

# WSU Milperra – Stage 1 Subdivision Traffic Impact Assessment

Prepared for:

Mirvac

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The Transport Planning Partnership



# WSU Milperra – Stage 1 Subdivision Traffic Impact Assessment

Client: Mirvac

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#### **Quality Record**

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# 1 Introduction

The Transport Planning Partnership Pty Ltd (TTPP) has prepared this Traffic Impact Assessment report on behalf of Mirvac Residential (NSW) Developments Pty Ltd, to accompany the Development Application (DA) to be lodged with City of Canterbury Bankstown Council (Council) for the subdivision of Stage 1 on the former WSU Milperra site located at 2 Bullecourt Avenue, Milperra.

# 1.1 Project Background

On 1 June 2022, a Gateway determination was issued by the Department of Planning and Environment to endorse the planning proposal to rezone the site to provide residential dwellings, a new commercial centre and public open spaces (Ref: PP-2021-5837).

The subdivision is being proposed to be undertaken in six stages for the residential component, as shown in Figure 1.1.

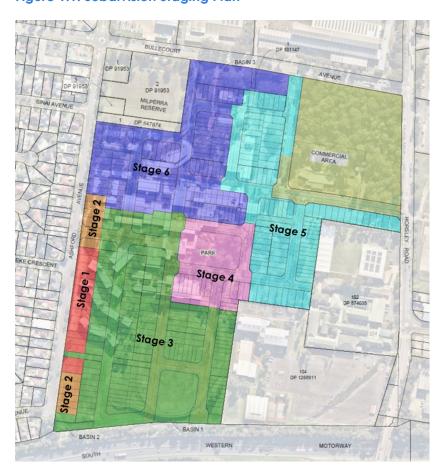


Figure 1.1: Subdivision Staging Plan



This report relates to the Stage 1 subdivision DA which involves 16 'Premium Housing' lots fronting Ashford Avenue (as shown in red in Figure 1.1). All other stages would be subject to a separate approval.

In preparation of this report, reference to the adopted Former WSU Campus, Milperra site specific Development Control Plan (site specific DCP, amended August 2024) and Planning Agreement which was accepted by Council at its Ordinary Meeting on 24 October 2023 has been included in this assessment. It is noted that the site specific DCP is included in Chapter 11.13 of Canterbury-Bankstown Development Control Plan 2023.

The intended outcomes of the adopted Planning Agreement are as follows:

- Dedication of 14.400m<sup>2</sup> of land as RE1 Public Recreation Zoned land
- Construction and dedication of local roads incl. shared cycleway and 668m<sup>2</sup> SP2 Zoned stormwater detention drainage land
- Open space embellishment within the site (valued \$1.5 million)
- Milperra Reserve embellishment (valued \$1.04 million)
- Discussions with Mount St Josephs College for shared use of playgrounds
- Repair and renovate Milperra Community Centre (valued \$393,000)
- Affordable housing contribution (monetary contribution of \$5.3 million)
- Undergrounding powerlines along Ashford Avenue being added, subject to any relevant Ausgrid approval
- Construction of a footpath and landscaping along the eastern side of Ashford Avenue being added
- The applicant contribution toward cycleway connection to Panania Station to promote the use of active and public transport for future residents and the broader Milperra community.

This report relates to the Stage 1 subdivision DA only.

The above adopted Planning Agreement is envisaged to be delivered at the later stages of the project.

#### 1.2 References

In preparing this report, reference has been made to the following:

- Canterbury-Bankstown Development Control Plan 2023
- Roads and Maritime Services Guide to Traffic Generating Development, updated technical direction TDT 2013/04a
- Adopted Planning Agreement



• Other documents referenced in this report.

# 1.3 Report Structure

This report assesses the traffic and transport implications of the proposed development and is set out as follows:

- Chapter 2 discusses the existing conditions including a description of the subject site.
- Chapter 3 provides a brief description of the proposed development.
- Chapter 4 assesses the future parking requirement of the site.
- Chapter 5 examines the traffic generation and its impacts.
- Chapter 6 presents the conclusions of the assessment.



# 2 Existing Conditions

### 2.1 Site Description

The site is located in Milperra and falls within the Canterbury-Bankstown local government area. The site is known as the former Western Sydney University Milperra Campus which would be redeveloped for residential, business, recreation and conservation uses. The Stage 1 subdivision DA relates to a site area of 6,030m<sup>2</sup> along the Ashford Avenue site frontage.

