

STATEMENT OF ENVIRONMENTAL EFFECTS CHERRYBROOK VILLAGE SHOPPING CENTRE

41-47 SHEPHERDS DRIVE, CHERRYBROOK SEPTEMBER 2016

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1. INTRODUCTION

1.1. OVERVIEW

This Statement of Environmental Effects (SEE) has been prepared for Mirvac Real Estate Pty Ltd (the Applicant) and in support of a Development Application (DA) to Hornsby Shire Council (the Council). This DA has been prepared in accordance with Part 4 of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

This application relates to the Cherrybrook Village Shopping Centre located at 41-47 Shepherds Drive, Cherrybrook. This DA seeks consent for staged alterations and additions to the existing shopping centre to expand the existing retail offering. It also proposes to reconfigure and expand the existing car park, improving traffic flows into and throughout the centre by incorporating an additional accessway along Shepherds Drive.

The Architectural Plans prepared by Ignite Architects and submitted at **Appendix C** are relied upon in regards to the extent of the proposed works sought.

1.2. COST OF WORK AND PLANNING FRAMEWORK

The 'cost of works' for the purpose of determining the DA fee for the proposed development is calculated in accordance with clause 255 (1) of the EP&A Regulation at \$36,950,666 including GST. This is detailed in the Quantity Surveyors Cost Assessment prepared by WT Partnership and provided at **Appendix A**.

The cost of works exceeds \$20 million and is identified under Section 91 of the EP&A Act as 'Integrated Development' with the Rural Fire Service and the NSW Department of Primary Industries. Therefore, the DA will be assessed by Hornsby Shire Council and determined by the Joint Regional Planning Panel or the new Sydney North Planning Panel (as set to commence on the 21 November 2016) subject to concurrence from the Integrated Authorities.

1.3. SUPPORTING DOCUMENTATION

The following technical and design documents have been prepared to accompany this DA and are provided as Appendices to this SEE as identified in Table 1.

Document	Consultant	Appendix
Quantity Surveyors Cost Report	WT Partnership	Appendix A
Site Survey Plan	Craig and Rhodes	Appendix B
Architectural Plans	Ignite Architects	Appendix C
Landscape Plans	Site Image	Appendix D
Arboricultural Impact Assessment	Urban Arbor	Appendix E
Flora and Fauna Report	Ecological Australia	Appendix F
Civil Engineering Plans	Cardno	Appendix G
Heritage Impact Statement	Urbis	Appendix H
Waste Management Plan	Mirvac	Appendix I
Noise Impact Assessment	Acoustic Logic	Appendix J

Table 1 – List of Supporting Documentation

Document	Consultant	Appendix
Traffic and Parking Report	Colston Budd Hunt and Kafes	Appendix K
Access and Mobility Report	Morris-Goding Accessibility Consulting	Appendix L
BCA Compliance Report	Modern Building Certifiers	Appendix M
CPTED Report	Harris Crime Prevention Services	Appendix N
Economic Impact Study	Urbis	Appendix O
Bushfire Protection Plan	Bushfire Planning Services	Appendix P
Geotechnical Report	Douglas Partners	Appendix Q

1.4. STRUCTURE OF THIS REPORT

This report provides the following:

- Section 2 outlines a background to the proposal and details the recent Pre-DA Meeting held in August 2016.
- Section 3 provides a description of the site context, including identification of the site, existing development on the site, and surrounding development.
- Section 4 provides a detailed description of the proposed development including staging.
- Section 5 provides an assessment of relevant matters under Section 79C of the EP&A Act 1979.
- Section 6 provides a summary and conclusion.

2. BACKGROUND

The shopping centre was constructed in the late 1980s and underwent a significant refurbishment and expansion in 2004. It currently includes a Woolworths supermarket and 55 specialty retailers, including a fresh food precinct. The centre has a trade area population of 46,210 and attracts 2.5 million customer visits that generate annual sales of \$124 million.

Mirvac is proposing to redevelop the existing shopping centre to respond to customer feedback and previous discussions with Council, including the need to:

- Provide for an increased range of retail and specialty tenancies.
- Improve the existing vehicle access arrangements to the shopping centre.
- Provide a more efficient and legible car parking layout.
- Introduce undercover car parking with all-weather protection.

Consideration was given to the potential opportunities and constraints of the site and its locality in the preliminary design phase for the proposal, including:

- Siting and layout of the existing shopping centre, including the current access arrangements, car parking location and principal building entries.
- Critical importance of maintaining the operation of the shopping centre during demolition and construction.
- Spatial requirements for the proposed new tenants, including a second supermarket and gymnasium, the relocated child care centre and associated car parking.
- Opportunity to accommodate an additional accessway to address existing constraints associated with the current access arrangements.
- Landscaped setting of the site, including the existing trees within the front setback along Shepherds Drive, the public open space and vegetation on the immediately adjoining land to the west and the public open space on the opposite side of Shepherds Drive.
- Site topography, including the level difference between the existing car park and Shepherds Drive and between the site and the adjoining public open space, particularly along the western boundary.

2.1. PRE-LODGEMENT CONSULTATION

An initial Pre-Lodgement Meeting was held with Council Officers in July 2015 (PL/ 67/2015). It later became apparent that the construction process required to facilitate the proposed expansion would have a significant impact on the ongoing operations of the shopping centre. This includes both the physical works and the extended period of disruption to the car park.

A revised scheme including the staging of demolition and construction works was presented to Council on 23 August 2016 (PL/68/2016). A summary of the feedback received from this meeting and the proposal's response is provided in **Table 2**.

Table 2 – Response to Pre-DA Minutes

Matter	Response	Reference
Streetscape/ Built Form		
The extension of the existing car parking deck closer to the Shepherds Drive boundary will impact significantly on established vegetation and screening provided along this frontage. Consideration should be given to shifting back the walls and undercroft car park to accommodate additional landscaping and retention of the existing trees along the Shepherds	The proposal has been designed to ensure vegetation along Shepherds Drive is retained as far as practicable.	Appendix D Appendix E
	The existing ground layer covers in the landscaped area fronting Shepherds Drive are sparse and the canopy cover of the trees is relatively high and, as a result, is not considered to provide aesthetical and functional screening to the car parking behind.	
Drive frontage.	While the proposal necessitates the removal of 118 existing trees, a comprehensive replanting strategy is proposed which includes planting of 42 new native trees (based on Sydney Blue Gum High Forest Species) and significant new shrub and ground layer species at street level. In this regard, the proposal is likely to increase habitat complexity and contribute visually to the streetscape along Shepherds Drive.	
Details are to be provided of the proposed external treatment of the car	A materials and finishes schedule has been prepared and is submitted at Appendix C .	Appendix C
park wall. Blank walls will not be supported.	The proposal incorporates extensive landscaping along Shepherds Drive to screen the car park walls. The proposal also includes screening devices to the undercroft car park to ensure it is not visible from the public domain.	
	Interesting façade materials to contribute to articulation and activation are also proposed to the façade at the new vehicular entry to the site along Shepherds Drive.	
Heritage		
a) The proposal should be designed so that the Shepherds Drive boundary tree	The proposal has been designed to retain as many trees as possible along Shepherds Drive.	Appendix D
planting of the site is retained.	A significant replanting strategy comprising new native trees, shrubs and ground covers is proposed and is submitted at Appendix D .	
b) Any new buildings/structures should be designed to have minimal impact on the natural setting of the items in the vicinity.	A Heritage Impact Statement has been prepared and is submitted at Appendix H . The report considers that the proposed works are modest and would not dominate the adjacent items in terms of scale or character.	Appendix H

Matter	Response	Reference
	It is also acknowledged that the proposal will not obscure any significant views towards or from the heritage items as they are visually separated from the proposal by existing and proposed vegetation.	
c) Details of the exterior schedule of finishes, materials and colours should be provided.	A materials and finishes schedule has been prepared and is submitted at Appendix C .	Appendix C
d) A Heritage Impact Statement (HIS) is required to address the impact of the proposed works on the significance of the items in the vicinity, including measures to reduce and remove impacts.	A Heritage Impact Statement has been prepared by Urbis and is submitted at Appendix H . Heritage considerations are also detailed at Section 5.2.3 of this Report.	Appendix H
e) A landscape plan should be submitted which includes additional tree planting on the sites boundaries to complement and enhance the setting of the heritage items in the vicinity.	A Landscape Plan has been prepared and is submitted at Appendix D . The plan identifies new plantings along Shepherds Drive for 42 new native trees (based on Sydney Blue Gum High Forest Species) and new shrub and ground layer species.	Appendix D
a) An accurate tree location plan	An accurate tree location plan has been	Appendix F
prepared by a suitably qualified surveyor showing the location of existing trees (plotted to scale), within ten metres (10m) of any proposed works (including trees within adjoining properties), with trees numbered.	prepared by Urban Arbor and is submitted at Appendix F .	Дреник I
b) A referenced table with corresponding tree numbers to the plan which includes details of the trees genus and species and with trunk Diameters at Breast Height (DBH at 1.4m) and at Ground Level (DGL), health and condition and the trees useful life expectancy.	A reference table identifying the trees within the tree location plan and corresponding details has been prepared and is submitted at Appendix F .	Appendix F
c) A suitably qualified and experienced Project Arborist must be consulted and appointed in accordance with the Australian Standard Protection of Trees on Development Sites, Section 1.4.4 (AS 4970-2009) where works are proposed within the Tree Protection	A suitably qualified Arborist has been consulted during the design development of this proposal and has worked with the project architect to advice on the proposals impact to existing trees located along Shepherds Drive.	Appendix F

Matter	Response	Reference
Zone (TPZ) of a tree to be retained.		
d) For any proposed works within the TPZ of a tree to be retained an Arboricultural Impact Assessment should prepared by an Arborist (AQF 5) in accordance with Councils Guidelines for Arboricultural Impact Assessment. It must be clearly demonstrated that any works proposed within the TPZ of a significant tree or group of trees will not reduce the useful life expectancy of the tree/s.	An Arboricultural Impact Assessment has been prepared by a suitably qualified arborist and is submitted at Appendix F .	Appendix F
e) A tree protection plan in accordance with AS 4970-2009 should be provided with the application for all trees required to be retained. Arboricultural justification will need to be provided where the proposed encroachment is greater than 10% of a Tree Protection Zone (AS 4970-2009). Locating a new building within the TPZ a tree to be retained which will result in pruning or damage to that tree, contrary to that prescribed in AS 4373 or AS 4970 would not be supported.	A Tree Protection Plan has been prepared for the 14 trees proposed to be retained. See Appendix F .	Appendix F
f) Excavation, filling or stockpiling of building materials, parking of vehicles or plant, disposal of cement slurry, waste water or other contaminants is not permitted within the TPZ, of any tree to be retained. Worksite facilities, stockpiles and waste zones must be indicated on the plans provided outside the TPZ of trees to be retained.	Noted. It is recommended that this requirement be conditioned accordingly.	Appendix F
g) Any tree removed from the site as a result of a relevant Development Application, must be replaced with a tree or trees of like habit. A landscape plan must be provided indicating the location and species of replacement plantings. The planting locations should provide sufficient area above and below ground to accommodate a mature specimen of the species selected and permit symmetrical growth of the root system and the tree canopy. The area	The proposal requires the removal of 118 existing trees and retention of 14 trees located along the sites frontage to Shepherds Drive. It is proposed that the retained trees will be integrated with new landscaping including 42 new indigenous native trees (based on Sydney Blue Gum High Forest Species) and more shrub and ground layer species. The level of replanting is considered acceptable and will replace a currently sparse ground layer with boundary planting that is based on the	Appendix D Appendix F

