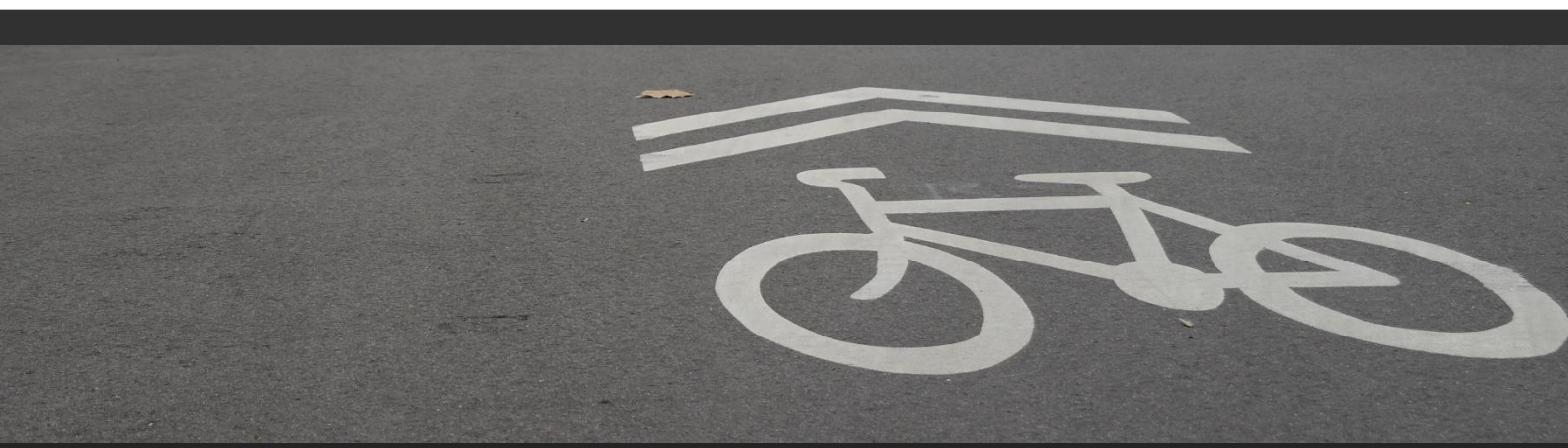


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409 Clayton Road, Clayton

Green Travel Plan



200170GTP001E-F
27 November 2020

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EXECUTIVE SUMMARY

It is proposed to develop the site for a mixed use, comprising, retail, commercial and residential uses. The development includes car parking across multiple levels and a generous bicycle parking provision.

The traffic and transport assessment of the development indicates that sufficient bicycle and car parking is provided on-site to meet the needs of the development, with an appropriate design outcome in relation to access, loading and parking.

Six development principals have been devised in order to guide the direction of the proposed development at 409 Clayton Road, Clayton, as listed below.

- Principal 1 – The 10 Minute Community;
- Principal 2 – Employment;
- Principal 3 – Diversity & Affordability;
- Principal 4 – Sustainability;
- Principal 5 – Health, Wellbeing & Security; and
- Principal 6 – Architectural Leadership.

This Green Travel Plan seeks to outline the measures which address Principal 1 – The 10 Minute Community, which seeks to provide substantial new housing with immediate access to employment opportunities, public transport and existing local services, all within 10 minutes of the home or office. In this regard, the development is located within 10-minutes walk of numerous train and bus services, the Station Trail shared path, a share car, and numerous retail, supermarket and other commercial uses. Furthermore, the site is located within a 10-minute bike ride (15-minute walk) of Monash Hospital as well as a 10-minute bus ride (15-minute bike ride / 30-minute walk) of Monash University, two of the major employment precincts in the area.

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1 INTRODUCTION

onemilegrid has been requested by Tango Projects to prepare a Green Travel Plan for the proposed mixed-use development at 409 Clayton Road, Clayton.

2 DEVELOPMENT PROPOSAL

2.1 General

It is proposed to develop the subject site for the purposes of a multi-level mixed-use development, containing both residential and commercial uses, as shown in Table 1.

Table 1 Proposed Development

Component	No/Area
1-Bedroom Apartment	105
2-Bedroom Apartment	46
3-Bedroom Apartment	1
Total Apartments	152
Retail	1,479 m ²
Office	1,197 m ²

Private communal amenities are provided on the fourth floor, which will only be accessible by residents of the development. It is understood that the communal amenities may include a gym, library, working spaces, and/or veggie garden.

2.2 Car Parking and Vehicular Access

A total of 196 car spaces are proposed across a basement car park level and three podium levels, with access provided via a crossover to Centre Road. The proposed site access will be restricted to left in / left out movements only.

The site access leads to the development car park which includes parking on the ground level, basement and upper podium levels. Access between levels is provided by a ramp system with one ramp leading to the basement and a second ramp providing access to the podium levels.

It is proposed to allocate the car parking across the various uses as follows: -

- 153 residential spaces;
- 13 retail spaces; and
- 30 office spaces

2.3 Bicycle Parking

A total of 44 bicycle spaces are proposed in a secure compound within the ground level car park that will be made available for residents and staff. A further 18 bicycle parking spaces are provided at the frontage of the site in the form of horizontal hoops, for use by visitors.

End of trip facilities for staff are provided on the ground level next to the bin storage area in the form of two showers (including one DDA), bathrooms and change rooms.

3 GREEN TRAVEL PLAN

A Green Travel Plan is a suite of initiatives and services employed to encourage travel mode behaviour change and to promote use of sustainable transport options such as walking, cycling, public transport or car-pooling in preference to single occupant car trips where practicable.

