

# Development Application Statement of Environmental Effects

## Top Ryde Shopping Centre Redevelopment Stage 2 Residential Development – Buildings B and F

Submitted to  
City of Ryde Council  
On Behalf of Bevillesta Pty Ltd

August 2008 ■ 06412

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# 1.0 Introduction

This report is submitted to the City of Ryde as part of a Development Application (DA) that seeks consent for a Stage 2 DA for two residential buildings, Buildings B and F, which form part of the residential component of the redevelopment of Top Ryde Shopping Centre.

This DA seeks approval for:

- 185 residential units in two buildings (Building B and Building F);
- design and embellishment of the Stage 1 residential allocated car parking (576 spaces) and part of the commercial allocated car parking (41 spaces) on Levels 3 and 4. Two (2) of the 576 car park spaces are proposed in this application for disable visitors and 2 additional bays are proposed in this application to be used exclusively as car wash bays for residents (totalling 619 car park spaces);
- allocation of a maximum of 233 designated car park spaces for Buildings B and F;
- facilities for residents including gymnasium, swimming pool and common rooms; and
- associated private and communal landscape works.

The application has been prepared on behalf of the applicant Bevellista Pty Ltd. JBA Urban Planning Consultants Pty Ltd has prepared this report based on plans and information provided by Bovis Lend Lease, Marchese and Partners Architects and supporting technical documents.

This report describes the site and its environs, the proposed development and includes an assessment of the proposal in terms of the matters for consideration as listed under Section 79C(1) of the Act. It should be read in conjunction with the supporting information and Architectural Drawings appended to this report (refer to Table of Contents).

This Statement of Environmental Effects (SEE) should be read in conjunction with the original SEE for a Staged Mixed Use Development dated November 2006 and Development Consent (DA672/2006).

## 1.1 Background – Previous Approvals

### Stage 1 (DA 672/2006)

The redevelopment of the Top Ryde Shopping Centre (TRSC) is being progressed out in stages. On 8 May 2006 Council approved **DA 672/2006** for a Staged Mixed Use Development (DA 672/2006 hereafter referred to as the 'Stage 1 DA'). The Stage 1 DA approved:

- the detailed design and construction of a mixed use development comprising retail, entertainment, civic and commercial uses within a podium level development, with associated car parking, access and public domain works (referred herein as the 'Stage 1 Development'); and
- in principle or concept approval for the commercial and residential elements of the development above the Stage 1 podium levels of the development, which comprises five residential buildings, Buildings B, C, D, E and F and two commercial buildings.

DA 672/2006 has subsequently been amended by a series of Section 96 applications. The amendments predominantly relate to the internal configuration of the shopping centre development and the provision of an additional parking level, referred to as Basement Parking Level 3.

## Other Relevant Approvals and Development Applications

DAs approved to date which have facilitated the redevelopment of TRSC, including the retail component currently being constructed, include:

**DA 671/2006 Stage 1** – Early Works DA approved the following works on 8 May 2007:

- removal and proper disposal of hazardous materials located throughout the centre and adjoining shops;
- demolition of all existing built structures including all subterranean structures on the site;
- removal of all existing trees and vegetation / landscaping;
- temporary removal of existing bus shelters / stops from the western side of Devlin Street;
- bulk excavation of the site and part of Devlin Street to a maximum depth of approximately RL38.10 metres (m) with miscellaneous excavation to RL34.70m for pits, plenum, trenches and the like;
- site remediation works;
- associated shoring and retention systems (piling) for the excavation;
- hoardings and fencing to secure the site;
- removal of existing street lighting and bus stops on the eastern side of Devlin Street and replacement with temporary lighting; and
- decommissioning and disconnection of existing services, including disconnection of the existing water main located on the western side of Devlin Street.

**DA1025/07** – Construction of slab Levels 3 and 4 and façade treatment

- construction of slab levels to and including Level 3 and Level 4; and
- extension of facade treatment to 1,200mm above the slab of Level 4.  
DA approved: 31 March 2008.

Various other minor approvals have been granted including service relocations, hoarding signage, substation upgrade and major tenant fit-outs.

## 1.2 Pre-Stage 2 DA Meetings

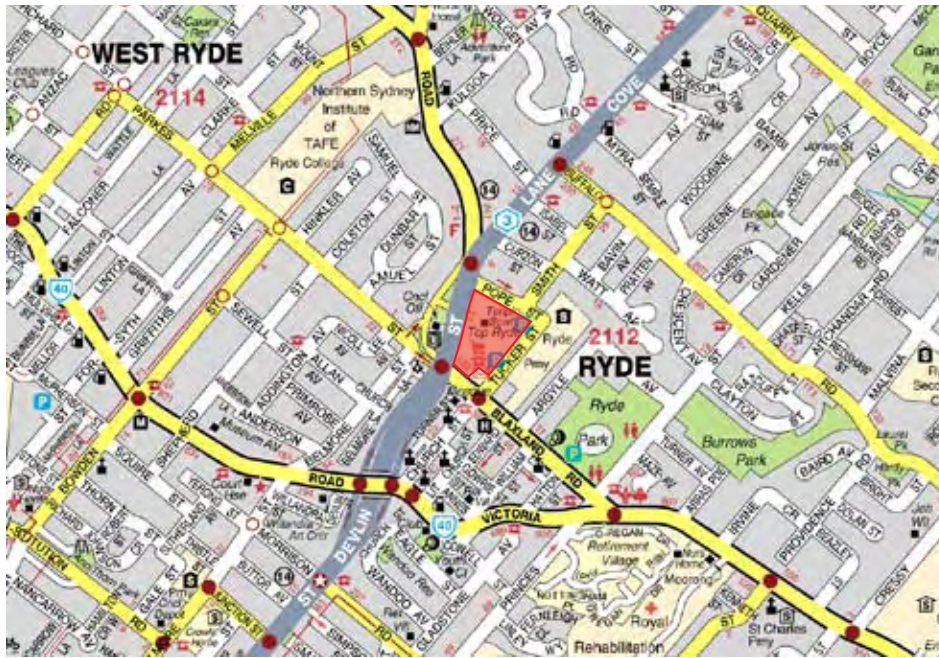
Several pre-DA and other associated meetings have been held with Council officers. Issues raised at these meetings have been considered in preparing the proposal and are addressed in this report. The latest Pre DA meeting regarding Buildings B and F was held on 27 May 2008. Council's minutes of the meeting held on 27 May 2008 are provided at **Appendix A**.



## 2.0 Site Analysis

### 2.1 Site Location and Context

The site, referred to as the Top Ryde Shopping Centre (hereafter TRSC), is located in the heart of the Ryde Town Centre. It comprises the majority of land within the block bounded by Blaxland Road, Devlin Street, Pope Street and Tucker Street, Ryde. The site is located approximately 13 kilometres to the north-east of the Sydney CBD. It has close and convenient access to Victoria and Epping Roads. The site’s locational context is shown in **Figure 1** below.



**Figure 1** – Locality Plan

### 2.2 Site Description

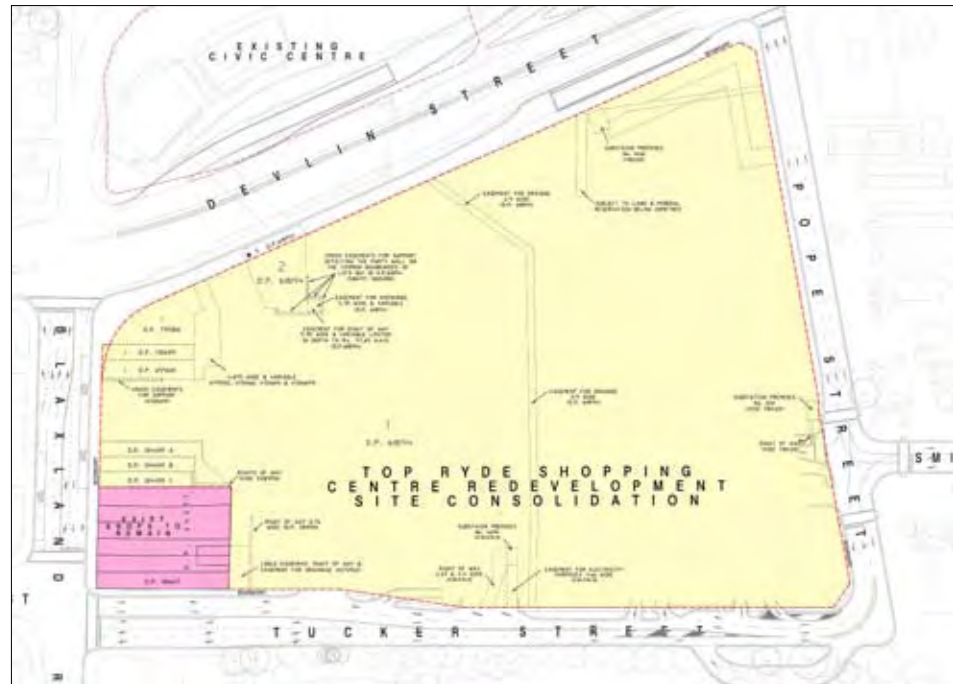
#### Site Description – Top Ryde Shopping Centre

The land to which TRSC (Stage 1 DA) relates is identified within **Table 1** and at **Figure 2**. Site Survey Plans prepared by Degotardi, Smith and Partners are included at **Appendix B**.

**Table 1** – Current Legal Description of Land Related to TRSC

Legal Description	Registered Proprietor
Lot 1 DP 618154*	Bevillesta Pty Ltd*
Lot 2 DP 618154	Bevillesta Pty Ltd
Lot A DP 104409	Bevillesta Pty Ltd
Lot B DP 104409	Bevillesta Pty Ltd
Lot C DP 104409	Bevillesta Pty Ltd
Lot 1 DP 795810	Bevillesta Pty Ltd
Lot 1 DP 130689	Bevillesta Pty Ltd
Lot 1 DP 655601	Bevillesta Pty Ltd
Lots 6 & 7 DP24237	Bevillesta Pty Ltd

\* These lots are intended to be consolidated and subdivided by plan of subdivision which is currently the subject of a DA being assessed by Council.



**Figure 2** – Top Ryde Shopping Centre (Current) Site Plan

There are several easements and structures registered on the title for Lot 1 DP 618154 (which comprises the majority of TRSC site). These easements are for the purposes of drainage, electricity, substation premises, cables, structural support, land and mineral reservation, overhanging and right of way. Details of the easements and structures over the TRSC site are provided in the Cadastral Plan prepared by Degotardi, Smith and Partners attached in **Appendix B**.

A separate DA has been lodged which seeks to consolidate the existing lots on-site, which relate to the previous land uses and then subdivide land to enable the various components of the TRSC to be provided for.

### Site Description – Buildings B and F

Buildings B and F are principally located on the main TRSC lot (being Lot 1 in DP 618154). Building F is partly located on Lots A, B and C in DP104409. A separate subdivision DA is currently lodged with Council to subdivide the relevant commercial, retail and residential components. Under this subdivision DA, Building B and F is located within proposed lots 9 and 13.

Building B is located in the centre of the site (Refer to **Figure 3**). Building F is located in the south western corner of the site, adjacent to Tucker Street (Refer to **Figure 3**). The remaining buildings (Buildings C, D and E for which development consent will be sought in later stages) are located on the corner of Blaxland Road and Tucker Street.



Figure 3 – Buildings B and F Location Plan

## 2.3 Existing Development

The whole of the site is currently a construction zone for the staged mixed use development element (Stage 1) of TRSC (Refer to **Figure 4**). TRSC will deliver a balanced mixture of retail, commercial, entertainment, recreation, residential and community uses. The easements identified above in no way impede the development of Stage 2 (Buildings B and F).



Figure 4 – Aerial photograph of the current construction works on the site (May 2008)



## Supporting Road Improvements

To facilitate the redevelopment of TRSC, a number of road improvements are currently being implemented. The road improvements are provided as part of the Integrated Traffic Solution for Ryde Town Centre, prepared by Mark Waugh Pty Ltd as part of the Stage 1 DA, under the requirements of Ryde LEP 143. These works will improve the level of service on the adjacent roads and will be provided by the time Buildings B and F are completed. The works include:

- provision of an integrated ramp access system to the retail element of TRSC off Devlin Street;
- new pedestrian overbridges across Devlin Street; and
- new signalised site access from Smith and Pope Street which will form the key point of access for the residential component of the overall development.

The full range of improvements which support the redevelopment of TRSC are documented in the TRSC Redevelopment Traffic Study, November 2006, which accompanied DA672/2006.

## 2.4 Site Analysis

A detailed site analysis was undertaken as part of Stage 1. The main planning opportunities and constraints for the development are illustrated in Site Analysis Plan at **Figure 5** and, those particularly relevant to Buildings B and F can be summarised as:

- the site is large in area and bound on all sides by busy arterial and local roads;
- the site slopes steeply from the west to the east;
- the site has interface with various uses including residential, educational, civic, retail and commercial; and
- all vegetation on site has been removed as part of the ongoing redevelopment.

