

Traffic Impact Assessment Report

Edmondson Park Frasers Town Centre
Section 75W Modification

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Appendix A: Modified Concept Plan

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1 Introduction

1.1 Study Objectives and Scope

Ason Group has been engaged by Frasers Property Australia (FPA) to prepare a Traffic Impact Assessment (**TIA**) relating to modifications to the approved Concept Plan for Edmondson Park South (**EPS**). Specifically, these modifications relate to the Edmondson Park Frasers Town Centre (**EPFTC**) site. The EPFTC comprises of approximately 25 hectares, located to the north of Campbelltown Road and within the study area referred to as the Edmondson Park Release Area. A Site Context figure is presented in **Figure 1**, which provides an appreciation of the EPS and its location within the greater Edmondson Park Release Area which itself forms part of the South West Growth Centre (**SWGC**).

This Section 75W Modification seeks to revise the Edmondson Parking South Concept Plan to reflect current planning for the Edmondson Park Frasers Town Centre site to reflect further design development of the town centre south of the railway line by FPA. This report addresses the relevant traffic, transport and parking implications of the modified Concept Plan.

As part of this TIA study, reference is made to the key development controls, planning documents and supporting traffic and transport assessment, including the following documents:

- Edmondson Park South Part 3A – Concept Plan Application Transport Management and Accessibility Plan (**TMAP**), prepared by AECOM, September 2010 (referred to herein as the AECOM **TMAP**).
- Edmondson Park South – Stage Significant Site Listing and Concept Plan Preferred Project Report (**PPR**), prepared by JBA Urban Planning Consultants, November 2010.
- Edmondson Park Town Centre Section 75W Traffic Modelling Report, prepared by AECOM, February 2016 (referred to herein as the AECOM **Modelling Report**).

