

MODIFICATION REQUEST:

Edmondson Park South Concept Plan

MP 10_0118 MOD 4



Environmental Assessment Report Section 75W of the *Environmental Planning and Assessment Act 1979* August 2017

ABBREVIATIONS

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EXECUTIVE SUMMARY

Frasers Property Australia (the Proponent) seeks approval to modify the Concept Plan (MP 10_0118) for a mixed use town centre and residential subdivision at Edmondson Park in southwest Sydney, pursuant to Section 75W of the *Environmental Planning and Assessment Act 1979* (the Act).

On 18 August 2011, the Planning Assessment Commission (the Commission) approved a Concept Plan for 3,530 residential dwellings, 35,000-45,000 square metres (m²) of retail and commercial floor space, and approximately 150 hectares of conservation lands within regional parklands. The approved site layout includes a medium to high density town centre to the north and south of Edmondson Park Railway Station (including approximately 912 dwellings) surrounded by lower density greenfield residential development, conservation lands and public open space.

This modification application relates to the town centre, south of the railway line, known as the Frasers Town Centre (FTC). It seeks approval to increase the number of dwellings within the FTC from 912 to 1884, increase the maximum height from 24 m to approximately 67 m, provide Design Guidelines and a Public Domain Plan in place of a development control plan (DCP), include an indicative internal road network and provides a Voluntary Planning Agreement (VPA). The Department is satisfied the proposal is a modification within the scope of section 75W of the Act.

The Department publicly exhibited the application from 25 August 2016 until 23 September 2016 and received 10 submissions from public authorities and 45 public submissions, comprising 40 objections, two comments and three letters of support. Key issues in public submissions include increased dwelling numbers, building heights and traffic and parking impacts. Liverpool City Council (Council) does not object to the proposal but raises concerns about street activation and landscaping.

The key considerations in the Department's assessment are the proposal's strategic justification and the site's capacity to accommodate the increased dwelling numbers, assessed in terms of building heights and design framework, infrastructure provision and traffic and transport impacts.

The Department considers the strategic justification for the proposed uplift is strong. The proposal seeks to increase the number and diversity of dwellings within walking distance of a new railway station. It achieves the housing volume, types and locations identified in relevant directions and actions in *A Plan for Growing Sydney* and the draft *South West District Plan*.

The proposed increase in building heights will increase the built form diversity of the town centre, contain the demand for increased housing within the town centre while retaining the suburban character of surrounding areas, and provide sufficient residential amenity within and surrounding the town centre. Subject to amendments around design excellence and residential amenity, the Design Guidelines and Public Domain Plan provide an appropriate framework for future development of the FTC.

The Department has considered the proposed parking provision and road layout. The parking provision is an appropriate balance between the site's medium to high density built form and outersuburban location. The indicative road layout is considered to appropriately accommodate the FTC's anticipated traffic movements, subject to conditions requiring the Campbelltown Road interface to be consistent with Roads and Maritime Services requirements.

The proposal includes an offer to enter into a Voluntary Planning Agreement (VPA). This VPA offer is an appropriate contributions framework to accommodate the proposed increase in dwelling density. Council has agreed to the offer in principle.

The Department therefore considers the modification application is approvable, subject to conditions.

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1. BACKGROUND

1.1 Introduction

This report provides an assessment of a section 75W modification application to a Concept Plan (MP 10_0118 MOD 4) for mixed use development at Edmondson Park South, Edmondson Park and Bardia.

Frasers Property Pty Ltd (the Proponent) seeks approval for modifications for the portion of the Concept Plan area known as the 'Frasers Town Centre', including an increase in dwelling numbers and maximum building height, introduction of a maximum Gross Floor Area (GFA) for the Town Centre Core, introduction of Design Guidelines, a Public Domain Plan and maximum car parking rates, changes to the road network and a Voluntary Planning Agreement (VPA) with Liverpool City Council that provides arrangements for the payment of infrastructure contributions.

1.2 The site and surroundings

1.2.1 Edmondson Park

Edmondson Park was rezoned for urban development in 2008 and was one of the first areas to be planned in the NSW Government's South West Sydney Priority Growth Area (formerly the South West Growth Centre). It is located approximately 8 kilometres (km) south west of the Liverpool City Centre, 11 km north east of Campbelltown City Centre and 34 km south west of the Sydney City Centre (**Figure 1**).



Figure 1: Western Sydney context plan (Source: Nearmap)

Edmondson Park is located in both the Liverpool and Campbelltown local government areas (LGAs). It is serviced by the Edmondson Park Railway Station which opened in February 2015, and is adjacent to the M5 and M7 Motorways.

Over the next 10-15 years Edmondson Park will become home to approximately 25,000 new residents, who will live in approximately 8,200 dwellings. Subdivision and residential development has commenced throughout Edmondson Park, although large parts of the precinct are rural landholdings yet to developed (**Figure 2**).



Figure 2: Location Plan showing Liverpool and Campbelltown LGAs (black line) Concept Plan area (red) and Frasers Town Centre (blue) (Source: Nearmap)

Edmondson Park is no longer part of the South West Sydney Priority Growth Area. However, the Department maintains a role in regional infrastructure co-ordination and delivery in the area through a Special Infrastructure Contribution (SIC) requirement, as well as bio-certification offsets. The Department is responsible for administration of the planning framework for Edmondson Park South as it falls within the State Environmental Planning Policy (State Significant Precincts) 2005 and the

Concept Plan. The plan making and consent roles for all land outside of Edmondson Park South are administered by Liverpool and Campbelltown Councils under the Liverpool and Campbelltown Local Environmental Plans respectively.

1.2.2 The Concept Plan site

The Concept Plan site is bounded by the M5 Motorway to the south, and extends north of the South West Railway Line. It has an area of approximately 413 hectares (ha). It is located north and south of Campbelltown Road (the boundary between the Liverpool and Campbelltown LGAs), with 260 hectares in Liverpool and 153 hectares within Campbelltown (**Figure 2**).

The site is undulating with an elevation varying between 40 metres (m) to 80 m AHD. Vegetation is concentrated in the western and north-eastern parts of the site (designated as regional parks). Vegetation in other parts of the site is sparse, and is being cleared as development occurs within the Concept Plan area.

At the time of the original Concept Plan approval, the site was owned by the Commonwealth Department of Defence (the former Ingleburn Army Camp site) and then Landcom (now UrbanGrowth NSW). UrbanGrowth has subsequently sold some parts of the site for urban development. Development of the Concept Plan site is occurring in stages with the first development stage in Bardia (south of Campbelltown Road) nearing completion.

1.2.3 The Frasers Town Centre site

The proposed modification relates to the southern portion of the town centre identified in the Concept Plan and is referred to as the 'Frasers Town Centre' (FTC) (**Figure 3**). This land was acquired by Frasers Property in 2015, following a tender process conducted by UrbanGrowth NSW. The proposed modification is based on that tender.



Figure 3: Aerial view of the site showing the Concept Plan area in red and the Town Centre area in blue (Source: Applicant's EA)

The FTC has an area of 26.1 ha and is bounded by the South West Rail Link to the north, the extended Bernera Road to the west, and Campbelltown Road (an arterial road between Liverpool and Campbelltown to the south-east). The FTC site is entirely within the Liverpool LGA.

The FTC adjoins Edmondson Park Railway Station and its furthest distance from the station is approximately 500 m. There are train services to the City every 15 minutes in peak periods and every 30 minutes in off-peak periods. Travel time to the City is approximately 66 minutes. Roads and Maritime Services (RMS) has recently finalised the design for an upgrade (widening) of Campbelltown Road from two to six lanes.

The site has an undulating topography with a slight fall from north to south and west to east. It is currently partially vegetated, although vegetation within the site is approved to be cleared under a separate approval by the Sydney South West Joint Regional Planning Panel (DA-628/2016). Vegetation clearing and bulk earthworks under this approval are currently being carried out on the site.

1.3 Previous approvals

1.3.1 Concept and Stage 1 project approvals

On 18 August 2011, the Planning Assessment Commission (the Commission) approved a Concept Plan (MP 10_0118), which comprises:

- residential development of 3,530 dwellings
- development of the Edmondson Park town centre including 35,000-45,000 square metres (m²) of retail, business and commercial floor space, along with associated uses, including a single 'landmark development' of up to 30 m in height within 300 m of the proposed station
- protection of approximately 150 ha 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 m, 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
- associated infrastructure.

The Concept Approval includes dwelling density maps, which show 912 dwellings in the FTC site.

The Concept Approval includes the following terms of approval, modifications, and future environmental assessment requirements (FEARs) relevant to the proposed modification:

- Modification 1.1: requires a development control plan (DCP) to be prepared for the Concept Plan area.
- Modification 1.4: requires the applicant to enter into a Works Authorisation Deed with RMS for any works on Campbelltown Road, specifies the Campbelltown Road upgrade will be paid from the Growth Centres SIC levy, and requires the application pay the required SIC levy or enter into an agreement for works in kind
- FEAR 1.1: requires future subdivision applications to be consistent with the DCP required by Modification 1.1
- FEAR 1.2: provides a landmark building of up to 30 m in height may be approved in accordance with applicable exemptions to development standards requirements
- FEAR 1.6: requires any future application for the town centre must be accompanied by a detailed traffic and transport assessment, including a micro-simulation model
- FEAR 1.8: requires each subsequent subdivision application is accompanied by an offer to enter into a voluntary planning agreement (VPA) with the relevant council.

The Commission also approved a Project Application for Stage 1, which included infrastructure and early works, which have been completed.

1.3.2 Modifications

The Concept Approval has since been modified on three occasions, as summarised in Table 1.

Mod No.	Summary of Key Modifications	Approved	Approved By
MP 10_0118 MOD 1	Changed timing of a remediation rehabilitation plan.	27/1/2012	Director, Strategic Assessment
MP 10_0118 MOD 2	Changed sales and information centre location and five year extension for its operation, and entry signage at Campbelltown Road entry.	25/1/2017	Director, Key Sites Assessments
MP 10_0118 MOD 3	Provide for the decommissioning, demolition and remediation works of the former sewage treatment plans without the need for further environmental assessment.	23/5/2017	Planning Assessment Commission

 Table 1 – Modifications to the Concept Approval and Stage 1 Project Approval

1.3.3 Part 4 Applications

Council approved (DA-595/2014) the demolition of three heritage listed cottages within the FTC site on 28 October 2014. The Sydney South West Joint Regional Planning Panel approved (DA-628/2016) vegetation clearing and bulk earthworks (including basement excavation) within the FTC site on 16 March 2017.

2. PROPOSED MODIFICATION

2.1 Proposal

The Proponent has lodged a modification request application under section 75W of the EP&A Act to modify the Concept Plan (MP 10_0118) for future development in the FTC.

The modification divides the Town Centre into two areas (Figure 5):

- Town Centre Core (TCC), a high density residential and retail precinct featuring daily and destination shopping, a restaurant and café strip, and apartments above ground level; and
- Residential Precinct, a medium density residential precinct with varied building typologies.

The proposal also includes public open space and privately owned communal open space areas, including a town square, a reserve, smaller scale parks and pocket parks.

A summary of the key components of the proposal is provided in **Table 2**.

Aspect	Approval	Proposed Modification			
Dwelling yield	Concept Plan: 3,530 Town Centre: 912	Concept Plan: 4,502 (+972) Town Centre: 1,884 (+972)			
Density	38 dwellings/ha	78.5 dwellings/ha			
Gross Floor Area (GFA)	No GFA or FSR controls in Concept Plan. Relies on SSP SEPP 2.5:1 FSR control (equivalent of 145,025 m ² within the TCC)	 Town Centre Core - 145,025 m², distributed between four quadrants with ability to vary by 10% across quadrants: North West Quadrant: 20,000 m² (-3,910 m²) North East Quadrant: 45,000 m² (+4,886 m²) 			

Table 2: Key components of the proposal

Aspect	Approval	Proposed Modification
		 South West Quadrant: 56,500 m² (+10,227 m²) South East Quadrant: 23,525 m² (-11,202 m²).
Building Height	No height controls in Concept Plan. Relies on SSP SEPP 24 m height, with provision for one 30 m high landmark building.	 Residential Precinct – no change Town Centre Core: North West Quadrant: RL 99.5 / 39.5m from ground level (15.5 m increase) North East Quadrant: RL 105.8 / 46.8m (22.8 m increase) South West Quadrant: RL 132.9 / 67.4m (43.4 m increase) South East Quadrant: RL 96.4 / 37.9m(13.9 m increase).
Design Guidelines and Public Domain Plan	Requires the preparation of a DCP for the Concept Plan area.	Residential Precinct – no change Replace the Concept Plan requirement to prepare a DCP with Design Guidelines and a Public Domain Plan for the FTC site.
Traffic and Transport	Three north-south local roads between Campbelltown Road and the South West Railway Line.	 Retains the three north-south roads and provides for additional internal roads Introduction of maximum car parking rates as outlined in Section 5.4.
Contributions	Contributions required as per Liverpool Development Contributions Plan 2008 – Edmondson Park with provision for additional VPAs.	A contributions offer to Liverpool Council in the form of monetary contribution, works in kind and / or land dedication and to be delivered through a VPA.

2.2 Concept Designs

The Proponent has submitted the following documents which provide the vision for the Town Centre:

- Urban Design Report
- Town Centre Core Concept Design Report and Illustrative Scheme
- Residential Precincts Concept Design Report and Illustrative Scheme.

While these documents are illustrative and do not seek an approved building layout, they broadly depict the Proponent's intended town centre design and inform the proposed maximum building height, GFA allocation in the TCC and the Public Domain Plan and the Design Guidelines.