A Green Travel Plan provides value to future residents, staff and visitors of the development, informing them of the alternative transport options when accessing the site and surrounds and provides associated health and fitness benefits when increasing their activity levels through regular walking and cycling. In addition, a Green Travel Plan will provide benefits to developers when advocating for a reduction in car parking requirements, or assisting them in meeting environmental targets.

The implementation, coordination and funding of the Green Travel Plan is the responsibility of the Owners Corporation, and should be a dynamic document, reflecting changes in on-site and off-site conditions e.g. additional bicycle parking, or changing public transport timetables. As such, the plan should be frequently revisited and amended to provide the most accurate and relevant information to achieve the desired objectives of reducing car usage.

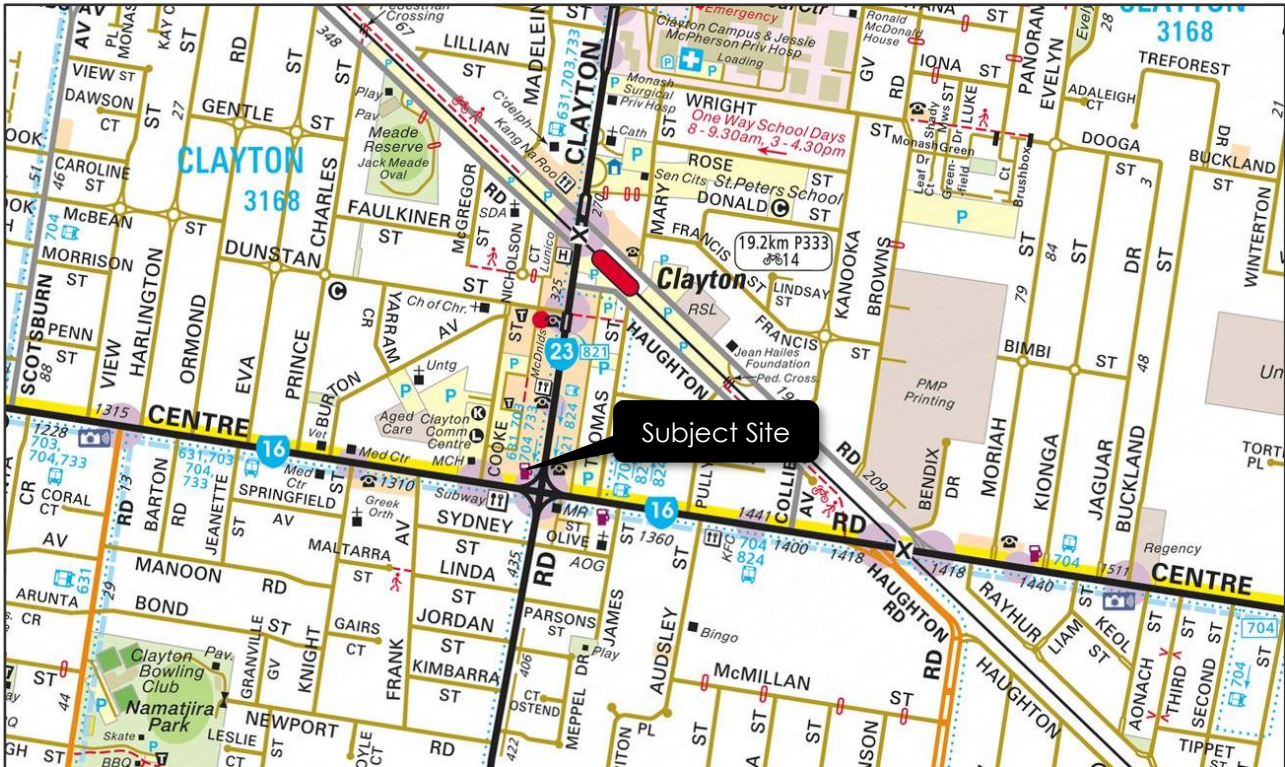
Journey to work data from the City of Monash indicates that approximately 85% of work trips to Monash are by car drivers while 70% of residents of Monash drive to their place of employment. Consequently, the objective of this Green Travel Plan will be to increase the proportion of sustainable transport mode use by staff of the development by 30% from the municipality average.

4 SITE LOCATION & SUSTAINABLE TRANSPORT

4.1 Site Location

The subject site is located at the northwest corner of Clayton Road and Centre Road, Clayton, as shown in Figure 1.

Figure 1 Site Location



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The site is irregular in shape and includes frontages to Centre Road and Clayton Road of approximately 43 metres and 37 metres respectively, for an overall site area of approximately 2,100 square metres. In addition, the site has a partial abuttal to a laneway in the northwest corner of the site.

An aerial view of the subject site is provided in Figure 2.

Figure 2 Site Context (28 April 2020)



Copyright Nearmap

4.2 Sustainable Transport

4.2.1 Public Transport

The site has excellent public transport accessibility, with a wide variety of transport modes and services servicing the immediate vicinity of the site. Of note, a bus stop is located at the southwest corner of the site. The full public transport provision in the vicinity of the site is shown in Figure 3 and detailed in Table 2.