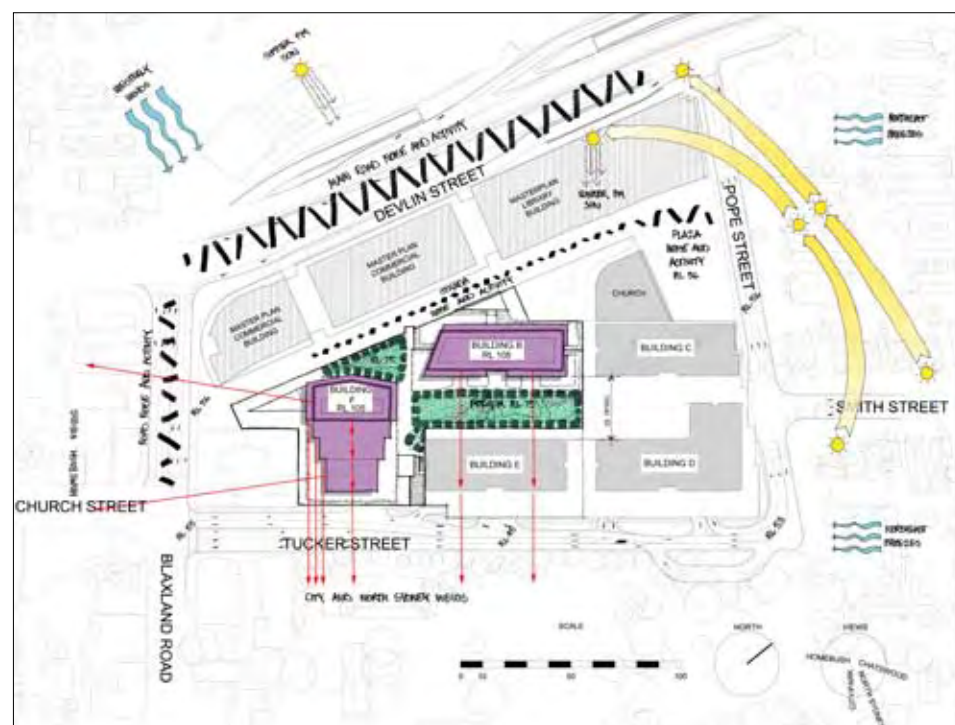


Figure 5 – Site Analysis Drawing

## 2.5 Surrounding Development

The area surrounding the development site contains a mix of established residential, commercial and community land uses. An aerial photo and surrounding street network is identified in **Figure 6**.

A range of commercial and residential land uses are located to the north. Uses to the north of Pope Street include four storey residential flat buildings, single storey dwellings, and both single and double storey commercial premises. The area to the north west of the site (on the opposite side of Pope Street) predominantly contains high density residential flat buildings. A child care centre is located at the eastern end of Pope Street, adjacent to the Ryde Public School.

To the east on the opposite side of Tucker Street is Ryde Public School and associated playing field. Commercial land uses occupy the southern end of Tucker Street towards the intersection of Tucker Street and Blaxland Road.

To the south is the Blaxland Road commercial precinct. The buildings are predominantly two storeys in height with retail and commercial businesses located on the ground floor and commercial and/or professional services located on the first floor. Blaxland Road presents an active street frontage as a result of the high level of pedestrian traffic generated by the retail/commercial premises.

To the west, on the opposite side of Devlin Street, is Ryde Civic Precinct, comprising the Ryde Civic Centre, Civic Hall, War Memorial and a Public Library. Further west beyond the Ryde Civic Centre is an established residential area characterised by detached dwelling houses (Refer to **Figure 6**).

A detailed assessment of the surrounding development was provided in the SEE submitted in support of DA672/2006 (November 2006).



**Figure 6** – Aerial photo and surrounding street network

## 2.6 Views and Vistas

### Views from the Site

Views at present from the site are limited to the local streets as the site is currently a construction zone. After the completion of the shopping centre component up to and including Level 4, being the podium level of the residential buildings, district views will be obtained south east towards North Sydney and Sydney CBD and west towards Homebush, providing significant amenity benefits for residents.

Local views can be obtained to the surrounding area, including to Council's Civic building and library across Devlin Street.

### Views to the Site

The location of the site at the intersection of Devlin Street and Blaxland Road is prominent within the Ryde Town Centre given its size and access to various roads. The topography of the site and of the Ryde Town Centre obscures the visibility of the site from within the Town Centre.

From the highest point within the Town Centre, St Anne's Church at the southern end of Church Street, the site in its current form is not visible above the ridgeline. The most visually dominant portion of the site, and subsequently the shopping centre element will be able to be viewed from Tucker Street. The Stage 1 consent established building envelopes that respect the prominence of the site and views into the site.

## 2.7 Heritage and Archaeological Context

The original and now demolished TRSC is listed as a heritage item No. 272 in the Ryde Planning Scheme Ordinance. Notwithstanding this demolition, and current construction of a new shopping centre, the heritage listing has not yet been removed from the LEP. A full archival record of the demolished shopping centre is held by Ryde Council.

The SEE submitted in support of DA672/2006 detailed the heritage significance and archaeological context of the site and surrounding area. Other Heritage Items identified in Schedule 15 of RLEP No. 105 that are located within the vicinity of the site include:

- Item No. 48 – Former Court House, 42 Church Street.
- Item No. 49 – St Anne's Church, 46 Church Street.
- Item No. 50 – Church and Church Hall, 25-27 Church Street.
- Item No. 79 – Ryde Public School, Tucker Street.
- Item No. 165 – Church Hall, 27 Church Street.
- Item No. 177 – Ryde Park, 7 Blaxland Road
- Item No. 215 – St Anne's cemetery, 46 Church Street.
- Item No. 243 – Great North Road, Bedlam Point to Eastwood.
- Item No. 276 – Masonic Temple, 142 Blaxland Road.
- Item No. 303 – Church, 22 Blaxland Road.

The location of heritage items (including the original TRSC) are identified at **Figure 7**.

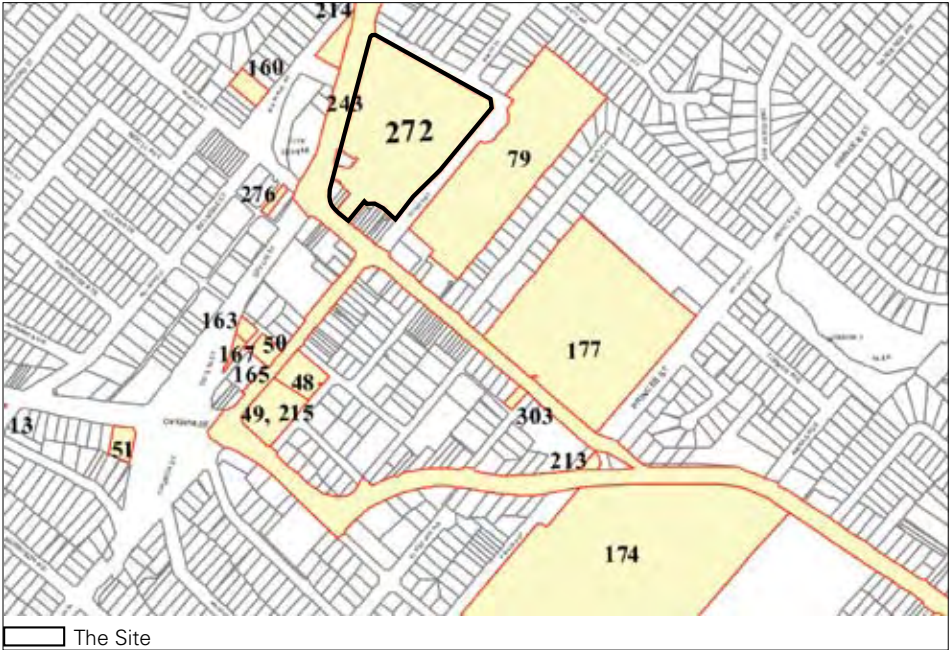


Figure 7 – Location of heritage items within the vicinity of the site



## 3.0 Relevant Planning Instruments and Controls

### 3.1 Relevant Planning Instruments

The following planning instruments (and draft planning instruments) are relevant to the proposed development:

- State Environmental Planning Policy (Infrastructure) 2007;
- State Environmental Planning Policy No. 65 – Design Quality for Residential Flat Buildings (SEPP 65) and Residential Flat Design Code;
- Draft State Environmental Planning Policy No. 66 - Integration of Land use and Transport (Draft SEPP 66);
- Ryde Planning Scheme Ordinance (as amended by RLEP 143); and
- Ryde Development Control Plan 2006 (DCP 2006).

### 3.2 Key Planning Controls

The key planning controls for the development are set out in **Table 2** below. A detailed table of compliance identifying all relevant planning provisions and controls is included **Appendix C**.

**Table 2 – Key Planning Controls**

Instrument	Standard / Development Control
Infrastructure SEPP 2007	Traffic generating developments are to be referred to the RTA for due consideration.
SEPP No. 65 – Design Quality of Residential Flat Development	This policy aims to raise the design quality of residential flat development through the application of a series of design principles. The accompanying regulation requires the involvement of a qualified designer throughout the design, approval and construction stages.
Draft SEPP No. 66 – Integration of Land use and Transport	Developments should utilise proximity to transport through appropriate densities, design and accessibility to discourage car usage, more readily achieve the state's air quality goals and utilise investment in public transport infrastructure.
Ryde LEP 143	
Clause 51H Maximum RL or storeys	The maximum height permissible for development in Precinct 2 (Refer to Figure 21) is RL91. Consent may be granted for the construction of a building that exceeds RL91, but if no part of the proposed building exceeds RL105.
Schedule 19 – Planning Principles for Ryde Town Centre	Development within the Ryde Town Centre should contribute to the status of the land as an important retail, business, employment, recreational, entertainment, civic and residential centre.
Schedule 20 – Planning Controls for Ryde Town Centre Precincts Precinct 2 – Town Core	(1) The maximum nett useable floor area for Precinct 2 is 150,000m <sup>2</sup> with a land use mix that includes: <ul style="list-style-type: none"> <li>(a) A minimum 15% being residential development, and</li> <li>(b) A maximum 45% being development for the purpose of shops.</li> </ul>
	(2) An adequate mix of land uses in the Precinct will be achieved.
	(3) This sub-clause applies to development in Precinct 2 that would result in: <ul style="list-style-type: none"> <li>(a) the total nett usable floor area in all buildings in the Precinct exceeding 30,000m<sup>2</sup>, or</li> <li>(b) residential use in the precinct.</li> </ul>



Instrument	Standard / Development Control
	<p>(4) Consent must not be granted for any application for development that is residential or that exceeds a nett useable floor area of 30,000m<sup>2</sup>:</p> <p>(a) unless the DA is for the whole of the Precinct, and</p> <p>(b) the DA proposes an integrated traffic solution for Precincts 1 and 2, that to the satisfaction of the consent authority, takes account of the total development potential of both Precinct and includes:</p> <p>(i) primary vehicular access from Devlin Street utilising grade separation in the form of access ramps and underpasses under Devlin Street and into basement car parking, and</p> <p>(ii) is consistent with the map marked Devlin Street Integrated Traffic Solution deposited in the office of the Council of the City of Ryde.</p>
	<p>(5) The proposed development is to include:</p> <p>(a) a north-facing plaza of not less than 2,000m<sup>2</sup> with a minimum area of 1,500m<sup>2</sup> that must be publicly accessible;</p> <p>(b) a main pedestrian thoroughfare of not less than 10m wide running north south and connecting the plaza and Pope Street to Blaxland Road;</p> <p>(c) community related uses, such as a library, of not less than 2,500m<sup>2</sup> of nett useable floor area;</p> <p>(d) a long day childcare centre catering for at least 60 children including babies, toddlers and pre-schoolers and the provision of an occasional childcare centre for at least 40 children; and</p> <p>(e) two all weather protected footbridges connecting areas west of Devlin Street.</p>
	<p>(6) When granting consent to a development to which subclause (3) applies, the consent authority must be satisfied that the component of the development that comprises the integrated traffic solution (as referred to in subclause (4)(b) is to be completed to the satisfaction of the consent authority before the occupation of any buildings that is the subject of the consent.</p>
	<p>(7) Car parking provided in excess of the standards set out in the Ryde DCP 29A Parking (now DCP 2006) are not to be included in the calculation of nett useable floor area if the car parking is designed and located so that is not visible when viewed from public streets, thoroughfares and plazas.</p>
	<p>(8) Consent must not be granted for development unless the consent authority has considered the following:</p> <p>(a) An Access Management Plan</p> <p>(b) Design Quality Plan</p> <p>(c) A Public Domain Enhancement Plan</p> <p>(d) An Arts and Cultural Plan</p> <p>(e) An Economic Impact Report</p> <p>(f) A Social Impact Assessment and Report</p> <p>(g) A Staging Plan</p> <p>(h) A Construction Management Plan</p> <p>(i) A 3D Computer Model of the development</p>
<p>Ryde DCP 2006 Section 3.4 – Residential Flat Buildings</p>	<p>Section 3.4 of DCP 2006 sets design standards for Residential Flat Buildings in Ryde.</p>
<p>Ryde DCP 2006 Section 4.4 – Ryde Town Centre</p>	<p>Section 4.4 of DCP 2006 outlines planning strategies and controls to ensure that development in the Ryde Town Centre is attractive, accessible and unique. This section also provides detail controls applying to Precincts 1, 2 and 3.</p>