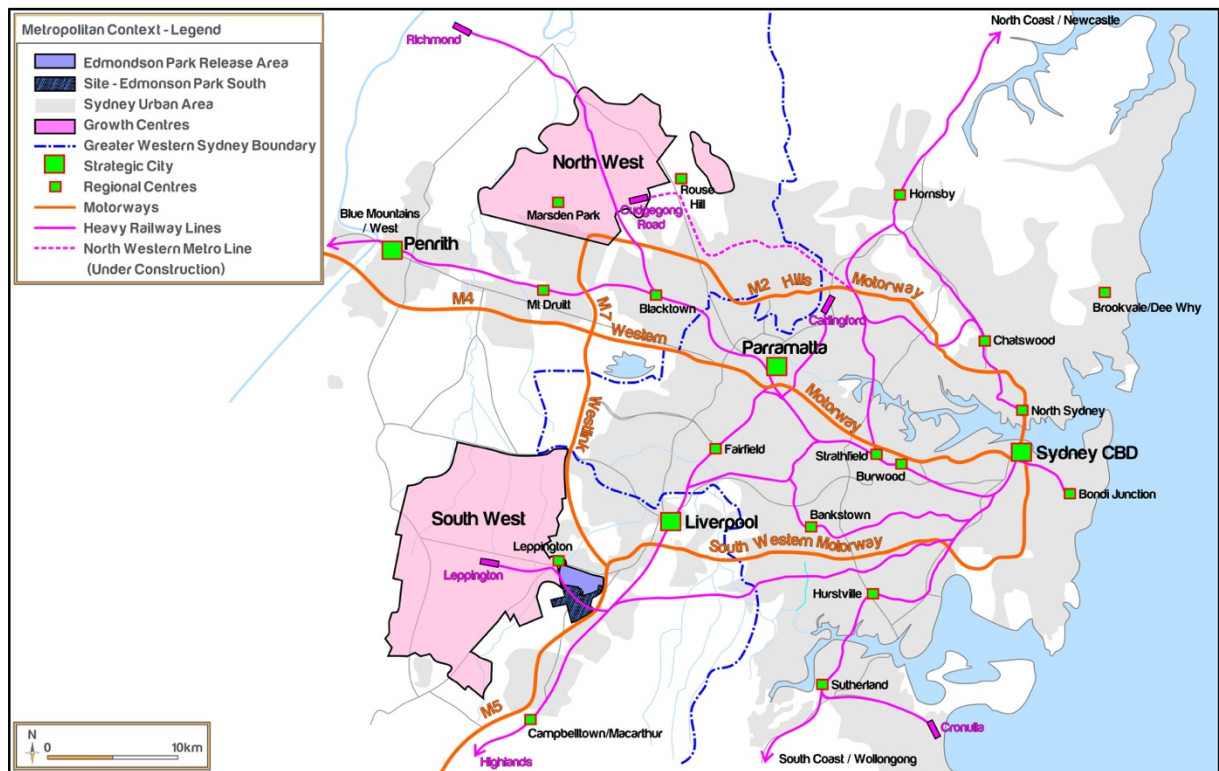


Figure 1: Site Context

1.2 Report Structure

This report is structured as follows:

- Section 2 describes the location of the site and development background.
- Section 3 provides a summary of the proposed changes to the Concept Plan.
- Section 4 outlines the car parking provisions proposed for the Edmondson Park Frasers Town Centre.
- Section 5 discusses the traffic implications associated with the revised Concept Plan including the site's projected trip generation and forecast network performance.
- Section 6 provides a summary and key conclusions.

2 Planning Context

2.1 Site Location

Edmondson Park is approximately 8 kilometres southwest from the Liverpool CBD and approximately 34 kilometres from the Sydney CBD. The overall EPS Concept Plan area is located within both Liverpool Council and Campbelltown Council LGAs. It forms the southern sub-precinct within the within the Edmondson Park Release Area.

The site subject to this S75W modification application is known as the Edmondson Park Frasers Town Centre site which is located on the northern side of Campbelltown Road within the suburb of Edmondson Park and lies solely within the Liverpool Council LGA. Within the context of the Edmondson Park Release Area, the Site is immediately adjacent to the new Edmondson Park train station on the South West Rail Line (SWRL), as shown in **Figure 2** below.