Figure 3 Public Transport Provision

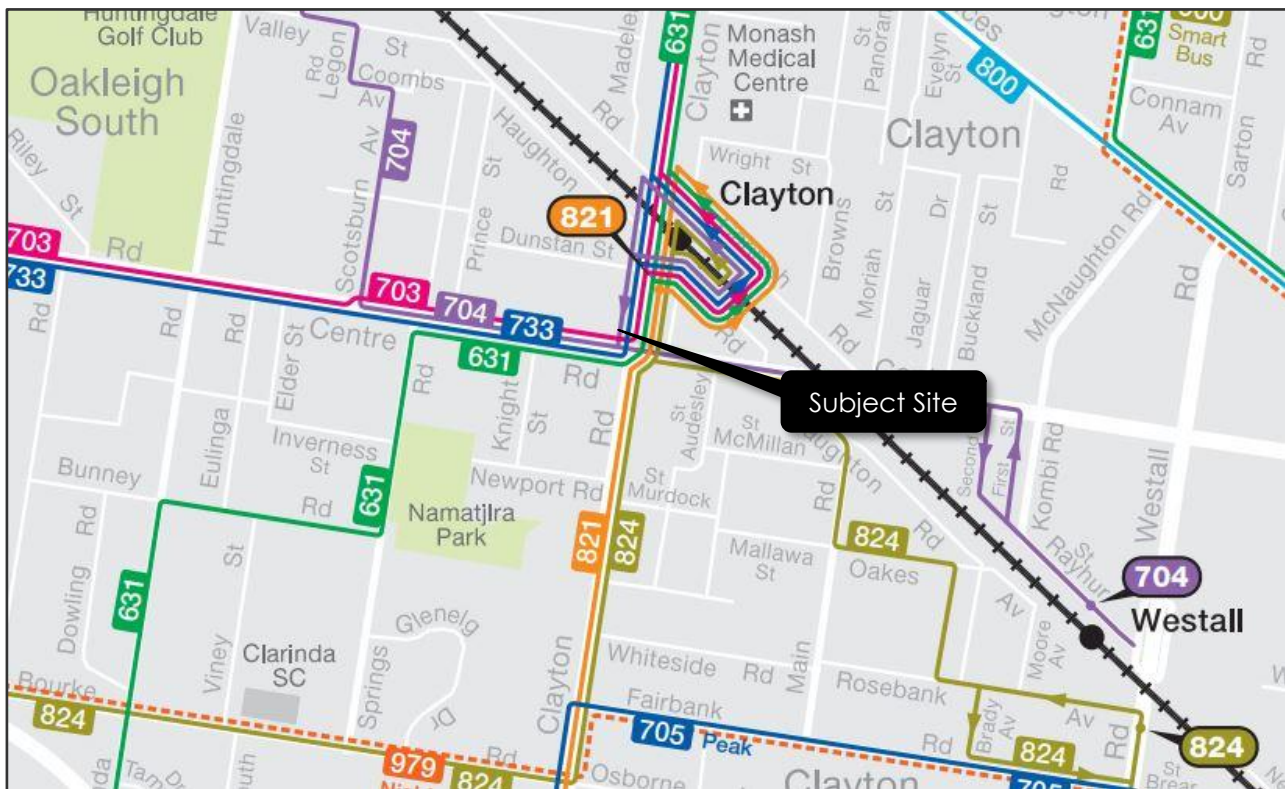


Table 2 Public Transport Provision

Mode	Route No	Route Description	Nearest Stop/Station
Train		Cranbourne Line	Clayton Station
		Pakenham Line	
Bus	631	Southland - Waverley Gardens via Clayton, Monash University	Centre Road (at the site frontage)
	703	Middle Brighton - Blackburn via Bentleigh, Clayton, Monash University	
	704	East Clayton - Oakleigh via Clayton, Huntingdale	
	733	Oakleigh - Box Hill via Clayton, Monash University, Mt Waverley	
	821	Southland - Clayton via Heatherton	
	824	Moorabbin - Keysborough via Clayton, Westall	

Cranbourne and Pakenham line trains generally depart every 5 to 10 minutes during the peak hours, and every 20 to 30 minutes outside of the peak hours, with services reducing to one per hour very late at night / early in the morning.

The frequency of each bus route during the weekday peak and off peak, as well as on Saturdays and Sundays is described in Table 3 below.

Table 3 Bus Frequencies

Route	Weekday Peak Hour	Weekday Off-Peak	Weekend
631	20 – 35 mins	35 – 60 mins	40 – 60 mins
703	7 – 25 mins	9 – 20 mins	25 – 35 mins
704	30 – 40 mins	40 mins	30 – 40 mins
733	5 – 35 mins	12 – 20 mins	30 – 60 mins
821	60 mins	60 mins	N/a
824	20 mins	20 – 60 mins	30 – 60 mins

Furthermore, the Principal Public Transport Network for the surrounding area is shown in Figure 4, which identifies that the site falls within the Principal Public Transport Network Area.

Figure 4 Principal Public Transport Network Area Map



Further to the existing public transport services in the vicinity, it is noted that the Suburban Rail Loop which has just been announced by the State Government will run through Clayton Station, connecting the middle suburbs of Melbourne.