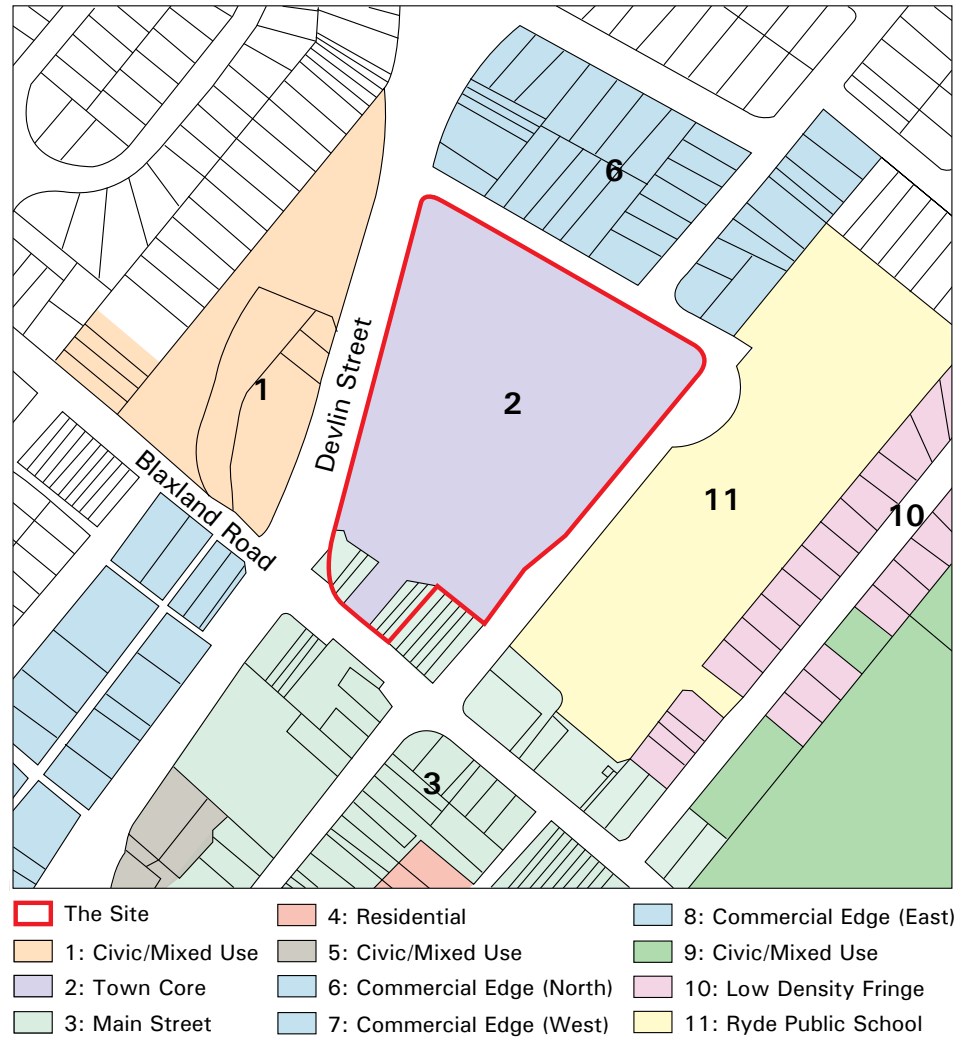


Figure 8 – Ryde LEP 143 Precinct Plan

## 4.0 Description of Development Proposal

This section of the report provides a detailed description of the proposed development, which comprises the following:

- 185 residential units in two buildings (Building B and Building F);
- design and embellishment of the Stage 1 residential allocated car parking (576 spaces) and part of the commercial allocated car parking (41 spaces) on Levels 3 and 4. Two (2) of the 576 car park spaces are proposed in this application for disable visitors and 2 additional bays are proposed in this application to be used exclusively as car wash bays for residents (totalling 619 car park spaces);
- allocation of a maximum of 233 designated car park spaces for Buildings B and F;
- facilities for residents including gymnasium, swimming pool and common rooms; and
- associated private and communal landscape works.

Architectural drawings of the proposed development, including architectural perspectives, prepared by Marchese and Partners, are included at **Appendix D**. The Architectural drawings are supported by a SEPP65 Statement and Design Statement, prepared by Marchese and Partners, included at **Appendix E**. A landscape plan and statement, prepared by Oculus, is included at **Appendix F**.

An architectural perspective of the Buildings B and F is provided in **Figure 9**. As agreed with Council, a complete scale model of the development is available for public viewing at the site office, operated by Bovis Lend Lease. A photograph of the model is provided at **Appendix G**.

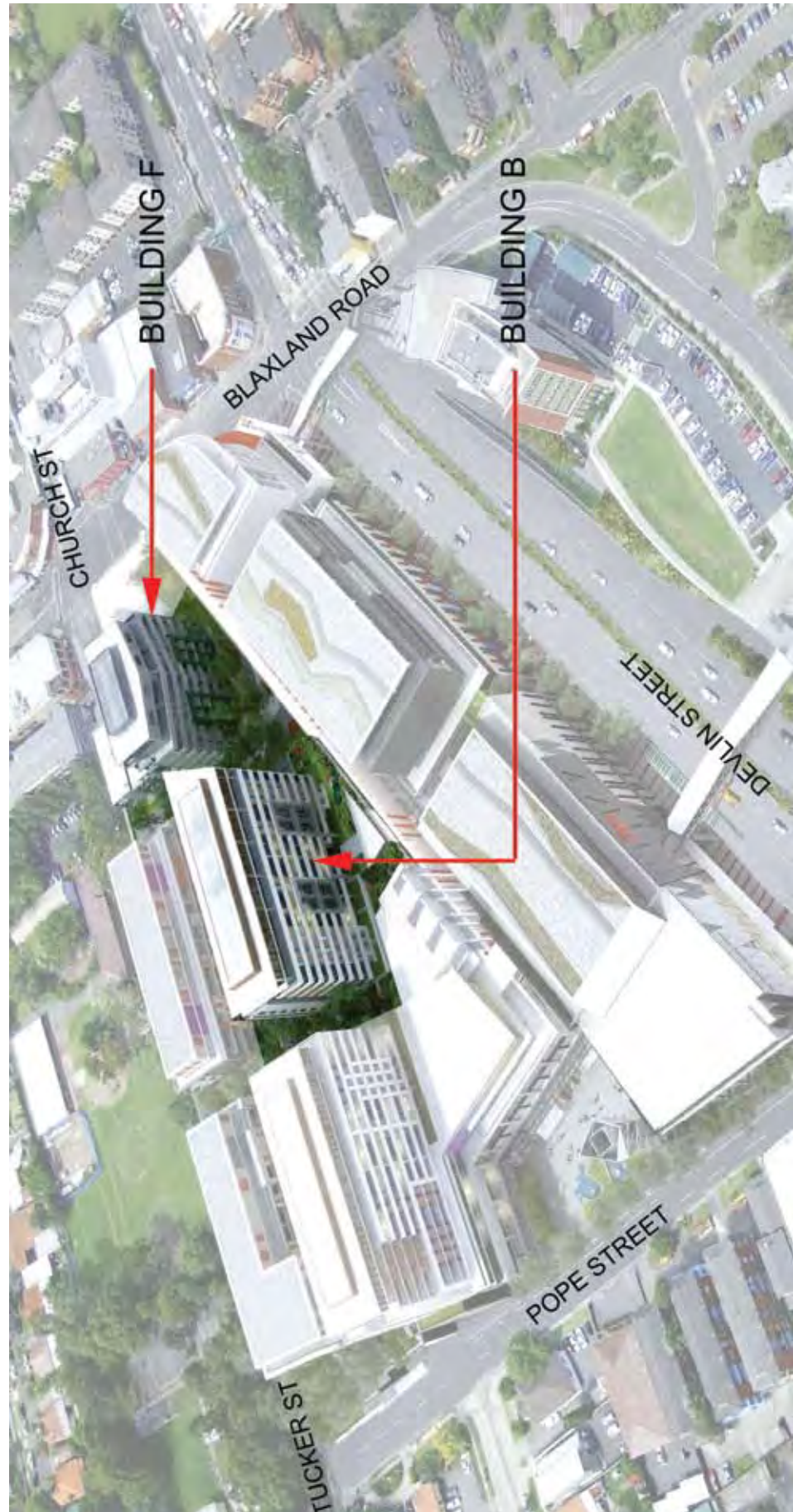


Figure 9 – Redeveloped Top Ryde Shopping Centre, including the retail, residential and commercial component

## 4.1 Development Principles

### Relevant Stage 1 Development Principles

The SEE for Stage 1 included development principles for the building envelopes for subsequent stages. These principles have been adopted and adhered to as part of the preparation of this DA. The design objectives, relevant to Residential Buildings B and F, can be summarised as:

- to minimise any potential for additional overshadowing to adjoining development, particularly to the Ryde Public School (south);
- to maintain the amenity of occupants within the adjoining buildings to the south of the site;
- to optimise outlook for residents of the proposed development;
- to optimise solar access to the development during winter months and reduce solar penetration during summer;
- to provide a high level of amenity and privacy to future residents;
- to complement and integrate with the design and function of the Stage 1 component of the development; and
- to ensure adequate ventilation to residential units and commercial office spaces.

The development proposed as part of this DA is consistent with the concept proposal approved as part of the Staged Mixed Use DA, DA672/2006.

### Independent Environmental Assessment

As part of Councils assessment of the concept proposal for the residential components of the redeveloped TRSC, Council commissioned Architectus to undertake an Independent Environmental Assessment.

The Architectus Independent Environmental Assessment Report, prepared in April 2007 makes the following comments with regards to the concept proposals for the residential element:

*“The principles for defining the concept proposal building envelopes are sound planning principles... we consider that the principles define building envelopes which attempt to minimise environmental impacts in terms of overshadowing, impacts on items of heritage significance, appropriate relationship in scale with the public domain areas of the site and adjoining the site, optimise views from the site, optimise the amenity of workers and residents in terms of solar access, natural ventilation and privacy are appropriate.*

*Generally, the design principles establish appropriate parameters for defining building envelopes from which stage 2 designs can optimise the amenity of workers and residents...”*

Source: Page 119, Top Ryde Shopping Centre, Independent Environmental Assessment Report, April 2007, Architectus.

This Stage 2 DA adheres to the envelope established and assessed by Architectus at Stage 1.



## Residential Buildings Development Principles

The Design Statement (**Appendix E**) prepared by Marchese Partners Architects describes the planning and design principles adopted for the residential component of the redevelopment of TRSC.

The design principles for the residential component are:

- Principle 1: 'Perimeter Arrangement', maximising common open space, functionality of the open space, separation distances between buildings and light penetration.
- Principle 2: 'Large Open Common Landscaped Space', providing different types of spaces, which are more intimate, allow for a variety of more specialised uses whilst retaining the feeling of a large open area.
- Principle 3: 'Building Component Parts', breaking down the scale of the development.
- Principle 4: 'Circulation', to maximise secure and clear circulation routes for residents, visitors, services and deliveries.
- Principle 5: 'Façade and Materials', providing superior and attractive articulation and modulation.

## 4.2 Numeric Overview

**Table 3** provides a summary of key numerical information relating to the proposal.

**Table 3** – Key Development Information

Component	Building B	Building F
Building footprint	1,348m <sup>2</sup> (Approx)	1,632m <sup>2</sup> (Approx)
NUFA <sup>1</sup>	8,648m <sup>2</sup>	7,692m <sup>2</sup>
Height (AHD) (Top of Plant)	RL105	RL91 - RL105
No. of apartments	106	79
Aggregate for Buildings B and F		
Car parking spaces	A maximum of 233	
Private Open Space	From 6m <sup>2</sup> to 77m <sup>2</sup> (Refer to a complete schedule at Appendix H)	
Communal Landscaped area	1,816m <sup>2</sup>	

1 NUFA is defined under the Ryde LEP143 to mean:

*"floor space, excluding the following:*

- (a) walls,*
- (b) stairs, lobbies, corridors and other space permanently set aside for circulation,*
- (c) lift wells and service ducts,*
- (d) toilets and space permanently set aside for common storage,*
- (e) plant, machinery and service areas, including service corridors and garbage areas,*
- (f) car park ticketing booths, trolley return areas and associated storage space,*
- (g) kiosks, but only if temporary and designed to be readily relocated, and placed within public circulation areas,*
- (h) terraces, balconies or like spaces with walls less than 1.5 metres high."*

## 4.3 Building Height and Setbacks

### Building Height

The entry foyer and the common landscaped space to Building B and F are located at the podium Level 5, at RL75.7. This level is approximately 20m above the Strada<sup>2</sup>. The proposed building heights range from RL91 to a maximum of RL105, consistent with the requirements of LEP 143 and the approved Stage 1 concept envelopes.