Matter	Response	Reference
and volume of the soil profile should be sufficient to allow adequate root system to develop that will support the mature tree. An adequate proportion of locally indigenous species should be included for planting.	Sydney Blue Gum High Forest Species and native and exotic grasses and ground covers. Refer to discussion at Section 5.2.5 of this Report.	
Traffic		
 A Traffic and Parking Assessment is required to be prepared by a suitably qualified Traffic Consultant. The assessment is to cover, but not be limited to, the following: a) Intersection analysis during weekday and Saturday peak hours b) Considering the traffic network implications c) Pedestrian counts along the frontage of the Shopping Centre on Shepherds Drive during weekday and Saturday peak hours. d) Consideration to given to the removal of the roundabout and signalising the intersection of Shepherds Drive, Kenburn Avenue and Shopping Centre Access. e) Consideration of limiting the proposed secondary access to left/right entry and left exit. This would include the installation of a right turn bay into the site on Shepherds Drive and a raised concrete median to restrict right turn exits. f) Pedestrian and cycle access from both the northern and southern side of the Shopping Centre. g) Consideration of active transport such as a shared path along the site frontage from Shepherds Drive, Kenburn Avenue and Shopping Centre. g) Consideration of active transport such as a shared path along the site frontage from Shepherds Drive, Kenburn Avenue and Shopping Centre. 	 A Traffic and Parking Assessment has been prepared and is submitted at Appendix K. The assessment details the following: Intersection analysis, Traffic generation and effects of the proposed development on the surrounding road network, Pedestrian counts are currently being prepared and will be submitted to Council during the assessment of the proposal, An assessment of the need for traffic signals against the RMS warrants was undertaken which note that the traffic flows do not meet the RMS requirements for installation of traffic signals, Details of the proposed new vehicular accessway along Shepherds Drive which is restricted to left/ right entry and left out only. The proposal includes new pedestrian priority crossings throughout the site to improve pedestrian safety and legibility into and throughout the site. Traffic and Parking matters are discussed further at Section 5.2.4 of this Report.	Appendix K

Matter	Response	Reference
The proposed secondary access is to be designed in accordance with ASINZS 2890.1:2004 Offstreet car parking.	A Traffic and Parking Report has been prepared and is contained at Appendix K . The Report identifies that the new accessway along Shepherds Drive complies with the relevant Australian Standards.	Appendix K
All car parking spaces are to be shown on drawings with staff, customer and disabled spaces nominated.	Car parking spaces are clearly identified on the Architectural Plans contained at Appendix C . The proposal will retain the current number of staff spaces. The spaces will be located at the undercroft and level 1 parking levels. A total of 15 accessible spaces are proposed which are located throughout the undercroft, ground and level 1 parking levels.	Appendix C
Disabled parking spaces are to be designed in accordance with AS/NZS 2890.6:2009 Off-street parking for people with disabilities.	The Traffic and Parking Report confirms the proposed disabled spaces comply with the relevant Australian Standards.	Appendix K
Any proposed landscaping and/or fencing must not restrict sight distance from the driveway to pedestrian and cyclists travelling along the footpath (Refer Figure 3.3 ASINZS 2890.1:2004).	The proposed landscaping is generally located in replacement locations. Therefore it is not considered the landscaping will restrict sight distance from the driveway to pedestrian and cyclists.	Appendix D
Stormwater Management		
The on-site detention system is to be designed to limit discharge to 5 year ARI pre development rate and storage volume for up to 50 years ARI storm events. The on-site detention system is not to be constructed in a location that would impact upon the visual or recreational amenity of residents.	Cardno have analysed the existing and proposed impervious site area draining to the Council outlets and notes an approximate 2.51% increase in impervious area with an additional 50 litres/sec runoff in the 1 in 100 year event. Existing 1% flow is 1,278 litres/sec versus proposed 1,333 litres/sec . Cardno notes that this increase is minor and is not proposing On site Detention.However,2 new	Appendix G
	water quality units are proposed and the Music Modelling report is attached at Appendix G .	
The plan is to meet the quality targets in the table 1 C.1.2(b) 'Urban Stormwater Quality Targets' of the Hornsby Development Control Plan (page 22 of chapter 1). Music model outputs, prepared in in accordance with Hornsby Council parameters as contained in the	A Stormwater Quality Report has been prepared by Cardno and is submitted at Appendix G . The report acknowledges that the proposed treatment exceeds the minimum reduction pollutant targets as set by the Hornsby DCP	Appendix G

Matter	Response	Reference
Hornsby Council Music Model Link are to be submitted with the files. Council will permit a second discharge point to Council system that must be connected to a pit if the discharge exceeds 30 litres/per second or exceeds the capacity of the gutter.	2013.	
Driveway and parking areas are to be designed and constructed in accordance with AS 2890.1 and 2890.2. Vehicular swept paths, particularly at the corners/bends are to be shown. Vehicles from the premises are to come out in a forward direction.	The Traffic and Parking Report submitted at Appendix K confirms that driveway and parking areas comply with the relevant Australian Standards. Vehicular swept path analysis has been prepared and documented at Appendix K .	Appendix K
Condition of footpath, kerb and gutter will be assessed with submission of a development application and appropriate conditions applied.	Noted.	-

3. SITE AND SURROUNDS

3.1. THE SITE

This Development Application (DA) relates to the Cherrybrook Village Shopping Centre located at 41-47 Shepherds Drive, Cherrybrook and legally described as Lot 1 in Deposited Plan 816893. The site is located on the northern side of Shepherds Drive between the intersection with Kenburn Avenue in the west and Macquarie Drive in the east.

The site measures approximately 2.954 hectares and is characterised by a rectangular shaped lot with splayed side boundaries. The shopping centre currently accommodates 11,208m² of commercial floor space area, on-grade car parking and undercroft parking forward of the building line fronting Shepherds Drive. A child-care centre is located adjacent to the western boundary. The extent of the site is illustrated in the following **Figure 1**.

Figure 1 – Aerial Photograph of the Site



URBIS

41-47 SHEPHERDS DRIVE, CHERRYBROOK AERIAL IMAGE

Source: Urbis

Key characteristics of the site include:

- The site is accessed via the northern spur of the roundabout located at the intersection of Shepherds Drive and Kenburn Avenue. The frontage of the whole site, including Caltex, is approximately 360m.
- The site falls towards the south to the edge of the existing car park (approximately 2.5m) then falls sharply to the Shepherds Drive carriageway. As Shepherds Drive falls to the east, the elevated nature of the existing carpark above Shepherds Drive increases to the east.
- Minor landscape beds and shrubs at the entrance to the property. A vegetated bank exists along the Shepherds Drive frontage.
- Due to the fall of Shepherds Drive to the east, the site is elevated at the eastern end. Cut beneath the elevated carpark area at the eastern end of the site, at the Shepherds Drive level, exists a Caltex

Service Station. This Service Station sits within a separate lot restricted in height (Lot 2, DP 816893), and is accessed directly from Shepherds Drive under separate stratum title.

Figure 2 provides a series of site photos, illustrating key features identified above.

Figure 2 – Site Photos



Picture 1 – Existing main pedestrian entry and at-grade car parking





Picture 3 – Existing landscaping along Shepherds Drive

Picture 2 – Existing vehicular roundabout entry/ exit to the site



Picture 4 – View of existing car park and landscaping from the south

3.2. SURROUNDING DEVELOPMENT AND INFRASTRUCTURE

The site is well located in terms of proximity to other retail centres and public transport hubs, specifically:

- The proposed Cherrybrook Station (railway station proposed as part of the Sydney Metro Northwest) is located approximately 3km south of the site. A Structure Plan has been developed within an 800m radius of the new station located along Castle Hill Road which features a high density mixed use precinct close to the station including residential development and a new local centre.
- The Appletree Shopping Centre is located approximately 1km north east of the site. This centre features
 speciality shops and non-retail uses including a medical centre, dentist, physiotherapist and real estate
 agency.

- Thompsons Corner is a small neighbourhood retail precinct located approximately 3.5km south of the site. This centre is anchored by a small Coles supermarket and small food and beverage tenancies.
- Oakhill Shopping Village is small neighbourhood centre located approximately 2km west of the site. The centre is anchored by a small IGA supermarket and a number of complementary speciality retail tenancies and non-retail tenancies.



Figure 3 – Location Map



41-47 SHEPHERDS DRIVE, CHERRYBROOK LOCATION MAP

Source: Urbis

Development within the immediate vicinity of the site comprises a mix of land uses primarily open space and residential in nature. More specifically the following land uses surround the site:

- Bounding the western, northern end eastern boundaries of the site is a community and recreation precinct known generally as "Greenway Park". Greenway Park accommodates bushland (mainly to the west) as well as open parkland, sporting ovals and associated parking (to the north and east).
- To the south of the site, across Shepherds Drive, exists "The Lakes of Cherrybrook". This parkland area accommodates established trees lining the Shepherds Drive frontage and small lakes around which exists picnic tables and amenities.
- Also to the south of the site, toward the Kenburn Avenue roundabout is low density residential houses. These houses are setback off the road in landscaped settings.
- As discussed, a Caltex Service Station is located beneath the eastern end of the site with direct frontage to Shepherds Drive.

Generally, the site is bounded by significant tracts of open space to all but a portion of its southern boundary (across Shepherds Drive) where low density residential development is situated. Residential development exists further south and west fronting Kenburn Avenue and Shepherds Drive.

3.3. SURROUNDING ROAD NETWORK

The site has its sole frontage to Shepherds Drive. Shepherds Drive is a collector road that services the site and immediate residential area. It provides for one traffic lane and one parking lane in each direction and bus stops on either side of the road.

Shepherds Drive intersects with Kenburn Avenue in the south west, adjacent to the vehicular entry into to the centre, and Macquarie Drive in the south east. Kenburn Avenue and Macquarie Drive are also classified as collector roads. Entry into the centre at the Shepherds Drive and Kenburn Avenue intersection is controlled by a roundabout. The roundabout features two exit lanes from the shopping centre on the approach to the roundabout.

Shepherds Drive connects with New Line Road in the south west which provides broader connections to Dural in the north, Pennant Hills in the south and surrounding suburbs.

3.4. PUBLIC TRANSPORT

Public transport options within easy access of the subject site include:

- Local bus services operate throughout the area with bus stops located along Shepherds Drive and Macquarie Drive in close proximity to the site. Routes of particular note include:
 - Route 600-M60: Hornby and Castle Hill to Parramatta,
 - Route 620/620X: Dural via Cherrybrook to the City,
 - Route 621: Cherrybrook, West Pennant Hills, Macquarie Park to the City,
 - Route 622: Dural via Cherrybrook to Milsons Point,
 - Route 626: Dural via Cherrybrook to Pennant Hills.
- The Sydney Metro Northwest will extend from Rouse Hill to the existing Chatswood Railway Station via Castle Hill and Epping. Cherrybrook Station is located approximately 3km south east of the site.

4. **PROPOSED DEVELOPMENT**

4.1. OVERVIEW

This application seeks development consent for alterations and additions to the existing Cherrybrook Village Shopping Centre to accommodate 6,599m² of additional commercial floor space and reconfiguration and expansion of the existing car park.