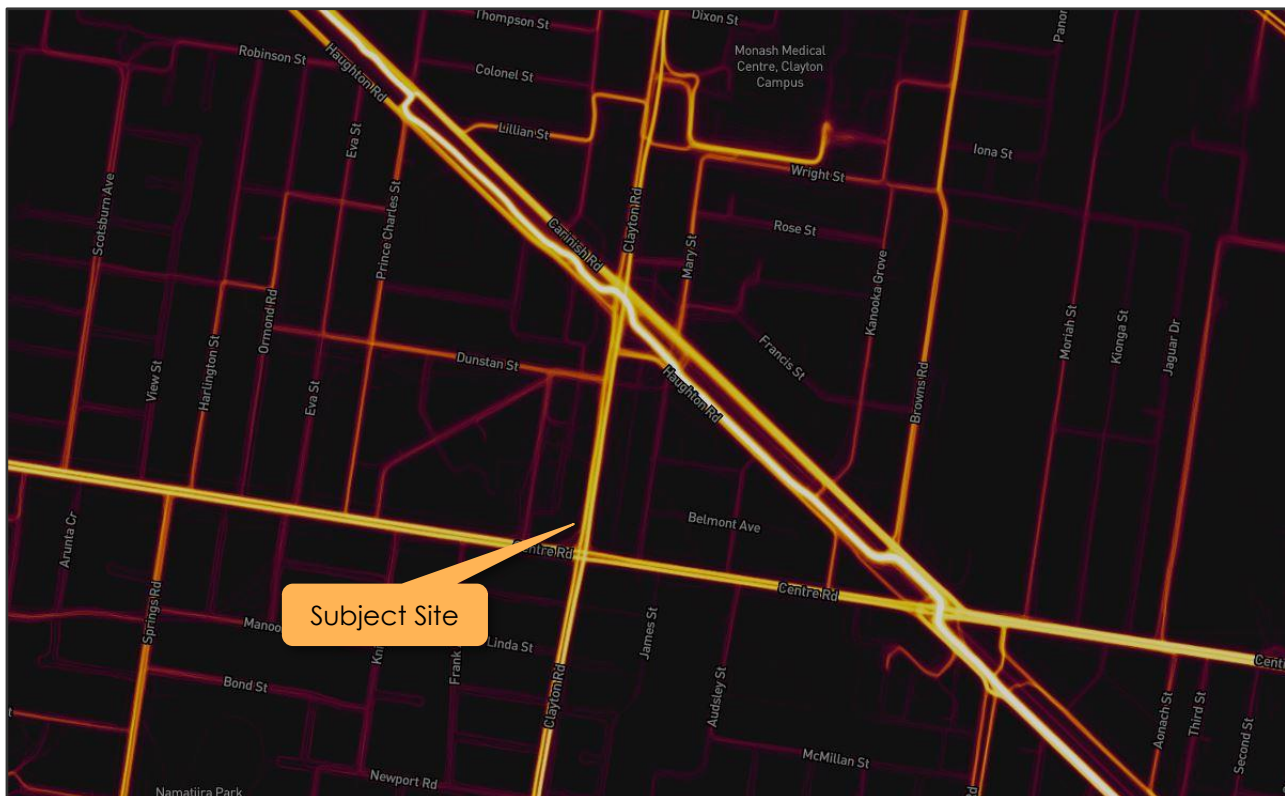
4.2.2 Bicycle Facilities

Strava is a social network and training tool for cyclists, runners and swimmers. Users record their physical activity using a dedicated GPS device or utilise the mobile app, and upload the file to their profile.

Strava anonymised this information and makes it available through their "Global Heatmap" tool, showing aggregated all public activities over the last two years across the world.

A view of the cycling heatmap in proximity to the study area is provided below in Figure 5. Routes of higher usage are brighter in colour.

Figure 5 Strava Cycling Heatmap



Copyright Strava

As shown above, primary routes in and out of the study area comprise:

- Clayton Road;
- Centre Road; and
- The Station Trail that runs under the Cranbourne/Pakenham train line.

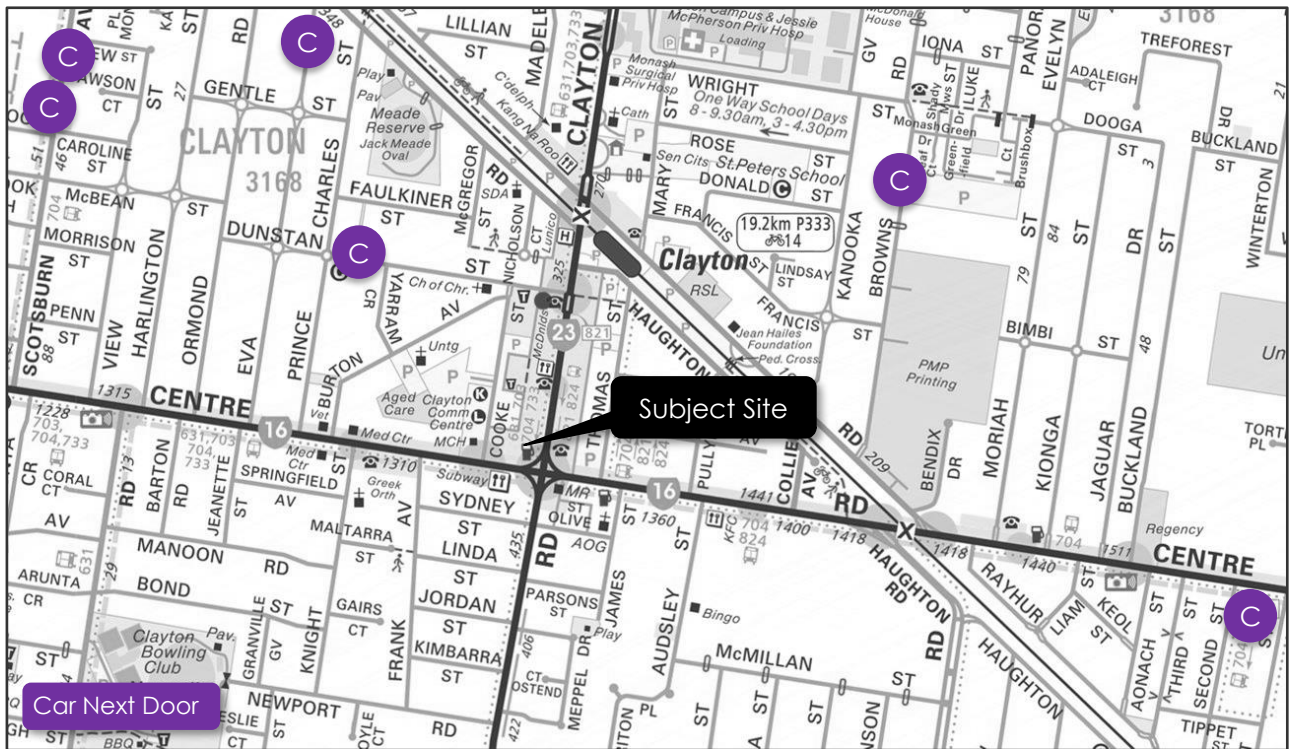
It is noted that this information includes all cycling activities recorded on the platform, inclusive of weekend trips, and all trips throughout the day. Additionally, the data is skewed towards sports cyclists, given that the bulk of commuter and recreational cyclists will not be tracking their rides.