### Building Setbacks

Building B and F setbacks from the four roads which form the perimeter of the site are detailed in **Table 4**.

**Table 4** – Proposed Building Setbacks

Minimum Setback	Building B	Building F
Devlin Street	50m	60m
Pope Street	80m	160m
Tucker Street	70m	10m
Blaxland Road	110m	50m

Building F is setback 6m from the podium edge along Tucker Street. Where the site increases in width, Building F is setback 12m from the podium edge. As a consequence of the podium's height, from Tucker Street Building F will be barely perceivable from the street. The western facades of both Buildings B and F have been setback from the podium edge along the retail Strada.

## 4.4 Land Use and Floor Space

### Land Use and Floor Space

A total of 185 apartments are proposed, 106 in Building B and 79 in Building F. Land use and floor space per floor is detailed at **Table 5** and the proposed apartment mix is detailed in **Table 6**.

**Table 5** – Floorspace by Level

Level	Land Use	Building B	Building F
		NUFAm <sup>2</sup>	NUFAm <sup>2</sup>
4	Residential	394	-
	Residential gym / swimming pool	-	410
5	Residential	768	846
	Common Rooms	-	233
6	Residential	946	1164
7	Residential	946	1198
8	Residential	946	866
9	Residential	946	896
10	Residential	960	555
11	Residential	960	544
12	Residential	851	467
13	Residential	931	512
Sub Total		8,648m <sup>2</sup>	7,691m <sup>2</sup>
Total		16,339m <sup>2</sup>	

<sup>2</sup> Strada – A key component of the staged mixed use element is the Strada. The Strada provides a through site link between Tucker Street and Pope Street. The Strada is pedestrian only, open to the sky and forms the central spine of the mixed use development.

**Table 6** – Proposed Apartment Mix

Apartment Type	Building B		Building F		Aggregate	
	No. of Apart	%	No. of Apart	%	No. of Apart	%
1 Bedroom	13	12	20	25	33	18
1 Bedroom + study	26	25	2	3	28	15
2 Bedroom	54	51	11	14	65	35
2 Bedroom + study	2	2	42	53	44	24
3 Bedroom(+ study)	11	10	4	5	15	8
Total	106		79		185	

### Unit Size

The proposed development provides for generous apartment sizes, ranging from:

- 51m<sup>2</sup>- 64m<sup>2</sup> for 1 bedroom apartment;
- 57.5m<sup>2</sup>- 70m<sup>2</sup> for 1 bedroom plus study apartment;
- 76m<sup>2</sup>- 127m<sup>2</sup> for 2 bedroom apartment; and
- 79m<sup>2</sup>- 109m<sup>2</sup> for 2 bedroom plus study apartment; and
- 110m<sup>2</sup>- 143m<sup>2</sup> for 3 bedroom apartment.

The proposed apartment sizes exceed the minimum requirements as set out in the NSW Government's Residential Flat Design Code (SEPP 65), enabling well organised, functional, high quality apartment layouts which maximise views.

## 4.5 Landscaping and Open Space

A communal residential roof garden is proposed on the podium, at Level 5. 1,816m<sup>2</sup> of communal open space will be provided as part of this Stage 2 DA (Refer to the Landscape Plan, provided at **Appendix F** and illustrated in **Figure 10**). The communal open space will be extended when Building C, D and E are constructed. The communal open space will be available to all residents.

The completed communal landscape area will comprise five smaller landscape "rooms", each offering different aesthetic qualities and opportunities for people to gather, relax or play. The five areas are described as:- The Communal Gathering Space, The Grass Room, The Garden Room within Grove, The Sculptural Play Room and Water Garden Room.

The key attributes of the five areas are summarised in **Table 7** below and illustrated in **Figure 10**.

**Table 7** – Key Attributes of Landscaped Areas

Area	Key Attributes
The Communal Gathering Space	<ul style="list-style-type: none"> <li>- Flexible paved area providing space for residents barbecues and gatherings.</li> <li>- Moveable outdoor dining furniture could also be used in this space.</li> <li>- Evergreen trees reduce wind impact and provide privacy.</li> </ul>
The Grass Room	<ul style="list-style-type: none"> <li>- Large open grass area, approximately 12m wide by 15m long.</li> <li>- Deciduous feature trees provided around edge, providing a small shady and sheltered space for supervising children and relaxing.</li> </ul>
The Garden Room within Grove	<ul style="list-style-type: none"> <li>- Grove of deciduous trees, providing for a small gathering of people or individuals to relax.</li> </ul>
The Sculptural Play Room	<ul style="list-style-type: none"> <li>- Sculptured steel and timber elements become play elements for children and exercise elements for adults.</li> </ul>
Water Garden Room	<ul style="list-style-type: none"> <li>- Informal play space for children, height platforms.</li> </ul>



To integrate and provide unity between the landscape elements and the residential buildings, common stone and paving materials are proposed to be used in both the landscaped area and internal common areas.

Two major circulation paths running lengthways through the garden, link the landscaped rooms and the major entrance points from Buildings B and F.

The landscaped area has been designed to ensure that the lawn and landscaped areas can be established at a raised podium area and are well protected in a potentially heavily trafficked area. This has been achieved by raising areas of planting and providing a geometric arrangement of paths that relate to the buildings and the pedestrian desire lines.

Where trees are proposed, suitable soil depth will be provided which supports the following species of trees:

- Blueberry Ash (evergreen);
- Crepe Mytles (deciduous);
- Crow's Ash (evergreen);
- Evergreen Ash (evergreen); and
- Honey locusts (deciduous).

This communal roof garden will be extended at the time of completion of the remaining buildings, Building C, D and E.

### Private Open Space

Each apartment is provided with an area of private open space in the form of a balcony (minimum 6m<sup>2</sup> in area) or terrace that is accessible from the main living area. A schedule of private open space associated with each unit is provided at **Appendix H**.



Figure 10 – Common Landscaping for Buildings B & F

## 4.6 Communal Facilities

In addition to the extensive communal landscaped open space, Buildings B and F include the following communal facilities for exclusive use of the residents:

- Three Common Rooms, approximately 252m<sup>2</sup> in total. Located on Level 5 of Building F. The Common rooms can be accessed via Building F. Each common room has a terrace with access to the common landscaped area and can be combined, providing flexibility for future users.
- A fifteen metre lap pool and gymnasium, totalling 314m<sup>2</sup> located on Level 4 of Building F and accessed either directly off the podium via a flight of steps or for disabled users via the lift core serving Building F.
- A unit manager's office is located on Level 5 of Building F, adjacent to the common rooms.

These communal facilities are provided in the first stage of the residential development but will be available to all residents as other stages are developed. The communal facilities will be administered and maintained by the unit manager.

These communal facilities are in addition to the dedicated car parking (which will be extended across Level 3 and 4 in conjunction with future residential development), loading docks and lift lobbies which will also be utilised by Buildings C, D and E when complete.

## 4.7 External Materials and Finishes

The proposed development includes materials and finishes that have been selected to integrate with the Shopping Centre, future built environment of the other buildings and to provide a positive addition to the aesthetics of the Ryde Town Centre. The proposed materials and finishes are shown on the coloured drawings prepared by Marchese and Partners, a copy of which is provided at **Appendix I**.

The principal materials and finishes are:

- feature cladding panels – Bradcore panel or similar;
- landscape feature wall – Natural stone cladding or similar;
- vertical adjustable louvre blades – Powdercoated aluminium or similar;
- glass balustrading – Powdercoated metal semiframless or similar;
- glass – Translucent or clear glass range or similar;
- sliding and fixed windows – Powdercoated aluminium or similar; and
- horizontal adjustable sliding louvers/screening panels - Powdercoated aluminium or similar.

A combination of independent colour palettes which have three tones will be used for each building. Each building will have unifying white highlight to slab edges and balcony balustrade and metal louvre sun screening. Stone cladding is used in the base of all buildings which continues into the landscaped areas, as illustrated on the materials and finishes drawing provided at **Appendix I**.

## 4.8 Vehicular Access and Parking

The Stage 1 DA, DA672/2006 approved:

- The location of the car parking;
- Allocation of spaces for the residential element (Being Buildings B, C, D, E and F) (Totalling 576 spaces residential spaces).

### Parking - Design and Construction

This DA seeks consent for design and embellishment of the Stage 1 residential allocated car parking (576 spaces), part of the commercial allocated car parking (41 spaces) on Levels 3 and 4 and 2 additional bays proposed in this application to be used exclusively as car wash bays. Totalling 619 car park spaces. The provision of the 619 car park spaces is as follows:

- a maximum of 233 residential spaces for Buildings B and F;
- two (2) residential bays to be used exclusively for car washing;
- two (2) residential visitor disabled car parking spaces;
- a maximum of 341 residential spaces for Buildings C, D and E; and
- 41 of the commercial car parking (as only 209 of the 250 commercial car park spaces can be accommodated elsewhere).

Seeking consent for the design and embellishment of all the car park spaces on Levels 3 and 4 at this stage is considered appropriate and logical as it allows for the complete design, construction and designation of all the car park spaces, safety barriers, lighting and the like on Levels 3 and 4 to occur simultaneously.

As the entire Level 3 and 4 slab is to be constructed in its entirety (consistent with approval DA1025/07), it is therefore logical, orderly and economic to seek consent for the actual design and embellishment of the entire Stage 1 residential allocated spaces (being 576 spaces).

### Vehicular Access

Onsite car parking for the residential component and part of the commercial component is located on Level 3 and 4 (above the retail component). Vehicle access to the residential and commercial car parking spaces is via an access ramp off Pope Street. **Figure 11** illustrates the location of the vehicle entry point. Architectural plans and access plans are provided at **Appendix D** and **Appendix J** respectively.

At level 3, a roller shutter door controls the entry into and out of the dedicated residential car parking spaces. Past the roller shutter door, access to parking level 4 is provided via a ramp.

The garbage truck and service vehicles which will serve the residential component also utilise the ramp off Pope Street. Parking for up to four garbage and / or service vehicles is provided in front of the secure access point (a roller shutter door) to the residential car park at Level 3.

The minimum clearance up to the garbage and service area is 4.2m. The minimum clearance within the main car parking component is 2.6m. The minimum clearance for accessible car parking spaces is 2.6m.



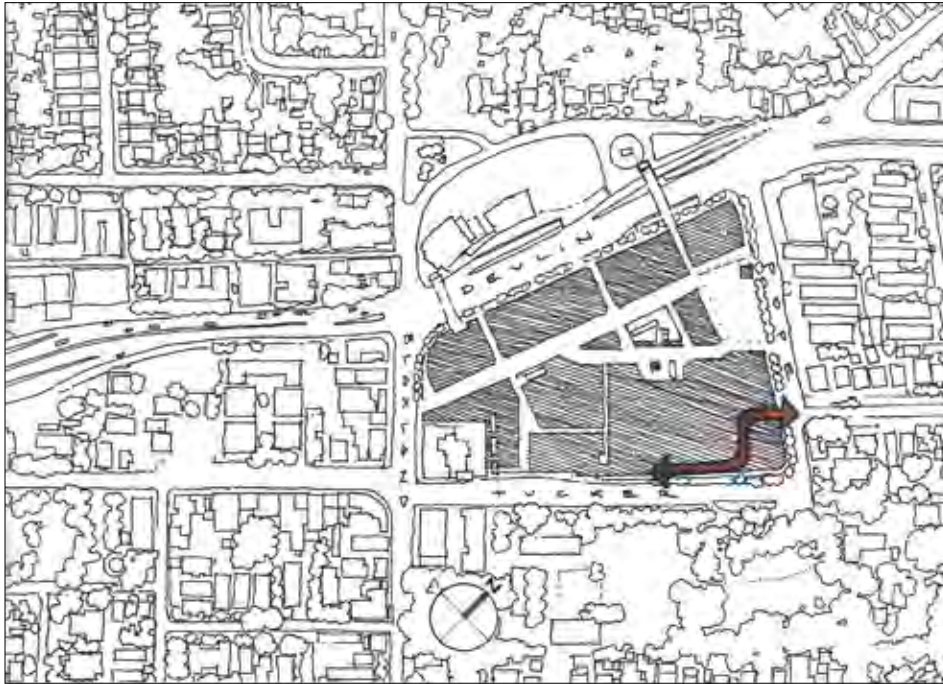


Figure 11 – Vehicle Access Point off Pope Street

## 4.9 Pedestrian Access and Way Finding

### Access to Podium Level from the Strada

Two access points provide direct access from the Strada level (which can be accessed directly from each of the four surrounding streets) either to the podium level at Level 5 (illustrated in **Figure 12**). The two access points on the Strada, approved as part of DA 672/2006, are located at the Blaxland Road end of the Strada and at the centre of the Strada. A third access point may be provided as part of later residential stages (illustrated in **Figure 12**). Detailed plans of the access arrangements are provided at **Appendix D** and **Appendix J** respectively.