The location of Stage 1 subdivision site is shown in blue in Figure 2.1, with the overall site outlined in red.

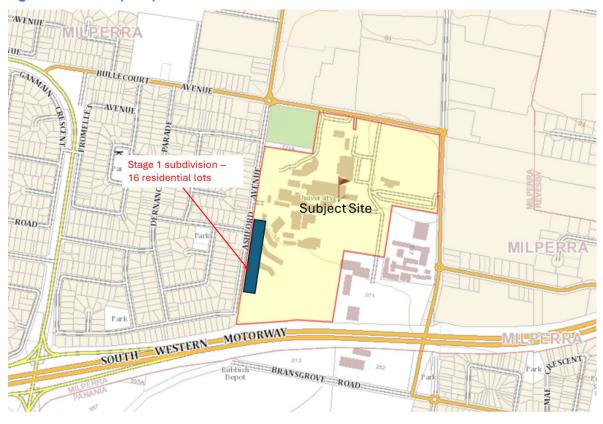


Figure 2.1: Locality Map

Source: SIX Maps

Surrounding land uses in the area are predominantly light industrial to the north and east, including the Milperra Industrial Precinct, and low density residential to the west and southeast of the site. Of note, Mount St Joseph Catholic College Milperra is located directly adjacent to the site and has recently purchased Building 17 to 19 within the campus.



### 2.2 Abutting Road Network

The site is surrounded by a network of local roads, including Bullecourt Avenue to the north, Horsley Road to the east and Ashford Avenue to the west of the site. A brief description of these roads is provided below.

#### 2.2.1 Bullecourt Avenue

Bullecourt Avenue functions as a two-way, two-lane primary collector road, generally aligned in an east-west direction between Horsley Road and Ashford Avenue. The road carriageway is approximately 12.5m wide (kerb to kerb), with unrestricted kerbside parking generally provided on both sides of the road. Bullecourt Avenue has a posted speed limit of 60 km/hr. This road provides good connectivity between Henry Lawson Drive and Horsley Drive to the west and east ends respectively.

#### 2.2.2 Horsley Road

Horsley Road functions as a two-way, two-lane primary collector road and is generally aligned in a north-south direction between Ladbroke Street and Bransgrove Road. The road carriageway is approximately 12.0m wide (kerb to kerb), with unrestricted kerbside parking generally provided on both sides of the road. This road provides good connectivity to/from the wider arterial road network via Bullecourt Avenue, Beaconsfield Street and Bransgrove Road.

The posted speed limit is 60km/hr, with 40 km/hr school zone restrictions in operation during school hours to the south of the Horsley Road-Bullecourt Avenue intersection.

#### 2.2.3 Ashford Avenue

Ashford Avenue functions as a two-way, two-lane local collector road, generally aligned in a north-south direction between Milperra Road and Flanders Avenue to the north and south ends respectively. The road carriageway is approximately 12.0m wide (kerb to kerb), with unrestricted kerbside parking provided on the east side and restricted kerbside parking on the west side of the road.

The posted speed limit is 50 km/hr within the vicinity of the site.

### 2.3 Pedestrian and Cyclist Infrastructure

Paved pedestrian footpaths are generally provided on both sides of Bullecourt Avenue and Horsley Road, which provides good access to the surrounding areas and public transport facilities. In addition to this, formal pedestrian footpaths are only provided on some sections



of Ashford Avenue, near the retail shop frontages at the corner of Ashford Avenue and Bullecourt Avenue. No formal pedestrian footpaths are provided along the site frontage on Ashford Avenue or along the frontage of the residential dwelling houses on the west side of Ashford Avenue between Sinai Avenue and Flanders Avenue.

There is a good provision of cycle infrastructure in the local area. To the west of the site, a shared path is provided along Henry Lawson Drive, providing connectivity in a generally north-south direction between Landsdowne and East Hills. In addition to this, there is a cycleway provided to the south of the site traversing the sports fields which provides good connectivity to/from Panania.

A map showing existing cycling facilities within the site vicinity is shown in Figure 2.2.