4.2.3 Share Cars

Car sharing is becoming increasingly popular within highly populated areas for both employees and residents, where parking is restrictive and expensive. Car sharing operates similar to a car rental company, except that users join as members and are charged on an hourly rate rather than a daily.

The location of the share cars within close proximity of the site are shown in Figure 6. As further development occurs and the area continues to densify, it is anticipated that additional 'pods' are likely to become available.

Figure 6 Share Car Locations



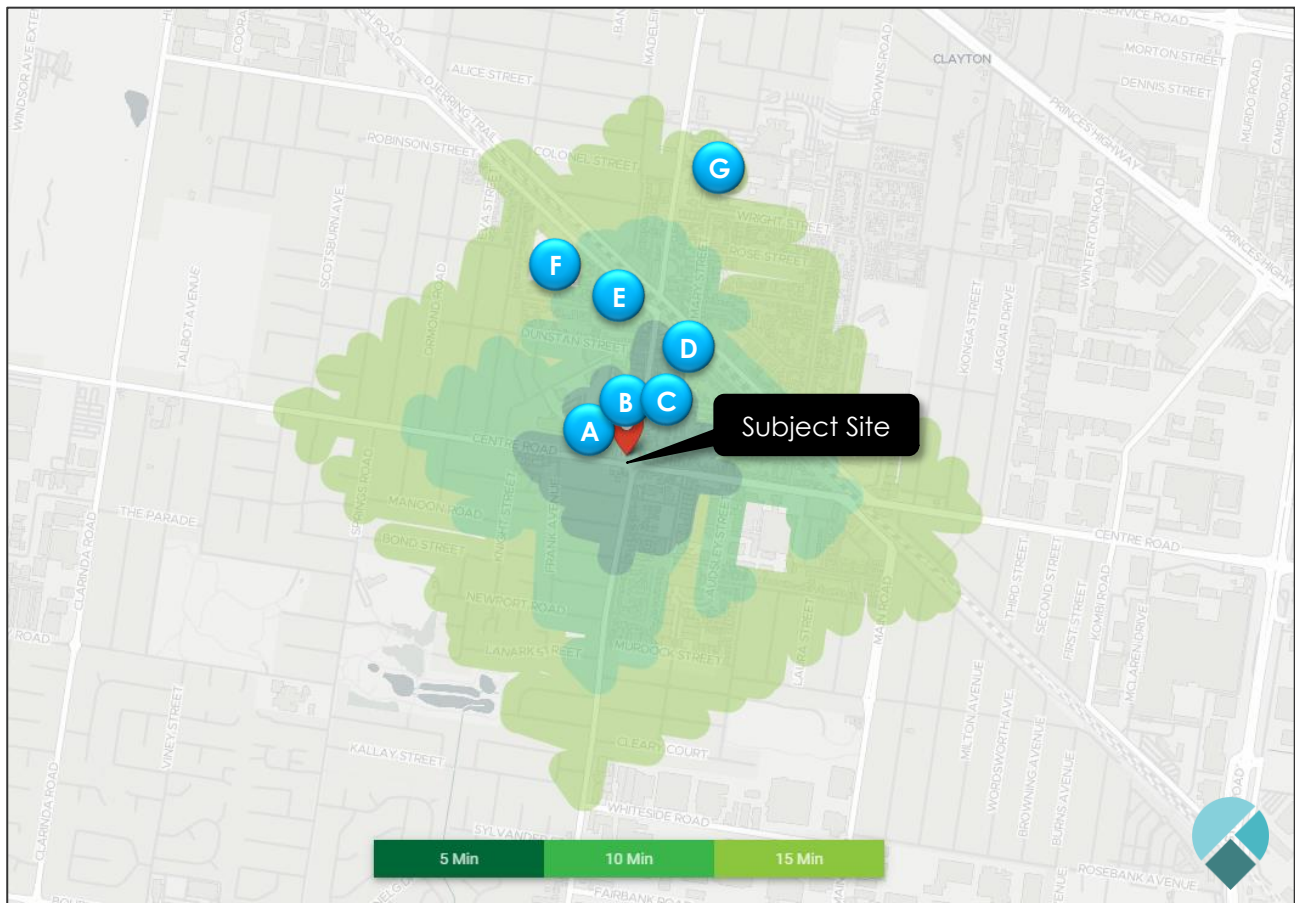
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4.2.4 Pedestrian Accessibility

In addition to having good access to public transport modes, the site is well-located for pedestrian accessibility, with a number of recreation, education, shopping and employment uses located within 10 - 15 minutes' walk of the site.

Figure 7 shows a pedestrian walk time map for the site, with the major facilities in the vicinity of the site identified in Table 4.