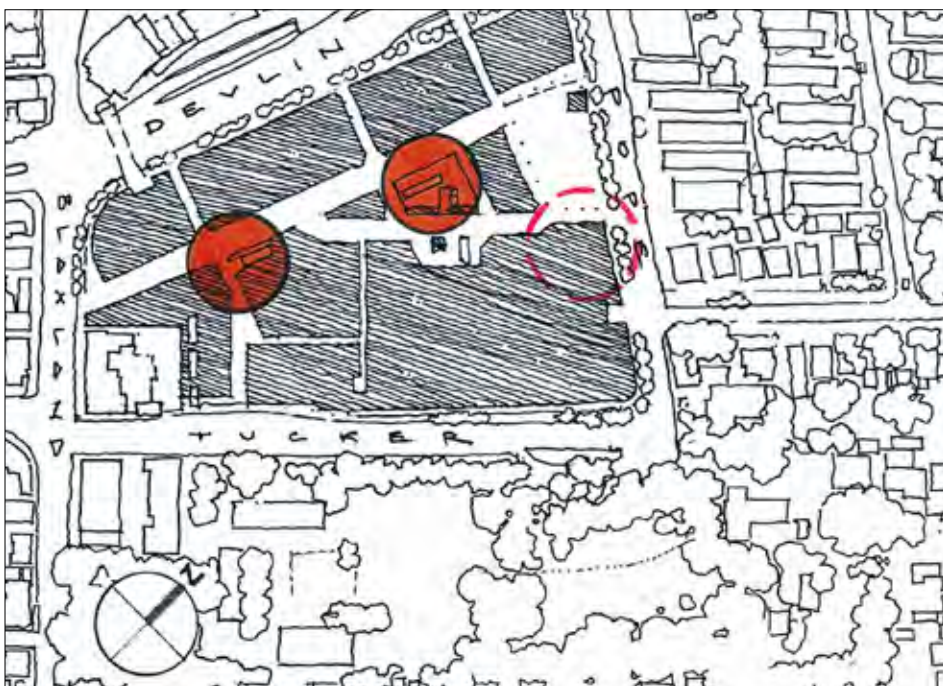


Figure 12 – Pedestrian Access Points off the Strada

The access point at the Blaxland Road end of the Strada provide direct secure lift access to Building F to the communal landscaped space provided at the podium. The access point at the centre of the Strada provides direct secure lift access to Building B to the communal landscaped space provided at the podium.

Pedestrians (residents and visitors) accessing Buildings B and F from beyond the site can also make use of pedestrian bridges over Devlin Street, approved as part of DA672/2006 and through the multitude of through site links (such as the through link from Tucker Street) from surrounding streets through to the Strada level.

Figures identifying the access points to the podium level from the Strada are included at **Appendix J**.

### Pedestrian Access from Residents Car Park to Podium level

Three pairs of lifts (six in total) provide direct access from car park levels 3 and 4 to Buildings B and F.

The pair of lifts located adjacent to the loading dock provides access to each level of Building F (including the common rooms, swimming pool and gymnasium) and the podium level.

The two pairs of lifts located towards the centre of the car park provides access to the podium level and each level of Building B.

Figures identifying the pedestrian access points from resident's car park to the podium level are included at **Appendix J**.

### Pedestrian Access from Building Lobby at Podium Level to Individual Apartments

Building B is divided into two cores. Each core has their own separate entry lobby connecting to the stair and lift core. The two cores work independently of each other and break the building down, so that no more than eight units on each floor are accessed by the same set of lifts.

Building F contains one central lift and stair core, with no more than 11 units on each floor being serviced by this core. The corridors from the lifts on every floor have been designed to be component parts of the circulation.

Figures identifying the pedestrian access points from the building lobbies at the podium level to individual apartments are included at **Appendix J**.

### Signage and Way Finding

To ensure that clear, accessible paths are provided to the residential buildings from off site, the Strada and from on-site car parking and to help mitigate against anti social behaviour, a signage and lighting strategy will be prepared prior to issuing the Construction Certificate.

The signage strategy will include a colour-coordinated signage brief, utilising text and symbol styles. The signs will be linked to lighting points for ease of night time identification.

Further details are provided in the Crime Prevention Report, prepared by Harris Crime Prevention Services at **Appendix K**.

### Post Drop Facilities

Post drop facilities for residents will be provided on Level 3 car park. Post boxes have been provided in this location to allow Australian Post to drive a delivery van up to the post drop facilities.

Courier and private post deliveries can either use the buildings main entrances at the Strada level, by either the residents apartment directly or utilise the service bay at Level 3 where an intercom is provided which will connect to each apartment or, in the event that they are not available, the building manager.

## 4.10 Water, Stormwater and Waste Management

The stormwater management regime adopted for Buildings B and F is integrated with the stormwater management regime approved as part of Stage 1 DA.

A Stage 2 Residential detailed Hydraulic Services Report prepared by Warren Smith and Partners is provided at **Appendix L**. This report is supported by the earlier Hydraulic Services Report and A Hydrologic Assessment and Hydraulic Analysis of Ryde City Council Drainage Infrastructure prepared by Warren Smith & Partners Ptd Ltd as part of DA672/2006.

The detailed Hydraulic Services Report confirms that:

- the stormwater drainage system will be provided with three On-site Detention Tanks;
- rainwater re-use from the residential apartments will be incorporated into rainwater tanks on the residential levels and will connect water from the buildings roofs to be used for irrigation, toilet flushing in the gym, pool and general hose down area (located in Level 3 service bay).
- Building B will be provided with 2 x 10,000 litre tanks with a total storage of 20,000 litres;
- Building F will be provided with 3 x 10,000 litre tanks with a total storage of 30,000 litres; and
- a subsoil drainage system will be provided in the landscaped planters and drain to the stormwater drainage system.

Plans of stormwater system are provided at **Appendix L**. The detailed design of the stormwater system will be submitted at the relevant Construction Certificate stage.

### Waste Management

A Waste Management Plan for Buildings B and F has been prepared by Waste Audit and Consultancy Services and is included as **Appendix M**. The Waste Management Plan details measures to minimise the generation of waste and addresses waste segregation, waste containment and waste disposal.

A waste room is provided on each level of the residential development. The waste room, will house two recycling bins (240 litres) and a chute for general waste. To encourage appropriate waste separation at point, appropriate signage will be displayed in each waste room.

Each general waste chute feeds directly into 1,100 litre bins, located under each chute, in a dedicated garbage room located on level 3. Cleaners will monitor these bins throughout the day to ensure waste does not overflow. When full, the 1,100 litre bins will then be transferred to the waste and recycling storage area. To transfer the bins, a towing system may be employed by the cleaners.

For recyclable waste, the recycling bins provided in each waste room on each residential floor will be cleared and replaced with empty recycling bins by the cleaners. Full recycling bins will then be transferred to the main waste storage area located on Level 3.

General waste and recycled waste will be stored in the waste area until removed, with general waste being serviced three times a week and recycled waste being serviced once a week.

The waste areas will be finished with appropriate materials and finishes to allow for easy cleaning. The cleaning contractor will be responsible for cleaning and maintaining the waste area and waste equipment.

The main waste storage area located on Level 3 is located adjacent to the service bays on level 3 and can be accessed directly by the garbage truck and by residents if required. Garbage truck access to the site is discussed in Section 4.8.

### 4.11 Utility Services

All services (i.e. sewer, water, electricity, gas and telecommunications) are available to the site and to Buildings B and F. All services will be connected in accordance with the requirements of the relevant service providers.

For sewer drainage and sanitary, the sanitary plumbing from the residential apartments will be connected to the shared sanitary plumbing that is provided throughout the TRSC development.

The provision of hydraulic services is detailed further by WS&P at **Appendix L**.

### 4.12 Construction Staging and Methodology & Management

A Residential Staging & Construction Methodology Review has been prepared by Bovis Lend Lease and is included at **Appendix N**. The Residential Staging & Construction Methodology Review details:

- construction staging for the whole of the site (being the main retail element and the five residential buildings);
- construction methodology; and
- impacts of the construction of the residential buildings on the retail development components and adjoining properties (Considered further in **Section 5.0**).

#### Construction Staging

Buildings B and F are a component of the wider redevelopment of TRSC, the first major component, being the construction of the shopping centre up to and including the slab of Level 4 in the main (some uses, such as the cinema, approved in detail as part of Stage 1, are located above Level 4).

At present, construction of the mixed use retail element of the shopping centre is ongoing. When the mixed use retail element, up to and including Level 4 slab levels is complete, construction of Buildings B and F will commence. Concept design of residential buildings C, D and E will commence during the construction phase of Buildings B and F.

#### Construction Methodology

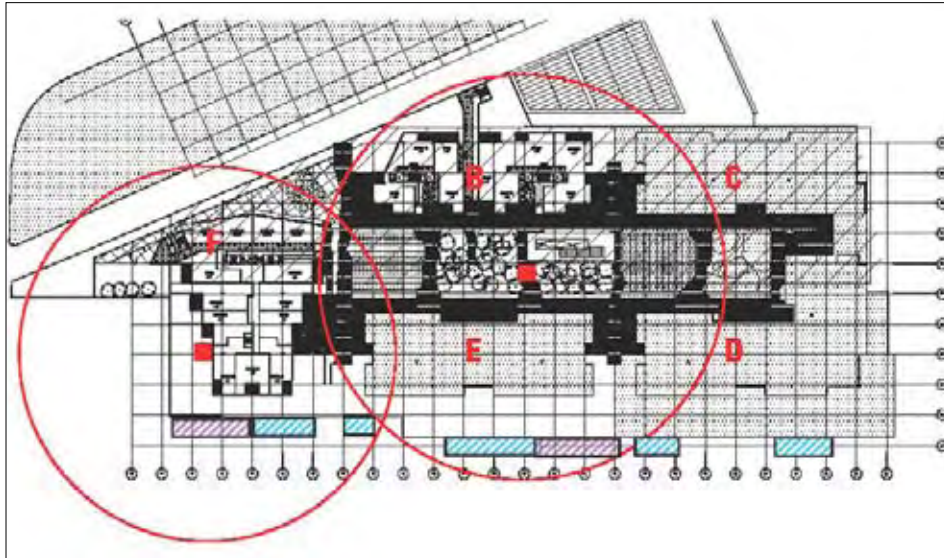
The Level 5 podium will be constructed utilising the retail tower cranes prior to them being dismantled and removed from site. Once Level 5 is constructed it will form the base for the individual residential buildings.

Subject to relevant approvals, each of the five residential buildings will be constructed as individual projects, so that for construction purposes, no one building relies upon another building to be completed. It is the intention however to construct Buildings B and F simultaneously.

The construction of each building will include a dedicated tower crane and dedicated construction team (including supervisors, labourers and subcontractors).

While the tower cranes are being utilised, dedicated construction zones are required on Tucker Street. The location of the construction zones are identified in **Figure 13**.





**Figure 13** – Location of Construction Zones for Buildings B & F along Tucker Street

The location of the construction zones are consistent with the construction zones approved as part of Stage 1 for the retail element. These construction zones will be established and users of the redeveloped TRSC and Tucker Street will be familiar with them in the period when the retail element is open to the public and the residential buildings are being completed.

In the interim period, between the completion of Buildings B and F and prior to the completion of Buildings C, D and E, construction hoarding will be provided along the boundary of the communal open space, separating and securing the two sections of the podium.

### 4.13 Future Staging

The remaining components of the redeveloped TRSC will be constructed in stages. A key numeric overview of the staging is provided in **Table 8** below and illustrated in plans provided at **Appendix J**.

**Table 8** – Subsequent Staging of TRSC Components

Stage	Component	No. of Units / NUFA	Car Parking Spaces
<b>This DA</b>			
Stage 2	Buildings B + F	185	A maximum of 233 spaces
	Buildings C, D & E		A maximum of 341 spaces
	Buildings B, C, D E & F		2 disabled visitor spaces and 2 car wash bays
	Commercial Buildings 1 & 2		41 commercial (out of approved 250) spaces unable to be located elsewhere
<b>Future DAs</b>			
Stage 3	Buildings C, D & E	243	
Stage 4	Commercial Buildings 1 & 2	10,000m <sup>2</sup>	209 (out of approved 250)
<b>Total</b>		<b>428 Units + 10,000m<sup>2</sup> Commercial NUFA</b>	<b>826 (plus 2 residential car wash bays)</b>

## 4.14 Emergency Vehicle Access

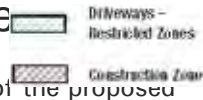
Emergency vehicle access provision is as follows:

- Ambulances will drive through residential car parking ramp to enter residential car parking spaces on Level 3. They will park in front of residential lifts for the particular building that is required.
- Fire trucks will park on Pope Street or Blaxland Street and go to dedicated fire lift (3 x shuttle lifts) to access the required levels and units. The fire control room for the whole development is located on Pope Street.

To facilitate access in emergencies and to support on-site security measures, an emergency intercom system will be placed at the residential car parking entry points.

These arrangements satisfy BCA and other regulations.