The concept designs collectively anticipate a high density mixed use TCC featuring retail, commercial, entertainment and residential uses with an active public domain. Key building elements in the TCC would be a landmark tower and a market hall adjoining a town square. Apartment buildings would also be provided within the TCC.

The Residential Precincts would feature a range of medium density housing types, including terrace houses and 'townhomes', which are low-rise multilevel apartments and studios (**Figure 6**).

The public domain includes a modified grid street layout with direct connections to the TCC and Edmondson Park Railway Station. It features a hierarchy of landscaped streets, shared mews, and parks and communal open space for residents. **Figure 5** outlines the indicative street layout, street hierarchy and open space.



Figure 4: Original Concept Plan (top) and proposed modification (bottom) with FTC outlined in red



Figure 5: Indicative town centre layout, with TCC outlined in purple and Residential Precinct outlined in blue (Source: Applicant's EA)

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TERRACE MODULE FIRST FLOOR

STUDIO

Figure 6: Typical townhome (top) and terrace (bottom) configuration (Source: Residential Precincts Concept Design Report and Illustrative Scheme)

GARAGE

GARAGE

TERRACE

TERRACE MODULE GROUND FLOOR

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2.3 Strategic Context

2.3.1 A Plan for Growing Sydney

A Plan for Growing Sydney (the Plan) is a strategic document that guides the development of the Sydney Metropolitan area for the next 20 years. The Plan contains four key goals for Sydney by 2036, including housing. Each goal includes strategic directions and actions to achieve these directions.

Relevant directions are Direction 2.1: Accelerate housing supply across Sydney, and Direction 2.3: Improve housing choice to suit different needs and lifestyles.

Direction 2.1 sets a target of 664,000 new dwellings across Sydney and nominates areas in and around centres served by frequent public transport as suitable for increased housing. The current proposal seeks to add nearly 1,000 dwellings to the FTC. This would result in 1,884 new dwellings located in a new town centre within 500 m of high capacity public transport at Edmondson Park Railway Station.

Direction 2.3 notes demographic changes in Sydney that require smaller housing forms, which has led to a shortage of medium to high density dwellings across Sydney. Actions under this direction encourage local housing strategies to plan for a range of housing. The proposed housing within the FTC would include a range of medium to high density housing types. This would increase housing options in south-west Sydney that are close to transport and services.

The Plan also emphasises the importance of Western Sydney to the success of managing Sydney's growth. It notes the spread of housing and employment across Western Sydney has made it difficult to service the area with public transport. Improvements in transport infrastructure such as the South West Rail Link provide an opportunity for housing growth. The proposal maximises the value of the investment in public transport by providing medium to high density housing within walking distance of a new Western Sydney railway station.

The Department considers the proposal to be consistent with relevant goals and directions of *A Plan for Growing Sydney* as it provides a positive response to the established need to increase Sydney's housing supply. A more detailed consideration of consistency with the Plan is provided in **Appendix B**.

2.3.2 Draft South West District Plan

The Plan will be implemented through District Plans prepared by the Greater Sydney Commission that link the metropolitan planning with the detailed land use planning in environmental planning instruments (EPIs). The District Plans for the six districts in greater Sydney were on public exhibition in early 2017 and the Department has therefore considered the relevant draft plan in this assessment.

The site is within the South West District, which includes the Liverpool and Campbelltown LGAs. The draft South West District Plan provides more targeted local directions and actions towards implementing the *Plan for Growing Sydney* goals. These are divided into productivity, liveability and sustainability categories.

The Proponent's vision for the site will deliver a range of apartments and medium density housing forms, in contrast to the predominant form of detached dwelling in the surrounding area. This is consistent with the liveability objectives of the plan, and will improve housing diversity, choice and affordability. The proposal also provides a framework for creating great places through the Design Guidelines and Public Domain Plan as discussed in **Section 5.2**. A detailed assessment of consistency with the draft *South West District Plan* is provided in **Appendix B**.

The Department considers the proposal consistent with the relevant goals, objectives and actions of *A Plan for Growing Sydney* and the draft *South West District Plan*. It increases housing supply and through the concept design, Design Guidelines and Public Domain Plan, demonstrates a commitment to providing diverse and well-designed housing and public spaces accessible to different life stages and budgets.

3. STATUTORY CONTEXT

3.1 Continuing Operation of Part 3A to Modify Approvals

In accordance with clause 3 of Schedule 6A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), section 75W of the EP&A Act as in force immediately before its repeal on 1 October 2011 and as modified by Schedule 6A, continues to apply to transitional Part 3A projects.

Consequently, this report has been prepared in accordance with the requirements of Part 3A and associated regulations, and the Minister (or his delegate) may approve or disapprove of the carrying out of the project under section 75W of the EP&A Act.

3.2 Modification of a Minister's Approval

The modification application has been lodged with the Secretary pursuant to section 75W of the EP&A Act. Section 75W provides for the modification of a Minister's approval including revoking or varying a condition of the approval or imposing an additional condition on the approval.

The Minister's approval for a modification is not required if the project as modified will be consistent with the existing approval. However, this proposal seeks to make substantial changes to the approved dwelling yields and maximum building height, and modify specific requirements of the approval, which require further assessment and approval.

The Department has considered whether the scale of the proposed changes constitutes a modification rather than a new application. The Department notes the scope of section 75W is broad and is satisfied the application is within the scope of section 75W for the following reasons:

- the proposal remains a mixed use development and the Edmondson Park South Concept Plan, if modified by MOD 4, would remain essentially the same fundamental concept plan; and
- its environmental consequences are limited in nature to those resulting from the existing Edmondson Park South Concept Plan.

Having regard to the above, the Department recommends that the Commission can reasonably form the view that the modification request is within the scope of section 75W of the EP&A Act and is capable of being approved as a modification under section 75W of the EP&A Act.

3.3 Secretary's Environmental Assessment Requirements

Section 75W(3) of the EP&A Act provides that the Secretary may notify the Proponent of Secretary's Environmental Assessment Requirements (SEARs) with respect to the proposed modification that the Proponent must comply with before the matter will be considered by the Minister.

In this instance, following an assessment of the modification request, it was not considered necessary to notify the Proponent of SEARs as suitable information was provided to the Department to consider the application.

3.4 Environmental Planning Instruments

The Department undertook a comprehensive assessment of the original concept proposal against the following EPIs:

- State Environmental Planning Policy (State Significant Precincts) 2005 (SSP SEPP)
- State Environmental Planning Policy (Infrastructure) 2007
- State Environmental Planning Policy 44 Koala Habitat

- State Environmental Planning Policy 55 Remediation of Land
- Greater Metropolitan Regional Environmental Plan 2 Georges River Catchment
- Liverpool Local Environmental Plan 2008 (Liverpool LEP 2008).

The proposal varies the height of buildings as currently set out in the relevant provisions of the SSP SEPP (Schedule 3, Part 31, Clause 18). The proposal also seeks approval of Design Guidelines and a Public Domain Plan instead of a DCP required in the SSP SEPP (Schedule 3, Part 31, Clause 36). A detailed assessment of these are provided in **Section 5**. However, the Department notes that the Minister's power to modify an approved Concept Plan under Section 75W of the EP&A Act is not restricted to compliance or consistency with relevant EPIs.

3.5 Delegated Authority

In accordance with the Minister's delegation of 14 February 2015, the Commission may determine the proposed modification application under delegated authority as more than 25 submissions have been received objecting to the proposal.

4. CONSULTATION AND SUBMISSIONS

4.1. Exhibition

In accordance with section 75X(2)(f) of the EP&A Act, the Department publicly exhibited the application for 30 days from 25 August 2016 until 23 September 2016. The application was publicly available on the Department's website and exhibited at the Department's Information Centre and at the Liverpool and Campbelltown Council offices.

The Department placed a public exhibition notice in the *Liverpool Leader* and *Campbelltown Advertiser* on 24 August 2016 and notified surrounding landowners and relevant state and local public authorities in writing.

The Department received a total of 57 submissions, comprising 10 submissions from public authorities and 47 submissions from the general public (including 41 objections).

Copies of the submissions may be viewed at **Appendix A**. A summary of the issues raised in the submissions is provided in **Table 3**.

Table 3: Summary of public authority submissions to exhibition

Liverpool City Council (Council)

Liverpool Council does not object to the modification but provided comments in relation to:

- the proposed planning agreement, which should be negotiated prior to determination
- the scope and content of the Design Guidelines and Public Domain Plan
- commuter car parking at Edmondson Park Railway Station.

Campbelltown City Council (Campbelltown Council)

Campbelltown Council does not object to the modification but noted the increase in dwellings will lead to an increase in traffic, particularly on Campbelltown Road (which is the council boundary) and requested to review RMS' comments on the proposal and traffic modelling.

Camden Council

Camden Council does not object to the modification and provided comments in relation to:

- the hierarchy of centres in the South West Growth Centre
- the proposed removal of height and FSR controls from the SSP SEPP may create uncertainty if development does not proceed in accordance with the Concept Plan
- requesting to be a stakeholder for future applications.

Transport for New South Wales (TfNSW)

TfNSW provided a combined submission that included the comments of RMS and Sydney Trains. TfNSW does not object to the proposal and provided comments in relation to:

- potential impacts on RMS plans to upgrade Campbelltown Road
- adequacy of the traffic modelling
- ability of the internal road network to support future bus plans
- noise and vibration impacts of rail operations.

Sydney Water

Sydney Water does not object to the proposal and provided comments in relation to adequacy of water and wastewater networks to support the increased development. It noted there is insufficient wastewater capacity.

Environment Protection Authority (EPA)

The EPA does not object to the modification and provided comments in relation to:

- minimising land use conflict in the TCC in terms of noise and air quality
- revised water quality targets
- wastewater capacity
- early consideration of waste minimisation and resource recovery.

Heritage Council

The Heritage Council does not object to the modification and recommended that appropriate measures are taken to avoid indirect impacts on the setting of the State-listed Ingleburn Military Heritage Precinct, Denham Court, Horningsea Park, Glenfield Farm, Macquarie Fields House, Varroville and Robin Hood Farm.

Water NSW

Water NSW does not object to the proposal and noted that it is unlikely to cause detrimental impacts on natural watercourses.

Endeavour Energy

Endeavour Energy does not object to the proposal but requested further clarification about the number and type of residential units and the division of commercial and retail GFA in order to determine electricity augmentation requirements.

Rural Fire Service (RFS)

The RFS does not object to the proposal but notes there is insufficient justification for the proposed reduction to Asset Protection Zones (APZs) and does not support this reduction until sufficient justification is provided.

Table 4: Summary of issues raised in public submissions

Issue	Proportion of submissions (per cent)
Density and overdevelopment	65
Maximum building height increase	61
Traffic	61
Excessive number of dwellings in town centre	57
Insufficient parking at the train station	55
Noise	41
Overshadowing	44
Insufficient schools	30
Inadequate local infrastructure	17
Limited public transport access	7

Other issues raised in public submissions (less than 5%) to the exhibition included:

- insufficient community consultation
- replacement of SEPP and DCP controls with Concept Plan and design guidelines
- general public amenity
- improvements to local services and infrastructure
- adequacy of traffic modelling.

4.2. Response to Submissions

The Proponent provided a Response to Submissions (RtS) that addressed agency and public submissions. The Department made the RtS publicly available on its website and referred the RtS to public authorities for comments. The Department received eight submissions on the RtS, all from public authorities. These submissions are summarised in **Table 5**.

Table 5: Summary of public authority submissions in response to the notification of the RtS

Liverpool Council

Contributions

Council accepts the Proponent's in-principle Voluntary Contributions Agreement offer of \$35,151,577.00, subject to:

- compliance with Council's Planning Agreement Policy
- Council endorsement and exhibition of the VPA, as required by the Act
- guarantees about the standard of works and
- indexation of the contribution amount.

Urban Design

- reiterates previous comments about activating streets on the edge of the TCC, particularly Henderson Road
- suggests building forms on streets outside the TCC should accommodate non-residential uses on the ground floor, such as home-based professional suites
- the service laneway adjacent to Campbelltown Road should be a minimum of 5.5 m wide
- the Public Domain Plan should be amended to demonstrate how street trees and landscaping can be achieved on the continuous concrete slab underneath the TCC
- building forms within the Residential Precinct should be sufficiently set back to allow for street trees.

General

• Council suggested a note is added to the report or determination stating no approval is given for any of the building or civil works indicated in the concept designs.

Campbelltown Council

Council requested a copy of the Proponent's traffic modelling data for review.

TfNSW

- TfNSW raised several issues, including:
- the northern side of the East Town Centre Road and Campbelltown Road intersection must be five lanes, as per the approved Campbelltown Road upgrade plans
- land dedication is required for the Campbelltown Road upgrade
- future development applications for significant buildings within the town centre buildings should include updated mesoscopic modelling
- TfNSW should be consulted about any changes to Bernera Road's indicative 3.5 m lane width to ensure it can support future rapid bus routes
- the Proponent should provide a report for TfNSW consideration prior to the first development application demonstrating how the proposal would comply with *Development Near Rail Corridors and Busy Roads – Interim Guidelines.*

Sydney Water

Sydney Water reiterated its earlier response that wastewater services require augmentation to serve the additional dwellings and noted it would work with the Proponent during the Sydney Water infrastructure approval process to identify necessary augmentation.

EPA

The EPA made the following comments:

- requested updated assessment of rail noise impacts to reflect current operations, and measures to
 ensure appropriate validation of noise mitigation measures
- recommended updated and targeted water quality targets, rather than generic targets
- recommended wastewater requirements are resolved as part of the current modification rather than through later DAs
- requested further information on whether the existing sewerage system can support the additional wastewater load

• suggested provisions are included to ensure operational waste management is adequately considered in future DAs.