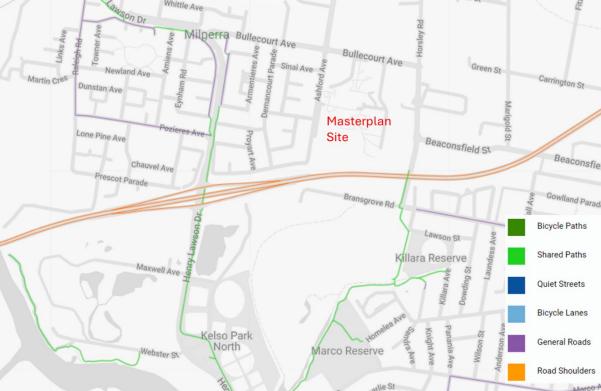


Figure 2.2: Cycleway Map

Source: Roads and Maritime Services Cycleway Finder

# 2.4 Public Transport Facilities

The site is accessible by public transport, with a number of bus services operating within a 400m catchment radius of the centre of the site. It is however noted that there are no nearby railway stations within the immediate local area. The nearest railway station is Panania Station, which is approximately 1.5km from the site.

The site's proximity to nearby public transport facilities is shown in Figure 2.3.



estern Motorway (Toll road) Reve 800m Kelso Park 1.2km Revesby Panania 1.6km Tower St Tow Legend Panania Bus stops r Point Train Station Radial distance from centre of subject site East Hill

Figure 2.3: Site Proximity to Nearby Public Transport Facilities

Base Map Source: Google Maps Australia

A summary of the existing bus services within a 400m radius catchment of the centre of the site, as well as their associated frequencies, is provided in Table 2.1.

Table 2.1: Bus Service Summary

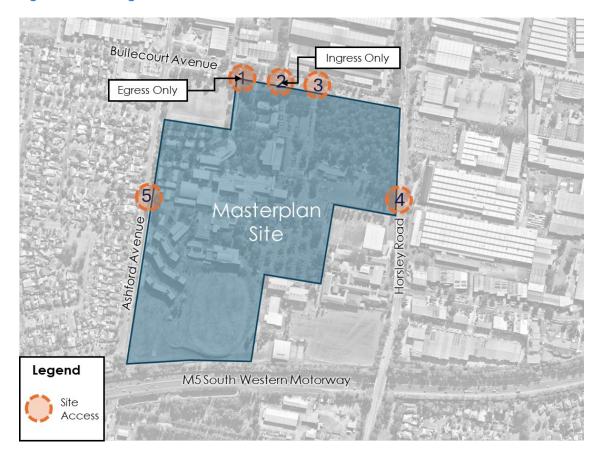
Service	Paula Passinlian	Approximate Frequency (Each Direction)		
No.	Route Description	Peak	Off-Peak	
922	Between East Hills and Bankstown	Every 30 mins		
962	Between East Hills and Miranda	Every 15-20 mins	Every 30 mins	
M90	Between Burwood and Liverpool	Every 10 mins	Every 15 mins	
\$5	Between Milperra and Padstow	Five services per day		



# 2.5 Existing Vehicle Access

The subject site was formally occupied by the Western Sydney University Milperra campus, which has been relocated to a new location in Bankstown. Whilst the site is not currently operational, there are several vehicle access points provided along Ashford Avenue, Bullecourt Avenue and Horsley Road frontages as shown in Figure 2.4.

Figure 2.4: Existing Vehicle Access Locations





# 3 Proposed Development

# 3.1 Project Background

On 1 June 2022, a Gateway determination was issued by the Department of Planning and Environment to endorse the planning proposal to rezone the site to provide residential dwellings, a new commercial centre and public open spaces (Ref: PP-2021-5837).

As part of the previous traffic assessment, the indicative masterplan assessed was as follows:

- 441 low rise residential dwellings (197 free standing and 244 attached and semidetached dwellings)
- 136m<sup>2</sup> GFA of shared community/meeting office space
- 250m² GFA of restaurant/café use
- 250m<sup>2</sup> GFA of convenience retail use
- The existing child care centre is proposed to reduce its capacity from 67 to 40 children

It is however noted that the planning proposal was approved for a total number of 430 low density residential dwellings (which is slightly lower than the above 441 residential dwellings assessed as part of the planning proposal traffic report).

The proposed development is proposed to be provided in accordance with the Concept Masterplan in the adopted Site Specific DCP, as shown in Figure 3.1.