## 5.0 Assessment of Planning Issues



The following is our assessment of the environmental effects of the proposed development as described in the preceding sections of this report. The assessment includes only those matters under Section 79C(1) that are relevant to the proposal.

The key planning issues associated with the proposed development are as follows:

- Compliance with Stage 1 development consent;
- Compliance with statutory plans;
- Built form and urban design;
- Heritage conservation;
- Traffic generation, parking provision and transport;
- Internal amenity;
- Access and mobility;
- Safety and security;
- Wind;
- Reflectivity;
- Construction impacts;
- Impacts on adjoining properties;
- Noise;
- Resource, energy and water efficiency;
- BCA issues;
- Site suitability; and
- Public interest.

### 5.1 Compliance with Stage 1 Development Consent

Stage 1 development consent approved the concept proposal building envelopes for Buildings B and F.

The concept proposal building envelopes, approved as part of Stage 1, set the physical parameters and established the overall massing, height, orientation, scale and configuration within which the detailed building design is to occur. The proposed development, as shown on the architectural drawings at **Appendix J**, have been designed to be consistent with the approved concept proposal.

Buildings B and F continue to be consistent with Stage 1 as follows:

- the proposed height are within the approved concept envelope;
- does not exceed the maximum amount of residential floor space; and
- the proposed buildings sit within the approved concept envelope building setbacks.

Plans prepared by Marchese and Partners, provided at **Appendix J**, provide an overlay of the approved concept proposals for Buildings B and F with the outline of the proposed Stage 2 development of Buildings B and F. The figures identify that Buildings B and F are contained within the approved building envelope.

## 5.2 Compliance with Statutory Plans

The Tables of Compliance at **Appendix C** provide a detailed assessment of the proposal against each of the relevant provisions and controls of the Ryde PSO (as amended) and Ryde DCP 2006.

**Appendix C** demonstrates that the proposal meets all of the requirements of Ryde PSO and Ryde DCP 2006 other than car parking provision (car parking provision is discussed in **Section 5.5** with allocation of parking approved as part of Stage 1). Specifically the proposal:

- is permissible with consent, and is consistent with the objectives of the Business (Town Centre) Zone;
- is consistent with the Planning Principles for the Ryde Town Centre at Schedule 19 as the proposed development contributes to the significant range of benefits being provided by TRSC, in particular increasing residential population within the town centre and raising the status and importance of the Ryde Town Centre;
- complies with the planning controls set out at Schedule 20. Explicitly the proposed development:
  - does not propose a NUFA which will result in the overall NUFA for TRSC exceeding the maximum 150,000m<sup>2</sup>;
  - is consistent with the Stage 1 development consent for the development of the whole of Precinct 2; and
  - is consistent with the integrated traffic solution for Precincts 1 and 2;
- complies with the maximum permitted building height at Clause 51H (refer to **Figure 14**).

Buildings B and F complies with the maximum permitted building height at Clause 51H, being limited to RL91 and up to RL105. The buildings height compliance with Clause 51H is illustrated in **Figure 15** and as shown in sections included as drawing numbers DA2 4.00 to DA2 4.03 in the set of architectural plans at **Appendix D**.



Figure 14 – Building B & F Height Compliance with Clause 51H of Ryde LEP143

## State Environmental Planning Policy No. 65

A SEPP 65 Statement and Design Statement, prepared by Marchese Partners Architects, is provided at **Appendix E**. The SEPP 65 Statement provides an analysis of the proposed development with respect to the principles of SEPP 65 and demonstrates that all relevant design principles are achieved.

## Residential Flat Design Code

The Residential Flat Design Code provides additional detail and guidance for applying the design quality principles outlined in SEPP 65.

The proposed development complies with all the design quality objectives and design principles of the Residential Flat Design Code. However, the proposed development does not fully achieve some of the “rules of thumb” set out in the Code.

As demonstrated below, the proposed development relies on better design practice to ensure that the amenity of the proposed development is not compromised in any way and that an inability to achieve some of the rules of thumb is generally related to the context of the site.

The minor variations of these rules of thumb, and a description of the measures proposed to ensure that a high standard of amenity is still achieved, are described below:

### Solar Access

The rules of thumb for solar access is that living rooms and private open spaces for at least 70% of apartments in a development should receive a minimum of three hours direct sunlight between 9am and 3pm in mid winter. In dense urban areas a minimum of two hours may be acceptable.

Across Buildings B and F, 68% of the apartments receive solar access, 2% less than the rule of thumb (which equates to approximately 3 apartments). This minor variation to the rule of thumb is considered acceptable as the main internal living areas and principal private open space areas have been orientated to maximise their outlook over the communal open space and to maximise the opportunity for the main internal living areas to have views over to Sydney CBD and North Sydney.

Both the communal open space and the city views are located to the south east of Buildings B and F and as such restrict the number of apartments that can gain solar access from the north.

In addition, to ensuring that the internal amenity of the apartments are of high quality, the apartments across the development have been appointed with generous balcony size, extensive private open space in the form of the communal open space, common rooms, gymnasium and swimming pools.

To ensure that residents have the opportunity for additional solar access, all residents can make use of the communal open space being provided on the podium.

In light of the superior amenity afforded by the city views, ample common open space and apartment and balcony sizes, it is considered that a 2% variation to this rule of thumb is supportable in this instance.

### Storage

The rules of thumb for storage space are as follows:

- 1 bedroom: 6m<sup>3</sup>;
- 2 bedroom: 8m<sup>3</sup>; and
- 3 bedroom 10m<sup>3</sup>.

The rules of thumb also require that 50% of the required storage space is located within the apartments. **Appendix H** details the amount of storage space within each unit.

Whilst **Appendix H** identifies that the rules of thumb for storage space is not met in some instances, the provision of an additional 1,654m<sup>3</sup> (equating to approximately 5.3m<sup>3</sup> per apartment) is provided in the car parking levels. Storage space provided within the car park will be allocated to specific tenants and placed on title.

The extent of storage space provided is considered adequate as:

- generous open plan living areas provide opportunity for provision for a range of additional storage space options if required by the occupant (e.g pantries, studies and wardrobes);
- the proposed storage space have been designed to be easily accessible;
- the provision of storage space within the unit and car park allows for flexibility of space; and
- the overall quantum of required storage space for each apartment is met (all be it most of it being within the car parking level).

Notwithstanding the non compliance to the rule of thumb the apartments continue to have a high quality amenity by the provision of large, open plan living areas, access to private and public (communal open space on Level 5) open space, as well as the communal facilities which include gymnasium, pool and common rooms and easily accessible storage within the basement.

### 5.3 Built Form and Urban Design

As part of the Stage 1 DA the height of Buildings B and F were considered in the context of the proposed height of the shopping centre element and the other three proposed buildings, Buildings C, D and E.

Buildings B, C, D, E and F have their highest scale towards the middle of the site, respecting LEP height controls. The master plan of the five buildings, approved as part of DA672/2006, provides a clear and straightforward framework.

Buildings B and F are two distinctly different buildings that occupy different contextual locations. Both Buildings B and F are envisaged as being distinct elements of the family of all five residential buildings.

The residential buildings adopt a perimeter arrangement. The perimeter arrangement was selected as it:

- maximises the common open space into one large space, to which all the buildings (Buildings B, C, D, E and F) face;
- maximises the functionality of the open space;
- maximises the separation distances between buildings; and
- maximises light penetration into the open space.

The perimeter arrangement is illustrated in **Figure 15** below.



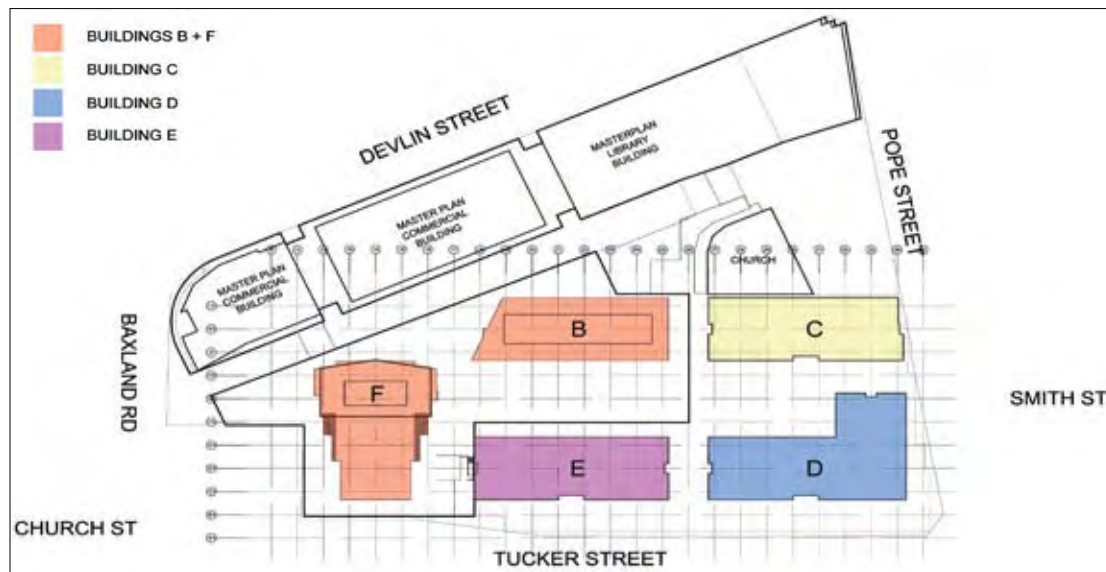


Figure 15 – Perimeter Arrangement for Buildings B, C, D, E and F

Building F is located at the south eastern end of the open space and has developed a unique shape determined by the maximisation of views to the south east, a stepping height plane that follows the topography and giving some setback to the south eastern podium edge corner.

The built form and urban design characteristics of Building F are described as:

- it steps from its highest point in the middle of the site down in a south easterly direction toward Tucker Street; and
- provides a highly modulated stepping in both plan and elevation that relates to the topography and maximises views to the south east.

Building B is located at the south west side of the open space and takes a more regular footprint and reinforces the line of the ridge. It is more centralised within the development site and as such its overshadowing impacts are minimised (Refer to the Overshadowing Plans, prepared by Marchese & Partners, provided at **Appendix D**). It has a splay on the southern end which responds to the proximity of proposed commercial buildings opposite to the west and works in an angular language with the western façade of Building F.

The built form and urban design characteristics of Building B are described as:

- a straight forward linear building that runs parallel to the ridge line and spine of the site; and
- building that is divided into two separate cores with attractive articulation.

## 5.4 Heritage Conservation

A Statement of Heritage Impact has been prepared by NBR&P Heritage and is included at **Appendix O**. The Statement of Heritage Impact details Heritage Items located in the vicinity of the site (Refer to **Section 2.7**) and the impact that Buildings B and F may have on those heritage items.

In reviewing the heritage items in the vicinity of Buildings B and F, NBR&P Heritage consider that the only potential heritage impact arising from the proposed development will be on the setting of Ryde Public School (Heritage Item No. 79) and the setting of Ryde Park (Heritage Item No. 177). Whilst the present context of these heritage items is separated from the TRSC site by a road and by substantial existing tree planting of some maturity, the presence of the new buildings has the potential to impact on views from within the curtilage of the heritage listed school.

This potential impact was considered during the Stage 1 DA when establishing and approving the residential building envelope. The impact however was not considered to be of such a level as to be unreasonable for this context or unacceptable in heritage terms, and as such the residential envelopes were deemed acceptable for the surrounding heritage context.

As part of the assessment undertaken by NBR&P Heritage, the materials selected and the detailed design of Buildings B and F have also been reviewed and are not considered to have a detrimental impact on neighbouring heritage items.

Therefore NBR&P Heritage conclude that on grounds of heritage impact, the proposed development is considered to be acceptable.

## 5.5 Traffic Generation, Parking Provision and Transport

A Traffic Impact Statement has been prepared by Mark Waugh Pty Ltd, and is included at **Appendix P**. The Traffic Impact Statement has been prepared in the context of the Traffic Impact Statement (referred to as the comprehensive Traffic Impact Statement) and the Integrated Traffic Solution developed for the site approved as part of Stage 1 (refer to **Section 2.3** above).

The comprehensive Traffic Impact Statement for Stage 1 prepared by Mark Waugh in November 2006 included a description of the proposed development (including the residential component) and provided an assessment of transport operations with the commercial and residential component.

### Impact on the Local Road Network

From the Stage 2 Traffic Impact Statement, Buildings B and F are expected to generate 50 peak hour vehicle trips, with daily flows in the order of up to a maximum of approximately 380 vehicle trips.

During the morning peak, typically 85% of trips are outbound with 15% inbound, with the reverse occurring during the afternoon peak. Daily traffic flows are generally split 50/50 between inbound and outbound.

The flows associated with Buildings B and F would therefore be:

- AM peak, 40 vehicle trips outbound and 10 vehicle trips inbound;
- PM peak, 10 vehicle outbound and 40 inbound; and
- Daily, up to 190 vehicle trips outbound and 190 vehicle trips inbound.

The impact of these vehicle trips on the local road network was considered as part of the comprehensive impact assessment undertaken in November 2006.