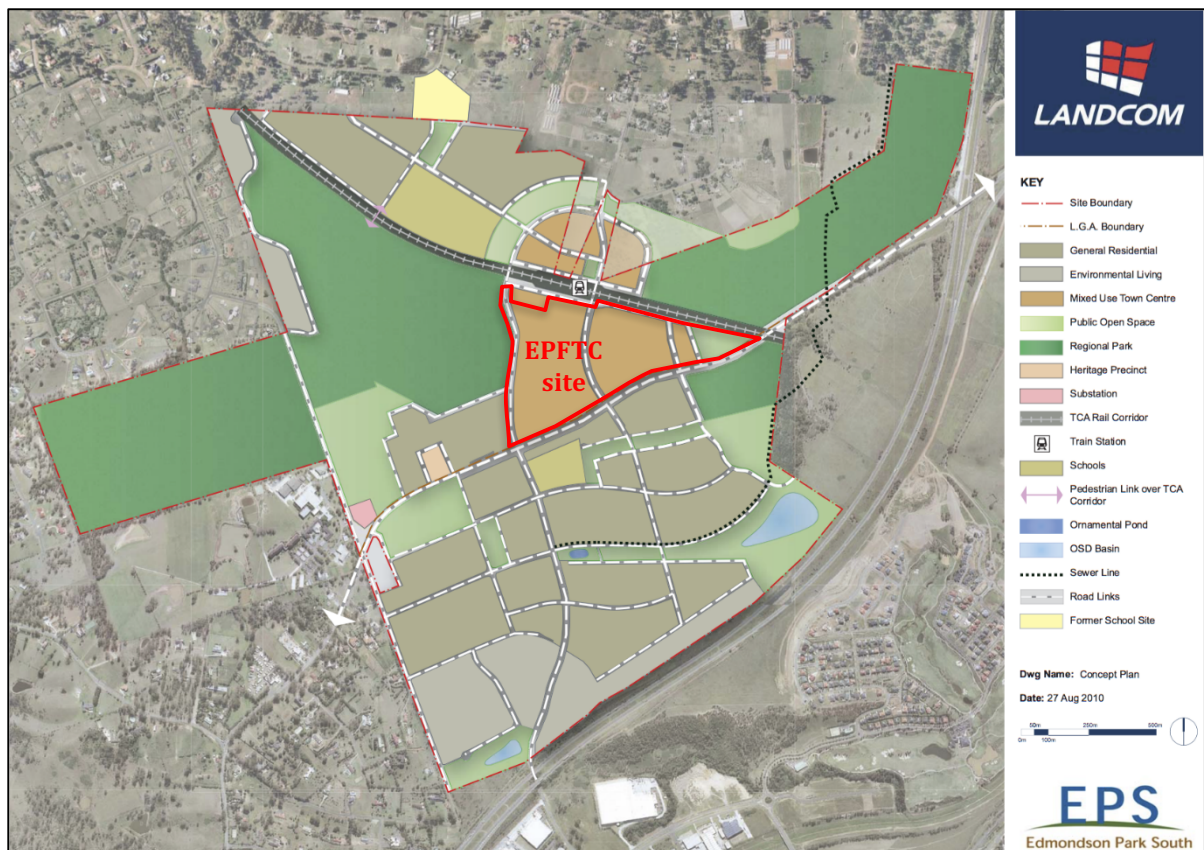


Figure 2: Original Edmondson Park South Concept Plan

2.2 Background of Concept Plan (MP10_0118)

A Concept Plan was lodged by Landcom (now UrbanGrowth NSW) in 2010 seeking approval for a mixed use residential, commercial and retail development within the Edmondson Park Release Area. A concurrent Project Application (MP 10_0119) was also lodged to develop the Stage 1 works in EPS. The initial Concept Plan, as shown in Figure 2, established the overall planning framework for the EPS site and sought to achieve the following:

- Residential development of 3,530 dwellings (with a min of 912 residential dwellings within the EPFTC southern precinct);
- Development of the Edmondson Park town centre including 35,000-45,000m² of retail / business / commercial floor space, including a single 'landmark development' of up to 30 metres in height within 300 metres of the Edmondson Park Station;
- Protection of approximately 150 hectares of conservation lands within regional parklands;
- Adaptive relocation of three heritage listed 'Riley Newsum' pre-fabricated cottages, within the open space network, and retention of the Ingleburn Military Precinct and Mont St Quentin Oval;
- Upgrade of Campbelltown Road with a maximum road width of 38.8 metres, and construction of three signalised intersections with Campbelltown Road;
- A temporary sales and information office and temporary signage associated with the sale of land;
- Site remediation works;
- Demolition of a number of existing buildings across the site; and
- Associated infrastructure.

The original Concept Plan was approved in 2011 by the Planning Assessment Commission (**PAC**), with the following conditions relating to further traffic and transport environmental assessments:

- Any future application which proposes additional intersections with Campbelltown Road is to be supported by a traffic analysis and is to have the concurrence of the RTA (now RMS). (Part C, Condition 1.4)
- Any future application is to address the need for the relocation of Macdonald Road, with timing to be supported by a detailed traffic assessment to RTA's satisfaction. (Part C, Condition 1.5)
- Any future application for the Edmondson Park town centre must be supported by a detailed traffic and transport study, including a micro-simulation model. This should identify appropriate bus priority measures along the proposed Main Street, and ensure integration with the transport interchange, through consultation with the Department of Transport. (Part C, Condition 1.6)

- Any future application for development within 25m of the South West Rail Link must identify and mitigate any impacts on the South West Rail Link, in consultation with the Department of Transport. (Part C, Condition 1.7)

A Revised Statement of Commitments was provided in the Preferred Project Report (**PPR**), which detailed the responsible parties to deliver and maintain infrastructure to ensure the sustainable delivery of Edmondson Park South.

2.3 Edmondson Park South TMAP (2010)

In 2010, AECOM prepared a TMAP to accompany the original Concept Plan Application in response to the Director General's Requirements (**DGRs**). The study proposed a package of active and public transport initiatives with the objective of achieving the NSW State Plan journey-to-work mode split targets for Edmondson Park South, which included:

- 28% of total journeys to work by public transport in the Sydney Metropolitan Region by 2016;
- Increase of the share of commute trips made by public transport to and from the Liverpool CBD to 20% by 2016; and
- 5% for bicycle trips of less than 10km made in the Greater Sydney region by 2016.

