

9.0 Environmental Assessment

This section reports and details environmental issues and assessment methods. It includes environmental baseline information on existing conditions, discusses environmental impacts and recommends appropriate mitigation measures.

9.1 Road Transport

9.1.1 Introduction

The road transport input into the EA consists of analysis undertaken in the Transport Assessment (**Appendix D**) including:

- A review of existing road conditions and the available capacity for redevelopment
- An evaluation of potential impacts from predicted future development scenarios (initial operations in 2024 and final operations in 2034);
- The development of criteria to guide future development and potential mitigation measures to be adopted.

Relevant RTA guidelines, including the RTA *Guide to Trip Generating Developments* were consulted in association with this assessment. Detailed trade forecasts were provided by NPC and these have been used to predict trips generated by the redevelopment.

9.1.2 Existing Environment

Regional Road Network

F3 (Sydney – Newcastle Freeway)

The F3 Freeway is a 127-kilometres motorway linking Sydney to the Central Coast, Newcastle and Hunter Regions. The freeway alternates between two and three lanes in each direction for its length. The northern section of the freeway in the vicinity of the site, from north of Wyong to its terminus at John Renshaw Drive, has two lanes in each direction. The freeway has a speed limit varying between 80 and 110 kilometres per hour.

Pacific Highway

The Pacific Highway is a 1,025 major transport route which links Sydney and Brisbane along the east coast of Australia. The section of the Pacific Highway in the vicinity of Mayfield has two lanes in each direction and a speed limit that varies between 60 kilometres per hour and 80 kilometres per hour. The Hexham Bridge carries the Pacific Highway over the Hunter River and has two lanes in the southbound direction and three lanes in the northbound direction. Currently, the section of road between the F3 Freeway and the Raymond Terrace bypass (12.2 kilometres) is being upgraded from a single carriageway to a dual carriageway to improve safety and relieve traffic congestion.

New England Highway

The New England Highway connects to the Pacific Highway at Hexham and travels west towards Maitland. It is an alternative inland route to the Pacific Highway between Sydney and Brisbane. The majority of the route is single carriageway; however, between Hexham and Maitland, it has two lanes in each direction. For most of its length the New England Highway has a 100 kilometres per hour speed limit.

Cormorant Road

Cormorant Road is located on Kooragang Island. Cormorant Road is a sealed road that predominantly consists of one lane in each direction; the eastern section of the road widening into a dual carriageway in each direction. There is a speed limit of 60 kilometres per hour in the westbound direction and 80 kilometres per hour in the eastbound direction.

Tourle Street

Tourle Street is the continuation of Cormorant Road over the South Arm of the Hunter River. Tourle Street provides a direct route between Newcastle, the industrial area and Newcastle Port facilities on Kooragang Island. The new Tourle Street Bridge opened in May 2009, and consists of one lane in each direction, with 2 metre wide shoulders. Tourle Street has a speed limit of 60 kilometres per hour in both directions.

The regional road network is shown in **Figure 9-1**.

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AECOM

REGIONAL ROAD NETWORK
Environmental Assessment
Mayfield Site Port-Related Activities Concept Plan

Figure 9-1

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Local Road Network

The northern portion of the site is connected to the regional road network through Industrial Drive (via Ingall Street or Bull Street); while the southern portion of the site is connected to Industrial Drive via Selwyn Street and George Street (refer to **Figure 9-2**).

Industrial Drive

Industrial Drive is a major four lane divided, classified road providing connections to the Pacific Highway, the north bank of the South Arm of the Hunter River and the site. It is used as a major link between Maitland and Newcastle CBD providing access to the Honeysuckle Precinct and is the preferred alternative to the Pacific Highway for southbound traffic. It is a B-Double approved vehicle route signed at 80 kilometres per hour and operates as a public transport corridor for Bus Routes 104 and 118.

Ingall Street

Ingall Street currently provides access to the north of the site from Industrial Drive, terminating at a security gate. To the south of Industrial Drive, it is an undivided, two lane, two-way collector road connecting Industrial Drive to the Pacific Highway through a predominantly residential area. It is sign posted at 50 kilometres per hour and 40 kilometres per hour to the north and south of Industrial Drive, respectively. There are slight cracks present on the road surface of Ingall Street making it uneven in places.

Bull Street

Bull Street is a one-way slip road off Industrial Drive for eastbound traffic. It joins Ingall Street at a T-junction and is signed at 50 kilometres per hour. It has large cracks and an uneven road surface along most of its length.

George Street/Selwyn Street

To the west of Industrial Drive, George Street is a four lane road with two traffic lanes and two parking lanes. It is signed at 50 kilometres per hour and runs through a residential area in Mayfield East. To the east of Industrial Drive, George Street connects to Selwyn Street, which runs adjacent to the rail line to the south of the site, and provides access to the site. The section of Selwyn Street nearest the site has an uneven road surface with cracks forming in places.

Traffic Volumes

Daily Traffic Counts

RTA traffic volume data has been obtained to determine the historical traffic growth and current mid-block traffic flows in the area surrounding the site. **Table 9-1** shows historical Average Annual Daily Traffic (AADT) volumes at two stations in the vicinity of the site. Both stations are located on Industrial Drive to the west of the site.

Table 9-1: Historical Traffic Volumes and Growth

Station Number	Location	1995	1998	2001	2004	% growth
05.953	Industrial Drive, (North West of Woodstock Street)	29,746	29,549	30,334	30,717	0.36
05.979	Industrial Drive, (West of Werribi Street)	22,952	21,608	21,559	23,339	0.19

Source: RTA Traffic Volume Data

The data shows that between 1995 and 2004, there has been an average yearly growth rate of 0.27 percent in the surrounding area.

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