Figure 7 Pedestrian Walk-Time Map



Courtesy of [Targomo](#)

Table 4 Site Facilities

Ref	Facility	Approx. Distance
A	Coles Clayton	Adjacent
B	Chemist Warehouse Clayton	Adjacent
C	NAB ATM	40m
D	Clayton Station	400m
E	Australia Post - Clayton	500m
F	Meade Reserve	1.3m
G	Monash Medical Centre	1.1km

4.3 Walkability

Walkability is a measure of how friendly an area is to walking. Walkability has many health, environmental, and economic benefits. Factors influencing walkability include the presence or absence and quality of footpaths or other pedestrian rights-of-way, traffic and road conditions, land use patterns, building accessibility, and safety.

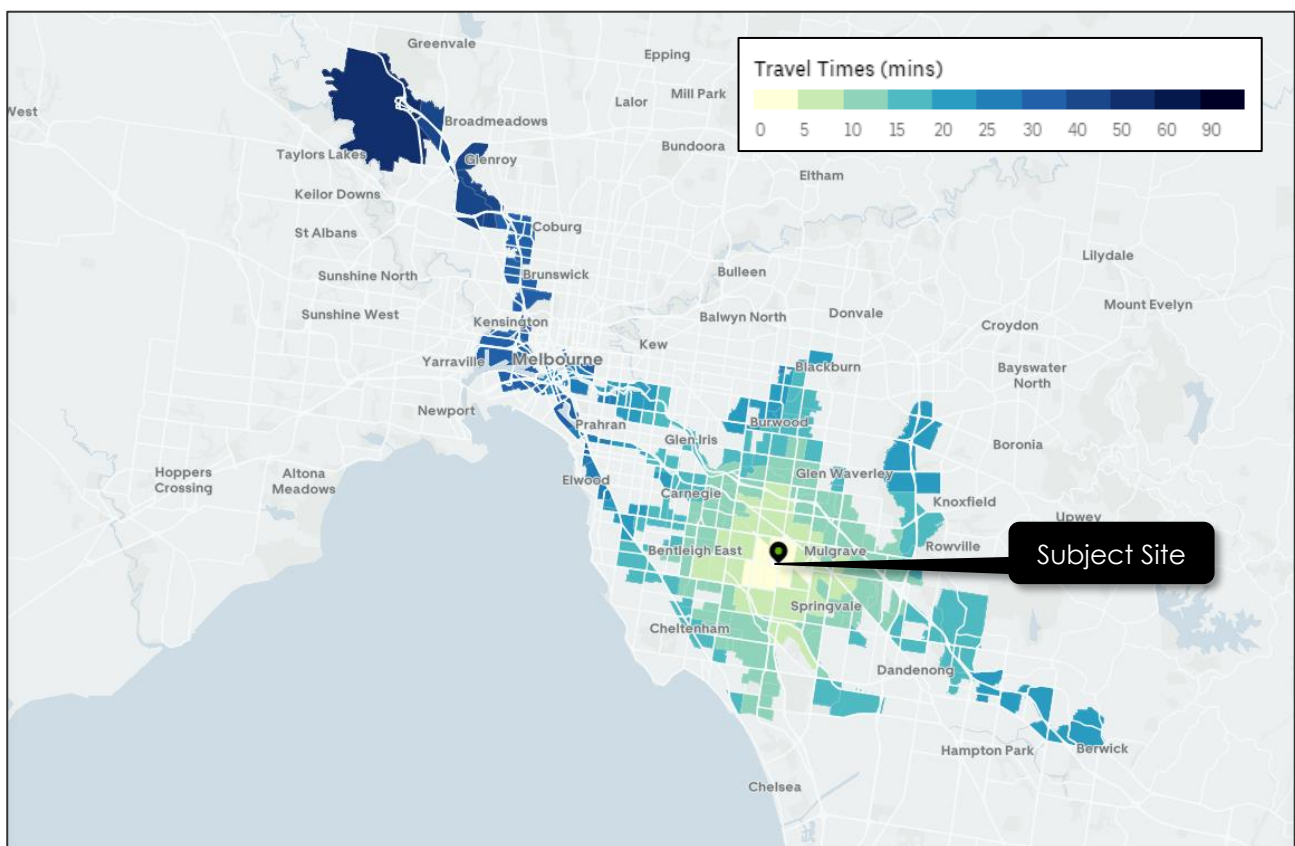
The site has a Walk Score rating of 90/100 and is very walkable, whereby daily errands do not require a car, and most errands able to be accomplished on foot.

4.4 Travel Time

The Uber Movement app uses aggregated trip data from the Uber app to provide vehicular travel time data. Figure 7 below shows the expected travel time to drive a car from the subject site to different locations across Melbourne.

It can be seen below that travelling to the Melbourne CBD generally takes between 25 and 30 minutes, with trip to Tullamarine Airport taking around 60 minutes. Trips to the surrounding southeast suburbs generally take between 5 and 20 minutes.

Figure 8 Travel Time Map



Copyright Uber

5 GREEN TRAVEL INITIATIVES

5.1 General

The applicant has committed to implement a number of Green Travel Initiatives to encourage the use of pedestrian, bicycle and public transport travel to and from the site. The initiatives included in the package are outlined as follows.

5.2 Green Travel Plan Champion

A Green Travel Plan "Champion" will be appointed by the Owners Corporation who will be responsible for the implementation and ongoing management of the Green Travel Plan.

5.3 Car Parking Facilities

The proposed development considers a significant reduction in car parking from the statutory car parking requirements. Through a reduced supply, staff and visitors to the site are expected to contemplate alternative transportation means.

5.4 Bicycle Facilities

The development proposed bicycle parking in excess of the minimum statutory requirements, with secure facilities provided on the ground parking level. Secured bicycle parking facilities are located in close proximity to the pedestrian and vehicle entrance from Centre Road and will be made available for residents and their visitors, and for staff.

