47-49 Curry Street, Wallsend Traffic Impact Assessment

Prepared for:

NSW Land and Housing Corporation

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The Transport Planning Partnership



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APPENDICES

A. SWEPT PATH ANALYSIS



1 Introduction

The Transport and Planning Partnership (TTPP) has prepared this transport impact assessment (TIA) report to accompany an application for a two-storey residential flat building at 47-49 Curry Street, Wallsend

The development is an initiative of the NSW Land and Housing Corporation (LAHC) and involves the construction of a nine residential flat dwellings, consisting of 1-bedroom and 2-bedrooms units.



2 Existing Conditions

2.1 Site Description

The subject site is located at 47-49 Curry Street, Wallsend and falls within the local government area of Newcastle City Council.

The site is currently occupied by two low-density residential dwellings, which comprises a total area of 1,226 m².

The location of the site and its surrounding environment are presented in Figure 2.1.

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Figure 2.1: Site Context

Source: Google Maps

2.2 Surrounding Road Network

Curry Street is a 6 m two-lane, two-way local road, connecting with Peters Avenue to the west and Douglas Street to the east. The street has a speed limit of 50 km/h. On-street parking with no parking restriction is provided.



Douglas Street is a two-lane, two-way road, connecting with Sandgate Road to the north and Newcastle Road to the south. It has a posted speed limit of 50 km/h. On-street parking is allowed with no parking restriction in place. Douglas Street permits to parallel park without causing disruption to traffic.

Newcastle Road is a divided two-way road, which connects with Thomas Street to the west and Newcastle Inner City Bypass and Main Road to the east. The road consists of five lanes with a posted speed limit of 60km/h with no on-street parking permitted.

2.3 Public Transport Services

The subject site is surrounded by a number of bus stops as shown in Figure 2.1. The nearest stop is within an 100m walking distance, at the intersection of Douglas Street and Curry Street. The service at this stop is summarised in Table 2.1.

Table 2.1: Bus Stops within 400m

Closest Bus Stop	Route	Hours of Operation	Weekday Frequency	Weekend Frequency
Douglas St at Curry St (Stop ID: 2287176)	24 (Wallsend to Marketown)	Weekday: 5:20am – 10:26pm Weekend: 6:45am – 6:30pm	Peak: every 30 minutes Off-peak: every 1 hour	Every 1 hour

Reference: TfNSW

In addition, several bus services can also be found along Newcastle Road within a 550m walking distance.

Bus stop ID 2287176, serves bus route 24 which runs from Wallsend to Marketown, is situated within a 100m walking distance from the subject site. Based on the schedule in Table 2.1, the site meets the 'accessible area' requirements of the State Environmental Planning Policy (Housing) 2021, which states that an accessible area means land within:

(c) 400 metres walking distance of a bus stop used by a regular bus service (within the meaning of the Passenger Transport Act 1990) that has at least one bus per hour servicing the bus stop between 06.00 and 21.00 each day from Monday to Friday (both days inclusive) and between 08.00 and 18.00 on each Saturday and Sunday.

Bus route 24 runs everyday with a weekday frequency of one hour during the off-peak period and 30 minutes during the peak period, while the weekend service runs hourly. Also, the service starts before 6:00 am on weekdays, 8:00 am on weekends and finishes after 9:00 pm and 6:00 pm on weekdays and weekends respectively. Therefore, the site meets the 'accessible area' criteria of the Housing SEPP.

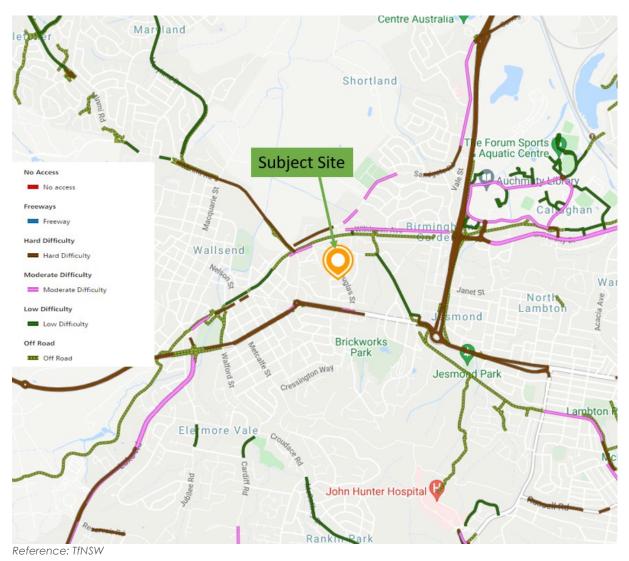


2.4 Pedestrian and Cycling Infrastructure

Sealed footpaths are provided along Curry Street, Douglas Street and Peters Avenue, allowing for convenient pedestrian access throughout the area.

The cycling infrastructure surrounding the site is demonstrated in Figure 2.2 below.

Figure 2.2: Cycling Infrastructure





3 Proposed Development

The proposed development involves demolition of existing dwellings and construction of a two-storey residential flat building, comprising nine residential units at 47-49 Curry Street, Wallsend.

