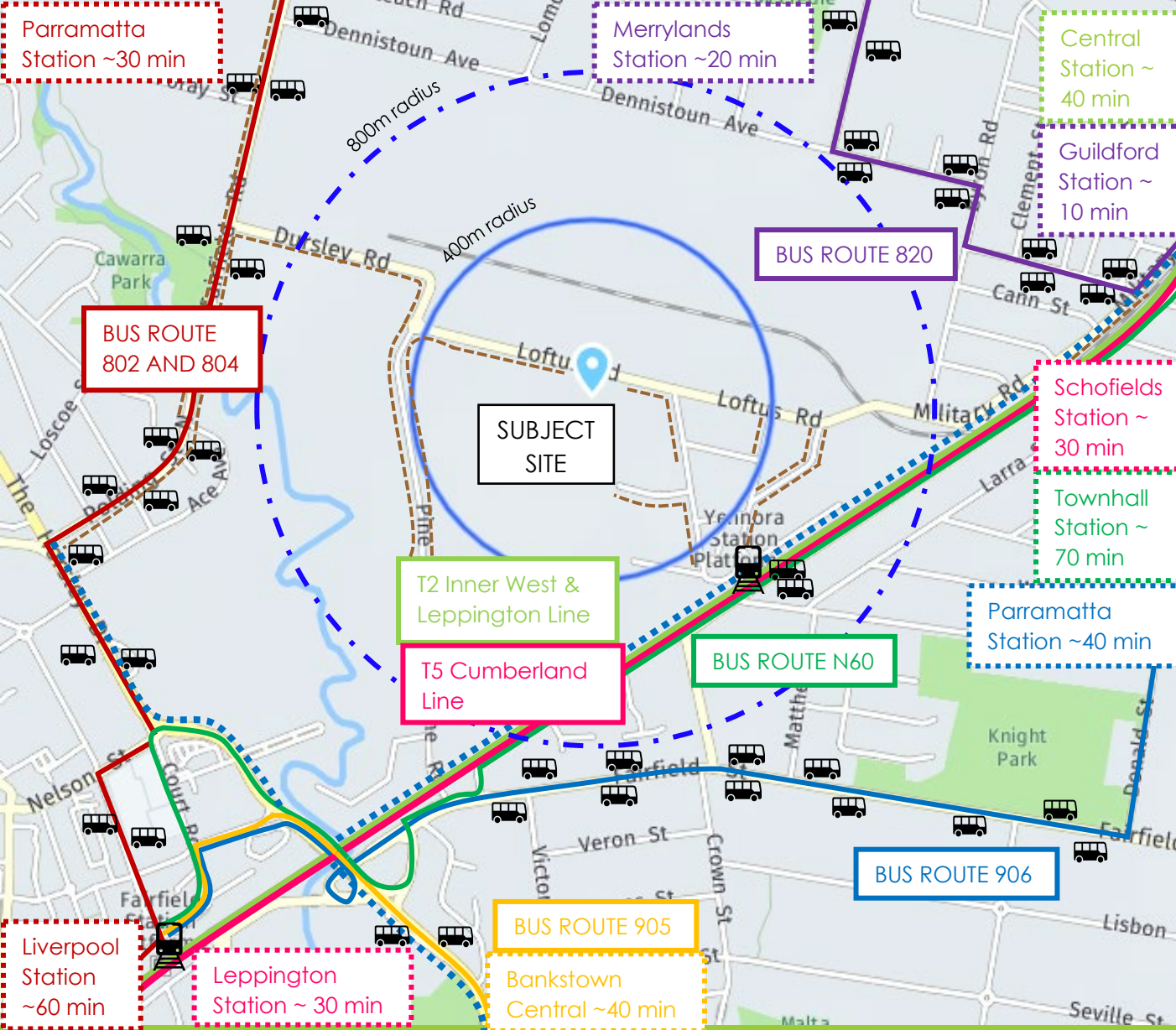
Sydney Buses offer wheelchair accessible services at limited times. Look for the accessibility symbol on the bus operator's timetable to identify these services.



Heavy Rail

The nearest train station to the subject site is Yennora Station which is situated at approximately 700m walking distance (an 8-minute walk) to the south-east of the site. Access to Yennora Station is via Loftus Road, Norrie Road and Nelson Road.

Yennora Station is on the T2, Inner West and Leppington Line which and on the T5 Cumberland Line. Trains from Yennora Station provide access to Leppington, Campbelltown, Parramatta, Richmond and the Sydney CBD.



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:

- <http://www.transdevsydney.com.au>
- <http://transportnsw.info>
- <http://www.cumberland.nsw.gov.au>
- <http://roads-waterways.transport.nsw.gov.au/roads/bicycles/cycleway-finder.html>

Disclaimer

The information contained in this brochure is current as of August 2021 and is provided as a guide. The brochure has been prepared in reliance on information provided by third parties and accordingly no guarantee, warranty or promise, express or implied, concerning the content or accuracy of information is provided. Readers should refer to the Transport Information Line, local bus companies or the local Council to obtain updated information referred to in this brochure.

LEGEND:



| | | | | | |
|---------------|--|---------------|--|------------------------------|--|
| Bus Stop | | Train Station | | Bicycle Path | |
| Walking Path | | Train Line | | 400m / 5 minute walk radius | |
| Bus Route 820 | | Bus Route 906 | | 800m / 10 minute walk radius | |
| Bus Route 905 | | Bus Route N60 | | Bus Route 802, 804 | |