The active transport measures recommended in the TMAP included:

- Sustainable travel strategies, to include provision of marketing of public transport options and a free travel pass.
- Infrastructure improvements to provide easy pedestrian and cyclist access via a safe and efficient shared path and footpath network, a Town Centre Main Street with low traffic environment, signalised crossings along Campbelltown Road and near the school sites.
- Public transport infrastructure, including well-designed bus stops to provide safe and convenient means for the future residents to use public transport services and bus priority treatments to reduce the travel times for public transport users.
- Transport service improvements, including the implementation of a new bus service connecting the development with Liverpool via Edmondson Park Station and Town Centre.

In addition, the TMAP assessed the proposed Concept Plan road network, as shown in **Figure 3**, for 2012, 2016 and 2026 development scenarios. It should be noted that this 2016 modelled scenario envisaged approximately 1,100 residential lots would be developed in addition to 50% of the Town Centre, however this level of development has yet to occur. The results of this assessment are discussed further in Section 5 with the future intersection layouts proposed under the assessment summarised in **Figure 4**.

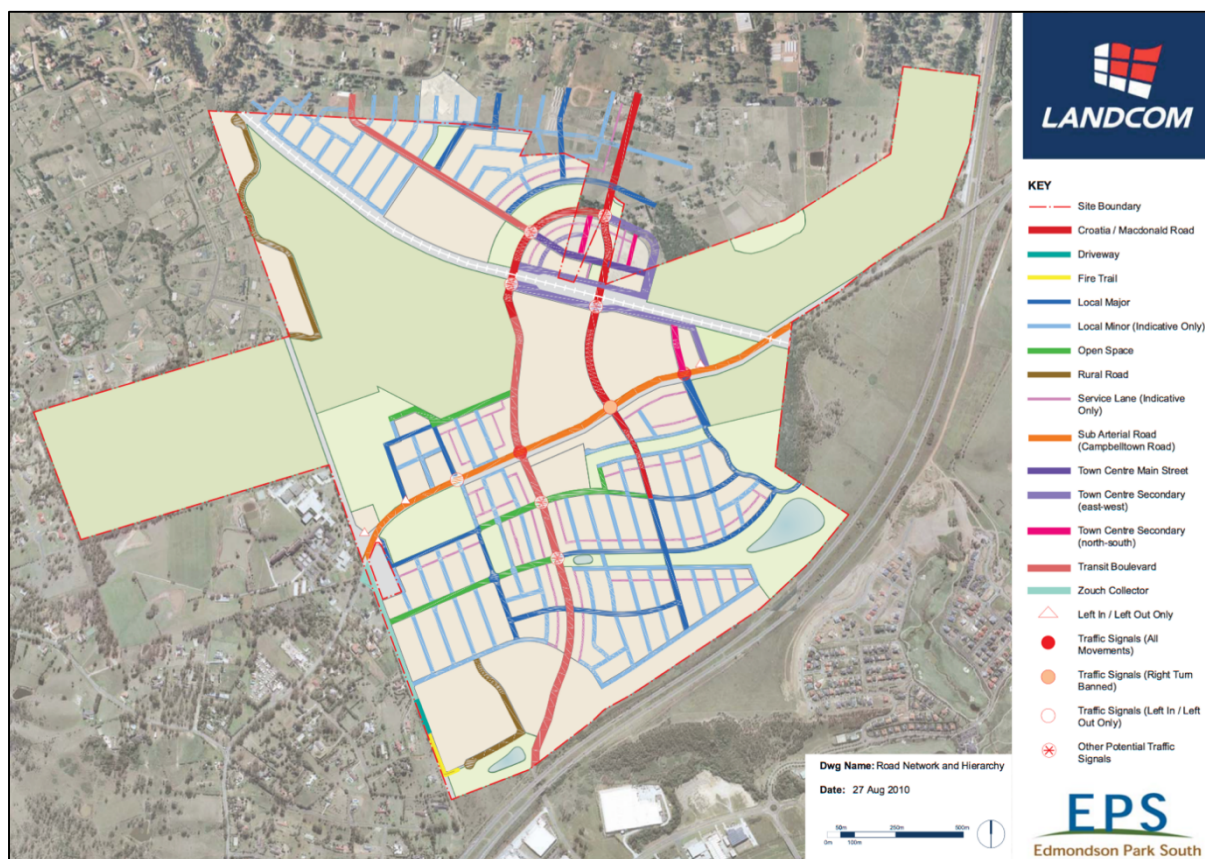


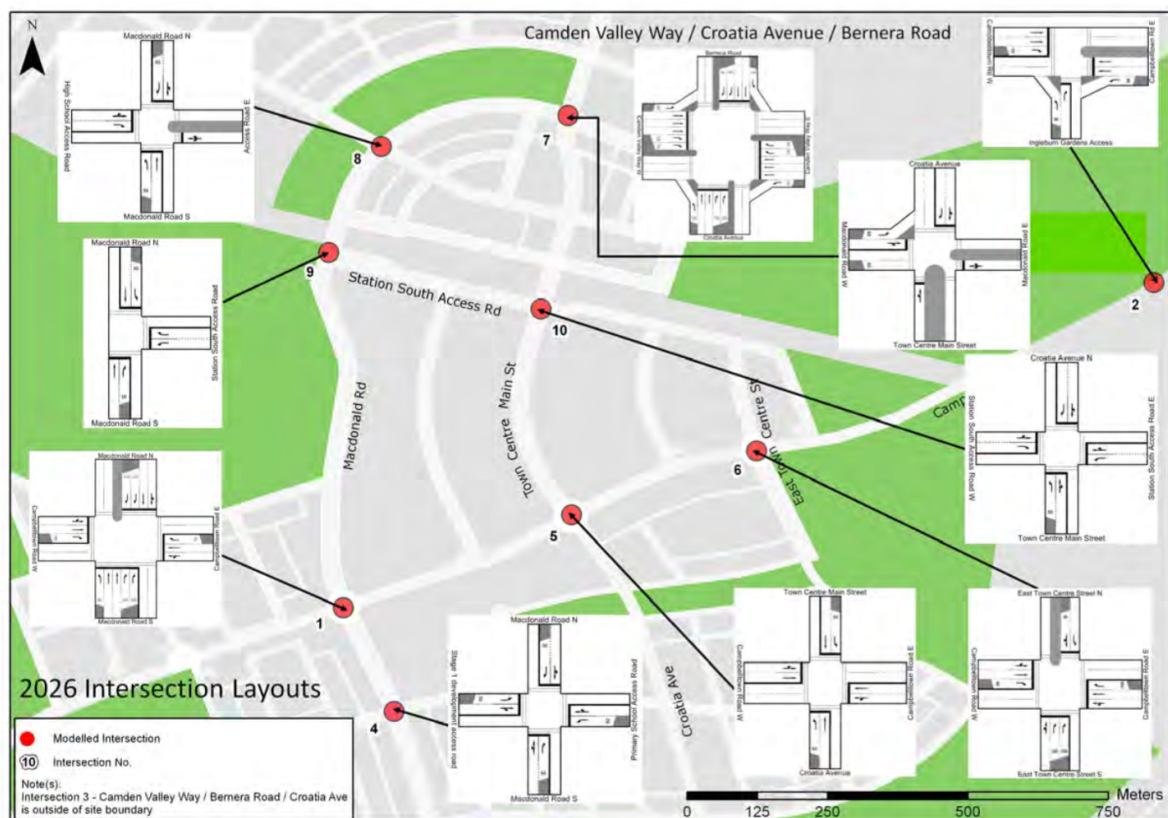
Figure 3: Original Edmondson Park South Concept Plan Road Network

2.4 Clarification of Road Name Terminology

The AECOM TMAP and Concept Plan approval refer to a number of roads in relation to the EPFTC, as shown in **Figure 4**.