It is proposed that any development consent issued for this proposal be prepared in a manner which enables the shopping centre to continue operation during the construction phase (s). To facilitate this, it is proposed to stage the issue of **construction certificates** (CCs) and enable **occupation certificates** (OCs) to be issued as various phases within each of the respective stages are completed. A final OC will be sought once all of the proposed works have been completed to the satisfaction of the Private Certifying Authority.

The proposed construction staging will consist of two stages being **Stage 1** and **Stage 2**. As illustrated in **Figure 4**, the Stage 1 works are located east of the main pedestrian entrance to the centre at ground level and the works west of the main pedestrian entrance form part of Stage 2.

A detailed breakdown of the works proposed in the two stages is provided in the subheadings below. Each stage has been planned to ensure the car parking supply, vehicle and pedestrian access arrangements is maintained to a satisfactory standard to support the operation of the centre while the other stage is under construction. An overview of the proposed development upon completion of Stage 2 is summarised in **Section 4.4**.

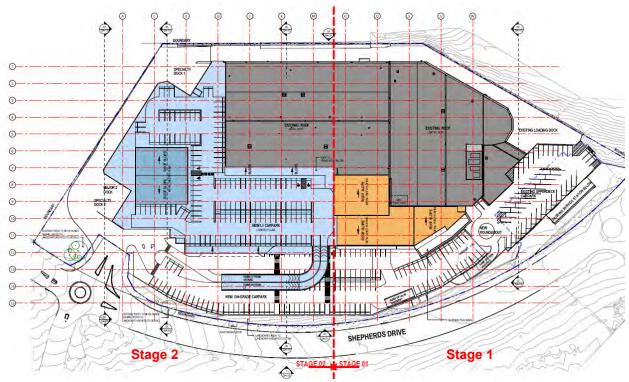


Figure 4 – Construction Staging Plan

Source: Ignite Architects

4.2. STAGE 1 WORKS

Stage 1 includes the following work:

- Part ground floor level demolition and construction of the following additions:
 - Extension of the existing Woolworths Supermarket by 99m² GLAR,
 - 1,069m² of speciality retail (n.b. net additional 744m² GLAR),
 - Reconfiguration of part of the ground floor level at-grade car park with provision for 339 at-grade car parking spaces (n.b. loss of 25 spaces).
- Extension of the existing undercroft car park to the west and provision of an additional 75 car parking spaces and associated storage areas and a 177m² car wash centre,
- Demolition of existing child care centre located in the north western corner of the site,
- Construction of a new level above the existing shopping centre (known as Level 1) including 1,317m² of non-retail gross lettable area, comprising:
 - Child care centre with a GLAR of 442m² (excluding outdoor play area),
 - Medical centre with a GLAR of 428m²,
 - Centre management office with a GLAR of 447m².
- Extension of the existing undercroft car park to the west and provision of an additional 75 car parking spaces and associated storage areas and a 177m² car wash centre,
- Provision of a secondary access driveway to the undercroft car park to provide egress and ingress
 movements with restricted left out only,
- Provision of vehicular and pedestrian circulation and access ramps between the shopping centre and car parking levels, including two vehicle access ramp between lower ground level and ground level,
- Construction of a new roundabout in the south eastern corner of the car park at ground floor level,
- Retention of trees where practical in the front setback to Shepherds Drive and provision of new replacement planting including 18 trees as well as shrubs, groundcovers and additional plantings in between the at-grade car parking spaces to soften the appearance.

The Architectural Drawings prepared by Ignite Architects and numbered DA-10.1, DA-11-DA-16 are relied upon in regards to the extent of the Construction Stage 1 works sought (see **Appendix C**).

4.3. STAGE 2 WORKS

Stage 2 includes the following work:

- Part ground floor level demolition and construction of the following additions:
 - Provision of 1,790m² of speciality retail (n.b. net loss of 919m²),
 - Provision of a new major supermarket in the north western corner with a GLAR of 1,823m²,
 - Provision of two mini major tenancies with a total GLAR of 1,011m²,
 - Provision of two new loading docks in the north western corner to service the new major supermarket and specialty retail,
 - Reconfiguration of part of the ground floor level at-grade car park and provision of 191 spaces (n.b. net loss of 148 spaces).
- Construction of a new level above the existing shopping centre (known as Level 1) including a 786m² gymnasium and 145 car parking spaces,
- Extension of the existing undercroft car park to the west and provision of an additional 52 car parking spaces,

- Provision of vehicular circulation and access ramps between ground level and level 1 car parking levels including a separate 'up' and 'down' ramp,
- Improved pedestrian access into the centre through provision of a number of pedestrian priority crossings within the at-grade car park,
- Retention of trees where practical in the front setback to Shepherds Drive and provision of new replacement planting including trees, shrubs and groundcovers as well as additional plantings in between the at-grade car parking spaces to soften the appearance.

The Architectural Drawings prepared by Ignite Architects and numbered (DA-17-DA-22) are be relied upon in regards to the extent of the Construction Stage 2 works sought (see **Appendix C**).

4.4. NUMERICAL OVERVIEW

Cumulatively, key numerical details of the proposal are provided in Table 3.

Table 3 – Key Numerical Details

Development Element	Proposed
Site Area	2.954 hectares
Existing Gross Floor Area	11,208m ²
Proposed Gross Floor Area	17,807m ²
Existing Gross Lettable Area	9,636m ²
Proposed Gross Lettable Area	14,097m ²
Demolition	3,434m ²
New areas (GLAR)	
Specialty Retail	-175m ² (total - 5,194m ²)
Mini Major Retail	1,011m ²
Supermarket	1,922m ² (total - 5,789m ²)
Childcare	442m ²
Gymnasium	786m ²
Medical centre	428m ²
Office	447m ²
Existing car parking	
Undercroft	97 spaces
Ground	364 spaces
	Total - 461 spaces
Proposed car parking	
Undercroft	224 spaces

Development Element	Proposed
Ground	-173 spaces
Level 1	145 spaces
	Total additional spaces- 196 spaces
Total car parking spaces	657 spaces
Building height	11.96 metres

4.5. BUILT FORM

The existing built form is generally characterised by at-grade car parking elevated above Shepherds Drive and a single level shopping centre setback behind. The proposed development seeks to expand the existing centre while improving vehicular access into and throughout the site. This includes reconfiguration of the existing at-grade car park and existing centre at ground floor level and construction of an additional part storey above the existing centre. The proposed additions will accommodate a mix of non-retail uses and additional car parking spaces.

The proposed expansion of the ground floor retail into the existing car park will improve the existing presentation of the shopping centre along the Shepherds Drive streetscape. A number of architectural and landscape initiatives are proposed such as articulation to car parking walls and new native tree plantings, shrubs and ground covers along Shepherds Drive (detailed in **Section 4.7** and **4.10**).

4.6. SIGNAGE

Business and building identification signage is not sought by this Development Application (DA). Indicative signage locations are illustrated on the Architectural Plans for reference purposes.

A separate Development Application (DA) will be sought for signage that does not satisfy the Exempt and Complying provisions set out in the *State Environmental Planning Policy (Exempt and Complying Codes)* 2008.

4.7. FAÇADE, MATERIALS AND FINISHES

The proposed façade, materials and finishes have been purposely designed to enhance the sites existing built form and complement the adjacent heritage parkland. The primary building materials and finishes include:

- Stacked stone cladding to the new vehicular entry façade and elements at ground floor level,
- Render paint masonry car park wall fronting Shepherds Drive,
- Feature timber look finish batters to level 1 and at the undercroft level to screen car parking that is visible from the street frontage,
- Continuation of the brown toned colour palette throughout the centre.

The external finishes are described and illustrated in the Architectural Plan package contained at **Appendix C**.

4.8. HOURS OF OPERATION

The proposed land uses are proposed to operate in accordance with the existing operating hours of the centre, which are as follows:

Monday- Wednesday, Friday – 9am to 5:30pm

Thursday – 9am to 9pm

Saturday – 9am to 5pm

Sunday – 10am to 4pm

Any tenancy that seeks to operate outside of the standard hours of operation will be subject to separate development consent.

4.9. TREE REMOVAL

An Arboricultural Impact Assessment has been prepared by Urban Arbor to provide an assessment of the health and condition of existing vegetation on site, and the impact the proposed development will have on existing trees.

The Report is provided at **Appendix E** and it identifies the following:

- In total 128 were assessed of which 54 trees were awarded a Category A retention value, 4 trees were Category AA retention value and 74 trees were Category Z retention value. Category Z retention value was given to trees that are not indigenous to Hornsby Council and therefore exempt from retention under the Hornsby LEP and DCP.
- The assessment found that 118 trees are required to be removed in order to accommodate the proposed development. The retention value of these trees is described as follows:
 - 48 trees contain Category A retention value,
 - 4 trees contain Category AA retention value,
 - 66 trees contain Category Z retention value.
- A maximum of 14 trees have been identified as being capable of being retained along the Shepherds Drive frontage comprising 6 Category A trees and 8 Category Z trees.
- A group of 6 trees (trees 3, 4, 37, 66, 112, 114) has been classified as forming part of the Blue Gum High Forest critically endangered ecological community. However, due to the disturbed nature of the landscaping and lack of characteristic mid-storey heights, the vegetation does not correspond to Blue Gum High Forest under the EPBC Act.
- An additional 7 trees (trees 115,117, 119, 121,123, 124, 125) were considered to potentially form part of the Sydney Turpentine Ironbark Forest ecological community. However, the patch size of the local occurrence is not large enough to satisfy EPBC Act criteria.

The Arboricultural Report is supplemented by a Flora and Fauna Assessment prepared by Eco Logical which assesses the significance of the existing trees on site (see **Appendix F**). Tree removal and flora and fauna matters are discussed further at **Section 5.2.5** of this Report.

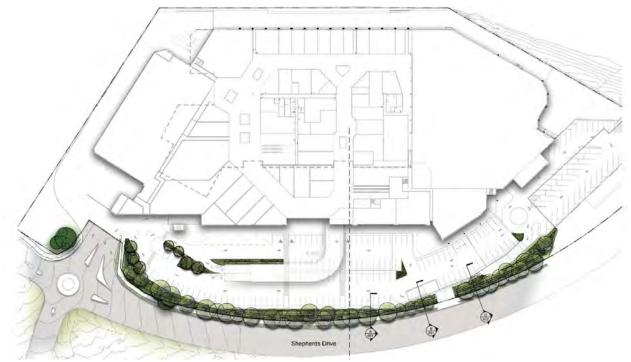
A landscaping strategy including replacement planting is proposed to offset the removal of existing trees, and is discussed in **Section 4.10** below.

4.10. LANDSCAPING

A Landscaping Strategy has been prepared by Site Image and is contained at **Appendix D**. The proposed landscaping includes the following key elements:

- Replacement tree planting along Shepherds Drive for 42 trees, including:
 - 35 boundary trees along Shepherds Drive,
 - 7 feature trees at south western corner of the site at the entrance to the shopping centre,
- Boundary grasses, ground covers and shrubs along Shepherds Drive and within the at-grade car park.

Figure 5 – Ground Level Landscape Plan



Source: Site Image

4.11. VEHICULAR AND PEDESTRIAN ACCESS

The proposal seeks to retain the existing vehicular entry /exit to the site via the roundabout at the intersection of Shepherds Drive and Kenburn Avenue.