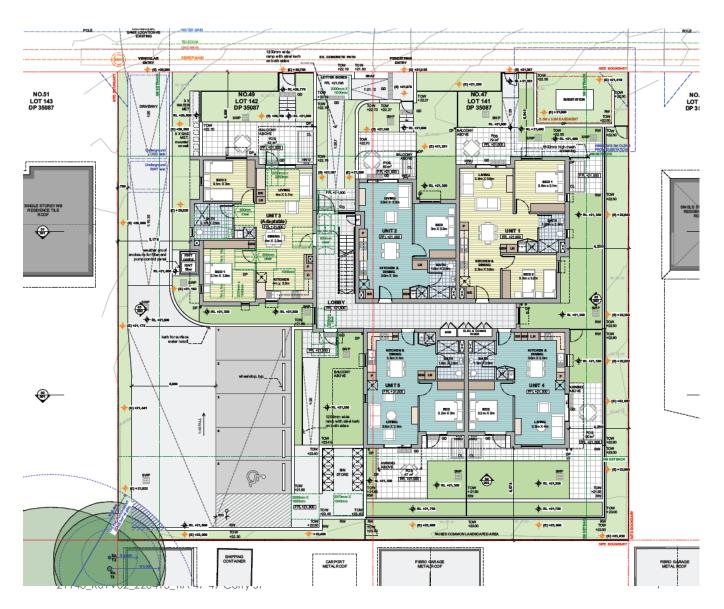
A breakdown of the development is as follows:

- 5 two-bedrooms units
- 4 one-bedroom units

The site also consists of a one-lane, 3m wide driveway access, connecting to five (5) car parking spaces at the rear of the site, including one (1) accessible car parking space.

The proposed ground floor layout is presented in Figure 3.1.

Figure 3.1: Proposed Ground Floor Layout





4 Parking Assessment

4.1 Car Parking Requirements

The assessment and approval of the proposed development will be undertaken by Land and Housing Corporation (LAHC). As such, requirements set out in Division 6 (Residential Development – Land and Housing Corporation) of *State Environmental Planning Policy (Housing)* 2021 applies and prevail over any Council Development Control Plan (DCP).

Division 6 of Housing SEPP states that residential development with height of 8.5m or less and with 60 dwellings or less should provide the minimum parking spaces:

- for development on land in an accessible area
 - o 0.4 parking spaces for each dwelling containing 1 bedroom;
 - o 0.5 parking spaces for each dwelling containing 2 bedrooms; and
 - o 1 parking space for each dwelling containing 3 or more bedrooms
- Or, for development that is not in an accessible area
 - o 0.5 parking spaces for each dwelling containing 1 bedroom;
 - o 1 parking space for each dwelling containing 2 bedrooms;
 - 1.5 parking spaces for each dwelling containing 3 or more bedrooms.

It is noted that the proposed development is located in an "accessible area" as defined in Housing SEPP. In addition, the building is proposed to be under 8.5 m in height. As such, the first parking requirement applies, which means 0.4 parking spaces are required for each 1-bedroom unit and 0.5 parking spaces are required for each 2-bedroom unit.

Based on the above, the proposed development comprises 5 2-bedroom units and 4 1-bedroom units must not be refused if at least five (5) car parking spaces are provided.

It is proposed to provide five (5) car parking spaces on site, which satisfies the Housing SEPP requirements.

4.2 Car parking Design Compliance

The subject site is accessed via Curry Street via a 3 m wide ramp. The driveway has a maximum grade of 1:10. The first 6m of the driveway is provided with a maximum grade of 1:20 as per AS2890.1 requirements. Swept path analysis of the proposed driveway has been undertaken and is provided in Appendix A.



The proposed access is classified as a Category 1 driveway in accordance with AS2890.1: 2004 Table 3.1 (i.e. access with frontage along local road that serves less than 25 parking spaces). AS2890.1 specifies a minimum driveway width of 3m to 5.5m for combined Category 1 driveway. Therefore, the proposed driveway width satisfies the AS2890.1 requirement.

AS2890.1:2004 indicates that residential parking should be provided as Class 1A parking. The proposed at-grade parking spaces satisfy the design requirements for 90-degree Class 1A which require minimum 2.4m width, 5.4m length and a 5.8m aisle width.

AS2890.6:2009 requires accessible parking spaces to be provided as 2.4m wide by 5.4m long with an adjoining shared area of equal dimensions. The accessible parking space complies with this requirement.



5 Transport Assessment

Roads and Maritime Services provides traffic generation rates for different land uses in their Guide to Traffic Generating Developments (Guide) and in their technical direction TDT 2013/04a containing revised rates.

The Guide stipulates the following trip generation rates for medium density residential flat buildings:

- weekday peak hour vehicle trips (up to 2 bedrooms): 0.4-0.5 per dwelling
- weekday peak hour vehicle trips (3 or more bedrooms): 0.5-0.65 per dwelling

By using the trip rates presented above, the proposed development is anticipated to generate approximately 4-5 vehicles per hour during the weekday peak periods.