Furthermore, a considerable provision of bicycle parking spaces are provided in horizontal racks at the frontage of the site for use by visitors.

Government policy currently aims to encourage the use of bicycles as a mode of transport in order to reduce the dependency on private vehicles. The provision of easily accessible bicycle facilities on-site is expected to increase the number of trips made by bicycle.

The ground level bicycle storage area also includes a maintenance area which will include typical bicycle maintenance tools and equipment, including:

- A bicycle tyre pump;
- Tyre levers; and
- Standard hex keys and adjustable wrenches.

All bicycle tools and equipment will be wired to the maintenance area, to prevent theft.

5.5 Bicycle User Group

Bicycle User Groups (BUGs) are groups of people who identify as bike riders, particularly those who ride for their commute. As part of the development the operator will establish a BUG for the office and commercial uses, of which staff may choose to participate. Typically BUGs may:

- Run and participate in events such as Ride2Work Day;
- Produce a newsletter / intranet site with information on bicycle facilities, events and shops in the area;

- Establish bike buddy schemes, pairing new riders with experienced riders who share similar routes;
- Advocate for improvements to on and off-site bicycle facilities; and
- Run workshops to share tips, answer questions and start discussions.

5.6 Public Transport

To encourage public transport use, information sourced from Public Transport Victoria (PTV) will be provided through posters and leaflets. The information detailed will address local services in regard to frequency, location and linkages to other networks. These will be displayed in common areas of the building to ensure they can be accessed by all tenants.

Information on how to utilise the public transport system, and in particular how to purchase a Myki, the costs of a Myki, and the nearest Myki purchase and top-up locations will also be provided.

5.7 Car-Pooling

Car-pooling is when two or more people share a car and travel together. It allows people to benefit from the convenience of the car, whilst alleviating the associated problems of congestions and pollution. Added benefits include reduced operating and parking costs.

Staff will be encouraged to car pool to the site with links to popular car pool matching websites provided on staff portals.

Parking may be allocated in priority locations for staff who car pool to the site.

5.8 Building Intranet Site

An intranet site for the building will be established and maintained by the Owners Corporation, which will include the following information for residents and employees:

- Information and contact details for the Owners Corporation and the Green Travel Plan "Champion";
- Maps of surrounding bicycle facilities and routes;
- Public transport maps and timetables;
- Information on how to use the public transport system, including how to purchase a Myki, Myki costs and top-up locations;
- Maps of surrounding services, including shopping locations, schools and services, with suitable non-car-based transport options (i.e. bike and walking routes, and public transport options);
- Links to relevant Green Travel, public transport and local services websites including:
 - + www.walkscore.com
 - + www.ptv.vic.gov.au
 - + www.bicyclenetwork.com.au

5.9 Resident/Tenant Welcome Pack

All new residents and tenants will be provided with a 'welcome pack', which will include the following:

- General information about the development;
- Information regarding the building intranet site and the information contained within;
- Maps of surrounding bicycle facilities and routes;
- Public transport maps and timetables;
- Maps of surrounding services, including shopping locations, schools and services, with suitable non-car-based transport options (i.e. bike and walking routes, and public transport options);
- Links to relevant Green Travel, public transport and local services websites.

6 MAINTAINING THE GREEN TRAVEL PLAN

6.1 Monitoring and Assessment

In order to monitor the success of the aforementioned initiatives, it is proposed that a three-stage monitoring system be implemented, and the Green Travel Plan “Champion” be responsible for the ongoing monitoring and assessment of the Green Travel Plan.

It is proposed that monitoring take place in the following stages:

- Stage One – would involve a questionnaire survey of staff on occupation of the proposed development. The survey will be useful to collect information on the travel characteristics of employees, to gauge interest in the various initiatives and to seek ideas for other initiatives and set baseline travel mode percentages such that they can attempt to meet the proposed targets;
- Stage Two – would involve a questionnaire and feedback form to be filled out by staff six months after occupation, in order to determine what initiatives are working and which are not;
- Stage Three – would be the monitoring component of the plan which would be undertaken 12 months after occupation. This questionnaire would test the success rate of the various initiatives and help rework programs to suit the needs of the new staff. At this stage, the targets identified in previously will be reviewed.