The proposal includes a new vehicular entry and exit further along Shepherds Drive. This driveway will connect to the new undercroft car park and is directly accessible via ramps to ground floor level. A right turn bay is proposed to be constructed along Shepherds Drive to allow for vehicles to access the new driveway. Vehicles exiting the site will be restricted to left out only.

The proposal seeks to improve pedestrian access into and throughout the site. An existing pedestrian refuge is located along Shepherds Drive to provide safe pedestrian access from the park to the centre. A series of new pedestrian priority crossings are proposed within the at-grade car park and in the south western corner to cater for pedestrians arriving to the site by means other than a private vehicle. Travelators are proposed between the shopping centre and car parking levels.

4.12. CAR PARKING AND LOADING

The proposal includes demolition and reconfiguration of the existing at-grade car park, extension of the undercroft car park to the west and construction of an additional part storey above the existing shopping centre (known as Level 1).

The proposal results in an additional 196 spaces with a total parking provision of 657 spaces (including 15 accessible spaces) and 13 motorcycle spaces and 24 bicycle spaces. The car park layout has been designed to comply with the relevant Australian Standards (AS). A new roundabout is proposed at ground floor level to improve vehicular circulation throughout the car park. Ramps are proposed to provide access between the car parking levels.

A reconfigured loading area is proposed in the north western corner of the site with provision of two separate docks. The loading area will service the new supermarket, mini major and speciality tenancies. The loading docks are able to accommodate up to a 19m semi-trailer. The existing loading dock in the north eastern corner of the site will continue to service the Woolworths Supermarket.

Car parking and traffic matters including compliance with the relevant DCP and RMS standards is discussed further at **Section 5.4.2** of this report and in the Traffic Impact Statement contained in **Appendix K**.

4.13. CONSTRUCTION TRAFFIC MANAGEMENT

A Construction Management Plan will be prepared by the Principal Contractor (once appointed) and be submitted to Council prior to the issue of a Construction Certificate. The Plan will include the construction staging of the proposal including construction traffic management.

The Traffic and Parking Report (see **Appendix K**) identifies key principles that will be implemented during the construction phase to ensure the works do not adversely impact upon the functioning of the surrounding road network. In summary these principles include:

- The construction of the development will commence with site preparation works,
- Construction access will be provided along Shepherds Drive and a works zone will be required along the site frontage to Shepherds Drive,
- Construction fencing will be erected around the perimeter of the site with overhead protection (where required) and pedestrian footpaths adjacent to the site will be maintained for the duration of the construction works,
- The movement of trucks entering and exiting the site will be controlled by traffic controllers and will enter and exit the site in a forward direction,
- Establishment of designated truck routes,
- Maintain existing on-street car parking along Shepherds Drive.

An Erosion and Sediment Control Plan has been prepared and is submitted at Appendix G.

4.14. WASTE MANAGEMENT

A Waste Management Plan has been prepared by Mirvac and is submitted at Appendix I.

The report details a comprehensive operational waste management strategy for the site that is to be adhered to by all tenants within the Centre.

5. ASSESSMENT OF PLANNING CONSIDERATIONS

This chapter contains our assessment of the environmental effects of the proposed development in accordance with Section 79C (1) of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

5.1. COMPLIANCE WITH RELEVANT STRATEGIC AND STATUTORY PLANS AND POLICIES

The consent authority is required to take into account the relevant provisions of any environmental planning instrument, draft instrument, or development control plan in their assessment of a DA. The following legislation is considered relevant to the proposed development:

- 'A Plan for Growing Sydney',
- Environmental Planning and Assessment Act 1979 (EP&A Act),
- Rural Fires Act 1997,
- Water Management Act 2000,
- Relevant State Environmental Planning Policies (SEPP's),
- Hornsby Local Environmental Plan 2013 (Hornsby LEP 2013),
- Hornsby Development Control Plan 2013 (Hornsby DCP 2013).

The consistency and compliance of the proposal with the relevant strategic and statutory plans and policies is detailed in the following sections.

5.1.1. A Plan for Growing Sydney

The Metropolitan Strategy for Sydney titled 'A Plan for Growing Sydney' (the Strategy), provides the NSW Government's strategic planning vision for metropolitan Sydney, guiding land use planning decisions for development over the next 20 years. The Strategy identifies the need to accommodate continued growth in population and employment, with 1.6 million additional people and an additional 689,000 new jobs.

The site is located within the Northern subregion. The proposal achieves the objectives of the Plan and the subregion as it:

- Contributes to employment through the construction and operational stages with the proposed additions generating approximately 149 new casual, part time and full time jobs,
- Improves vehicular and pedestrian access into and throughout the centre. The centre is well located in terms of proximity to a number of bus routes thereby encouraging sustainable travel to the site,
- Protects the natural environment and surrounding heritage parkland by retaining trees where possible and proposing a comprehensive replanting strategy,
- Promotes sustainability through Mirvac's commitment to incorporating environmentally sustainable initiatives.

5.1.2. Rural Fires Act 1997

The site is not identified as bushfire prone land, however, the land to the sites south and south east of the site (known as the Lakes of Cherrybrook) is mapped as a bushfire hazard and the southern portion of the site is located within the 100m buffer area (see **Figure 6**).

Section 100B of the *Rural Fires Act 1997* identifies development for the purposes of subdivision of land or land uses that are considered to be Special Fire Protection Services on bushfire prone land is development requiring a Bushfire Safety Authority.

A child care centre is listed in Section 100B (6) of the *Rural Fires Act 1997* as a Special Fire Protection Service. A Bushfire Risk Assessment has been prepared and is submitted at **Appendix P**. The Report details that the proposed child care centre is located approximately 105m from the mapped hazard but the

outdoor play area is located within the100m buffer area. Therefore, in accordance with Section 91 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) the proposal is 'integrated development' with the Rural Fire Service and requires a Bushfire Safety Authority to be obtained prior to development consent being granted.



Source: Hornsby Shire Council

Figure 6 – Bushfire Prone Land Map

5.1.3. Water Management Act 2000

A Geotechnical Report has been prepared by Douglas Partners and is submitted at **Appendix Q**. The report identifies that the excavation works may encounter some seepage of groundwater. At this stage, it is not possible to accurately estimate the likely extent and rate of seepage although based on the permeability test results it is anticipated that it will be less than 3 ML/ year.

Therefore, in accordance with Section 91 of the *Water Management Act 2000*, the proposed works are considered to require an aquifer interference approval with the NSW Office of Primary Industries.

5.1.4. State Environmental Planning Policy No. 65 Remediation of Land

State Environmental Planning Policy No. 55 – Remediation of Land (SEPP 55) was gazetted on 28 August 1998. SEPP 55 provides a State wide planning approach for the remediation of land and aims to promote the remediation of contaminated land for the purpose of reducing the risk of harm to human health or the environment. Clause 7(1) requires the consent authority to consider whether land is contaminated prior to consent of a development application.

The previous land uses of the site do not suggest that contamination may be present on the site. Consequently, the possibility of the land being contaminated is not considered high. Therefore, no further assessment or accompanying documentation is required under the provisions of the SEPP.

5.1.5. State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (ISEPP) aims to facilitate the effective delivery of infrastructure across NSW. This is achieved by identifying matters to be considered in the assessment of development adjacent to particular types of infrastructure, including classified roads, rail corridors and prescribing consultation requirements for certain development.

Clause 104 *Traffic generating development* is applicable as the proposed development results in an additional 2,000m² of shops. A Parking and Traffic Report has been prepared and is submitted at **Appendix K**. The report discusses that the traffic increases along Shepherds Drive would be some 50 to 300 vehicles per hour two-way peak times and some 120 vehicles per hour along Macquarie Drive.

Therefore, the proposal must be referred to RMS for a period of 21 days and the applicant and council is required take into consideration any response received from RMS within that period.

5.1.6. Sydney Regional Environmental Plan No. 20 – Hawkesbury Nepean River (No. 2 – 1997)

Sydney Regional Environmental Plan No. 20 – Hawkesbury Nepean River applies to land located within the Hornsby LGA.

As described in this Report, the proposed development is considered to be consistent with the specific planning policies and recommended strategies with respect to improved water quality, cultural heritage and flora and fauna. The proposal is therefore considered to satisfy the objectives of this SREP.

5.1.7. State Environmental Planning Policy No.44 – Koala Habitat Protection

State Environmental Planning Policy No.44 – Koala Habitat Protection applies to land located within the Hornsby LGA that is greater than 1 hectare in area.

Clause 7 Step 1 - Is the land potential koala habitat? stipulates that before granting development consent, Council must be satisfied as to whether or not the land is a potential koala habitat. The site is occupied by an existing shopping centre featuring an at-grade car park, forward of the building line, and minor landscaping along Shepherds Drive.

A Flora and Fauna Assessment has been prepared and is contained in **Appendix F**. The Assessment confirms that the presence of koalas on the site is unlikely. Therefore, taking into consideration the findings of this report and the characteristics of the site, being an existing shopping centre, it is considered that council can be satisfied that the site is not a potential koala habitat.

5.1.8. Hornsby Local Environmental Plan 2013

This section addresses key compliance considerations in the *Hornsby Local Environmental Plan 2013* (Hornsby LEP 2013) including:

- Land Use Zoning and Permissibility (Clause 2.3),
- Building Height (Clause 4.3),
- Floor Space Ratio (Clause 4.4),
- Preservation of trees or vegetation (Clause 5.9),
- Heritage Conservation (Clause 5.10),
- Earthworks (Clause 6.2),
- Terrestrial Biodiversity (Clause 6.4).

5.1.8.1. Land Use Zoning and Permissibility

The site is zoned B2 Local Centre (refer to **Figure 7**) and the proposed development is characterised by multiple land uses including 'retail premises, 'child care centre, 'medical centre', 'recreation facility (indoor)' and 'office premises'. These uses are all listed as permissible with development consent in the B2 zone.

The proposed development is consistent with the objectives of the B2 zone, as follows:

- Increases the existing retail offering of the centre and proposes additional non-retail uses such as a gymnasium, medical centre and child care centre to serve the people who live in, work in or visit the local area,
- Contributes to job generation during the construction and operational phases. It is considered that the
 proposed additions will generate approximately 149 full time, part time and casual jobs,
- The centre is well located in terms of proximity to a number of bus routes. The proposal seeks to improve pedestrian connections into and throughout the centre through the provision of an additional pedestrian accessway from Shepherds Drive thereby encouraging sustainable travel to the site.

Figure 7 – Zoning Map

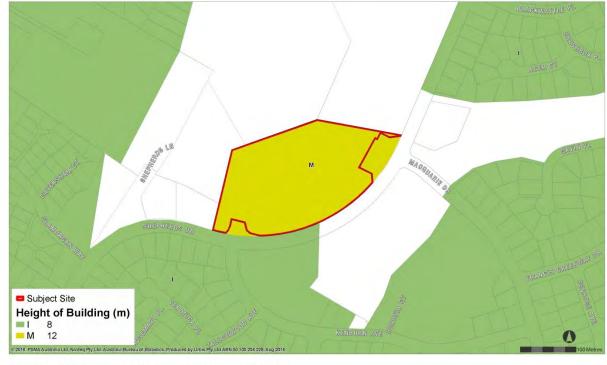
Source: Hornsby LEP 2013

5.1.8.2. Height of Building

Clause 4.3 of the Hornsby LEP 2013 states that the height of a building on any land is not to exceed the maximum shown in the Height of Buildings Map. The maximum height of buildings permitted on the site is 12 metres (refer to **Figure 8**).