19334-R03V03-240920-Stage 1 Subdivision TIA

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TTPP Transport Assessment Version 05 dated 2 June 2020 (TTPP Ref: 19334-R01V05-200602-TIA)



WESTERN SYDNEY UNIVERSITY CAMPUS, MILPERRA STRUCTURE PLAN (27/09/2022) Legends Preminum Detached Housing (Min. 10m lot width) Bt Zoo Local centre and Child Care Residential Three Storey Low Rise Residential (Two storey max.) Area Excluded from Masterplan Existing Public Open Space REI Zone Proposed Public Open Space Woodland Conservation Site Access Points On street parking (min. run of 3 spaces) Parking Spaces Road Type Local Road Local Road-Minor ..... Laneways Private Driveways Existing Bus route M5 MOTORWA

Figure 3.1: Concept Master Plan

Source: Figure 2 of Canterbury-Bankstown Development Control Plan 2023 – Chapter 11.13 Former WSU Campus, Milperra

# 3.2 Proposed Residential Staging

The proposed indicative residential development would be staged across six (6) stages, being:

- Stage 1 16 residential lots
- Stage 2 11 residential lots
- Stage 3 135 residential lots, plus internal access roads and public open space
- Stage 4 19 residential lots, plus internal access roads and public open space
- Stage 5 96 residential lots, plus internal access roads
- Stage 6 105 residential lots, plus internal access roads and public open space

Please note, the above Stages 2 to 6 may be subject to change based on upcoming planning process and market demand.

This assessment seeks approval for the Stage 1 subdivision DA only.



The development yields for future stages are indicative only and shall be subject to separate approvals, along with the proposed non-residential uses.

The proposed residential subdivision staging plan is shown in Figure 3.2, with the residential breakdown outlined in Table 3.1.

Figure 3.2: Proposed Subdivision Staging Plan

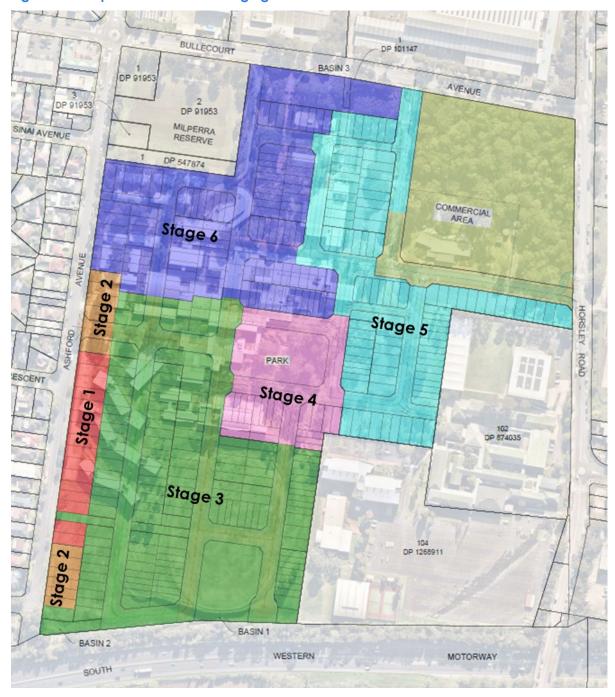




Table 3.1: Proposed Indicative Subdivision Development Yields

Stage	Number of Residential Lots (no. of dwellings)	Number of Public/Draining Reserve Lots	Stage Area (m²)
1	16	0	6,030
2	11	0	4,690
3	135	2	61,674
4	19	1	15,108
5	96	0	35,176
6	105	1	40,385

<sup>\*</sup>This assessment relates to Stage 1 only. The remaining stages would be subject to a separate DA.

The Stage 1 subdivision DA (of which this report relates to) involves the construction of 16 residential lots fronting Ashford Avenue along the western boundary.

The proposed residential dwellings would be provided as 'premium housing' with a minimum 10m lot width in accordance with the Concept Masterplan in the Site Specific DCP in Figure 3.2. Each dwelling shall have individual access off Ashford Avenue and therefore, no internal road infrastructure or public open spaces will be constructed as part of Stage 1 works. A 1.2m wide footpath on the existing verge will however be delivered along the property frontage on Ashford Avenue to facilitate pedestrians.

The proposed Stage 1 subdivision DA is considered consistent with the Concept Masterplan for the site under the adopted Site Specific DCP.



# 4 Parking Assessment

### 4.1 Car Parking Assessment

The Canterbury-Bankstown DCP 2023 stipulates a car parking rate of 2 car spaces per dwelling house for residential dwellings. It is proposed to comply with this requirement and provide each dwelling with 2 car parking spaces. Vehicle access to these spaces would be provided for each dwelling directly off Ashford Avenue. The car park and associated elements would also be proposed to be designed in accordance with relevant Australian Standard, namely AS2890.1:2004.