Heritage Council

The Heritage Council made the following comments:

- requested the Statement of Heritage Impact (SHI) is revised to address impact on views from several state heritage listed items in the broader vicinity of the site
- noted appropriate protection mechanisms are identified in a Construction Environmental Management Plan (CEMP)
- recommended a process to follow if unexpected archaeological relics are found.

Endeavour Energy

Endeavour Energy advised of electricity supply requirements for the proposed development, and noted the Edmondson Park Zone Substation (which serves the Town Centre) will not have full security of supply until mid-2019 due to the need to coordinate network augmentation with Campbelltown Road and Croatia Avenue roadworks.

RFS

The RFS advises the matter raised in its earlier comments is satisfactorily addressed.

Copies of the submissions to the RtS may be viewed at **Appendix A**. The Department has considered the comments raised in the authority and public submissions during the assessment of the application and has given specific consideration to the key issues raised in **Section 5** and **Appendix D** of this report and/or by way of recommended conditions in the instrument of consent at **Appendix E**.

5. ASSESSMENT

The Department considers the key assessment issues are:

- increased dwelling yield
- built form and urban design
- infrastructure provision / contributions
- traffic and transport.

Each of these issues is discussed in the following sections of this report. Other matters that were taken into consideration during the assessment of the application are discussed at **Section 5.5**.

5.1 Increased dwelling yield

The original Concept Plan anticipated 912 dwellings within the FTC, at a density of 38 dwellings per hectare (as shown in the dwelling yield maps attached to the Environmental Assessment).

The approved density reflects the former minimum density controls for the site within the Liverpool LEP 2008. The purpose of the minimum densities was to ensure future development achieved a minimum dwelling yield. This was used to justify and fund (through developer contributions) transport and other infrastructure improvements.

The proposal now seeks to increase the approved dwelling numbers in the FTC from 912 to 1,884, equating to a density of 78.5 dwellings per hectare. Approximately 992 dwellings would be in the TCC (171 dwellings per hectare), and 892 in the Residential Precinct (43 dwellings per hectare).

Several public submissions raised concern about the proposed increase in dwellings and density.

The Proponent advises the currently approved dwelling number was intended as a minimum, and underestimates the density available under the existing 2.5:1 FSR that is provided in the SSP SEPP.

The Department notes the concerns raised by the community about the increase in dwellings. However, as discussed in **Section 2.2**, the increase in dwelling yield has strong strategic merit. All dwellings will be within walking distance of Edmondson Park Railway Station, and the diverse housing forms and sizes meet Government objectives to increase housing supply and diversity and is consistent with the relevant goals, objectives and actions of *A Plan for Growing Sydney* and the draft *South West District Plan*.

The Department considers the site can and should accommodate a greater dwelling yield than established by the Concept Approval in 2011, noting the following changes over the past six years:

- the need to accommodate housing for current and projected population of Sydney, now home to 4.7 million people and estimated to grow to 6.4 million by 2036
- a decline in housing affordability, and the need to provide a range of housing types in suburban locations, along with a range of other measures, to place downward pressure on house prices
- changes in the housing market, with an increased demand for a range of housing types and sizes, including apartments, in middle ring suburbs where buyers would have previously been seeking traditionally low and medium density housing
- the release of a revised metropolitan planning framework in *A Plan for Growing Sydney* and the draft *South West District Plan* that encourages higher densities in well-located suburban areas.

The Department is satisfied with the proposed housing densities and typologies. The proposed density in the Residential Precinct is 43 dwellings per hectare. This is consistent with the draft *Medium Density Design Guide 2016's* (DPE) expectation that medium density housing will typically result in a density of 25-45 dwellings per hectare.

Additionally, the higher density form of the TCC can and should accommodate greater densities to ensure the critical mass of the town centre and maximise the opportunities for residential development closer to the railway station, shops and services. The Department considers the proposed density of 171 dwellings per hectare (as per the Department's calculations) is reasonable, noting the additional dwellings can be accommodated without any increase in the FSR already allowed under the SSP SEPP. The Department considers this density would allow a range of dwelling sizes (average of 80 m²) and that built form and amenity standards are adequately ensured through the Design Guidelines and the state-wide *Apartment Design Guide* (ADG).

The proposal increases housing supply and through the concept design, Design Guidelines and Public Domain Plan, demonstrates a commitment to providing diverse and well-designed housing and public spaces accessible to different life stages and budgets.

The Department has also considered the immediate impacts of the proposed increase in density and the capacity of the site to service it and concludes the proposal is acceptable in terms of:

- built form and urban design outcomes through the proposed uplift in building heights in the TCC, Design Guidelines and Public Domain Plan, as discussed in **Section 5.2**
- infrastructure provision and development contributions, as discussed in **Section 5.3**
- adequacy of the proposed road network and impacts on regional transport infrastructure, as discussed in **Section 5.4**.

On this basis, the Department supports the proposed increase in dwelling yield.

5.2 Built Form and Urban Design

5.2.1 Height and GFA

The key amendments to the built form proposed by the modification are within the TCC and include:

- introducing a maximum GFA limit for the TCC of 145,025 m² and distribution of the GFA between the four TCC quadrants
- increasing the maximum building heights in the TCC from 24 m (with one landmark building of up to 30 m) to a range of quadrant-specific heights up to approximately 68 m (RL 132.9) (approximately 68 m) for one landmark building.

The Department has considered the floor area and height below.

Gross floor area

The SSP SEPP provides a maximum FSR of 2.5:1 across the TCC, which is equivalent to a GFA of 145,025 m². The proposal seeks to redistribute the allowable FSR under the SSP SEPP. The overall floor space remains consistent with the SSP SEPP control, however the proposal increases the floor space in the North West and South West quadrants of the TCC while reducing the floor space in the North East and South East quadrants (**Table 6** and **Figure 6**).

The proposal also seeks the ability to redistribute a further 10% of GFA between the four quadrants of the TCC to allow for future flexibility.

TCC quadrant	Site area (m²)	Allowable GFA (m²) (based on FSR of 2.5:1)	Proposed GFA (m²) / equivalent FSR	Change (m2)
North West	9,564.37	23,910	20,000* / 2.1:1	-2,910
North East	16,045.59	40,113.9	45,000* / 2.8:1	+4,886.1
South West	18,509.16	46,272.9	56,500* / 3.05:1	+10,227.1
South East	13,890.72	34,726.8	23,525* / 1.7:1	-11,201.8
Total	58,010	145,025	145,025 / 2.5:1	0

Table 6: Comparison between the allowable FSR and proposed GFA allocation

* Up to 10% of the maximum GFA can be moved from one quadrant to another



Figure 6: Proposed allocation of GFA across the four quadrants of the TCC (Source: Proponent's EA)

The applicant states this proposed planning framework provides a robust mechanism to ensure appropriate distribution of GFA. The proposed distribution has been informed by an illustrative design scheme (as discussed in **Section 2.2**) which seeks to increase the density in the North East and South West quadrants of the TCC.

The Department notes the overall quantum of floor space across the TCC will be no greater than currently allowed under the SSP SEPP. The Department supports the proposed GFA distribution for the following reasons:

- the distribution will allow a variety of building forms and heights through the four quadrants, breaking up the otherwise uniform form which may result from blanket FSR and height controls
- increases in density, and associated height and massing, in the North East and South West quadrants will be offset by reductions in the North West and South East quadrants to maintain the overall maximum GFA
- the larger North East and South West quadrants (with respective FSRs of 2.8:1 and 3.05:1) have the capacity and scope to accommodate greater floor space densities whilst minimising impacts on neighbouring land

• future development in the TCC will be assessed against the urban design and amenity outcomes in the Design Guidelines (Section 5.2.2).

Height

The Concept Approval and the height of buildings development standard in the SSP SEPP currently provide a maximum height of 24 m across the site with provision for a landmark building up to 30 m in the Town Centre. The modification proposes to increase the maximum heights, ranging from approximately 38 m (RL 96.4) to approximately 68 m (RL 132.9) to consolidate the built form and density around the Edmondson Park Railway Station and accommodate a single 68 m landmark building. This retains the principle of a landmark tower within the taller built form now proposed. The proposed maximum heights in each of the four quadrants in the TCC are provided in **Table 7** and **Figure 7**.

TCC Quadrant	Existing height limit (m)*	Proposed maximum height (RL)	Indicative height (m)**	Change (m)*		
North West	24	99.5	39.5	+ 15.5		
North East	24	105.8	46.8	+ 22.8		
South West	24	132.9	67.4	+ 43.4		
South East	24	96.4	37.9	+ 13.9		

 Table 7: Proposed increase in height in the TCC

* The SSP SEPP and Concept Plan also allow for a single 30 m high landmark building within the Town Centre

** The actual height above finished ground level may vary as the finished ground level has not yet been established

The maximum height proposed for each quadrant in the TCC has been informed by an illustrative design scheme (as discussed in **Section 2.2**) which identifies potential building heights that could be delivered across the TCC. The landmark tower height of approximately 68 m is just over twice the height of the tallest building identified in the existing Concept Approval (30 m). Other buildings range in height from approximately 27 m to 40 m (3 – 16 m above the maximum height in the SSP SEPP and Concept Approval). There are also a number of buildings which are below the 24 m height limit as shown in **Figure 8** below.

Liverpool and Campbelltown Councils did not raise any concerns about the increase in height in the TCC. However, Camden Council raised concerns that the proposed increase in height in Edmondson Park exceeds the heights of buildings allowed within the Leppington District Centre. The proposed height increase was also a significant concern raised in 50% of public submissions. A further 35% of submissions raised a concern on overshadowing impacts.



Figure 7: Proposed maximum heights in each of the TCC quadrants (Source: Proponent's EA)



Figure 8: Illustrative design scheme overlayed with the existing 24 m height control (indicated by blue plane) to show the potential variation in height across the TCC (Source: Proponent's EA)

The Proponent has advised the increase in height controls will:

- enable taller buildings to deliver more dwellings near the Edmondson Park Railway Station, maximising investment in rail infrastructure in accordance with strategic outcomes identified in *A Plan for Growing Sydney*
- enable taller buildings in the TCC, including a landmark tower, to further identify and reinforce the town centre
- allow for further creativity and innovation in the mix of buildings provided, while providing certainty over the scale of the development by maintaining a maximum GFA
- retain the legibility of the hierarchy of centres throughout the South West District, noting the employment opportunities, which informs the hierarchy of the centres, is unchanged at Edmondson Park as the provision of retail/commercial space is unchanged.

The Department's assessment acknowledges the site is within a greenfield release area and there is no immediate surrounding context to inform appropriate building heights. The height limits in other town centres in the South West Priority Growth Area, including Leppington and Oran Park are 30 m. The maximum height in the Liverpool CBD is 100 m. The proposed heights would therefore be considerably higher than currently allowed in any existing and future planned town centres, but lower than the Liverpool CBD.

In response to concerns raised by Camden Council about the effect of building heights on the centres hierarchy in south-west Sydney, the Department notes the role of centres in relevant strategic planning documents is primarily related to employment land, commercial space and regional / sub-regional education and health services, rather than building heights or overall GFA. The proposed modification does not increase the Edmondson Park Town Centre's quantum of 35,000 m² to 45,000 m² of commercial / retail space. The Department therefore considers the proposed height and density increases will not significantly alter the centres hierarchy.

Notwithstanding, the proposed increase in height is consistent with growth in height controls in a number of centres in metropolitan Sydney, where heights have increased in and around CBDs and major town centres, with ready access to public transport.

The height increase would serve to clearly define Edmondson Park's built form hierarchy by providing a high density town centre, a medium density residential precinct surrounding the town centre, and lower density housing further from the town centre. This contrasts with the current Concept Approval and planning controls, which provide a consistent 24 m height limit throughout the wider Town Centre. The height increase would allow the TCC to accommodate the proposed increase in dwelling densities while retaining the low rise medium density character of the Residential Precinct and the low to medium density character of the remainder of the Concept Plan area.

The Department has also considered potential overshadowing impacts of the increased building heights. The Department recommends controlling overshadowing of residential properties within the FTC through a control requiring at least 70% of dwellings in both the TCC and Residential Precinct achieve at least two hours' solar access between 9 am and 3 pm on 21 June, as discussed in relation to the Design Guidelines in **Section 5.2.2**.

The proposed building heights will not create unacceptable overshadowing impacts on residential land or public open space (including the Regional Park) outside the Town Centre.

The Department considers the proposed height increase will retain an acceptable amount of solar access to surrounding land uses, noting detailed solar access studies will be done during the assessment of later development applications to ensure residential development meets the solar access requirements of the Design Guidelines.

The Department supports the proposed increased heights, including a single landmark building of up to 68 m, for the following reasons:

- increased heights and an associated increase in apartments within the TCC will add to the vibrancy of the town centre, located directly adjacent to the new Edmondson Park Railway Station
- increased heights will define the TCC and provide a genuine landmark building visually distinct from the scale of surrounding buildings
- the 68 m landmark building will be surrounded by other mid to high rise buildings in the TCC, which would break the bulk of the landmark building and enhance the TCC's visual appeal
- the proposal will encourage further diversity in the built form within the TCC, while ensuring the bulk and scale of the development is clearly established and unchanged through the FSR and GFA controls
- increased heights will provide increased housing without significant changes to the intended character of surrounding areas

- the interaction of height and GFA controls will limit the number of buildings constructed to the maximum building height, consistent with the available GFA
- variation in building heights allows flexibility to achieve improved urban design and amenity outcomes
- the proposal will retain reasonable solar access to surrounding land uses
- there are no direct or indirect heritage impacts from the increased heights (as discussed in **Section 5.5.1**).