The proposed additions result in a maximum building height of 11.96 metres (RL 164.215m). Therefore, the proposed development complies with the maximum 12 metre building height development standard.

Figure 8 – Height of Buildings Map





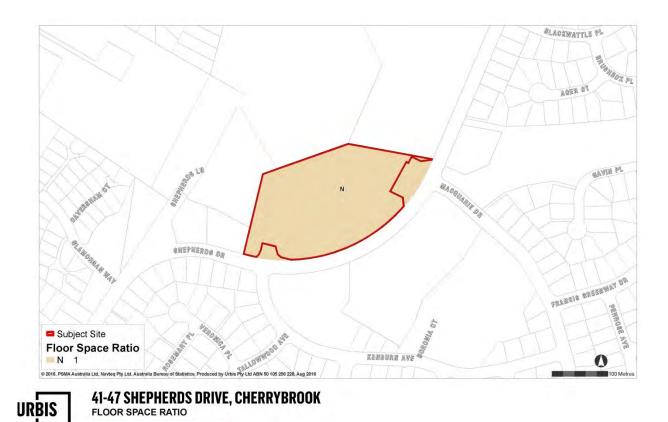
Source: Hornsby LEP 2013

5.1.8.3. Floor Space Ratio

Clause 4.4 of the Hornsby LEP 2013 states that the maximum floor space ratio (FSR) for a building is not to exceed the FSR shown for the land on the Floor Space Ratio map. The maximum FSR permitted across the site is 1:1 (refer to **Figure 9**).

The proposed works result in a total gross floor area (GFA) of 17,807m². Based on a site area of 2.954 hectares this results in a total FSR of 0.6:1. Therefore, the proposed development complies with the maximum floor space ratio development standard.

Figure 9 – Floor Space Ratio Map



Source: Hornsby LEP 2013

5.1.8.4. Preservation of Trees

Clause 5.9 aims to preserve the amenity of the area, including biodiversity values, through the preservation of trees and other vegetation. An Arboricultural Impact Assessment has been prepared and is supplemented by a Flora and Fauna Assessment (see **Appendix E** and **F** respectively).

The Arboricultural Impact Assessment recommends the removal of 118 existing trees as a result of the proposed development and retention of 14 trees. Tree considerations including replacement planting initiatives are discussed in greater detail at **Section 5.2.5** of this Report.

5.1.8.5. Heritage Conservation

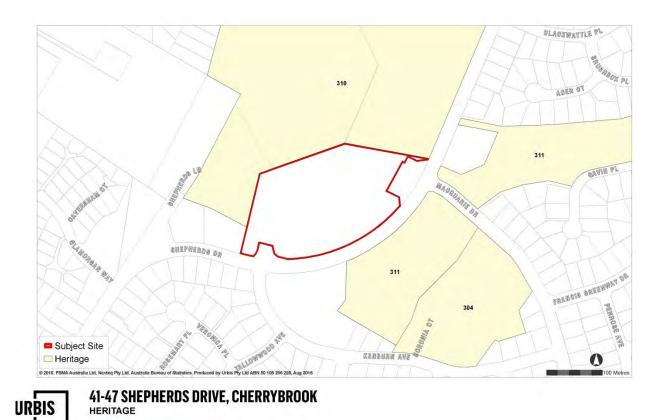
Clause 5.10 requires development consent to be obtained for works relating to a heritage item or for sites located within a heritage conservation area.

The site is not identified as a heritage item nor is it located in a heritage conservation area. However, a number of locally listed heritage items surround the site (see **Figure 10**), including:

- Item 310: Greenway Park,
- Item 311: 'The Lakes of Cherrybrook Reserve",
- Item 304: The Lakes of Cherrybrook "Kenburn Hall" and garden.

A Heritage Impact Statement has been prepared in support of the proposed development and is contained at **Appendix H**. The Report concludes that the proposed development will not have any unacceptable impacts on surrounding heritage items. Heritage considerations are also discussed at **Section 5.2.3** of this Report.

Figure 10 – Heritage Map



Source: Hornsby LEP 2013

5.1.8.6. Earthworks

Clause 6.2 aims to ensure that earthworks will not have a detrimental impact on environmental functions and processes, neighbouring uses, cultural or heritage items or features of the surrounding land.

The proposed development involves minor excavation to accommodate the undercroft car park and new vehicular entrance along Shepherds Drive. The level of excavation is not considered excessive, is confined to the boundaries of the site and is located at a considerable distance away from any heritage items. For these reasons, it is considered the level of excavation is appropriate and will not result in any detrimental environmental impacts on adjacent land.

A Geotechnical Report documenting the conditions of the site has been prepared and submitted at **Appendix Q**. The recommendations contained within this report will implemented during the construction phase.

5.1.8.7. Terrestrial Biodiversity

Clause 6.4 aims to maintain terrestrial biodiversity by protecting native flora and fauna, protecting ecological processes and encouraging the conservation and recovery of native fauna and flora and their habitats.

Land abutting the site to the west and the south western portion of the site is identified as biodiversity significant land. A Flora and Fauna Assessment has been prepared (see **Appendix F**) and assesses the site against the objectives and provisions of this clause. In summary, the report concludes the following:

- The proposal avoids impacting areas of remnant vegetation and seeks to take advantage of already cleared areas,
- Potential indirect impacts are not likely to be significantly adverse,
- New landscaping and protection are likely to encourage the conservation and recovery of flora and fauna and their habitats,
- The development would not result in any significant impact to any species, populations or communities listed under the Threatened Species Conservation Act or matters of National Environmental Significance.

5.1.9. Hornsby Development Control Plan 2013

Hornsby Development Control Plan 2013 (Hornsby DCP 2013) is the relevant DCP applying to the Hornsby LGA. The relevant sections of the Hornsby DCP 2013 applying to the proposal include:

- Part 1 General,
- Part 4 Business,
- Part 7 Community,
- Part 9 Heritage.

An assessment of the proposal's consistency with the Hornsby DCP 2013 is provided in Table 4.

Table 4 – Hornsby DCP 2013 Compliance Assessment

Control	Required	Proposal	Complies
Part 1 - General			
1C.1.1 - Biodiversity	Native vegetation along roadsides should be retained where possible as it provides fauna habitat, links bushland areas, and maintains the scenic qualities of the area.	All measures have been undertaken to ensure native vegetation along the Shepherds Drive site boundary is retained where practicable. An Arboriculture Impact Assessment has been prepared and is submitted at Appendix E . The report discusses the proposal requires the removal of 118 trees. This report is supplemented by a Flora and Fauna Assessment (see Appendix F) which confirms that none of the trees are considered to form part of any significant ecological community that occurs within the immediate area. Refer to discussion at Section 5.2.5 of this report.	Yes

Control	Required	Proposal	Complies
1C.1.2 - Stormwater Management	 Sediment and Erosion Control: Development should have appropriate controls to stabilise and retain soil and sediments during the construction phase. An Erosion and Sediment Control Plan must be prepared as part of the DA. Water Hydrology: An on-site stormwater management system is required for all development involving external works. An on-site detention (OSD) system, designed in accordance with the HSC Civil Works Specification, should be provided. Stormwater should be gravity drained to Council's drainage system. 	An Erosion and Sediment Control Plan has been prepared and is submitted at Appendix G . A Stormwater Quality Report has been prepared and is contained at Appendix G . The Report confirms that the proposal exceeds Stormwater Quality Targets detailed in the Hornsby DCP 2013.	Yes
1C.1.4 Earthworks and Slope	Development should be sited on the area of land presenting the least topographic constraints and away from ridge lines.	The proposal involves excavation to accommodate additional car parking at the undercroft parking level and a new vehicular entry/exit off Shepherds Drive. The level of excavation is considered appropriate as it is a horizontal continuation of the existing undercroft car park and is not considered excessive or likely to result in any environmental impacts. A Geotechnical Report documenting the conditions of the site has been prepared and submitted at Appendix Q . The extent of excavation is illustrated in the Architectural Plans contained at Appendix C .	Yes
1C.2.1 - Transport and Parking	Vehicle access and parking should be designed to allow vehicles to enter and exit the site in a forward direction. Loading areas should be located to the side or rear of buildings, screened from view from local and main roads, and be located so vehicles do not stand on any	The proposal seeks to retain the existing vehicular access point at the roundabout located at the intersection of Shepherds Drive and Kenburn Avenue. To alleviate queuing at this roundabout, a new secondary access point is proposed further east along Shepherds Drive.	Partial

Control	Required	Proposal	Complies
	public road, footway, laneway or service road. Loading and unloading areas should incorporate 1 car space and 1 motor cycle space for use by couriers, sited in a convenient location. Number of parking spaces per mode: Car: 1 space per 20m ² GLFA for shops 1 space per 40sqm GFA for offices 15 spaces per 100m ² GFA for restaurants and cafes 1 space per 4 children for child care centres. 4 spaces per surgery for medical centres. Disabled (car): 1-2% of total car spaces provided on-site Bicycle: 1 space per 50 car spaces provided Bicycle: 1 space per 600sqm GFA (for use by staff)	The new access point had been designed to ensure vehicles enter and exit the site in a forward direction in accordance with the Australian Standard for Parking Facilities. The proposal includes three loading docks including two along the western side boundary and a third at the north eastern side boundary (existing). The loading areas will not be visible to vehicle drivers or pedestrians along Shepherds Drive. The loading areas are setback from the sites primary frontage to Shepherds Drive. In terms of its impact on adjacent heritage parkland, the site slopes down toward the park in the east. Sightlines to the loading area will be obscured by extensive landscaping proposed along Shepherds Drive. The existing Woolworths loading dock (located along the sites north eastern boundary) remains unchanged as part of the proposal. The proposal will provide 657 car parking spaces (including15 accessible spaces), 13 motorcycle spaces and 24 bicycle spaces. The car parking supply results in a shortfall under the DCP rate by 82 spaces but provides a surplus when assessed under the RMS guidelines. The RMS rate is considered more appropriate as it is based on extensive surveys of shopping centres and better reflects the existing and proposed use. Parking and traffic matters are discussed in the Traffic and Parking Report submitted at Appendix K and in Section 5.2.4 of this Report.	
1C.2.2 - Accessible Design	Building work should comply with the accessibility provisions of the Building Code of Australia (BCA) and the Disability (Access to Premises -	The proposed extension has been specifically designed to provide equitable, safe and legible access for everyone - leading to the creation of a	Yes