Based on the whole redevelopment of the site the comprehensive Traffic Impact Assessment concluded:

*“Based on the traffic investigations of the road network and proposals for access to the Ryde Town Centre LEP 143 area it is recommended that the following road works be implemented as part of the Precinct Two redevelopment for which consent is sought:*

- *The proposed ramp access arrangements from Devlin Street are implemented as the basis for providing improved overall access and movement for Precinct Two (and potentially Precinct One);*
- *The development of Precinct Two makes use of the full range of access opportunities including the ramp access system, Pope Street and including improvements at the Devlin Street/Blaxland Road/Parkes Street intersection;*



- *The range of improvements to pedestrian, cyclist and public transport facilities outlined in these investigations is implemented as part of the Precinct Two proposal.*

*It is recommended that the development be approved on traffic and parking grounds."*

It should also be noted that the traffic generated by Buildings B and F constitutes only a minor part of the overall traffic generated by the redeveloped TRSC, being less than 2% of the total traffic generated.

### Adequacy of Car Park Access Ramps

An access ramp of Pope Street will provide vehicle access to the car parking allocated to residents of Buildings B and F. The Traffic Impact Statement notes that the proposed access ramp will work well due to the low levels of traffic generated by the residential units (which also includes Buildings C, D and E). The access arrangements also provide residents with good options for approach and departure without unnecessary travel on the surrounding road network.

### Adequacy of Car Park Design and Layout

The internal layouts of the car parking proposed for TRSC have been reviewed by Mark Waugh Pty Ltd as part of the traffic assessment and assessed in terms of the basic design parameters of the Australian Standard AS NZS 2890.1-2004 Parking facilities – Off Street car parking, and also Councils Ryde DCP 2006.

### Adequacy of Number of Car Parking Spaces

The quantum of car parking provided for the residential element of TRSC was approved as part of DA672/2006. DA672/2006 demonstrated to council's satisfaction that the visitor parking for the residential element of TRSC should be provided as part of the retail car park and a specific provision of visitor car parking for each residential building was not required.

Of the 576 car park spaces approved as part of DA672/2006 for the residential element of TRSC, being a maximum of 233 spaces for Buildings B and F, a maximum of 341 spaces for Buildings C, D and E and 2 disabled visitor spaces. Two (2) car wash bays are proposed for the exclusive use of residents (Refer to Section 4.8).

Buildings B and F account for approximately 43% of the total number of apartments proposed as part of the residential element of TRSC. The provision of 233 car park spaces dedicated to Buildings B and F accounts for approximately 41% of the total amount of car parking to be provided across the completed levels 3 and 4.

The number of car park spaces proposed is considered suitable as:

- it reflects the recommendation made at Stage 1 that a modified car parking rate be applied (which reduced the DCP car parking rates by 12%) as a reflection of the desired outcome of a reduction in car dependency for the centre and as part of achieving the desired transport outcomes outlined in Council's strategic planning for the area;
- the main visitor parking for the residential units is catered for by the general centre parking; and
- separating permanent and visitor parking allows the residential car parking component to be secured, preventing retail users from seeking to utilise the car parking on Levels 3 and 4.

The provision of two dedicated disabled visitor spaces on Level 3 and 4 has been provided to ensure that disabled visitors have the easiest access possible to the residential units, reducing the extent of travel required, not withstanding the Stage 1 approval which allowed all visitor spaces to be located in the retail component.

In the event that both disabled visitors bays are occupied, disabled users can continue to utilise the retail car parking spaces (which includes additional disabled spaces) and access Buildings B and F via the Strada.

As the entire Level 3 and 4 slab is to be constructed in its entirety (consistent with approval DA1025/07), it is therefore logical, orderly and economic to seek consent for the actual design and embellishment of the entire Stage 1 residential allocated spaces (being 576 spaces plus 2 car wash bays).

### Service Vehicles

Service vehicles are not expected to impact on peak operating conditions, with most deliveries occurring outside of peak movement periods. The service delivery manoeuvring space provided allows vehicles to enter and exit the loading area in a forward direction. The service delivery area has also been designed to accommodate removal vehicles.

### Impact on public transport provision

The impact on existing bus operations, which account for the majority of public transport movements in the locality have been considered in the assessment of the overall development, including the Staged Mixed Use Development and Buildings B, C, D, E and F.

Alterations to the local bus operations include changes to operations during construction, improvements to lane allocation, bus set down and pick up zones, placement of a bus lay-over area and new facilities for drivers as a replacement for facilities previously provided for in the now demolished shopping centre.

The comprehensive Traffic Impact Assessment concluded that the improvements to public transport facilities, proposed as part of the wider redevelopment of TRSC will assist in improving bus operations to and through Ryde town centre.

## 5.6 Internal Amenity

The built form is considered to be of a very high design standard and is appropriate to the site. Each unit has includes a high level of internal amenity as follows:

- generous unit sizes (ranging from 51m<sup>2</sup> to 143m<sup>2</sup>);
- provision of a private open space in the form of balconies and terraces;
- each habitable room will have a generous window and living areas with main living areas connected directly to private open space; and
- buildings northern facades have been designed to relieve the intensity of the afternoon heat (primarily by focussing the outlook of the development south east, over the communal open space and to maximise city views).

Within the context of the five residential buildings creating a perimeter around the communal landscaped open space, the built form contributes positively to the character of the residential component of TRSC and provides internal amenity and outlook to the residents of Buildings B and F.

Buildings B and F maximise surveillance opportunities to the open common space and views south towards North Sydney and the Sydney CBD skyline.

### Private and communal open space

All apartments have generous private outdoor spaces in the form of balconies or terraces (Refer to **Appendix H** for a comprehensive schedule). Private open space is located to take advantage of the sun and outlook.

The internal layouts of apartments have been considered to provide adaptability to suit changing needs of the future occupants and also provide open plan living through the minimisation of internal rooms.

### Circulation and storage

The proposed development provides suitable apartment and room sizes with efficient circulation spaces. The units have a modern floor plan and design solutions.

The proposed apartments seek dispensation on the Residential Flat Design Code rules of thumb for storage space, within each apartment, instead relying on storage areas in the basement levels. This is discussed further in **Section 5.2**.

### Natural light and solar access

The proposed development maximises receipt of natural daylight to each apartment within the constraints of ensuring suitable levels of privacy for residents with 68% of apartments receiving direct solar access. The extent that sufficient direct solar access is provided to the apartments is discussed further in **Section 5.2**.

### Cross Ventilation

The proposed development maximises the opportunity for cross ventilation, with 62% of the apartments achieving cross ventilation. The extent of apartments which are naturally cross-ventilated exceeds the rules of thumb of the residential flat code. Apartments are also of suitable depth to support natural ventilation.

### Visual Privacy

To provide privacy for apartments fronting the communal open space, appropriate wall to a height of 1.75-1.8 metres high is proposed along the frontage.

The adoption of the perimeter arrangement of the five residential buildings ensures that suitable visual privacy is available to each of the apartments within each building.

The separation between the closest point of Buildings B and F is greater than 12m. The distance between two habitable rooms is in excess of 20m. In addition, horizontal adjustable sliding louvres panels are provided on windows which will further mitigate against any adverse effects of visual privacy.

### Acoustic privacy

To provide adequate acoustic privacy the minimum distance between glass and active recreation space is 7m, with the maximum distance being 11m. Within this distance, a solid masonry wall with landscaping planting is provided to minimise acoustic impacts to internal spaces. In addition to these measures, external shutters are provided which will further reduce any adverse environmental impacts on acoustic privacy.

Internal noise transmission is mitigated by the provision of suitable glass (refer to **Section 5.13**) and through suitable provision of inter tenancy walls.

## 5.7 Access and Mobility

The review of accessibility has been prepared in-conjunction with the Access and Design Audit (Prepared by Access Design Solutions) and Access Management Plan (prepared by Bovis Lend Lease) prepared as part of the Stage 1 DA.

A review of the accessibility of Buildings B and F, provided at **Appendix Q**, has been undertaken by Access Design Solutions.

Buildings B and F includes the following measures to ensure that they are accessible:

- implementation of a signage strategy which will identify accessible routes through TRSC to the residential component;
- accessible car parking spaces, provided in accordance with Council's controls across Levels 3 and 4. All accessible car park spaces will comply with the criteria specified at Stage 1 DA and with relevant Australian Standards (AS2890.1);
- lifts from both Strada, car park and internal lifts within Buildings B and F will comply with the criteria specified at Stage 1 DA; and
- all residential apartments and communal facilities can be accessed by the lift;
- each residential lobby at the Strada level is either at grade, or can utilise an access ramp, which comply with the Australian Standards.

The review of the accessibility of Buildings B and F, undertaken by Access Design Solutions confirmed the design requirements to be incorporated into the detailed design of the residential buildings, which will be approved prior to the issue of a Construction Certificate.

## 5.8 Safety and Security

A Crime Prevention Report has been prepared by Harris Crime Prevention Services, provided at **Appendix K**. The Crime Prevention Report details matters relating to safety and security. These can be summarised as:

- Both Buildings B and F will be accessed by electronic security devices at the vehicle entry point at level 3 and at the three residential entry lobbies at the Strada level.
- In addition to the security provisions at the lobby levels, another form of electronic security will be applied to control access to the individual floor of each residential building.
- The private yards located adjacent to the common areas are secured with fences and lockable gates.
- Common areas, such as the landscaped area and car park will be well lit, with clearly defined paths between the buildings. The car parking area will also have close circuit television cameras which will be monitored by centre security.
- Access to the gymnasium and swimming pool will be electronically controlled;
- Coloured coded signage will be used to direct visitors around the different components of TRSC, including the residential component.
- A building manager of similar service will also be available for the residential units which can assist visitors and deliveries.

The Crime Prevention Report notes that, from a security perspective, the proposed development reflects appropriate 'security design' based on Crime Prevention Through Environmental Design (CPTED) principles.

In addition to the active security measures the onsite retail building manager will also provide an additional tier of building security. Building security is further strengthened by the active security personnel operating across the retail component of TRSC.

## 5.9 Wind

An Wind Effects Statement (carried out in January 2007) has been prepared by Vipac and is included in **Appendix R**. The Wind Effects Statement is based on VIPAC's experience as a wind engineering consultancy and previous model scale wind tests of various configurations of the redevelopment TRSC.

The Wind Effects Statement prepared for Buildings B and F has taken into account the Stage 1 Wind Effects Statement prepared for DA672/2006, which approved the building envelope and configuration of Buildings B and F.

### Predicted Wind Effects

The predicted wind effects (without wind control measures such as awnings or landscaping) would mean that wind conditions adjacent to the proposed development will be in excess of the recommended criteria. The areas predicted to be most exposed to adverse wind conditions would be:

- north west and south west building corner areas;
- the Strada retail area; and
- the podium roof top.

From testing, the Wind Effects Statement also notes that wind conditions (with no control measures) on the podium roof top adjacent to Buildings B and F were found to be in excess of the criterion for acceptability for walking and some localised areas were shown to be in excess of the criterion for safety.

Adjacent developments (beyond the site boundary of TRSC) are not expected to be adversely affected by the proposed development.

### Recommendations

In accordance with the recommendations of the Wind Effects Statement, the proposed development includes localised use of canopies and screens to achieve acceptable wind conditions at the podium level, specifically identified in detailed wind tunnel testing.

Furthermore, some precautions in the design and use of apartment balconies and podium roof top areas have been detailed in the Wind Effects Statement.

### Conclusions

The Wind Effects Statement concludes that:

*“with the use of wind tunnel testing, solutions to the predicted exceedences of the recommended criteria will be determined without the need to significantly modify the overall size and form of the proposed Stage (2) – Phase 1 development (being Buildings B and F)”*

Following the wind study carried out by Vipac in January 2007, Bovis Lend Lease have appointed CPP Wind Consultants to study the mixed use development as a whole. Ongoing detailed studies are considering residential buildings B, C, D, E, F and the two commercial buildings. The preliminary results of these studies have introduced medium sized plantings onto the Level 5 podium to dispose wind action in the communal landscape area. Furthermore, indicative localised screening to the residential balconies are included in the Architectural Plans provided at **Appendix D**.

## 5.10 Reflectivity

A Reflectivity Assessment has been prepared by Vipac and can be found at **Appendix S**. As part of Vipac's assessment of the expected reflectivity from glazed elements of the development, Vipac concludes that there will be no negative impacts at surrounding locations because of:

- The orientation of façade cladding elements and the assistance from shielding by upstream buildings;
- The choice of the development's cladding, which should comprise glass with reflectivity coefficients of less than 20% (at normal incidence); and
- Blockage to both incoming solar rays and outgoing reflectivity impacts provided by balcony sidewalls.
- In this respect, the proposed development will not produce unacceptable reflections.

## 5.11 Construction Impacts

A Residential Staging and Construction Methodology Review has been prepared by Bovis Lend Lease, (as outlined at **Section 4.12** of the SEE) included at **Appendix N**. This report details impacts of the construction of the residential buildings on the retail element of TRSC, and on adjoining properties.