For the purposes of the current S75W modification to the Concept Plan, the following changes to the road names have been adopted and referred to as such henceforth:

- **Benera Road** the town centre bypass loop road / Transit Boulevard to the west of the EPFTC connecting between Croatia Avenue / Town Centre Main Street (now Soldiers Parade) and Campbelltown Road. To the south of Campbelltown Road, this section of road is formed by the future relocation (westward) of Macdonald Road.
- **Soldiers Parade** the southern extension of Croatia Avenue through to Campbelltown Road, previously referred to as the “Town Centre Main Street”
- **Henderson Road** previously referred to as the “Station South Access Road”



Source: AECOM, 2010

Figure 4: TMAP Road Network and Key Intersections

2.5 TMAP Identified Road Infrastructure

The study also identified a number of road infrastructure improvements required to accommodate the development yield proposed in the original Concept Plan for the 2026 ultimate design year. These upgrades are incorporated in the TMAP road network (Figure 4) and include:

- 1) Relocation of Macdonald Road;
- 2) Construction of two bridge crossings over the South West Rail Link (SWRL);
- 3) Upgrade of Campbelltown Road / Macdonald Road / Bernera Road (Intersection 1) with an additional right turn lane (100m) on the southern approach of Macdonald Road;
- 4) Construction of a new signalised intersection – realigned Macdonald Road / Stage 1 development access road / Primary School Access Road (Intersection 4);
- 5) Construction of a new bus priority signalised intersection – Campbelltown Road / Soldiers Parade / Croatia Avenue (Intersection 5);
- 6) Construction of a new signalised intersection – Campbelltown Road / East Town Centre Street (Intersection 6);
- 7) Construction of a new signalised intersection – Croatia Avenue / Bernera Road / Soldiers Parade (Intersection 7);
- 8) Construction of a new priority controlled intersection – Bernera Road / Henderson Street (Intersection 9); and
- 9) Construction of a new priority controlled intersection – Soldiers Parade / Henderson Road (Intersection 10).
- 10) Construction of a new signalised controlled intersection – Bernera Road / High School Access Road (Intersection 8);
- 11) Signalisation (with bus priority) of Bernera Road / Henderson Road (Intersection 9); and
- 12) Signalisation (with bus priority) of Soldiers Parade / Henderson Road (Intersection 10).

Items 11 and 12 above seemingly contradict the earlier improvements identified under Item 8 and 9. However, it should be noted that the adopted Section 94 Contributions Plan for the precinct does not envisaged signals at Henderson Street with either Bernera Road and Soldiers Parade, with a roundabout currently constructed at the Bernera Road / Henderson Road intersection. Notwithstanding, signals are currently provided at the intersection of Soldiers Parade / Henderson Road.

3 Proposed S75W Modifications

3.1 Modified Concept Plan

This Section 75W Modification seeks to revise the Concept Plan to reflect current planning for the Edmondson Park Frasers Town Centre site to reflect further design development of the Concept Plan during a competitive Expression of Interest (EOI) process undertaken by UrbanGrowth NSW, with the FPA scheme as the selected entrant.

Key modifications to the Concept Plan relate to the Frasers Town Centre site and are as follows:

- Introducing a maximum Gross Floor Area (**GFA**) limit for the Frasers Town Centre Core (which corresponds with the FSR currently applicable to the site);
- Increasing the maximum building heights in the Frasers Town Centre Core;
- Increasing the approximate number of dwellings from 912 to 1,884, comprising an indicative 892 dwellings in the residential precincts and 992 in the Town Centre Core with a net increase in the approximate total number of dwellings from 3,530 to 4,502 across the overall Concept Plan area;
- Revising the road network and hierarchy;
- Introducing maximum car parking rates;
- Provision of the Edmondson Park Frasers Town Centre Public Domain Plan to guide the future design of the public domain; and
- Provision of the 'Edmondson Park Frasers Town Centre Design Guidelines' to guide the detailed design of the future buildings.

The revised Concept Plan is presented in **Figure 5**, with a comparison between the previously approved and proposed land uses within the EPFTC provided in **Table 1**. The traffic and parking implications of the modified Concept Plan is covered in Section 4 and Section 5.

Table 1: Comparison between Approved and Proposed Concept Plan Land Use Assumptions

Land Use	Approved Concept Plan (2010)	Modified Concept Plan (2016)
Residential ¹	912 dwellings	1,884 dwellings
Retail	18,750 GLFA	35,000 GLFA
Commercial	15,000 GLFA	-
Medical	-	8,000 GLFA

Note: 1) 422 dwellings modelled as part of the previous Concept Plan TMAP, as outlined in the AECOM report.