Control	Required	Proposal	Complies
	<i>Buildings) Standards 2010</i> where required.	more inclusive site. Refer to the Accessibility and Mobility Report submitted at Appendix L .	
1C.2.3 - Waste Management	 <u>Demolition and Construction:</u> A Construction Waste Management Plan should be prepared to demonstrate that waste resulting from demotion and construction will be disposed of safety and ethically offsite. <u>Site Operation:</u> A Waste Management Plan should be prepared to demonstrate that ongoing waste resulting from the ongoing operation of the shopping centre will be disposed of safely, efficiently and ethically offsite. 	A Construction Waste Management Plan will be prepared by the principal contractor once appointed. It is recommended that this requirement be conditioned accordingly. A preliminary construction traffic management plan has been prepared and is submitted at Appendix K . A Waste Management Plan detailing the operation waste management procedures has been prepared by Mirvac and is submitted at Appendix I .	Yes
1C.2.5 - Noise and Vibration	Development should be designed so that operational noise is kept to a minimum, with noise generating activities sited away from sensitive land uses.	Noise associated with the construction and ongoing operation of the proposed extension will be controlled to avoid unacceptable off-site impacts. Refer to the Noise Impact Assessment submitted at Appendix J.	Yes
1C.2.7 - Crime Prevention	 A Crime Prevention Through Environmental Design (CPTED) report is required for large scale or crime sensitive developments and should detail: How the proposal has incorporated CPTED principles; Strategies to be implemented to ensure site cleanliness, rapid repair of vandalism and graffiti, removal or refurbishment of decayed physical buildings and elements; and Measures to be incorporated into the development to reduce the potential for crime. 	The proposed extension has incorporated various design strategies to deter crime at the subject site. A CPTED Report has been prepared and is submitted at Appendix N . The report also makes a series of recommendations to be considered by the applicant during the detailed design stage to further deter criminal and anti- social behaviour from occurring at the site.	Yes
1C.2.8 - Building Sustainability	Building design should incorporate water conservation principles and the energy efficiency provisions of the <i>Building</i>	Mirvac is committed to incorporating sustainability initiatives into the development. All developments are required to abide by the Mirvac retail	Yes

Control	Required	Proposal	Complies
	Code of Australia.	Guidelines which provide an overarching sustainability strategy to guide new developments and major refurbishments. See discussion at Section 5.2.11 of this Report.	
1C.2.9 - Landscaping	Significant landscaping should be incorporated into the proposed development to soften the visual impact of buildings and screen undesirable elements. Landscape planting should achieve a mature height in scale with the structures on the site.	Significant landscaping including new tree plantings and groundcovers is proposed along the Shepherds Drive site boundary to offset the removal of the existing trees. Refer to the Landscape Plans attached at Appendix E . Proposed landscaping at the Shepherds Drive site boundary has been specifically designed to ensure the plants achieve a mature height that will screen the proposed car park from view. This will greatly mitigate its appearance to passers-by and positively enhance the public realm of Cherrybrook. Proposed landscaping will dramatically increase the visual attractiveness of the site when viewed from the public domain and help to revitalise and activate the existing Shepherds Drive streetscape.	Yes
1C.2.10 - Services and Lighting	Services:Services should be located within the basement or concealed within the façade with appropriate access. Air conditioning units and mechanical plants can also be located on rooftops, but must be well screened and integrated into the building form.Lighting:External and security lighting should be positioned to avoid light spillage.	Required plant rooms are proposed to be integrated within the shopping centre façade and at the undercroft parking level so that they are not visible from the public domain. This will ensure that the proposed shopping centre remains visually attractive within the public domain. All lighting will be constructed in accordance with the relevant Australian Standards.	Yes
1C.3.1 - Bushfire	Development on land identified as bushfire prone on Council's Bushfire Prone Land Map should address the bush fire protection measures in the publication <i>Planning for Bushfire</i> <i>Protection (2006).</i>	The site is not identified as bushfire prone land. However, mapped bushfire hazard is located to the south and south east of the site. A Bushfire Protection Plan has been prepared and is submitted at Appendix P . The report discusses that due to the proposed child care centres proximity to	Yes

Control	Required	Proposal	Complies
		the hazard, a 'Bushfire Safety Authority' is required to be obtained from the Rural Fire Service.	
Part 4 - Business	3		
4.1 - Commercial Centres Hierarchy	Cherrybrook is identified as a Village Centre within the Hornsby LGA. Accordingly, Cherrybrook should only contain small to medium scale commercial shopping districts that have limited office and bulky good retail functions.	The proposed additions to Cherrybrook Village Shopping Centre will not change the role or function of Cherrybrook within the local retail hierarchy. This is confirmed in the Economic Impact Assessment contained at Appendix O . The shopping centre will remain as a medium scale commercial complex within Cherrybrook, containing limited office and no bulky good retail functions.	Yes
4.2.1 - Scale	 Maximum height of 3 storeys (car parking above 1m is counted as a storey). Proposed buildings should incorporate a commercial podium that has; A maximum height of 8.5m (2 storeys); and An active frontage to the public domain. 	The proposed extension has a building height of 2 storeys. The proposed extension does not incorporate a commercial podium, as existing on-site car parking is located towards the Shepard's Drive site boundary. It would be both unreasonable and unviable to move on-site parking elsewhere. Whilst the proposal does not strictly comply with the DCP provision, the proposed car-park will not exceed the maximum height permissible, and will be visually screened by proposed landscaping to create a visually attractive street frontage into the public realm.	Partial
4.2.2 - Setbacks	 Front Boundary: Minimum 0m setback. Side and Rear Boundaries: A minimum of 1m for buildings up to 8.5m high; and A minimum of 3m for buildings above 8.5m high. Podium Setbacks Floor space above the building podium should be setback at least 3m from the 	The proposed building additions are located in excess of the minimum setbacks required.	Yes

Control	Required	Proposal	Complies
	external enclosing walls of the podium façade below. <u>Setback Encroachments:</u> Driveways or basement ramps up to 6 metres wide with deep soil verges at least 2 metres wide adjacent to the side boundary may encroach onto side setbacks.		
4.2.4 - Landscaping	Landscaping should be included in building setback areas to complement the appearance of the building. Setbacks from sensitive areas (adjoining heritage areas) should be fully landscaped. Street tree planting along primary and secondary retail frontages should be provided having regard to site lines, footpath widths, underground services and awnings.	Significant landscaping is proposed within the Shepherds Drive front boundary setback. Refer to the Landscape Plans attached at Appendix D . The locally heritage listed 'The Lakes of Cherrybrook Reserve' is located directly adjacent to Shepherds Drive boundary setback. Proposed landscaping within the setback has been specifically designed to ensure the site does not detract from, or hinder Cherrybrook Reserves heritage significance. Proposed street tree planting has been suitably designed in a setback heavily constrained of available planting space.	Yes
4.2.5 - Privacy and Security	Privacy: Development should encourage views from commercial areas to the horizon rather than downward onto residential areas. <u>Security:</u> Identify safe, clear and direct pedestrian and cyclist entrance to the building/s from the primary street frontage.	The shopping centres car park is located on the Shepherds Drive frontage. Accordingly, commercial areas are already setback from the primary frontage and views are restricted outwards towards the horizon and surrounding parkland only. Entrances into the subject site have been specifically designed to ensure they are clear and easily identifiable within the public domain to passers-by. A new pedestrian entry point is proposed along Shepherds Drive to improve pedestrian accessibility into the site and encourage alternative sustainable travel options.	Yes
4.2.6 - Sunlight and Ventilation	On 22 June, footpaths should receive 2 hours of sunlight between 9am and 3pm to at least 50% of the area.	Overshadowing diagrams have been prepared and are submitted at Appendix C .	Partial

Control	Required	Proposal	Complies
		The diagrams illustrate that overshadowing is oriented toward Shepherds Drive during the winter solstice period during 9am and 3pm. This impacts footpaths located on the northern side of Shepherds Drive of which the majority of the shadow is reflective of the existing arrangement.	
		The southern side of Shepherds Drive is considered to be the more sensitive interface as it located adjacent to the Lakes of Cherrybrook. The footpaths on this side of Shepherds Drive are considered to be more active than the northern side due to its connection with the parkland and are able to achieve more than 2 hours solar access between 9am and 3pm at mid-winter.	
		The proposal does not overshadow any residential areas or heritage items.	
4.2.8 - Vehicle Access and Parking	 On-site car parking should: Be provided behind buildings or beneath buildings in a basement; Not be sited within a front setback area; Be screened from the street and other public areas by landscaping; and Have the design of basement car park entrances incorporate other facade elements. 	On-site car parking is currently located towards the Shepherds Drive site boundary. The proposed car-park extension will be located within this existing site area and above and below. The proposed car-park extension (including car park entrances) will be visually screened by proposed landscaping to be planted at the Shepherds Drive site boundary. This will greatly mitigate the bulky appearance of the car-park to onlookers and will positively enhance the surrounding public realm of Cherrybrook.	Partial
4.2.9 - Public Domain and Traffic Management Works	Development proposing alternative traffic management solutions should be accompanied by a comprehensive traffic assessment. Development should be designed to accommodate the proposed traffic improvements.	The proposal includes an additional vehicular entry along Shepherds Drive. This access way will consist of a new right turn bay along Shepherds Drive. Refer to the Traffic and Parking Report attached at Appendix L .	Yes

Control	Required	Proposal	Complies
4.2.10 - Design Details	 General: Provides a distinctive base, middle and top; Provides active commercial ground floor uses; Provides frontages on upper levels that facilitate passive surveillance of the street; Incorporates awnings; Embodies active living principles; and Incorporates roof fixtures and lift overruns into the design of the roof. Facades: Continuous active frontages should incorporate windows and doors and avoid long expanses of blank walls. Materials should relate to the context of buildings within the area. Large areas of glass may be included. However, glass with reflectivity over 15% should be avoided. Buildings adjacent to bushland should have recessive colours and external finishes consistent with the nearby bushland areas. A balance between horizontal and vertical elements should be provided through careful placement of windows, colour patterns and signage. Security screens, grilles and bars should provide minimum 60% transparency. 	The proposed extension has been designed in accordance with the DCP design guidelines. However, the design, layout and built form of the existing shopping centre greatly restricts the proposal from fully complying with the DCP. The proposal has been purposely designed to enhance the existing built form. The proposal will create a distinctive base, middle and top for the shopping centre through use of visually attractive building materials, architectural features and colour pallets. Refer to the Schedule of External Finishes attached at Appendix C . The building materials and colour palette will not detract from the surrounding public realm. The proposal will create a visually interesting building. The use of brown tones in the building's architectural design will ensure the proposed external finishes are consistent with surrounding bushland. Accordingly, the proposed will have a negligible impact on the integrity of nearby natural environments within Cherrybrook.	Yes

Control	Required	Proposal	Complies		
Part 7 – Commur	Part 7 – Community				
7.1.2 Scale (Childcare Centre)	A maximum of one child care centre per allotment facilitating a maximum of 90 children. A minimum 3.25sqm of indoor play space per child should be provided within any childcare centre. A minimum 7sqm of outdoor play space per children should be provided within any childcare centre.	The proposed development will facilitate one childcare centre at Level 1 of the centre. The internal and external layout of the centre will be designed to comply with the requirements set out in this DCP.	Yes		
Part 9 - Heritage					
9.4 - Development in the Vicinity of Heritage	Design and siting of new work should complement the form, orientation, scale and style of nearby heritage item/s. Development should maintain significant or historic public domain views to and from the heritage item/s. Original or significant landscape features that are associated with the heritage item and which contribute to its setting should be retained.	 The site is not identified as a heritage item but a number of local heritage items surround the site including The Lakes of Cherrybrook to the south and south east and Greenway Park to the north. The proposed works are considered appropriate from a heritage perspective for the following reasons: The proposed works are modest and would not dominate the adjacent items in terms of scale or character, The proposal will not obscure any significant views towards or from the heritage items. Refer to the Heritage Impact Statement attached at Appendix H and discussion at Section 5.2.3 of this Report. 	Yes		

5.2. ENVIRONMENTAL IMPACTS

5.2.1. Built Form, Bulk and Scale

The proposed built form of the development is largely dictated by the established built form of the shopping centre and the built form controls provided within the Hornsby LEP and DCP 2013.