Construction of Buildings B and F will commence after completion (and start of operations) of the retail element of TRSC.

The Residential Staging & Construction Methodology Review provides a matrix of identified risks/issues associated with the construction of Buildings B and F.

Potential impacts on the retail element and surrounding properties as a result of the construction of Buildings B and F can be identified as:

- potential compromise during future construction phases, disruption, noise dust, vibration, material and waste movements, construction workers; and
- potential noise and vibration may impact on quieter neighbouring tenants;
- potential dust, and the spread of dust as a result of the elevated podium level;
- potential loose material;
- safety screening and catch platforms;
- management of conduct of construction workers; and
- potential impact of construction zones along Tucker Street on normal traffic movement;

To minimise the impacts during the construction phase, a number of measures are proposed. The key measures specific to the construction of Buildings B and F include:

- the construction zones established along Tucker Street for the retail element will be utilised by the construction phase of Buildings B and F;
- construction program will be coordinated with the retail operations, with particular regard to retail deliveries, to minimise the impact of construction of Buildings B and F on the retail operations. These measures will be detailed further as part of the detailed Construction Management Plan (CMP) prepared;
- Buildings B and F will be fully scaffolded and be provided with catch decks. Screening the buildings during construction helps to minimise the impacts of the construction on the retail element and neighbouring properties as well further strengthening onsite worker safety;



- where practicable, prefabrication will be utilised, reducing the quantum of deliveries; and
- Level 3 and 4 will be utilised for on site storage and contractor parking. Reducing the reliance on off site storage and construction zones and minimising visual and aural impacts.

The Residential Staging & Construction Methodology Review provides and details appropriate mitigation/resolution action to these matters. The key resolution action being:

- adopt best practice construction site management;
- provision of full scaffolding around residential buildings footprints, including shade cloths and crash decks to building works perimeter; and
- provision of best practice crane management and material movement.

A detailed Construction Management Plan, prepared in conjunction with the retail operations team, which will include a review against delivery scheduling and services coordination, will be prepared prior to issue of a Construction Certificate.

## 5.12 Impact on Adjoining Properties

Shadow diagrams have been prepared by Marchese and Partners and are included in Appendix D.

As per the Stage 1 consent Buildings B, C, D, E and F have their highest scale towards the middle of the site minimising overshadowing impacts. In light of this the Stage 1 envelopes were considered satisfactory from an overshadowing perspective and approved.

### Overshadowing – On Site

The extent to which the residential buildings (Buildings B, C, D, E and F) overshadow each other was determined to be acceptable as part of Stage 1.

As the proposal for Buildings B and F maintains consistency with approved Stage 1 envelope, the overshadowing impacts are considered acceptable and negligible in Stage 2 design.

### Overshadowing – Off Site

As the proposal maintains consistency with approved Stage 1 envelope, the overshadowing impacts are that same as approved at Stage 1.

Notwithstanding this, whilst the overshadowing plans identify that overshadowing will occur on the open space associated with Ryde Public School, these plans do not take into account the existing overshadowing as a result of the trees which line Ryde Public School and Tucker Street. The effect of overshadowing from the Stage 2 building is confined within the extent of the existing tree shade line.

### Visual and aural privacy

The impact on the visual and aural privacy of surrounding properties is considered acceptable as the proposed development is separated from the majority of the surrounding properties by Devlin Street, Pope Street, Tucker Street and Blaxland Road respectively. For those commercial buildings which remain in the block (adjacent to Blaxland Road), the separation between Building F is at least 15m.

Visual impact is further minimised as the primary outlook of the remaining buildings within the block (which are all commercial) is south, away from Building F. Building F has also been designed to maximise views to the south east, away from surrounding properties along Blaxland Road.

The impact of the noise is considered further in Section 5.13. The impact on the aural privacy of surrounding properties is expected to be minimal as any noise generated by the proposed development will be limited and the extent of separation between Buildings B and F and surrounding properties is at least 15m and in excess of 50m to neighbouring residential units.

## 5.13 Noise

A Noise Impact Assessment has been undertaken by Acoustic Logic Consultancy and is included at **Appendix T**. The assessment considers the existing acoustic environment and provides recommendations on the extent of acoustic treatments required to ensure that the extent of noise intrusion is acceptable.

Assessment of the noise generated by redeveloped TRSC, including the future traffic generated by Buildings B and F was considered acceptable as part of the Environmental Noise Impact Assessment prepared by Acoustic Logic Consultancy and approved by Council as part of the Stage 1.

The Noise Impact Assessment for Buildings B and F focuses on noise intrusion, and evaluates the extent and acceptability of traffic noise and mechanical intrusion expected into Buildings B and F.

### Internal Noise Level Criteria

The Noise Impact Assessment notes that the internal noise level criteria should not exceed the following within Buildings B and F:

- Bedrooms:  $L_{eq\ 1\ Hour}$  35 dB(A) (22:00-7:00); and
- Living Rooms:  $L_{eq\ 1\ Hour}$  40 dB(A) (7:00-22:00).

### Recommendations

To ensure that the internal noise level criteria detailed above are not exceeded, the Noise Impact Assessment recommends the following glazing for windows and doors:

#### Building B

- Bedrooms: 6mm thick glass with acoustic seals (where the minimum Sound Transmission Class<sup>3</sup> (STC) rating of installed glazing is 29);
- Living rooms: 5mm thick glass with acoustic seals (where the minimum STC rating of installed glazing is 28);
- Remaining windows: 4mm thick glass with acoustic seals (where the minimum STC rating of installed glazing is 27);

#### Building F

- Bedrooms: 6.38mm thick glass with acoustic seals (where the minimum STC rating of installed glazing is 31);
- Living rooms: 6mm thick glass with acoustic seals (where the minimum STC rating of installed glazing is 29);
- Remaining windows: 4mm thick glass with acoustic seals (where the minimum STC rating of installed glazing is 27);

### Conclusions

Provided that the glazing constructions requirements set down above are implemented, noise levels will comply with the criteria determined for Buildings B and F.

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<sup>3</sup> Sound Transmission Class (STC) is an instrument measurement of how much noise is stopped.

## 5.14 Resource, Energy and Water Efficiency

The provision of high density development in a location such as Top Ryde, with good public transport links and immediate proximity to the mixed use retail element of the redeveloped TRSC which includes child care, community facilities, entertainment, recreation and commercial office space is an efficient use of space and forms a significant contribution to resource and energy efficiency.

The proposed development also includes water efficient measures, including:

- stormwater detention; and
- retention and reuse for irrigation of the landscaped areas, communal toilets and wash down areas.

Rainwater reuse is also being utilised for Buildings B and F. Rainwater will be reused for:

- on-site irrigation;
- loading dock and car park Level 3 wash down; and
- cistern flush for communal WCs.

In addition, a BASIX report has been prepared (refer to **Appendix U**) which confirms that, Buildings B and F will achieve the reductions in energy and water consumption required by BASIX and also achieve the high level of thermal performance required by BASIX.

Measures which have been provided for in the development to secure BASIX certification include:

- water efficient fixtures and fittings;
- water and energy efficient appliances;
- gas boosted solar hot water; and
- significant portions of performance glazing and extensive shading.

## 5.15 BCA Issues

Advanced Building Approvals have prepared a BCA Report (Refer to **Appendix V**) for Buildings B and F. The report describes the development in accordance with the Building Code of Australia (BCA) as follows:

- car park on Levels 3 and 4: Class 7a;
- swimming Pool/gymnasium on Level 4 and common rooms on Level 5: Class 9b; and
- apartments on Levels 5 to 13 and plant on the roof: Class 2.

Advanced Buildings Approvals has determined that the development will be designed to generally comply with the 'Deemed to Satisfy' provisions of the BCA 2008. Where required, "Alternative Solutions" complying with the performance objectives and requirements in accordance with the BCA will be employed to address proposed deviations from Deemed to Satisfy provisions.

The proposed development is required to be of Type A construction.

It is anticipated by Advanced Buildings that the “Alternative Solutions” will be explored with regard to a number of issues, including, but not limited to the following:

- travel distances to a point of choice to alternative exists in Level 3 and 4 car park;
- travel distances to the nearest exit in Level 3 and 4 car park;
- travel distances between exits in Level 3 and 4 car park;
- travel distances from roof plant on Level 8 of Building F exceeds 20 to point of choice;
- horizontal exits comprising more than 50% of the required exits on Level 4 swimming pool;
- discharge of fire isolated stairs does not lead direct onto the street;
- deficient aggregate exit width in the podium; and
- the Class 9b part of the buildings (Swimming Pool/gymnasium on Level 4 and common rooms on Level 5) will not be provided with zone smoke control.

Where “Alternative Solutions” are employed, assessment and verification will generally be in accordance with the assessment methodology stipulated under Section A0.9 of the BCA or via “Fire Safety Engineering” analysis in accordance with the “International Fire Safety Engineering Guidelines”.

## 5.16 Site Suitability

The site remains suitable for the provision of residential Buildings B and F, as assessed and deemed acceptable under the Stage 1 consent. Having regard to the characteristics of the site and its location, the proposed development is considered appropriate in that it will:

- provide a key part of the redevelopment of TRSC that supports the desired transformation of the Ryde Town Centre as envisaged in LEP 143 and DCP 2006;
- endorses the aims and objectives for integrated land use outcomes in the vicinity of public transport services;
- be of appropriate scale and form, as envisaged under LEP 143;
- significantly contribute to the future provision of housing in the local area and provide housing choice to meet the needs of a diverse community.

On detailed review of Buildings B and F, the site is suited to the development in that:

- the proposed buildings are of high architectural design consistent with the spirit and intent of SEPP65 and the Stage 1 envelopes, and will complement the design of the shopping centre below;
- the proposed buildings respect the surrounding heritage items and open space associated with those heritage items;
- the buildings have been designed to ensure that there are no adverse impacts on the surrounding land uses; and
- have been designed in the context of future development proposed as part of a later stage.

## 5.17 Public Interest

Consistent with the overall objectives for the project, the proposed development will deliver a number of public benefits, including:

- establishment of a significant mixed use residential, retail and commercial development consistent with Ryde PSO (as amended by RLEP 143) and Ryde DCP 2006, and adding vitality to the locality;
- providing 1,816m<sup>2</sup> communal landscaped open space for residents of Building B and F;
- providing a range of housing choice to help support local community needs; and
- providing of paved and landscaped plaza, pedestrian footbridges, retail Strada and a network of through site links.

Overall, the provision of Buildings B and F as the next stage of redevelopment of the TRSC ensures the orderly and economic development of the integrated mixed use development envisaged at Stage 1, thereby contributing to the overall activation and revitalisation of the Ryde Town Centre.

### Developer Contributions

On 14 May 2007 a Voluntary Planning Agreement was entered into between Ryde City Council and Bevillesta Pty Ltd. The Voluntary Planning Agreement was made in lieu of monetary contributions otherwise payable under City of Ryde's Section 94 contributions plan and construction fees otherwise payable.

The Voluntary Planning Agreement included the provision of up to 450 residential apartments on the TRSC site. This DA makes up 185 of those 450 residential apartments.

The public benefits offered under the Voluntary Planning Agreement can be summarised as:

- public domain works;
- City of Ryde Centre;
- Plaza;
- Ryde Part public art contribution; and
- Cenotaph relocation.

The delivery of the contribution for these works (be they physical works or financial contribution) is to be undertaken at the final stage of Stage 1 (i.e. prior to the occupation of Buildings B and F) in accordance with the VPA. Separate developer contributions are therefore not required to be paid as part of this DA.

## 6.0 Conclusion

This DA seeks approval to construct the first residential component of the redeveloped TRSC.

Both Buildings B and F are wholly consistent with the approved Stage 1 envelope and deliver the first of residential units in a managed and coordinated manor.

Bringing forward Buildings B and F helps deliver the fundamental objective for the redevelopment of TRSC, being the achievement of a high quality urban outcome and the realisation of substantial improvements to the public domain and to the public facilities contained within the Ryde Town Centre.

The development principles, established as part of Stage 1, have continued to apply as part of the detailed design of Buildings B and F.

The extensive communal landscaped open space, which provides innovative common open space divided up into active and passive areas, common rooms, a gymnasium and pool will help to foster a strong community from the outset.

Stage 2 plans provide the necessary detail to demonstrate attractive architectural response to the Stage 1 envelopes. In this regard, as the envelopes have been set at Stage 1, the extent of many of the impacts has been considered. The development maintains this level of amenity for adjoining properties and for the future residents of Top Ryde.

The proposed apartments offer internal amenity for residents, afforded by generous apartment sizes, private open space, outlook and views, solar access, privacy and noise mitigation, as well as providing easy access to the extensive range of shops, cafes and restaurants, community and entertainment facilities provided as part of the redeveloped TRSC.

The SEE demonstrates that the proposed development will not give rise to any significant external adverse environmental effects. The proposed development is of high quality in terms of urban design and architectural design and will make a significant contribution to the redevelopment of TRSC, and an integrated mixed use centre.

Given the considerable benefits of the approval, we have no hesitation in recommending that the DA be approved by Council.