The Department supports the proposed building heights subject to the following conditions or future environmental assessment requirements related to building height:

- a Concept Plan condition requiring the RL 132.9 height is limited to a single building (i.e. the landmark tower)
- the landmark building is subject to a design excellence process, as discussed in Section 5.2.2
- 70% of dwellings in both the TCC and Residential Precinct achieve at least 2 hours solar access between 9 am and 3 pm on 21 June to ensure that the building height in the TCC does not cause unacceptable overshadowing impacts.

5.2.2 Urban Design and Public Domain

Modification 1.1 of the Concept Approval requires the preparation of a development control plan (DCP) for the for the Concept Plan area. FEAR 1.2 requires each subsequent subdivision application is consistent with that DCP.

The Edmondson Park South DCP 2012 was created in response to Modification 1.1 and provides controls for the Concept Plan area. However, controls for the Town Centre are limited to high level design principles, and the DCP anticipates a later DCP amendment will provide detailed development controls for the Town Centre.

The current application proposes to remove the requirement for a DCP for the FTC and instead provide development controls through Design Guidelines and a Public Domain Plan. The DCP requirement will be retained for the remainder of the Town Centre (i.e. north of the South West Rail Link).

The Department has consulted with Liverpool Council and conducted its own thorough review of the proposed Design Guidelines and Public Domain Plan and considers the key assessment issues are:

- the use of Design Guidelines in lieu of a DCP
- the content of the Design Guidelines to ensure high quality and high amenity development outcomes
- the content of the Public Domain Plan to ensure high quality public domain outcomes.

The Department has considered each of these issues in detail below.

Design Guidelines in lieu of a DCP

Submissions from Liverpool Council and two public submissions raised concern about the proposed use of Design Guidelines in place of a DCP. Council queried how the Design Guidelines would apply to future development applications (DAs), and the public was concerned it may allow the Proponent to circumvent local planning controls, particularly in relation to public participation in future DAs.

The proposal seeks to modify a Concept Plan, which is a transitional Part 3A project (**Section 3.1**). The savings provisions in the EP&A Act provide that:

- future DAs must be generally consistent with that Concept Plan
- in the event of any inconsistency with the provisions of an EPI, the provisions of the Concept Plan prevail.

In this case, should this proposal and the Design Guidelines be approved, the consent authority for any future DA would have to be satisfied the DA is consistent with the Design Guidelines in order to grant consent, in the same manner a DCP would otherwise apply.

The Department considers that Design Guidelines are an appropriate mechanism to guide future development within the FTC given that:

- the Design Guidelines, in conjunction with the Concept Approval and the Public Domain Plan, satisfy the requirements for a DCP outlined in the SSP SEPP, subject to the recommended amendments discussed below and in **Appendix C**
- Design Guidelines have been successfully applied to other significant Concept Plans and Stage 1 State significant developments including Discovery Point (Wolli Creek) and Barangaroo
- public participation in the assessment process is ensured through the Regulation and any future DAs would be exhibited and/or notified to allow community input at the detailed DA stage
- Schedule 3, Part 31, Clause 6 of the SSP SEPP excludes Part 3A projects from the requirement to prepare and be consistent with a DCP.

The Department is therefore satisfied the Design Guidelines can operate in place of a DCP for the FTC.

Design Guidelines

The proposed Design Guidelines establish built form principles for the FTC, key elements of the built form, and provide more detailed built form guidelines for the TCC and Residential Precinct. These detailed built form guidelines are divided into performance criteria and design solutions to meet relevant criteria. The design solutions are the preferred means to achieve those criteria, but are not compulsory and allow for alternative solutions.

The TCC built form guidelines address:

- building siting, scale and mass
- building design
- open space
- vehicle parking, access and manoeuvring (including parking rates)
- residential amenity
- signage
- ecologically sustainable development.

The Residential Precinct guidelines provide development controls for each dwelling typology including heights, setbacks, parking, and amenity issues such as internal area, solar access and private open space.

Council raised concerns about the lack of specificity and certainty provided by the Design Guidelines as well as concerns with the activation of the edges of the TCC.

The Department has considered the Design Guidelines in light of Council's concerns and considers the building siting, scale and mass guidelines provide appropriate considerations for the distribution of building heights and mass throughout the TCC, and control building length and depth to maintain the amenity of occupants of those buildings and the public domain. The building design guidelines include appropriate performance based controls for street activation, relationship with the public domain, façade treatment and materiality. However, the Department recommends amendments to the Design Guidelines to improve or provide greater certainty about design excellence, street activation, building forms and streetscapes, and residential amenity. These are outlined below and a full schedule of recommended amendments is provided in **Appendix C**.

The Department considers the Design Guidelines do not adequately provide for design excellence. This is considered critical in the TCC, noting the proposed increases in building height. The Department considers a design review process would lead to beneficial design outcomes and notes Liverpool Council has a Design Excellence Panel (DEP) that considers all residential flat buildings, medium density developments of more than 30 units and new buildings in commercial zones (including the B4 zoning that applies to the TCC). The Department expects Council's DEP to review any Concept Plan DA within its purview and recommends a modification to the Design Guidelines to reflect this.

In addition to the DEP requirement, the Department also recommends the Concept Plan include a future assessment requirement requiring a design excellence strategy is devised for the landmark tower and market hall (as the two most prominent future buildings in the TCC). This strategy will consider the site character, architectural design, layout, setbacks, materials and finishes, articulation and detailing, amenity and relationship to the public domain. The strategy will be independently peer reviewed and approved by Council.

The Department also recommends the Design Guidelines should be amended to include more details about setbacks, street alignments and podium forms, in order to increase certainty about building forms and streetscapes.

The Department shares Council's concern that the TCC could be too inward looking without specific requirements to activate the street edges. Council recommended Soldiers Parade is reclassified as an 'activity street', which would require active non-residential ground floor uses (**Figure 9**). While the Department agrees about the importance of preventing blank facades on the edges of the TCC, appropriate care must be taken to not oversupply the TCC with retail floor space. A requirement for retail tenancies on this street frontage may result in empty shopfronts, which would be unappealing and discourage activity. The Department recommends changes to the Design Guidelines to require retail, commercial or residential frontages to Soldiers Parade, and retail or commercial frontages on the corners of the TCC internal streets, Soldiers Parade and the Greenway. This would provide a reasonable level of street front activation along with some land use variation.

A high level of residential amenity will be ensured in the TCC as future applications will be assessed against State Environmental Planning Policy 65 – Design Quality of Residential Flat Buildings and the ADG. The Design Guidelines include numerical amenity guidelines for the various dwelling forms in the Residential Precinct. The Department considers the numerical guidelines will ensure a high level of amenity with the exception of:

- solar access
- minimum dwelling size.

Solar access

The Design Guidelines propose 60 per cent of dwellings receive two hours solar access between 9 am and 3 pm on 21 June.

The Department notes this will provide a lower amenity standard than the ADG (70 per cent of dwellings) and the Department's *Draft Medium Density Design Guide* (DMDDG), which was publicly exhibited in late 2016. The DMDDG provides design and amenity recommendations for different types of medium density housing. DMDDG recommendations would provide consistent state wide design guidelines for medium density housing and would apply in the same way the ADG applies to residential flat buildings. The DMDDG recommends living rooms or private open space of all terrace houses, 70 per cent of multi-dwelling housing, and 75 per cent of all manor house dwellings receive two hours' solar access between 9 am and 3 pm on 21 June.



Figure 9: FTC indicative plan showing recommended Soldiers Parade activation area (dark blue), and Soldiers Parade connection between Campbelltown Road and Edmondson Park Railway Station (dashed light blue) (Base source: Proponent's EA)

The proposed solar access also falls short of local development controls. The *Liverpool DCP 2012* – *Edmondson Park South*, which applies to the remainder of the Concept Plan, requires small lot housing (the closest equivalent to the Residential Precinct housing) receive two hours' solar access to living rooms or 50 per cent of private open space of all dwellings between 9 am and 3 pm on 21 June.

The Department does not consider there is any justification for not achieving appropriate levels of solar access in a greenfield subdivision. The Proponent will deliver the entire precinct and has the opportunity to ensure a high level of amenity through site planning and establishing the development controls through the Design Guidelines. The Department acknowledges the predominant medium density housing type, the townhome, has similar design characteristics and density to low-rise apartments, and is more dense than housing anticipated by the DMDDG and small lot provisions of the DCP. The Department therefore recommends the Design Guidelines be amended to require at least 70 per cent of dwellings in each stage receive two hours' solar access between 9 am and 3 pm on 21 June, consistent with the ADG and the multi-dwelling housing requirements in the DMDDG.

Minimum dwelling size

The Design Guidelines provide minimum internal floor areas for different size dwellings. These are consistent with the ADG and DMDDG. However, the Design Guidelines do not specify a minimum size for four bedroom townhomes. Instead, they specify townhomes with three or more bedrooms will have a minimum size of 90 m². The Department notes the indicative townhome typologies include four bedroom dwellings and recommends an additional 12 m² minimum area for each additional bedroom above three bedrooms, consistent with the ADG.

The Department supports the Design Guidelines subject to the abovementioned recommendations and other minor changes and clarifications. A full schedule of the Department's recommended amendments and additions to the Design Guidelines is contained in **Appendix C**.

Public Domain Plan

The Public Domain Plan outlines the design rationale for the public domain, principles for street networks, open space and pedestrian and cycle connectivity, and detailed diagrams of anticipated street character. The design rationale is consistent with the design principles in the Urban Design Report, and the street network principles are depicted in **Figure 11**.

The street character is divided into tree-lined boulevards, which are the main north-south and eastwest streets, secondary streets that include streets in the TCC and those on the edge of residential neighbourhoods, local streets, which run through residential neighbourhoods, and mews, which are shared zones between townhomes. The Public Domain Plan provides recommended planting and landscaping for the different types of streets.

The Public Domain Plan also outlines the different types of public and communal private open space, such as the Edmondson Park Reserve, a 'semi-wild' park containing remnant bushland, a town park, half of which will be a public park and half will be a residents' facility, the Town Square and Eat Street, as well as several pocket parks (**Figure 10**).



Figure 10: Proposed open space plan (Source: Public Domain Plan)

Council raised a number of concerns on the Public Domain Plan, including recommending a 5.5 m lane width for service lanes facing Campbelltown Road (rather than the 3.5 m width proposed),

concerns about the ownership and access to open space, and ensuring there is provision for street trees in building setbacks and on the indicative building slab in the TCC.

The Department notes the RtS outlines the roads and local streets in the Residential Precinct and surrounding the TCC would be dedicated to Council, while mews and TCC streets would be retained by the Proponent. Public access to privately owned streets will be permitted at all times. The Department recommends a condition requiring future DAs to outline the appropriate restrictions and/or covenants to manage the use of privately owned streets, including public access, permitted activities, and parking restrictions.

The Department notes Council's comments about tree planting on the indicative building slab and ensuring sufficient setbacks for street trees. The proposal does not provide this level of detail and the Department considers these matters can be resolved in Council's assessment of DAs for specific buildings and for the public domain.

The Department considers the 3.5 m wide service lane width is appropriate for its purpose, notwithstanding Council's suggestion these lanes should be 5.5 m wide. Critically, the Department notes the service lanes are one way only, limited in length, and are part of a grid network, so vehicles will only travel a short distance along them (**Figure 10** and **Figure 11**). Subject to appropriate restrictions on parking and loading within these lanes (which would be administered by Council), the Department considers the 3.5 m lane widths are practical.

The Department considers the Public Domain Plan is sufficiently detailed and appropriate for its purpose. It provides internal road networks and sections, and sufficient detail about landscaping and public open space. The landscaping details appropriately reflect the Cumberland Plain Woodland native to the area, and its location and street landscaping connect retained native vegetation. The Public Domain Plan provides sufficient detail about the likely future public domain, without limiting Council's ability to require changes (as per its submission) at the public domain DA stage.

The proposal does not include any additional public open space in areas designated or zoned for public open space in the Concept Plan, although there is a public park (i.e. to be transferred to Liverpool Council) and areas of publicly accessible open space in the FTC, including the town square and pocket parks in the Residential Precinct. The proposed modification retains the approved 47.42 ha of parks and 153.67 ha of conservation land within the Concept Plan area.

Council notes the proposal does not include additional public open space and initially queried the adequacy of the existing open space given the proposed dwelling increase. The RtS argues the open space continues to meet the traditional benchmark of 2.43 ha per 1000 people and the more recent benchmark of 15 per cent of non-industrial land.

These figures are taken from the *Recreation and Open Space Planning Guidelines for Local Government* (2010). These guidelines also provide default standards for proximity to local parks (such as pocket parks and civic plazas – within 400 m of most dwellings), larger district parks (within 2 km), and local and district sporting fields (within 1-2 km).

The Department accepts the quantity of public open space remains sufficient to serve the proposed population increase within the FTC. Excluding public space within the FTC and conservation land, the Concept Plan area will provide 4.3 ha of public open space per 1000 residents and will constitute 18 per cent of the Concept Plan area. Dwellings within the FTC will continue to meet proximity benchmarks.

The Proponent's letter of offer (**Section 5.3**) provides for open space contributions, which may be used to embellish approved open space rather than provide new open space. Council accepts this approach. The Department considers the quantity of open space is sufficient to support the proposed population increase, and appropriate provisions are in place in the required VPA offer to upgrade these facilities.



Figure 11: Proposed pedestrian and cycle network (top left) and street hierarchy (top right) (Source: Public Domain Plan)

Conclusion

The Proponent's vision for the site is for a high density, mixed use urban core surrounded by medium density housing and parklands. The Department supports this vision strategically, and considers the built form and public domain indicated in the concept designs is innovative and of a high design quality.