The existing shopping centre is characterised by at-grade car parking elevated above Shepherds Drive and a single level shopping centre setback to the rear. The proposed development seeks to enhance the existing retail offering while improving vehicular access into and throughout the site.

The built form is proposed to be extended forward of the building line at ground floor level toward the existing at-grade car parking to the south and towards the north western side boundary. A new part storey is also proposed to be constructed above the existing centre (see **Figure 11**).

The built form of the proposed additions is most visible on approach to the centre from the west, at the roundabout intersection of Shepherds Drive and Kenburn Avenue as this represents the highest point of the site. At this location, the proposed additions are built toward the north western side boundary but are considerably setback from the Shepherds Drive frontage to reduce visual impact from passers-by and adjacent residential dwellings. Architectural diversity and articulation is incorporated into the façade design and avoids exposed blank walls in order to create a visually interesting and unobtrusive development in the streetscape. Significant landscaping is also proposed to soften the appearance of the proposal and at-grade car parking while also acting as a screening mechanism.

At Level 1, the proposed gymnasium is further setback from the building line so as to be subservient and reduce further impact on adjacent sensitive land. Due to the extent of setback, it is not considered that the Level 1 addition will be readily perceived from the public domain.



Figure 11 – Aerial view of proposed development from the south west

Source: Ignite Architects

Travelling east along Shepherds Drive, the land slowly slopes downward making the proposed additions less visible from the public domain. As discussed, the proposal results in the at-grade car park protruding slightly forward of its existing alignment toward Shepherds Drive to the south.

To ameliorate any potential visual impacts, the proposal includes extensive landscaping along this boundary and integration of façade articulation such as interesting materials. As discussed in **Section 5.2.5**, the level of new tree plantings, shrubs and ground covers is likely to enhance the appearance of the site at street level and provide a more aesthetical and functional level of screening to the car parking behind. The existing

landscaping is considered to be sparse at street level and the trees contain a high canopy that does not necessarily provide a good degree of screening to the existing at-grade car park.

Due to the extensive building setback and landscape screening proposed it is considered the Level 1 additions will be slightly visible from street level and when viewed from adjacent heritage parkland (see **Figure 12**).

This is considered to enhance the existing appearance of the centre while contributing to the activation of Shepherds Drive. The extent of built form visible from adjacent heritage parkland is considered appropriate and is not excessive so as to dominate the streetscape or impact upon existing sightlines and views.

Figure 12 – View from Shepherds Drive footpath looking towards new lower ground car park entry



Source: Ignite Architects

Overall, the additional built form is entirely within the allowable building height and floor space ratio development standards and is considered to be of a scale and size that is commensurate to a Village Centre.

5.2.2. Overshadowing

Overshadowing drawings have been prepared and are submitted in **Appendix C**. The drawings illustrate that there are minor overshadowing impacts as a result of the proposal during mid-winter. The overshadowing effects of the proposal are described as follows:

- At 9am the shadow is generally confined to the subject site and projects slightly out toward Shepherds Drive in the south and Greenway Park in the north,
- At 12pm the shadow is generally the same,
- At 3pm the shadow impacts are the greatest and extend across Shepherds Drive and overshadow a small portion of The Lakes of Cherrybrook.

In summary, the proposed development results in no overshadowing impacts to the surrounding residential community and very minor impacts to adjacent heritage parkland that can be considered to have negligible environmental impact.

While the proposal overshadows the majority of the pedestrian walkway located on the northern side of Shepherds Drive, it is considered the majority of this shadow is attributed to the existing built form of the centre. The southern side of Shepherds Drive, adjacent to The Lakes of Cherrybrook, is only impacted by

shadow in the afternoon period during mid-winter. This side of Shepherds Drive is considered to be more activated than the northern side due to its connection with the parkland.

Overall, the overshadowing impacts are considered acceptable.

5.2.3. Heritage

A Heritage Impact Statement (HIS) has been prepared by Urbis and is submitted at Appendix H.

The site is not listed as a heritage item, nor is it within a heritage conservation area. However, the site is located within the vicinity of three listed heritage items of local significance.

These three items include:

- The Lakes of Cherrybrook "Kenburn Hall" (Item 304) A landscape item located between Macquarie Drive and Kenburn Avenue to the south of the site. The item is described as a reconstructed 19th century garden, with several mature trees dating from the 1940s to 1950s, arranged around a period mansion which has been preserved within the modern two-storey housing development.
- The Lakes of Cherrybrook Reserve (Item 311) A landscape item located directly to the south and east of the site. The item is described as a reserve of small scale, man-made lakes and tall blue gum trees forming a picturesque naturalistic scene, opposite the shopping centre.
- **Greenway Park (Item 310)** A landscape item wrapping around the northern and western boundaries of the site. The item is described as a large park with playing fields and sports complex containing mature and semi-mature Stringybark, Grey Ironbark, Bluegum, Smooth Bark Angophora and Forest She-Oak specimens.

The HIS has assessed the proposal against the relevant provisions of the Hornsby LEP 2013 and Hornsby DCP 2013 and considers that the proposed works are modest and would not dominate the adjacent items in terms of scale or character.

It is also acknowledged that the proposal will not obscure any significant views towards or from the heritage items as they visually separated from the proposal by existing vegetation along the northern boundary of the site, and the road reserve and street trees along the southern and western boundaries of the site.

Accordingly, the proposal will not have any adverse impacts on the significance of the heritage items in the vicinity of the site.

5.2.4. Traffic, Access and Parking

A Traffic Impact Assessment has been prepared by Colston Budd Rogers & Kafes and is included at **Appendix K**.

Matters relating to car parking, loading docks, vehicular access and traffic generation are addressed in the following subsections.

5.2.4.1. Parking

The Hornsby DCP 2013 prescribes the following parking rates for the relevant land uses of the site:

- 1 car parking space per 20m² GLFA for shops greater than 800 metres from a railway station.
- 1 car parking space per 40m² GFA for offices more than 800 metres from a railway station.
- 15 car parking spaces per 100m² GFA for restaurants and cafes.
- 1 car parking space per 4 children for child care centres.
- 4 car parking spaces per surgery for medical centres.
- 1 motorcycle parking space per 50 car parking spaces.
- 1 bicycle parking space per 600m² GFA.

The DCP does not include specific rates for gymnasiums and refers to the relevant rates in the RMS document, *A Guide to Traffic Generating Development*. The rate specified in this document is three spaces per 100m² GFA, based on the gym being located within a retail complex and shared use of the parking spaces.

For the purpose of calculating the car parking requirements for the proposal, both the DCP rates and RMS guidelines have been considered.

As the fit out for the proposed medical centre is has not been resolved, the RMS rate for this use has been adopted for the purpose of calculating car parking requirements.

A breakdown of the proposed areas of each land use and the calculated parking requirements are provided in **Table 5** below.

Land Use	DCP Rate	RMS Guidelines
Supermarkets (Woolworths and Aldi) – 5,789m ²	290 spaces	243 spaces
Specialty shops – 5,194m ²	260 spaces	234 spaces
Restaurants and cafes – 1,011m ²	152 spaces	40 spaces
Gymnasium – 786m ²	24 spaces	24 spaces
Medical centre – 428m ²	17 spaces	17 spaces
Office premises (incl. centre management) – 447m ²	12 spaces	4 spaces
Child care centre (48 children)	12 spaces	12 spaces
Total car parking required	767 spaces	574 spaces
Motorcycle parking (DCP rate uses for both)	16 spaces	12 spaces
Bicycle parking (DCP rate uses for both)	24 spaces	24 spaces

Table 5 – Car Parking Requirements

As indicated above, the proposal would require 739 car parking spaces, 15 motorcycle parking spaces and 24 bicycle parking spaces as per the DCP rates, and 574 car parking spaces, 12 motorcycle parking spaces and 24 bicycle car parking spaces as per the RMS guidelines.

The proposal will provide 657 car parking spaces, 13 motorcycle spaces and 24 bicycle parking spaces. This represents a shortfall of 82 car parking spaces and two motorcycle parking spaces, when calculated under the DCP rates. However, the parking provisions would provide a surplus of 83 car parking spaces and one motorcycle parking space when assessed against the RMS guidelines.

The proposed car parking provision is considered sufficient for the operation of the shopping centre as it is in excess of the RMS guidelines and patrons to the shopping centre are likely to visit the shopping centre to access multiple shops and facilities (i.e. visiting the supermarket, cafes, medical centre, child care centre and/or gymnasium in one visit).

The proposal includes 15 accessible spaces which equates to 2% disabled parking spaces in accordance with the DCP.

5.2.4.2. Loading Docks

The existing shopping centre has two loading dock areas; one located on the eastern side of the building for Woolworths, and one located on the western side for other retail premises.

The proposed alterations and additions to the shopping centre will include three loading dock areas:

- 1. The existing Woolworths loading dock, which will remain unchanged;
- 2. A combined loading dock for specialty shops and Aldi in the south-western corner of the building; and
- 3. A secondary loading dock for specialty shops in the north-western corner of the building.

The locations of the proposed loading docks are shown in Figure 13 below.

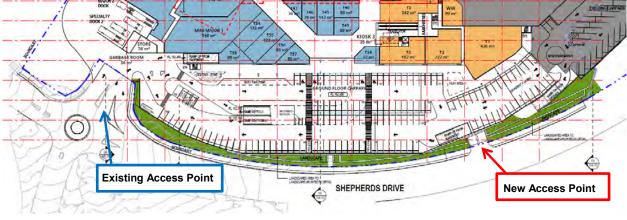
Figure 13 – Loading Dock Locations

Source: Ignite Architects

5.2.4.3. Vehicular Access

The shopping centre currently has a single vehicular access point at the roundabout located at the intersection of Shepherds Drive and Kenburn Avenue (identified in blue in **Figure 14** below). To alleviate queuing at this roundabout, a new secondary access point is proposed further to the east along Shepherds Drive as indicated in red in **Figure 14** below. The provision of the secondary will allow a smoother flow of traffic into and out of the shopping centre.

Figure 14 – Car Park Access Points



Source: Ignite Architects

5.2.4.4. Traffic Generation

Traffic generated by the proposed development will have its greatest effects during weekday afternoon and Saturday peak hours, when it combines with other traffic on the surrounding road network.

A SIDRA traffic analysis, using conservative traffic generation rates, has been undertaken to examine the additional traffic generated by the proposal.

Under the existing conditions, the analysis found that the roundabouts at the intersections of Shepherds Drive with Macquarie Drive and Shepherds Drive with Kenburn Avenue are operating with a good level of service (LOS B), with average delays of less than 20 seconds at peak times.

The analysis found that, after the proposed alterations and additions are constructed, the roundabouts would continue to operate with a level of service (LOS A/B), with and improvement to15 second delays during peak times.

The reduction of congestion at these roundabouts is contributed by the new secondary access point on Shepherds Drive, which will also have a good level of service (LOS A), with delays of less than 15 seconds during peak times.

Based on the above, the surrounding road network will have sufficient capacity for the additional traffic generated by the proposal.