### 4.2 Waste Collection Arrangements

Waste is proposed to be collected kerbside on Ashford Avenue. This is consistent with existing residential dwellings located on Ashford Avenue. The existing road network will allow Council waste vehicles to travel along the eastern side of Ashford Avenue to serve the proposed residential lots without the need for any new turnaround facilities or amendment to the existing road network.



# 5 Traffic Assessment

The Stage 1 subdivision DA is consistent with the previous scheme which was assessed as part of TTPP's Transport Assessment (Version 05 dated 2 June 2020) of the planning proposal to rezone the site (TTPP Ref: 19334-R01V05-200602-TIA).

Transport for NSW's Guide to Traffic Generating Development (2002) and Technical Direction TDT 2013/04a (2-13) stipulates the following traffic generation rate for low density residential dwellings:

- Weekday morning peak hour vehicle trips: 0.95 veh/hr per dwelling in Sydney
- Weekday evening peak hour vehicle trips: 0.99 veh/hr per dwelling in Sydney

The above rates are consistent for the low density residential component as part of the previous traffic assessment for the planning proposal of the site.

By applying the above trip generation rates to the proposed 16 dwelling houses as part of Stage 1 works, the expected traffic generation would be in the order of 15 veh/hr in the morning peak hour (1 hour) and 16 veh/hr in the evening peak hour (1 hour). This level of traffic generation equates to about 1 vehicle every 4 minutes, which is low and could not be expected to result in any noticeable traffic impacts on Ashford Avenue or the surrounding road network.

Notwithstanding this, the proposal is consistent with the overall masterplan for the site, which was assessed as part of TTPP's Transport Assessment (Version 05 dated 2 June 2020) as part of the planning proposal to rezone the site.

The previous study which assessed the full masterplan of the site concluded that:

The surrounding key intersections are expected to continue to operate satisfactorily at LoS B or better during both AM and PM peak periods. On this basis, the proposed development is not expected to compromise the existing intersection performance on the surrounding road network, nor result in any safety or operational issues. Therefore, the proposal is considered acceptable from a traffic capacity perspective.

In summary, the traffic impacts arising from the proposed Stage 1 subdivision DA is considered negligible from a traffic capacity perspective. Further, the proposal is consistent with the ultimate masterplan for the site which was previously assessed as part of the planning proposal which concluded that the full development when built was not expected to compromise existing intersection performance on the surrounding road network.



### 6 Conclusion

This report examines the traffic and parking implications of the Stage 1 subdivision development of the former Western Sydney University (WSU) campus, which forms part of the wider rezoning masterplan of the site.

The key findings of the assessment are presented as follows:

- The Stage 1 subdivision development application seeks approval to provide 16 free standing residential dwelling houses along the frontage of Ashford Avenue. A 3.5m wide verge including a 1.2m wide footpath will also be delivered along the property frontage on Ashford Avenue as per the Concept Masterplan in the adopted Site Specific DCP.
- This work forms part of the overall masterplan of the site which obtained approval from the South District Planning Panel in July 2023 to rezone the site to provide residential dwellings, a new commercial centre and public open spaces (Ref: PP-2021-5837).
- This assessment seeks approval for the Stage 1 subdivision DA only. All future stages would be subject to a separate DA for approval.
- The proposed Stage 1 development will provide sufficient off-street parking spaces with 2 car spaces provided for each dwelling as per Council DCP requirements. These spaces are proposed to be designed in accordance with AS2890.1:2004 design requirements.
- The Stage 1 subdivision is expected to generate about 15/16 vehicles per hour during the peak hour, which is low. This level of development could not be expected to result in any noticeable traffic impact on Ashford Avenue or the surrounding road network.
- The Stage 1 subdivision DA is consistent with the previous scheme which was assessed as part of TTPP's Transport Assessment (Version 05 dated 2 June 2020) as part of the planning proposal to rezone the site, which concluded that the masterplan could not be expected to compromise the existing intersection performance on the surrounding road network.

Overall, the traffic and parking aspects of the Stage 1 development are considered to be satisfactory. The proposal is consistent with the previous scheme assessed as part of the planning proposal for the site, which would be delivered across five (5) stages (Ref: PP-2021-5837). Future stages of the development would be subject to separate DA approvals.

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