The Design Guidelines and Public Domain Plan are crucial in ensuring the vision articulated in the concept designs is delivered on the site. The Department considers the Design Guidelines and Public Domain Plan are an appropriate alternative to a DCP and will deliver the vision for the FTC.

The Department recommends small but important changes to these documents, most significantly to ensure design excellence in buildings and their relationship to the public domain, and to ensure residential amenity. Subject to these changes, the Department considers the Design Guidelines and Public Domain Plan provide an appropriate balance between certainty and flexibility and provide a framework for a high quality, liveable town centre.

5.3 Development contributions

5.3.1 Local contributions

The *Liverpool Development Contributions Plan 2008 – Edmondson Park* (Contributions Plan) applies to the Edmondson Park land release area within the Liverpool LGA, including the FTC. It assumes various residential densities ranging from two dwellings per hectare to a maximum of 38 dwellings per hectare. The Contributions Plan does not anticipate the intensity of development proposed within the FTC, which averages 78.5 dwellings per hectare. Application of the Contributions Plan would not provide adequate local infrastructure for the proposed dwelling density.

FEAR 1.8 requires each subsequent subdivision application to include an offer to enter into a Voluntary Planning Agreement (VPA) with each Council. The Proponent initially did not propose to change this requirement and included a commitment to enter into a VPA with Liverpool Council prior to an Occupation Certificate (OC) for the first DA in the FTC (under the Concept Plan).

Liverpool Council's submission requested the Proponent make the VPA offer to address infrastructure requirements prior to determination of the current modification. Local infrastructure was also a key issue in public submissions. Eight submissions (18 per cent of submissions) explicitly queried the adequacy of local infrastructure to support the proposed uplift.

The Department also requested the Proponent provide a VPA offer prior to determination of the current modification, to ensure the proposal provides sufficient local infrastructure.

The Proponent has accordingly made an in-principle VPA offer to Council worth \$35,151,577.00 to provide appropriate infrastructure to support the FTC. This offer would be in lieu of local Section 94 contributions and is based on the infrastructure contributions identified in the *Liverpool Development Contributions Plan 2008 – Edmondson Park*. The Plan anticipates a maximum dwelling density of 38 dwellings per hectare. The offer includes a base contribution of \$25,802,552.00 in accordance with the Contributions Plan, and an additional contribution of \$9,349,025.00 to fund additional infrastructure demands created by the dwelling density beyond that anticipated in the Plan. The offer sets out that contributions will be delivered as monetary contributions, works in kind or dedications.

Council has agreed in principle to the Proponent's VPA offer subject to further resolution of a variety of matters including staging, payments, standard of works, dispute resolution, amendments. Council also notes that the VPA must comply with Council's Planning Agreement Policy and will require Council resolution prior to exhibition.

In relation to timing, the Proponent proposes to enter into the VPA with Council prior to the issue of an OC for the first residential dwelling. This will allow the lodgement and determination of

applications within the FTC without being unnecessarily held up by the VPA execution process. To provide certainty around the contributions framework, the Proponent has offered by provide a bank guarantee to Council prior to determination of any application.

Council's Planning Agreement Policy outlines that generally a VPA should be offered, negotiated and documented prior to lodgement of a development application. This allows for the public notification and final negotiation of the VPA to run in parallel with the relevant development application.

The Department initially took a view that the VPA between the Proponent and Council should be formally agreed and executed prior to any development application being submitted to Council. However, after reviewing both the Proponent's justification and Council's Planning Agreement Policy, the Department accepts that the VPA may be finalised in parallel with the future development applications for the FTC, which would allow the Proponent to lodge applications in a timely manner following determination of this proposal. However, in contrast to the Proponent's requested timing, the Department considers the VPA must be executed prior to determination of any development application that would trigger a contribution under the VPA. This would include any residential or commercial floor space and ensure that the formal agreement for public benefits is in place and able to be levied as a condition of any development consent issued by Council.

The Department therefore recommends a condition requiring a VPA in accordance with the Proponent's public benefit offer be prepared, publicly exhibited, executed and registered on the title of the land prior to the determination of the first development application for residential or commercial floor space within the FTC, or as otherwise agreed with Liverpool City Council.

5.3.2 State contributions

FEAR 1.4 requires the Proponent to enter into a Works Authorisation Deed with RMS for works to upgrade Campbelltown Road. It notes the works are to be funded through the Growth Centres SIC levy, and specifies "the Proponent must pay the required SIC levy" or otherwise provide a material public benefit towards the Campbelltown Road upgrade. The Proponent proposes to change this requirement to specify that UrbanGrowth NSW will pay the levy.

The SIC levy is payable at development or subdivision application stage, rather than at Concept Plan stage. It would be premature and potentially inaccurate to specify that UrbanGrowth NSW would pay the contribution given UrbanGrowth may not be the land owner or applicant for DA stages of development of the site. The Department therefore recommends FEAR 1.4 is not modified.

5.4 Traffic, transport and car parking

5.4.1 Traffic generation and local road network

The Concept Approval establishes the high order road network throughout the FTC and broader Edmondson Park South site. The key features of the road network on the FTC site include:

- Campbelltown Road to the south, which will be upgraded to a 38.8 m wide road reserve
- three north-south roads (Macdonald Road, Town Centre Main Street, and East Town Centre Street)
- an east-west road running parallel to the railway line and around the commuter car park site
- three signal controlled intersections along Campbelltown Road at East Town Centre Street, Town Centre Main Street, and Macdonald Road (Figure 12).

Environmental Assessment Report



Figure 12: Approved Edmondson Park South Road Network (site outlined in blue) (Source: Original Concept Plan EA)

The proposal seeks to make a number of changes to the high order road network and introduce additional local streets as listed below and as shown in **Figure 13**:

- relocation of 'Main Street' to within what is now the TCC, effectively changing the road hierarchy
 of Soldiers Parade from a main street to a collector road
- the addition of internal road connections, including the Greenway, Eat Street (pedestrians and cyclists only), Urban Street and associated intersections
- new traffic signals to facilitate pedestrian movements across Soldiers Parade
- new traffic signals at the intersection of the Greenway and Bernera Road
- new traffic signals at Bernera Road to access the residential and retail car park
- the narrowing of Henderson Road from two lanes to one lane in both directions
- removal of the easternmost left-in/left-out intersection to Campbelltown Road, and the No Right Turn restrictions at the intersection of Campbelltown Road / Soldiers Parade.

The proposed road network is conceptual only and the detailed design will be subject to further assessment and approval by Liverpool Council, in consultation with RMS.

The Proponent submitted a Traffic Impact Assessment (TIA) Report and traffic modelling to support the proposed increase in dwelling yield and changes to the road network. The Proponent also seeks to remove the existing requirement on the Concept Approval (FEAR 1.6) which requires any future applications within the town centre to be supported by a detailed traffic and transport study, including modelling.

The TIA concludes the increase in traffic volumes as a result of the proposal can be accommodated within the surrounding road network. Further, the traffic modelling indicates all intersections can operate with a Level of Service (LoS) D or better during peak periods (**Table 8**), subject to the following additional works to the Campbelltown/Bernera Road intersection:

- extension of the right turn bay on the northern approach from Bernera Road to Campbelltown Road from 75 m to 100 m
- provision of an additional right bay on the western approach from Campbelltown Road to Bernera Road
- changing the median through lane to a right turn lane on the southern approach from Bernera Road to Campbelltown Road.



Figure 13: Revised FTC road network and core access arrangements (Source: Traffic and Transport Assessment) **Table 8**: 2026 and 2036 modelling scenarios

	2026 (approved)				2026 (proposed)			2036 (proposed)				
Intersection	Average Delay (sec)		Level of Service (LoS)		Average Delay (sec)		Level of Service (LoS)		Average Delay (sec)		Level of Service (LoS)	
	AM	PM	AM	PM	AM	РМ	AM	PM	AM	PM	AM	PM
Campbelltown Rd / Bernera Rd	54.7	45.6	D	D	52.1	44.8	D	D	47.9	56.0	D	D
Campbelltown Rd / Soldiers Parade	8.3	10.8	A	A	31.1	42.3	С	С	27.4	40.4	В	С
Campbelltown Rd / East Town Centre St	50.0	21.6	D	В	28.8	38.0	С	С	29.5	29.0	С	С
Bernera Rd / Soldiers Parade	10.4	20.8	A	В	23.4	13.7	В	A	(not modelled*)			
Bernera Rd / Henderson Rd	17.1	13.5	В	А	30.1	32.5	С	С	(not modelled*)			
Soldiers Parade / Henderson Rd	13.8	17.2	A	В	44.0	42.2	D	С	(not modelled*)			

* The Proponent only undertook future modelling in 2036 for intersections along Campbelltown Road. The local intersections will be subject to future assessment and approval by Liverpool Council, in consultation with RMS

Liverpool Council raised no objection to the proposed changes to the road network, traffic generation and impacts on intersections. Campbelltown Council raised concern about the impacts of increased traffic on local and arterial roads, in particular Campbelltown Road. Public submissions also raised concerns about traffic congestion and inadequacy of local road infrastructure.

The Department notes the concerns raised in submissions in relation to the road infrastructure to support the development. The Department understands the current capacity of Campbelltown Road is limited being a two lane road, however RMS is undertaking an upgrade of Campbelltown Road which will accommodate three lanes in each direction and add the additional capacity needed to service the development.

Further, TfNSW and RMS have reviewed and not raised any concerns with the Proponent's TIA and modelling which demonstrates the proposal can be accommodated within the local road network and the intersections with Campbelltown Road, in its final approved design, will operate with a satisfactory level of service to 2036.

TfNSW and RMS have raised no objections subject to the proposal having no impacts on the RMS approved design of Campbelltown Road and intersections into the FTC. TfNSW/RMS also provided comments in relation to:

- required land dedication for the approved widening of Campbelltown Road
- the need for traffic modelling with each application for significant town centre infrastructure
- the need for modelling to support the layout and phasing of proposed signalised intersections
- the need for further consultation with TfNSW regarding the design of Bernera Road in relation to accommodating a rapid bus route

The Department considers the key issues are:

- traffic impacts on arterial and local roads
- design of roads connecting to Campbelltown Road
- layout of local road network

Traffic impacts

The traffic modelling considers traffic under three scenarios (**Table 8**):

- 2026 (the anticipated completion of development under the Concept Plan) under the existing approval (i.e. the base modelling)
- 2026 with the proposed modification
- 2036 (Concept Plan completion plus ten years).

The modelling indicates the Campbelltown Road intersections (with Bernera Road, Soldiers Parade and Easter Town Centre Street) would operate at LoS of D, C and C respectively under the 2026 modification and 2036 scenarios. This maintains the 2026 current approval scenario at Bernera Road, deteriorates at Soldiers Parade (while maintaining an acceptable performance), and improves the morning performance at East Town Centre Road while deteriorating the evening performance (while maintaining an acceptable performance).

The modelled local intersections within and to the north of the FTC will operate at LoS A to D. This represents a neutral result at Bernera Road / Soldiers Parade, and deteriorations at Bernera Road / Henderson Road and Soldiers Parade / Henderson Road, whilst maintaining acceptable performance.

The traffic modelling shows key arterial and local intersections will retain acceptable LoS of 'D' or better in the 2026 and 2036 scenarios. The Department therefore considers the local and arterial road network has sufficient capacity to accommodate the future development of the modified Concept Plan.

Campbelltown Road

The Department notes the modelling submitted to support the proposal proposed an intersection configuration at East Town Centre Street which was inconsistent with the approved RMS design for Campbelltown Road. Although the Proponent's modelling demonstrated the intersection could operate effectively, TfNSW and RMS both object to any changes to the approved design.
The Department considers the TfNSW and RMS position on this matter are well founded and the design of Campbelltown Road has been through a detailed process to ensure optimal safety and efficiency along this major arterial road. The Department therefore agrees that no changes should be made to Campbelltown Road or the intersections within the FTC. Discussions between TfNSW, RMS, the Proponent and the Department have revealed this will require some additional land set aside for road reserves in the FTC, but this can be accommodated within the proposal. The ultimate road design at each intersection would be subject to a future assessment and approval by Liverpool Council. Further, all connections into Campbelltown Road would require RMS approval under the *Roads Act 1993*.

The Department also notes the Proponent and RMS have agreed on the required land dedication. The Department recommends a FEAR to provide land dedication for Campbelltown Road to meet RMS requirements for road widening works.

Local road network

The Department notes the proposed internal road network is conceptual only but considers the proposed addition of internal road connections will contribute to creating a transit oriented, accessible and connected development between the Edmondson Park Railway Station, TCC, Residential Precinct and open spaces. The Department supports the principle of local signalised intersections to provide safe and convenient access for vehicles and pedestrians at the key intersections around the TCC. The proposed traffic signals would require future assessment and approval by Liverpool Council, in consultation with RMS. This would include modelling to support the warrant for the signals, as well as the proposed layout and phasing.

TfNSW/RMS requested traffic modelling to be submitted with each application for significant town centre infrastructure. The Department supports the requirement that a detailed traffic and transport study, including traffic modelling, to support any future application for road infrastructure within the FTC. However, as the submitted TIA and traffic modelling already assesses and demonstrates the acceptability of the traffic generation as a result of the proposal, the Department does not agree a detailed traffic and transport study is required for each and all future development applications for the town centre. The Department therefore recommends FEAR 1.6 be amended to relate only to any application for road infrastructure in the FTC.

The Department also recommends a new FEAR requiring consultation with TfNSW and RMS prior to the submission of any application for road infrastructure. In addition to the consultation, concurrent or approval requirements through the assessment of the application, this will ensure that there is early consultation between TfNSW, RMS and the Proponent on the design of the local road network, including detailed street designs, intersection treatments and provision for bus access.