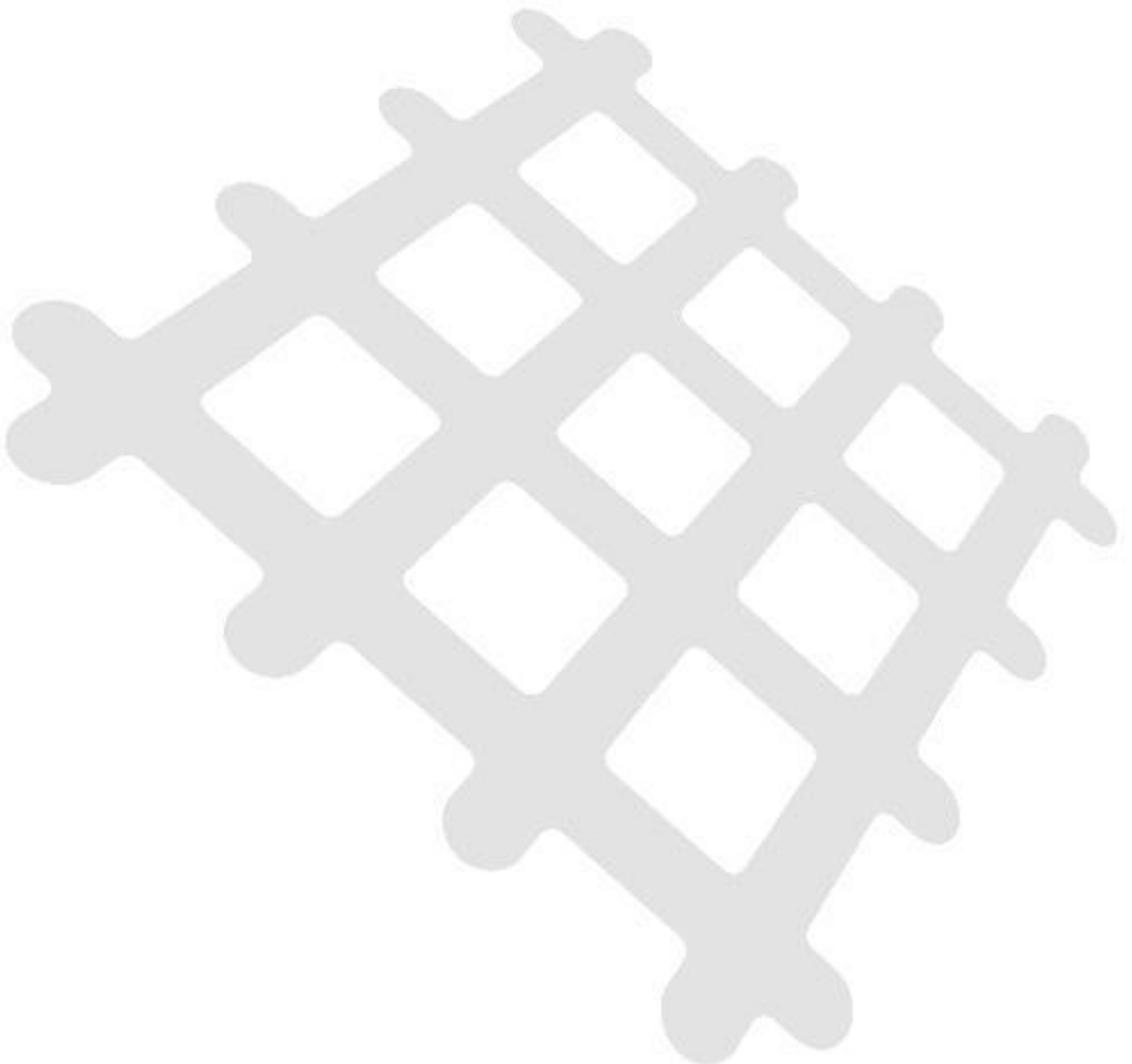
A questionnaire has been prepared for each of the three stages and have been provided within Appendix A.

6.2 Updates to the Green Travel Plan

The Owners Corporation, in particular the Green Travel Plan “Champion”, shall be responsible for the maintenance of the Green Travel Plan, which shall be updated every 5 years to ensure it is still relevant, and achieving the required results.

All costs associated with the management, maintenance and updating of the Green Travel Plan shall be borne by the Owners Corporation.

Appendix A Questionnaire Survey Forms



STAGE ONE QUESTIONNAIRE

Occupation and Department: _____

1. How do you travel to and from work?

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> Train | <input type="checkbox"/> Walk |
| <input type="checkbox"/> Bus | <input type="checkbox"/> Motorbike |
| <input type="checkbox"/> Car, as driver | <input type="checkbox"/> Bicycle |
| <input type="checkbox"/> Car, as passenger | <input type="checkbox"/> Other: _____ |

2. Approximately how far did you travel to reach 409 Clayton Road?

3. If you generally travel by car, either as a driver or passenger, what could be done to encourage you to use other more sustainable modes of transport?

4. Would you use any of the following services (if not already noted above)?

- | | |
|---|--|
| <input type="checkbox"/> Cycling | <input type="checkbox"/> Car pooling |
| <input type="checkbox"/> Walking | <input type="checkbox"/> 'Share car' or similar services |
| <input type="checkbox"/> Public Transport | |

If not, why? _____

Thank you for participating in the survey.

STAGE TWO QUESTIONNAIRE

Occupation and Department: _____

1. How do you travel to and from work?

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> Train | <input type="checkbox"/> Walk |
| <input type="checkbox"/> Bus | <input type="checkbox"/> Motorbike |
| <input type="checkbox"/> Car, as driver | <input type="checkbox"/> Bicycle |
| <input type="checkbox"/> Car, as passenger | <input type="checkbox"/> Other: _____ |

2. If you generally travel by car, either as a driver or passenger, what could be done to encourage you to use other more sustainable modes of transport?

3. Would you use any of the following services (if not already noted above)?

- | | |
|---|--|
| <input type="checkbox"/> Cycling | <input type="checkbox"/> Car pooling |
| <input type="checkbox"/> Walking | <input type="checkbox"/> 'Share car' or similar services |
| <input type="checkbox"/> Public Transport | |

If not, why? _____

4. Has the alternative transport mode information and initiatives encouraged you to change your travel mode choice? And if not, how could the information be improved?

Thank you for participating in the survey.

STAGE THREE QUESTIONNAIRE

Occupation and Department: _____

1. How do you travel to and from work?

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> Train | <input type="checkbox"/> Walk |
| <input type="checkbox"/> Bus | <input type="checkbox"/> Motorbike |
| <input type="checkbox"/> Car, as driver | <input type="checkbox"/> Bicycle |
| <input type="checkbox"/> Car, as passenger | <input type="checkbox"/> Other: _____ |

2. Has the above travel mode choice changed since you first started working at 409 Clayton Road, and if so, what drove that change?

3. Do you have any feedback for the sustainable transport initiatives implemented at 409 Clayton Road?

Thank you for participating in the survey.