In addition, TDT 2013/04a indicates that low density residential dwellings generate 0.95-0.99 vehicle trips per dwelling during the weekday peak hours. Therefore, the existing two (2) dwellings on site are estimated to generate two vehicle movements per hour during the weekday peak hours.

On this basis, the proposed development is anticipated to generate a net additional peak traffic of 2-3 vehicles.

The above traffic generation estimate is considered to be minimal and is not expected to have an impact on the surrounding road network.



6 Conclusion

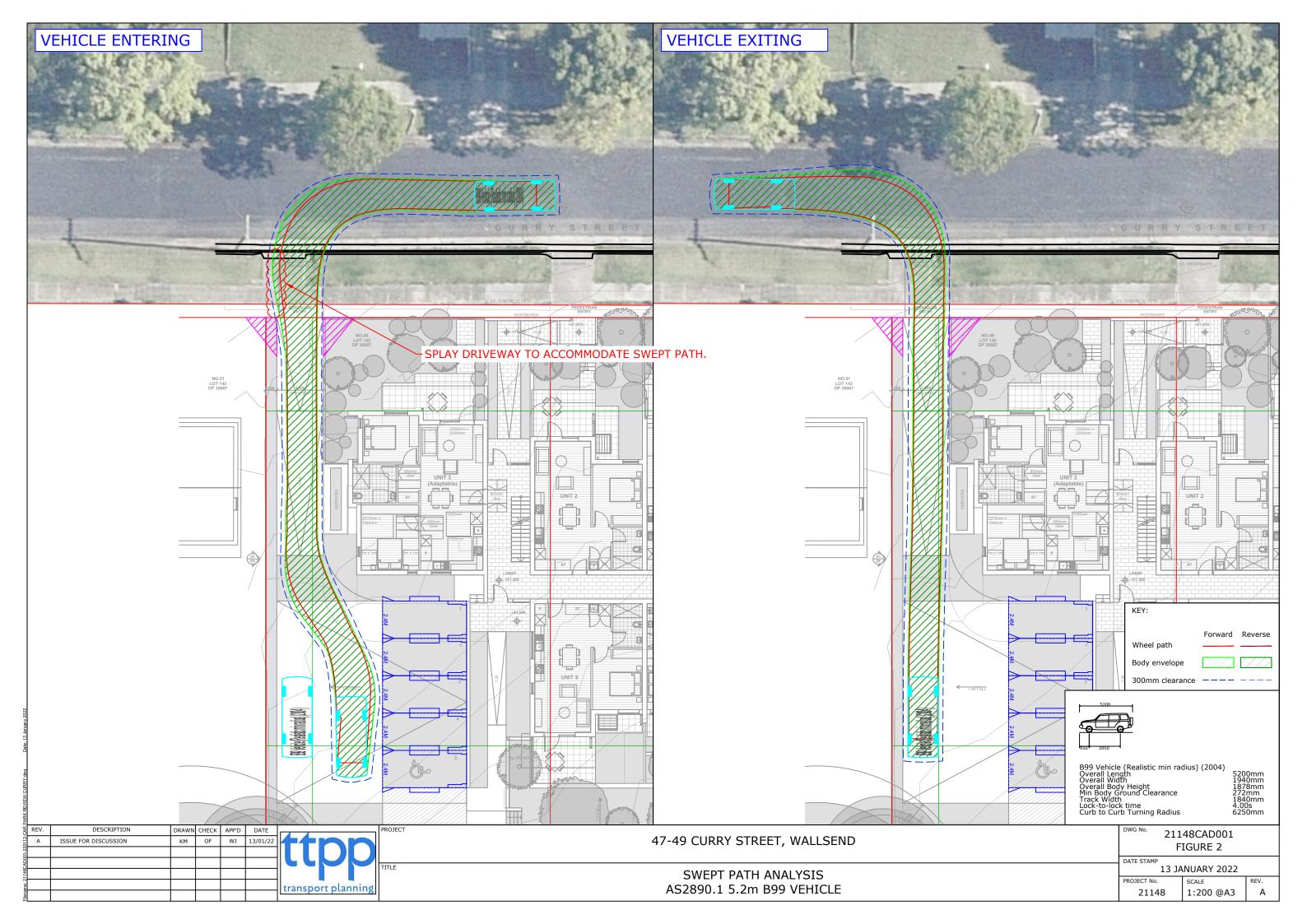
This report presents the traffic and parking implications of the proposed residential flat buildings at 47-49 Curry Street, Wallsend. The key findings of the report are presented below:

- The proposed car parking supply meets the minimum Housing SEPP requirement of 5 car parking spaces.
- The proposed car park and vehicle access layout comply with the design requirements specified in AS2890.1:2004.
- Traffic generation of the existing and proposed development has been estimated using the rates stipulated in Roads and Maritime Services Guide to Traffic Generating Developments (Guide) and in their technical direction TDT 2013/04a. Based on these rates, the proposed development is anticipated to generate between 4-5 vehicle trips per hour or net additional 2-3 vehicle trips per hour during the weekday peak periods.
- The estimated trip generation is considered minimal and is not expected to have a noticeable impact on the surrounding road network.



Appendix A

Swept Path Analysis



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