The Department concludes the traffic impacts of the proposal are acceptable as:

- there will be no change to the approved design of Campbelltown Road and all connections into Campbelltown Road will require RMS approval under the *Roads Act 1993*
- all intersections will operate with an LoS D or better during peak periods
- the final design of the internal road network, including proposed traffic signals will require future assessment and approval by Liverpool Council, in consultation with RMS.

5.4.2 Car and bicycle parking

The proposal seeks to introduce maximum car parking rates for development within the FTC, as presented in **Table 9**. The Proponent contends the maximum parking rates have been set to prevent undesirable overflow of resident demands onto surrounding streets and reflect the site's location to public transport.

Table 9: Proposed parking rates

Land Use	Maximum Parking Rate
Residential Flat Buildings	
Studio and 1 Bedroom Dwellings	1 space per dwelling
2 Bedroom Dwellings	1.2 spaces per dwelling
3 Bedroom Dwellings	2 spaces per dwelling
Visitors	1 space per 10 dwellings
Muliti-dwelling and Attached Housing	
1-2 Bedroom Dwellings	1 space per dwelling
3-4 Bedroom Dwellings	2 spaces per dwelling
Visitors	Provided on-street within the Mews
Other Uses	
Major Retail (Supermarket, DDS, etc)	4.1 spaces per 100 m ² Gross Lettable Floor Area (GLFA)
All other retail, commercial, medical,	4.1 spaces per 100 m ² GLFA
cinema and entertainment uses	
Child Care	1 space per 10 children & 1 space per 2 staff members
Gym	3 spaces per 100 m ² GLFA

[Note: any use not prescribed above is to be provided in accordance with the RMS *Guide to Traffic Generating Developments* (2002).]

The proposal also seeks to introduce minimum bicycle parking rates to assist in achieving the 5% modal split to bicycles for trips less than 10 km, as presented in **Table 10**.

Table 10: Proposed bicycle parking rates

Land Use	Minimum Bicycle Parking Rate
Residential Flat Buildings	1 space per dwelling (can be provided within a storage
	cage allocated to that dwelling or within a shared facility)
Multi-dwelling and Attached Housing	No specific requirement (assumes adequate space is
	provided in the dwelling, storage or parking area)
Non-residential Uses (staff and visitors)	1 space per 500 m ² of GFA

Liverpool Council did not raise any objections to the proposed car or bicycle parking, however did raise concern about the impact of commuter car parking demand on the proposed development.

Public submissions raised concerns about the proposed maximum car parking spaces, in particular noting that limited parking spaces will force residents to park in streets and there is currently not enough parking for commuters at Edmondson Park Railway Station.

The Department notes the proposed 'maximum' car parking rates generally reflect the 'minimum' parking controls identified in either the Liverpool or Campbelltown DCP or RMS *Guide to Traffic Generating Developments*.

The Department supports rationalising parking requirements to discourage excessive private vehicle use and dependency and to promote sustainable transport in accessible locations such as the subject site. However, adequate parking for established land uses is essential to ensure onstreet parking remains available for visitors, acknowledging this is a suburban area where there is a reliance on private vehicles. The Department considers in this instance car parking rates should not be set as a 'minimum' or 'maximum', and has included a FEAR requiring car parking is provided generally in accordance with this rate. The Department supports the proposed rates and notes this would allow Liverpool Council the ability to assess future applications on their merits, without mandating a maximum or minimum requirement.

While car parking at Edmondson Park Railway Station does not form part of this modification, the Department acknowledges the concerns raised by Liverpool Council and public submissions. The entire FTC is within the 800 m threshold for walkability to the train station, and aims to create walkable, pedestrian friendly neighbourhoods. Therefore the proposal is not likely to have any material impact on the commuter car park, as it is expected residents will walk to the station.

The proposal would impact on the surrounding streets which are currently used for informal commuter car parking, both during construction and once the precinct is occupied. However, the Department notes while the on-street parking surrounding the site is currently not timed or restricted in any way, there is no approval or ongoing right to use the on-street spaces for commuter parking.

The Department considers the proposed minimum bicycle parking rates are appropriate, as this provides a bicycle space for each resident, and the opportunity for visitors to cycle to the town centre and park their bicycles safely.

5.5 Other matters

5.5.1 Heritage

The Proponent seeks to modify FEAR 1.14 to specify a Heritage Interpretation Strategy for the former Ingleburn Army Camp is only required for aboveground works and does not have to consider the relocation and reuse of prefabricated cottages (as these have already been demolished). The Proponent also seeks to modify FEAR 1.15 to remove the requirement for future applications inside the FTC to include a Statement of Heritage Impact (SoHI).

The Heritage Council's advice did not discuss the proposed modifications to these requirements but recommended the (SoHI) also consider impacts on other State Heritage Items including Denham Court, Horningsea Park, Glenfield Farm, Macquarie Fields House, Varroville and Robin Hood Farm. The Heritage Council also recommended conditions prescribing procedures to follow if unexpected archaeological items are found, and requiring construction activities to minimise impacts on nearby heritage items.

The Department considers the Proponent's requested modifications are reasonable. Below ground works are unlikely to affect the interpretation of the Ingleburn Army Camp, and it would be unreasonable to require an interpretation strategy for those works. Similarly, the request to not require a SoHI for the FTC is supported, as it is 200 m from the retained parts of the Army Camp and will be separated from it by residential subdivisions. Given the distance and intervening development, the FTC is unlikely to have an impact on the Army Camp.

The Department notes the items specified by the Heritage Council for inclusion in the SoHI are homesteads that have heritage significance in demonstrating early agricultural activity in colonial New South Wales. However, these items are between one and four km from the FTC, and have, or will have, substantial greenfield development separating them from the town centre. Given this distance and intervening development, the Department considers the likelihood of any direct or indirect impact on these items to be remote. Requiring an SoHI to consider these items would be unreasonable.

The remaining conditions recommended by the Heritage Council are more appropriate for later development applications, as they are specific to future construction requirements.

5.5.2 Flooding, water supply and water quality

The Proponent seeks to modify FEAR 1.20 to specify that future applications within the FTC do not need to demonstrate compliance with the flood strategy approved for the original Concept Plan. It also seeks to modify FEAR 1.21 to specify future applications in the FTC must provide water sensitive urban design (WSUD) in accordance with the addendum study prepared for the current modification.

The water cycle study provided with the modification shows the FTC is not flood affected. This accords with the relevant flooding maps in the SSP SEPP and Liverpool LEP, which show the site is not flood affected land.

The addendum WSUD study changes the anticipated drainage point from the FTC from that identified in the original WSUD study. This is due to changed ground levels following South West Rail Link earthworks. The addendum study identifies potential alternative measures. The Department accepts the need for the revision and the potential suitability of the alternative measures and considers the proposed modifications to FEARs acceptable.

Sydney Water's advice notes the site is serviced for potable water and recycled water, but wastewater services require augmentation to service the proposed population increase. The Proponent is required to ensure future development can be serviced. To reinforce this, the Department recommends a new FEAR requiring the Proponent to demonstrate sufficient utilities services are in place or will be in place to service future development.

The EPA's advice recommended the water quality targets are updated with site-specific water quality parameters in place of the generic water quality targets currently in the Concept Plan documents.

The Department accepts best practice water quality measurements have changed since the original Concept Plan approval. The Concept Plan approval's parameters are based on the Australian and New Zealand Environment Conservation Council (ANZECC) guidelines. These set standardised criteria for pollutant reductions. Contemporary practice is to establish site specific water quality goals based on local conditions.

The Proponent argues it would be unreasonable to change the targets given the current water quality targets under the Concept Plan are based on ANZECC. The Department accepts the Proponent's position. It would be unreasonable to change the water quality parameters to site specific targets given the modification does not significantly increase water quality impacts given the built-on area, impervious areas and likely run-off would not change as a result of of the modification.

5.5.3 Noise and vibration

EPA and Transport for NSW advice recommends future applications demonstrate consistency with the noise and vibration provisions in *Development Near Rail Corridors and Busy Roads – Interim Guidelines* (Interim Guidelines). The EPA also suggested measures to ensure dwellings in the TCC are adequately protected from noise associated with active outdoor uses (such as outdoor dining) to minimise land use conflict.

The Department notes the road and rail noise provisions of the State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) will apply to future development in the FTC. It sets standards for acoustic performance in buildings exposed to rail or road noise. The Interim Guidelines provide detailed design recommendations to mitigate noise impacts of transport infrastructure. The ISEPP requires consideration of these guidelines in the assessment of applications that trigger the ISEPP. As such, the Department considers the existing statutory framework adequately provides for consideration of the road and rail-related noise and vibration in future applications.

The Department agrees with the EPA regarding noise protection measures in the TCC. The Proponent accordingly revised the Design Guidelines to set an internal acoustic level for TCC dwellings. This is based on similar provision in the City of Sydney DCP 2012. The Department is satisfied this provides an appropriate framework to minimise noise conflict between different land uses in the TCC.

5.5.4 Construction Impacts

The Proponent seeks to modify FEAR 1.24a) to replace the requirement for future applications to assess construction impacts with a requirement for future applications to have a Construction Management Plan (CMP) at Construction Certificate stage.

The proposed modification assumes construction impacts will be acceptable, or can be made so subject to implementation of the CMP. This would limit the scope of Council's consideration of construction impacts in future applications. The Department therefore does not agree with the Proponent's request and supports the retention of the existing Concept Approval requirements.

5.6 Consideration of key issues raised in public submissions

Table 11 presents the key issues raised in the public submissions (as summarised in **Table 4**), and how the Department has considered each issue.

Concerns raised	Department comments		
Number of dwellings in town centre	 The Department considers the proposed increase in dwelling density has strong strategic justification in increasing housing stock and housing diversity in south-west Sydney, consistent with A Plan for Growing Sydney and the draft South West District Plan (Section 3). The Department considers this increase would have acceptable amenity impacts on surrounding residents (Section 5.2), would be adequately serviced by local infrastructure through the planning agreement (Section 5.3), and would have acceptable traffic impacts (Section 5.4). 		
Maximum building	• Section 5.2 considers building heights and finds them acceptable and		
height increase	 appropriate. The Department considers the heights acceptable because: there is no corresponding increase in density (i.e. the GFA/FSR does not change) the changed height controls would provide a town centre with varied building heights potential amenity impacts, such as overshadowing, are predominantly limited to the Residential Precincts in the town centre. Development within the TCC would be required to demonstrate that the increased height would retain two hours' mid-winter solar access to at least 70% 		
	of dwellings in the Residential Precinct.		
Solar access	 As discussed above, the Department considers residential properties will be adequately protected from overshadowing impacts and impacts on residential properties and public open space outside the FTC are acceptable (Section 5.2). 		
Traffic impacts	 Section 5.4 considers traffic and transport impacts of the proposal. The Department has reviewed the Proponent's traffic modelling and finds roads within the FTC and at key intersections with Campbelltown Road will achieve acceptable Levels of Service. The traffic modelling was provided to RMS for review. RMS did not raise any objection to the traffic modelling. 		
Adequacy of traffic modelling	 The Proponent revised traffic modelling following initial TfNSW/RMS comments. The revised modelling was provided to these agencies for review. TfNSW/RMS did not object to or raise concerns with this modelling. 		
Commuter car parking	 As discussed in Section 5.4, the Department does not consider the proposed modification will materially affect the availability of parking at Edmondson Park Railway Station. The proposal is to increase the residential population of the medium to high density town centre adjacent to Edmondson Park Railway Station. All of the dwellings in the town centre are within 500 m of the station, which is within the accepted 800 m limit for walking to a railway station. Moreover, the concept public domain layout indicates a street grid that provides clear and safe walking paths from between the station and the town centre. This would further encourage residents to walk to the station. 		
Amenity of public spaces	 The Department considers the amenity of public spaces, as depicted in the concept designs and Public Domain Plans will be of a high standard. Public spaces are expected to promote activity and a public sphere, and will accommodate a diverse range of activities and people. 		

DAs.

6. CONCLUSION

The proposal seeks to increase the number of dwellings within the FTC from by 972 (912 to 1884), increase the maximum height by approximately 43 m, provide Design Guidelines and a Public Domain Plan in place of a DCP, include an indicative internal road network, and a VPA.

The Department has assessed the merits of the proposal taking into consideration the issues raised in all submissions and considers the impacts have been satisfactorily addressed within the proposal and the recommended conditions.

The Department considers the proposal has strong strategic merit. It seeks to provide a substantial increase in dwellings and to provide a range of medium and high density housing typologies within walking distance of the new Edmondson Park Railway Station. This is highly consistent with directions and actions in *A Plan for Growing Sydney* and the draft *South West District Plan* that encourage additional housing supply and housing diversity in areas served by public transport.

The site has sufficient capacity to accommodate the increase in dwellings in terms of:

- built form and urban design outcomes
- infrastructure provision and development contributions and
- adequacy of the proposed road network and impacts on regional transport infrastructure.

The increased building heights within the TCC would encourage a diverse built form with a range of building heights and typologies. They would also define Edmondson Park's built form hierarchy by containing the increased housing within the TCC, which would allow the remainder of the Concept Plan Area to retain its low to medium density character. The Department has assessed amenity impacts of the built form in terms of overshadowing, and finds public open space and surrounding residential properties will retain sufficient solar access.

The Public Domain Plan provides a well-considered structure for the FTC that emphasises walkability and provides public open space and appropriate vegetation. Subject to the Department's recommended conditions, the Design Guidelines provide an appropriate framework to ensure a high standard of urban design and residential amenity.

The Department notes Council has agreed in principle to the Proponent's revised VPA offer. The Department considers that Council is best placed to understand Edmondson Park's local infrastructure needs, and has therefore recommended a condition requiring a VPA in accordance with the Proponent's public benefit offer.

The Department has considered the traffic and transport impacts of the proposal. TfNSW and RMS have considered the proposal's impact on Campbelltown Road and the Proponent's traffic modelling. These authorities require the Proponent's road network to be consistent with the planned Campbelltown Road upgrade but otherwise do not raise any objections. The Department recommends a FEAR requiring the Proponent to consult with these authorities about future applications, particularly those related to road infrastructure. The amount of car and bicycle parking provided is adequate and the proposal is unlikely to materially affect commuter car parking.

Following on from its assessment of the project, the Department of Planning and Environment considers the project is approvable, subject to conditions of approval (outlined in **Appendix E**). This assessment report is hereby presented to the Planning Assessment Commission for determination.

APPENDIX A RELEVANT SUPPORTING INFORMATION

The following supporting documents and supporting information to this assessment report can be found on the Department of Planning and Infrastructure's website as follows:

1. Modification Application

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7905

2. Submissions

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7905

3. Proponent's Preferred Project Report and Response to Submissions

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=7905

APPENDIX B CONSISTENCY WITH STRATEGIC PLANS

The proposal is consistent with the following relevant directions and actions of *A Plan for Growing Sydney* and *draft South West District Plan*:

Table 1: Consistency with	A Plan for Grou	wing Sydney
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Direction	Action	Department consideration
Direction 2.1: Accelerate housing supply across Sydney	Action 2.1.1: Accelerate housing supply and local housing choices. This action includes identifying where investments in local infrastructure can create housing supply, and providing housing supply and choice though Urban Growth NSW projects and priority precincts	The proposal includes 972 additional dwellings near a new railway station. This improvement in transport infrastructure provides an opportunity to increase housing supply. The proposal would increase housing choice and diversity in south-west Sydney by providing a mixture of apartments and medium density housing. This responds to Government initiatives to increase the supply of medium density housing in suburban Sydney, known as the 'missing middle'.
	Action 2.1.3: Deliver more housing by developing surplus or under-used Government land	The proposal fulfils this action as it increases housing supply on a formerly Government owned site.
Direction 2.3: Improve housing choice to suit different needs and lifestyles	Action 2.3.1: Require local housing strategies to plan for a range of housing types. These include providing a range of building forms and types, considering housing for different life stages, and considering local affordable housing needs	While the proposal is more developed and definite than a housing strategy, it clearly provides for a range of building forms and types for different life stages and household situations. These are also expected to supply housing at a greater range of price points than existing detached housing stock in the area.
Direction 2.4: Deliver timely and well planned greenfield precincts and housing	Action 2.4.1: Deliver greenfield housing supply in the North West and South West Growth Centres	While the proposal is no longer in the South West Growth Centre, it is still adjacent to that growth centre. The proposal delivers medium to high density greenfield housing supply in a town centre adjacent to the South West Growth Centre.

Table 2: Consistency with draft South West District Plan

Direction	Action	Department's consideration
	West District's five-year housing targets Action 4.3.6: Create housing	The proposal falls between these objectives. It is more specific than the creating capacity action, but the actual delivery will be through the
	District	subsequent DAs.

		The five-year (2016-2021) housing target for the Liverpool LGA is 8,250 dwellings. The additional 972 dwellings would make a significant contribution to this target.
Direction 4.4: Improve housing diversity and affordability	Action 4.4.1: Plan for housing diversity	The proposal (particularly the Design Guidelines) provides diverse housing in the form of apartments and medium density housing. This contrasts with and provides an alternative to the detached dwelling houses of surrounding suburbs.
Direction 4.6: Create great places – not just building houses	Action 4.6.1: Provide design-led planning	The proposal presents a vision for well-designed buildings and public spaces. The Department considers the Design Guidelines and Public Domain Plan would deliver on that vision, as discussed in Section 5.2 .

APPENDIX C REVIEW OF DESIGN GUIDELINES

 Table 1: Suggested changes to TCC Guidelines (see recommended FEAR 1.3C)

lssue	Proposed	Department's Recommendation	Justification
Alternative Design Solutions	Section 1.5 of the Design Guidelines reads:	Amend Section 1.5 to read:	The approach of allowing alternative design solutions to meet performance criteria is well-established in
		Should development not adopt a	documents such as the Apartment Design Guide
	Should development not adopt a	design solution, it may propose an	(ADG). The Departments supports this approach to
	design solution, it may propose an	alternative design solution. This	these Design Guidelines.
	alternative design solution. This	alternative solution will be assessed	
	alternative solution will be assessed	against the relevant performance	The performance criteria are broad, and it is difficult
	against the relevant performance	criteria. Should the relevant	to imagine a well-designed building that does not
	criteria. Should the relevant	performance criteria not be satisfied,	achieve those performance criteria. Writing in a
	performance criteria not be satisfied, the applicant is to demonstrate that	the applicant is to demonstrate that the proposal considers the vision and	provision that would allow the performance criteria to not be met would affect the functioning of the
	the proposal considers the vision and	principles. When assessing a design	guidelines and undermine the built form guality of the
	principles. When assessing a design	solution, the consent authority is to	FTC.
	solution, the consent authority is to	apply a flexible approach that allows	110.
	apply a flexible approach that allows	consideration of reasonable	It is not the role of the Design Guidelines to dictate
	consideration of reasonable alternative design solutions.	alternative design solutions.	the consent authority's interpretation of the guidelines.
Activation	Section 1.8 provides a written	Include a map that clearly depicts	This would clearly and unambiguously inform
	description of Main Street and activity streets.	Main Street and activity streets.	readers which streets require ground floor activation.
Activation	Section 4.2, Design Solution DS2.3	Amend DS2.3 to require active non-	This would activate the edge of the TCC. The non-
	provides:	residential uses such as retail	residential tenancies would provide a clear and
		tenancies at the corner of Soliders	active entry marker to the TCC.
	The ground floor of buildings not	Parade and the TCC east-west	
	facing Main Street or an activity	street and the Greenway and Main	
	street will be designed to minimise blank walls visible from the public	Street, and to require the Soldiers Parade frontage between	
	domain and sleeved with other uses.	Henderson Road and the Greenway	
	such as residential apartments,	is predominantly sleeved by	
	where possible.	residential, commercial and retail	
		uses.	

Building design / design excellence	No design review process included.	Require that Liverpool Council's Design Excellence Panel (DEP) reviews all development within its purview. This would include all substantial building works within the TCC. Also require that significant public domain works (which are not ordinarily considered by the DEP) are considered.	Design review would promote design excellence using suitably qualified and independent people for peer review. This would test the suitability and quality of proposed designs and use collaboration to create better design outcomes.
Building design	Part 3, Table 1 includes the following design characteristic: Diversity of architectural form and expression is encouraged within a framework of visual compatibility between different buildings.	Amend wording to: Diversity of architectural form and expression is oncouraged achieved within a framework of visual compatibility between different buildings.	The Department considers the FTC can achieve architectural diversity, and it is reasonable that the built form characteristics reflect this more definitively than the Proponent's suggested wording.
Building design / design excellence	No specific requirements for key buildings, such as the landmark tower and market hall.	Include a design excellence strategy for these buildings that considers the site's character, suitability, layout, setbacks, architectural design, materials and finishes, articulation, amenity, street activation and relationship with the public domain. The strategy will be approved by Council or the Department, and will be independently peer reviewed.	The concept design for the TCC presents these buildings as central to the built form identity of the TCC. If that is the case, the Design Guidelines must include robust design excellence provisions for those buildings to ensure they are of a sufficiently high standard to reflect the importance of these buildings.
Community / civic uses	Part 3, Table 1 includes the following design characteristic: <i>Community uses are centrally</i> <i>located to maximise accessibility to</i> <i>all dwellings.</i>	Amend wording to: Community uses are centrally located to maximise accessibility to all dwellings and to provide a strong civic presence in the Town Centre.	The Department considers a civic presence in the TCC important to reinforce a non-commercial function to the Town Centre, noting it is zoned and intended to be a mixed uses area. However, requirements for the nature and location of civic uses should not be prescriptive, noting provision and location of community facilities would be the subject of further discussion with Council as part of the VPA.
Building siting, scale and mass	Section 4.1, DS 3.1 provides:	Move this to Performance Criteria PC3.	This is a fundamental factor in building scale and mass, and is more appropriate as a performance criteria.

	Maximum building height and Gross Floor Area for the TCC complies with the Concept Plan (as modified).		
Building siting, scale and mass	Section 4.1 does not contain any provisions for setbacks, street alignments or podium building forms.	Include measures in Section 4.1 for setbacks and street alignments. Ground and first floor levels should be constructed to the street alignment, to provide an urban streetscape. The street wall height and tower setback must provide for a human scale at street level and allow for street tree planting in accordance with the Public Domain Plan.	Providing these measures will increase certainty about the building forms and streetscapes within the TCC.
Vehicle access	Section 4.4, DS4.8 provides: Access to car park entries and the loading dock(s) is from Bernera Road, Greenway and Soldiers Parade only.	Change wording to: Access to car park entries and the loading dock(s) is from Bernera Road, Greenway and Soldiers Parade only. Access is preferred / encouraged from Bernera Road and Soldiers Parade.	The Department considers Bernera Road is the most appropriate access point for parking and servicing in the TCC, as it is the highest order street surrounding the TCC. However, given the size of the TCC, the Department accepts exclusive access and servicing from Bernera Road would not be practical. Access from the Greenway should be limited due to
			Access from the Greenway should be limited du potential conflict with residential dwellings on th southern side of the Greenway.

Table 2: Suggested changes to Residential Precinct Guidelines

Issue	Proposed	Department's Suggestion	Justification
Building Design	Mews housing will have dwellings facing the shared mews. As indicated in the Residential Precincts concept design, this could result in blank garage walls facing the street.	Amend Section 5.2 to include measures to encourage windows to local street frontages, and to ensure blank walls don't face blank walls (i.e. blank facades have dwelling entries opposite).	The Department supports the mews house typology, particularly in terms of its pedestrian-friendly streets. However, this has the potential for local streets (i.e. through traffic streets) to be addressed by driveways and garage walls. The recommended change to the guidelines serves to minimise this potential.
Amenity	Tables 3 and 4 provide that 60 per cent of terraces and townhomes in	Increase this to 70 per cent of terraces and townhomes.	The proposed 60 per cent requirement is less than the DMDDG requires for all types of medium density

	each of the three residential stages will receive at least two hours' solar access to principal living areas or private open space between 9am and 3pm on 21 June.		 development, and that the ADG requires for higher density apartment development. Given the proposed dwellings are less dense than the built form anticipated by the ADG, the Department does not accept the lower solar access requirement proposed by the proposal, and considers it would lead to a poor amenity outcome. Given the predominant building typology (the townhome) does not have a direct comparison in the DMDDG and shares characteristics of medium density development and apartments, the Department considers 70 per cent across the entire Residential Precinct. This allows for the Proponent to take a somewhat flexible approach to the layout of this area while maintaining an acceptable level of amenity. The Department has already requested the Proponent nerease the solar access to 70 per cent. The Proponent responded by claiming the street layout limits the ability to achieve solar access due to east-west streets leading to north-south oriented townhomes, in which the south-facing townhomes would receive reduced amenity. The resultant solar access for the three residential stages would be between 60 to 70 per cent. The Proponent did not provide a detailed working of this figure, or explore any alternative dwelling layouts within the street configuration that might improve solar access. In any case, allowing fewer than 70 per cent of dwellings to receive solar access would be inconsistent with long-held statewide guidelines, set a poor precedent, and lead to poor residential amenity.
Amenity	Tables 3 and 4 provide the following private open space areas: <i>Terraces:</i>	Include a provision that principal private open space must be accessed directly from living rooms.	This would ensure open space areas are functional extensions of living areas (i.e. it would allow for indoor / outdoor spaces) and would be consistent

	25m ² with 3m minimum dimension <i>Townhomes:</i> 1 bdrm: 10m ² with 2.5m dimension 2 bdrm: 12m ² with 2.5m dimension 3+ bdrm: 15m ² with 3m dimension		with ADG and DMDDG requirements for private open space.
Dwelling size and dimensions	3+ bdrm: 15m² with 5m dimension Tables 3 and 4 provide the following minimum internal dwelling sizes: Terraces: 100m² Studio Dwellings: 45m² Townhomes: 1 bdrm: 50m² 2 bdrm: 70m² 3+ bdrm: 90m² The townhomes sizes assume one bathroom. Additional bathrooms require an extra 5m².	Update Table 3 (townhomes) to require an additional 12m ² for a fourth bedroom. Update Table 3 (townhomes) to require a minimum dwelling width of four m.	The Department acknowledges the terraces and townhomes are smaller than recommended in the DMMDG, although townhome sizes are consistent with the ADG. Notwithstanding this, the Department considers the dwelling sizes are acceptable. The Department notes that smaller medium density dwellings can assist housing diversity and affordability. In relation to townhomes, the Department appreciates these have similar characteristics to low rise apartments, and the ADG requirements are therefore appropriate guidelines. The additional 12 m ² for a fourth bedroom will ensure townhomes have sufficient size to accommodate those bedrooms. This is consistent with ADG requirements. The four metre minimum width for townhomes is necessary to ensure rooms can function for their required purposes, and to provide appropriate sunlight access. This width is consistent with the ADG.

APPENDIX D – CONSIDERATION OF PUBLIC AUTHORITY SUBMISSIONS

Issue	Concerns raised	Department comments			
Liverpool Council					
Infrastructure and Contributions	Research needed on infrastructure to support increased density, including schools	 The Department notes the VPA offer made by the Proponent and agreed by Council would include local infrastructure (Section 5.3). State infrastructure would be provided under the SIC levy for the South West Growth Centres. Decisions about the need for and location of schools is the responsibility of the Department of Education, separate to this application. 			
Infrastructure and Contributions	A Planning Agreement should be negotiated prior to approval of the modification	• The Department agrees, and notes Council has accepted the Proponent's VPA offer in principle (Section 5.3).			
Infrastructure and Contributions	Council would not support a Planning Agreement that effectively substitutes items such as the additional open space and traffic signals for the items already in the contributions plan for Edmondson Park.	 Noted. Council can negotiate monetary contributions and works in kind with the Proponent as part of the VPA offer. 			
Design Guidelines	Querying the legality of using Design Guidelines instead of a VPA.	 The Department notes the proposal is a modification to a transitional Part 3A project Due to these transitional provisions, any future Part 4 DA for the site must be consistent with the Concept Plan, which, as amended, will require future applications are consistent with the Design Guidelines. There will be an inconsistency between the relevant EPI (the SSP SEPP) and the Concept Plan, as the EPI requires a DCP and the Concept Plan does not. In this case, the Concept Plan requirement will prevail. (Section 5.2) 			
Design Guidelines	Suggest the Design Guidelines are revised and incorporated into the existing DCP.	• The Department has assessed the Design Guidelines in detail (Section 5.2). Subject to the Department's recommended changes, the Design Guidelines provide a framework that address all of the DCP requirements set by the SSP SEPP.			
Design Guidelines	The Design Guidelines should achieve the Town Centre Design Principles of the Edmondson Park South DCP 2012	 The proposal uses alternative design criteria to the DCP (i.e. the Design Guidelines) (Section 5.5). The Depart has assessed the design guidelines and considers they are informed by appropriate principles and objectives. The Department's assessment demonstrates the proposed height and FSR are acceptable (or can be made so subject to conditions), notwithstanding the inconsistency with development standards. VPAs are commonly used mechanisms to transparently provide additional contributions for infrastructure. 			

Design Ordeling	Design Outdalines should be be	
Design Guidelines	Design Guidelines should include accurate drawings showing the terrain and proposed built form	 The Design Guidelines do not show the terrain and built form. This is acceptable given the document is a DCP-equivalent, which would also not include terrain and specific building envelopes.
		• Specific terrain levels and building envelopes would be the subject of Part 4 DAs to Council.
Design Guidelines	Ownership of and access to streets and open space within the Town Centre.	 The Public Domain Plan clarifies ownership of and access to streets and public open space in the Town Centre. The RtS confirms that access and management of open space and streets would be in accordance with Council's preferences.
Design Guidelines	Quantum of communal private open space on rooftops and podiums	• This would be considered (by Council) in the assessment of DAs for these buildings, in accordance with the Apartment Design Guide.
Design Guidelines	Ensure there is sufficient depth and setbacks for street trees in the TCC and the Residential Precinct	 The Public Domain Plan includes indicative tree sections that include soil depths and building setbacks. Council will have the opportunity to consider street tree locations in its assessment of later
		DAs for buildings and the public domain.
Design Guidelines	Include measures to reduce heat build-up and noise transmission	 The Department considers the Public Domain Plan provides a sufficient tree canopy to reduce heat build-up given the density and urban built form of the proposal. The Proponent has revised the Design Guidelines to require minimum internal acoustic performance for apartments.
		• The road and rail noise provisions of ISEPP will apply to the proposal. This mandates acoustic standards for residential development affected by road and rail noise.
Design Guidelines	Include measures to activate and encourage ancillary measures around the periphery of the TCC, and specify that Soldiers Parade between Henderson Road and the Greenway is designated as an Activity Street	 The Department agrees this part of Soldiers Parade should be an active street and recommends the Design Guidelines are amended to require residential, retail or commercial uses (Section 5.2).
Public Domain Plan	Increase the width of the service laneway adjacent to Campbelltown Road from 3.5 m to 5.5 m	• The Department considers the 3.5 m indicative width is acceptable as it is one way and will be used for a limited distance.
Campbelltown Cou		
Traffic and Transport	Noted the increase in dwellings will lead to an increase in traffic, particularly on Campbelltown Road (which is the council boundary).	 The Department has considered the proposal's traffic impact in Section 5.4 and considers it acceptable. RMS will shortly commence an upgrade of Campbelltown Road into a four to six lane arterial road. RMS has received a copy of the proposal for review, including traffic modelling data. RMS has not raised any concerns about the proposal's impact on Campbelltown Road traffic performance.

Traffic Transport	and	Noted it is interested to understand RMS' comments on the proposal.	•	RMS has not raised any concern with the proposal's impact on Campbelltown Road traffic performance.
Traffic Transport	and	Requested copy of traffic modelling data for review.	•	RMS has been provided with a copy of the traffic modelling data for review. RMS is the relevant roads authority, and the Department considers RMS the most appropriate body to review this data.
Camden Co	uncil			
Consistency Strategic Pla		The proposed building heights will exceed the 24m height limit at Leppington, which is a higher order centre. This is inconsistent with the centres hierarchy, in which Leppington is the higher order centre.	•	The Department notes A Plan for Growing Sydney and the draft South West District Plan emphasise centres as employment, commercial and services centres. The proposal does not affect the amount of non-residential GFA. The Department therefore considers the proposal does not change Edmondson Park's place in the centres hierarchy.
Transport fo	or NSW			
Traffic Transport	and	Road connections to Campbelltown Road must be consistent with the RMS design as exhibited in the Review of Environmental Factors (REF) for the Campbelltown Road upgrade.	 Proponent, TfNSW and the Department. The Department recommends a future environmental assessment requirer / infrastructure DA requiring RMS approval of road connections to Can including the length of the five lane configuration for East Town Centre Ro The Department recommends a condition of approval requiring dedication for the Campbelltown Road widening prior to the lodgement of the first domain works DA with a frontage to Campbelltown Road. 	The Department recommends a future environmental assessment requirement for the roads / infrastructure DA requiring RMS approval of road connections to Campbelltown Road, including the length of the five lane configuration for East Town Centre Road.
Traffic Transport	and	Further discussion will need to take place about the length of the five- lane configuration for East Town Centre Road.		for the Campbelltown Road widening prior to the lodgement of the first building or public
Traffic Transport	and	Land dedication to Roads and Maritime Services is required for the approved ultimate road design plans for the widening of Campbelltown Road.		
Traffic Transport	and	RMS will review the updated micro- simulation modelling relative to other priorities but acknowledge it is not determinative for the current modification.	•	Noted.
Traffic transport	and	Retain the requirement to provide an updated microsimulation model for each significant DA in the FTC (FEAR 1.6).	•	The Department considers requiring an updated model for each DA would defeat the purpose of the Concept Plan to quantify the intensity of development and plan the internal road network accordingly.

		•	The Concept Plan sets the maximum parameters for development of the FTC. These cannot change without another modification to the Concept Plan. The Department proposes to only require an updated microsimulation model for DAs for roads and infrastructure. These DAs would consider matters such as optimal road configuration, widths and intersection controls and locations. The Department considers there is value in providing an updated microsimulation model at this stage, as it would inform and test the detailed internal road layout.
Traffic and transport	Notes Bernera Road's indicative 3.5 metre lane widths would allow that road to be used as a rapid bus route but request TfNSW is consulted if that width is reduced.	•	The Department considers it appropriate to include a new FEAR requiring consultation with TfNSW and RMS prior to the lodgement of the infrastructure / roads DA.
Traffic and transport	Request condition requiring the applicant to include a submission to RMS in compliance of the <i>Roads</i> and Maritime Traffic Signal Design Guide – Section 2 (Warrants).		
Traffic and transport	TfNSW acknowledge the removal of a previously proposed left in-left out access to Campbelltown Road and request a condition requiring consultation with RMS if this is reinstated.		
Impacts from and on transport infrastructure	Request the Proponent provide a report for TfNSW's review prior to the first DA demonstrating consistency with <i>Development Near Rail Corridors and Busy Roads – Interim Guidelines</i> .	•	The Department considers this requirement unnecessary. The ISEPP will apply to development within the FTC. The ISEPP mandates consultation or concurrence with TfNSW and/or RMS for development within or adjacent to rail or arterial road corridors. It sets standards for acoustic performance buildings exposed to rail or road noise, and allows relevant agencies to comment on potential construction impacts on transport infrastructure. The Interim Guidelines provide detailed design recommendations to mitigate impacts of and on transport infrastructure. The ISEPP requires consideration of these guidelines in the assessment of applications that trigger the ISEPP. The Department considers the existing statutory framework adequately provides for consideration of the Guidelines in future DAs to Council.

Environment Prote	ection Authority (EPA)		
Noise and vibration	Suggest internal noise standards for TCC apartments to minimise impacts of active land uses and outdoor seating.	•	The Department agrees with this suggestion and requested the Proponent include internal noise measures in the Design Guidelines. The Design Guidelines now include an internal acoustic standard for apartments to achieve with windows and doors closed. This is based on an equivalent <i>Sydney DCP 2012</i> provision, which the Department considers an appropriate benchmark.
Noise and vibration	Request updated assessment of rail noise impacts to reflect current operations and measures to ensure appropriate validation of noise mitigation measures.	•	As discussed above, the Department considers the ISEPP adequately provides for consideration of rail noise.
Water quality	Recommend updated and targeted water quality targets, rather than generic targets.	•	The Department accepts best practice water quality measurements have changed since the original Concept Plan approval. The Concept Plan approval's parameters are based on the Australian and New Zealand Environment Conservation Council (ANZECC) guidelines. These set standardised criteria for pollutant reductions. Contemporary practice is to establish site specific water quality goals based on local conditions. The Proponent argues that it would be unreasonable to change the methodology given the current water quality targets under the Concept Plan are based on ANZECC. The Department accepts the Proponent's position. It would be unreasonable to require the work involved in changing to site specific targets given the built on area doesn't change and the intensity of development (in terms of land area, impervious areas and likely run-off) hasn't significantly changed as a result of the modification.
Water quality	Suggest developer contributions could be used for water quality measures.	•	The Department's review of the <i>Liverpool Contributions Plan (Edmondson Park) 2008</i> does not indicate a nexus between the proposed modification and augmentation of water management measures, as they are based on built upon land area rather than population density. However, nothing would preclude the provision of water management measures as part of the VPA, provided both parties agreed to it.
Water management	Recommend wastewater requirements are resolved as part of the current modification rather than through later DAs.	•	The Department notes Sydney Water's advice that there is currently insufficient wastewater capacity to serve the proposed additional population. The Department therefore recommends a FEAR for the Proponent to consult with utilities providers regarding capacity prior to each DA under the Concept Plan. This is consistent with Sydney Water's advice that it will work with the Proponent to provide detailed wastewater modelling at the Section 73 certificate stage.
Water management	Requested further information on whether the existing sewerage	•	Sydney Water has confirmed the proposed additional dwellings will overload the existing network.

Waste management	system can support the additional wastewater load. Suggested provisions are included to ensure operational waste management is adequately considered in future DAs.	• • •	The Department expects the Proponent would need to augment the existing wastewater network to accommodate the additional dwellings. As discussed above, the Department recommends a FEAR requiring the Proponent to consult with utilities providers regarding capacity prior to each DA under the Concept Plan. Sydney Water's Section 73 certificate requirements can also be relied on to ensure appropriate wastewater provision. The Department notes the Design Guidelines provide for loading and unloading arrangements in the TCC basement. Given the Town Centre is a greenfield site, the Department considers operational waste management (i.e. ensuring there is sufficient space for waste storage and collection) can be adequately considered by Council in its assessment of subsequent DAs.
Sydney Water		1	
Wastewater	The proposed additional dwellings will overload the existing network.	•	Noted.
Wastewater	The Proponent should submit a scheme plan of the proposed development and Sydney Water will review that plan.	•	As detailed above, the Department recommends a FEAR requiring the Proponent to consult with utilities providers about their approval requirements prior to lodging each DA under the Concept Plan.
Endeavour Energy	/		
Electricity supply	Clarifies requirements to connect the town centre to the Edmondson Park Zone Substation	•	Noted.
Electricity supply	Advises Edmondson Park Zone Substation will not have full security of supply until mid-2019. This is because augmented connections between the Prestons and Edmondson Park Zone Substations are dependent on the timing of Liverpool Council's Croatia Road upgrade and RMS' Campbelltown Road upgrade.	•	As discussed above, the Department recommends a FEAR requiring the Proponent to consult with utilities providers regarding servicing adequacy prior to the lodgement of each DA. This would ensure that development staging is coordinated with infrastructure staging.
Heritage Division			
Heritage	Requested that the Heritage Impact Statement is amended to include the following State Heritage Items: Denham Court, Horningsea Park, Glenfield Farm, Macquarie Fields	•	These items are early homesteads. The Department acknowledges these homesteads have heritage significance in demonstrating the early agricultural activity in colonial New South Wales.

	House, Varroville and Robin Hood Farm.	•	However, these items are between one and four km from the FTC, and have, or will have substantial greenfield development separating them from the town centre (i.e. there are more immediate changes to the setting of these items than the current proposal). The Department considers the likelihood of any direct or indirect impact on these items to be remote. Requiring an HIS amendment to consider these items would be unreasonable.
Archaeology	Recommend standard actions in the event of uncovering unexpected archaeological relics during construction.		The Department understands the purpose of these conditions, but considers it premature to include them in a Concept Plan that does not give approval for construction works. The Department considers these requirements appropriate as conditions of consent for subsequent DAs.
Construction impacts	Ensure appropriate protection mechanisms are provided in a Construction Environmental Management Plan.		