5.2.5. Tree Removal, Flora and Fauna and Landscaping

An Arboricultural Impact Assessment has been prepared by Urban Abor and is submitted at **Appendix E**. This report is supplemented by a Flora and Fauna Assessment prepared by Eco Logical and is submitted at **Appendix F**.

The Arborist Report discusses that the proposed development warrants the removal of 118 existing trees along the Shepherds Drive frontage. Of the proposed trees to be removed 66 trees are identified as lower value (Category Z) trees that are not worthy of being a constraint to the development, 48 higher value trees (Category A) and 4 Category AA trees.

In summary, the removal of these trees is considered acceptable based on the following:

- None of the trees located on the site are identified as ecologically significant vegetation,
- Vegetation to the south of the site known as The Lakes of Cherrybrook is mapped as Blue Gum Shale Forest (BGHF) and is a critically endangered ecological community. Within the subject site six trees (trees 3, 4, 37, 66, 112, 114) were identified as potentially forming part of this community. However, this was dismissed as the trees on the site do not meet the condition requirements under the EPBC Act for the following reasons:
 - No characteristic mid-storey species were recorded on the site,
 - The understorey elements of the BGHF are missing from the site and these trees have either been planted as landscaping or have germinated with the landscaped batter of the site,
 - The landscaping on the site is considered to be highly disturbed.
- An additional 7 trees (trees 115,117,119. 121, 123, 124, 127) were assessed against the condition requirements under the EPBC Act as potentially forming part of the Sydney Turpentine Ironbark Forest (TIF) endangered ecological community. However, the size of the patch within the study area is 0.95ha (under 1 ha) and therefore does not correspond to TIF under the Act,
- The exiting flora and fauna habitat value of the site is very low as there is sparse ground layer and invasion of by exotic species in the landscaping areas,
- The proposal retains 14 trees along Shepherds Drive in a viable condition including 6 trees with a Category A retention value.

While the existing trees on the site are considered to be mature, as demonstrated in the following site photos, the trees contain a high canopy cover and are integrated with limited ground covers and shrubs. The existing level of screening to the car parking walls behind is sparse and is not considered to positively contribute to the Shepherds Drive streetscape.

The proposal provides an opportunity to improve the functionality of the centre, with regard to vehicular access, car parking and retail provision, as well as its aesthetic appearance. While the proposal necessitates the removal of a number of existing trees, this is mitigated by an extensive landscape and replanting strategy that, once the trees mature, will provide a better level of screening to the site at street level.

The retained trees will be integrated with new landscaping including 42 new indigenous native trees (based on Sydney Blue Gum High Forest Species) and more shrub and ground layer species. Overall this is likely to improve the aesthetic appearance of the site, increase habitat complexity and potentially contribute to the habitat values within the site and surrounding area.

Figure 15 – Existing landscaping along Shepherds Drive





Picture 5 – Existing tree canopy

Picture 6 - Existing ground covers and shrubs

In respect to fauna, the report concludes that no fauna species were recorded on the subject site. However, a number of species were identified as likely to occur within the site and surrounding area. The Flora and Fauna assessment lists the following mitigation methods that should be implemented to reduce the potential impact of the proposal on threatened species and ecological communities:

- Mark out boundaries of the disturbed footprint to ensure the proposed works do not encroach into areas that have been designated for protection, supervision of works by an environmental officer and washing down equipment prior to use,
- Mark out retained trees during the construction phase,
- Control weeds within landscaped areas to minimise spread,
- Plant native canopy species to provide potential foraging and roosting habitat.

5.2.6. Accessibility

An Accessibility Report has been prepared by Morris Goding Accessibility and is submitted at Appendix L.

The assessment considers compliance with the Access to Premises Standards, the BCA 2013, where appropriate the Hornsby DCP 2013 and Commonwealth Disability Discrimination Act (DDA).

In summary, the assessment concludes:

- The proposal has accessible paths of travel that continue throughout the centre,
- Compliance with statutory requirements pertaining to site access, common area access, sanitary facilities and car parking can readily be achieved,
- The proposal includes 15 accessible car parking spaces equating to 2.3% of the total spaces proposed.

The report provided the following conclusion, inter alia:

Subject to the development of further detailed design incorporating, amongst other things the recommendations contained within this report, the proposed Cherrybrook Shopping Centre has demonstrated it is capable of complying with the mandatory requirements to provide suitable facilities for persons with disabilities in accordance with the requirements of the Hornsby Shire Council DCP 2013, the DDA and Disability (Access to Premises -Buildings) Standards 2010.

5.2.7. Building Code of Australia

A Building Code of Australia (BCA) Report has been prepared by Modern Building Certifiers and is submitted at **Appendix M**. The report provides an assessment of the proposed design against the deemed-to-satisfy (DTS) requirements of the Building Code of Australia (BCA).

In summary, the assessment concludes inter alia:

In view of the above assessment we can confirm that subject to the above measures being appropriately considered, that compliance with the Deemed-to-Satisfy Provisions and Performance Requirements of the BCA are readily achievable.

5.2.8. Stormwater Management

A Stormwater Quality Report and Stormwater Plans have been prepared and are submitted at Appendix G.

The proposal includes a number of new stormwater pipe and pits and water quality devices to improve the stormwater quality of the site. In order to achieve the water quality targets, two separate treatment trains are proposed as part of the water cycle treatment and are located along the Shepherds Drive boundary.

The results of the MUSIC model show that the nominated treatment trains exceed the nominated pollutant removal targets identified within the Hornsby DCP 2013.

5.2.9. Geotechnical

A Geotechnical Report has been prepared by Douglas Partners and is submitted at Appendix Q.

The Report details the results of drilling six boreholes to depths of 8.9 m to 12.0 m (below the excavation level of the development) and an additional seven boreholes at depths of 0.3m to 2.5m. Due to the site being occupied by an existing shopping centre, the location of the drilling was generally confined to the existing atgrade car park.

The investigations encountered filling to depths of 2.5m underlain by natural clays and very low to low strength, highly weathered to slightly weathered, fragmented to fractured, siltstone and laminite to depths of 5.6 m to 9.8 m. Further, the geological conditions on the site suggest that the groundwater level appears to be at level within the siltstone bedrock and seepage should be expected into the excavation.

Considering the proposed excavation to depths of FFL 149.5m AHD, ground water seepage is anticipated to be less than 3 ML/year (or 0.1 L/s) and should be readily handled by sump and pump measures. The Report recommends that monitoring of flow during the early phases of excavation below the groundwater table be undertaken to assess long term drainage requirements.

5.2.10. Bushfire Protection

A Bushfire Risk Assessment has been prepared by Bushfire Planning Services and is submitted at **Appendix P**. The purpose of this report is to assess the level of bushfire risk associated with the proposed additions.

The site is not identified as bushfire prone land. However, Council's Bushfire Prone Land map identifies land to the south and south east of the site as a bushfire hazard which the southern portion of the site forms part of the 100m buffer area. The hazard to the east is an undisturbed area of forest surrounding a small creek and the second hazard to the south east is an otherwise well managed council reserve known as "The Lakes of Cherrybrook Reserve". Of the two areas, it is the hazard located to the sites south east that affects the site.

The proposed additions are classed by multiple building classifications. However, the proposed child care centre (Class 9) is considered to be Special Fire Protection Development under the *Rural Fires Act 1997*. The proposed child care centre is located approximately 105m from the bushfire hazard. However the

outdoor play area associated with the child care centre is located within the 100m buffer area, and as such, the proposal requires a Bushfire Safety Authority from the Rural Fire Service.

An assessment of the proposed childcare centre was undertaken against the RFS document titled 'Planning for Bushfire Protection'. This assessment concluded that the proposal is deemed to comply with no specific construction requirements identified. Therefore the proposal meets clause 44 of the Rural Fires Regulations and warrants a 'Bushfire Safety Authority'.

5.2.11. Acoustic

A Noise Impact Assessment has been prepared by Acoustic Logic and is submitted at **Appendix J**. The report assesses noise generated by the proposal to surrounding properties.

Three attended and one unattended noise monitoring devices where set up at different locations along the sites periphery to Shepherds Drive to monitor noise generated by the centre.

The results of the acoustic survey indicated that the environmental noise sources impacting the site result from traffic noise along the surrounding roadways. The report investigates the potential noise impacts from traffic movements generated by the proposed additions. In summary, the report concludes that the anticipated increase in traffic flows will cause either no noise increase to existing roadways or compliance with the INP criteria for increased traffic volumes and would not adversely impact on the acoustic amenity of surrounding residential receivers.

In regards to the proposed child care centre, the report recommends that to ensure compliance with the nominated assessment criteria, 6.38mm Lam glazing should be constructed with acoustic seals around the perimeter of the child care centre.

5.2.12. Environmentally Sustainable Design

Mirvac is committed to achieving a high level of sustainability in all of their developments. The Mirvac Retail Guidelines have been developed and provide an overarching sustainability strategy to guide future developments and refurbishments.

Broadly, the Guidelines provide the following sustainability targets to guide initiatives in all new developments:

- Carbon 20% reduction in carbon intensity relative to a FY13 baseline by 2018,
- Energy Install 1MW of renewable energy by 2018,
- Water 15% reduction in water potable water intensity relative to a FY13 baseline by 2018,
- Water Increase water capture and recycling to 15% relative to a FY13 baseline by 2018,
- Waste Achieve a recycling rate of 75% or greater by 2018.

In order to achieve these targets, the proposal introduces a Stormwater Management Strategy to increase water capture and treat and remove gross pollutants and coarse sediments from stormwater runoff (see **Appendix G**).

The Waste Management Plan submitted at **Appendix I** also seeks to improve the waste generation and recycling performance of the centre.

5.3. SOCIAL AND ECONOMIC IMPACTS

5.3.1. Crime Prevention through Environmental Guidelines

A Crime Prevention Consultancy Report has been prepared and is submitted at **Appendix N**. The Report investigates whether the proposed expansion utilises its built environment architecture to positively influence Council's intentional community safety strategy and undertakes an analysis of the proposal against the following three objectives

- Objective 1 Contextual Crime Risk Identification and Mitigation,
- Objective 2 Application of CPTED Principles,
- Objective 3 Compliance with Local and State (Planning) Instruments.

In relation to **Objective 1**, the report identifies that Cherrybrook is not considered a high crime risk or high crime area and there are no 'hot spots' according to the NSW Bureau of Crime Statistics and Research (BOSCAR). Overall, it is considered that the proposal should add to the crime risk mitigation methods already evident in the surrounding residential and recreation neighbourhood.

Objective 2 relates to the proposal's consistency with the CPTED principles. The report considers that the proposed building, access/egress and circulation architecture reflects an understanding of CPTED principles as is embedded in the Mirvac Retail Design Guidelines, subject to incorporation of the following key recommendations:

- Re-design lighting, signage and appropriately secure plant and equipment throughout the centre,
- Installation of IP Network surveillance cameras covering vehicle and pedestrian entry into the site,
- The detailed design of retail entrances and centre or spinal aisle stalls should facilitate observation,
- The ceiling of the undercroft car parking level is to be painted white and overhead lighting should exceed the minimum lux levels,
- Installation of surveillance cameras at level 1 and a help point should an incident occur,
- Open entry (curvilinear) design into public toilets,
- Vandal resistance coatings to be applied to non-glazed building façade surfaces.

Objective 3 relates to the proposal's consistency with the relevant local and state guidelines. The proposal is considered to comply with the relevant guidelines including Hornsby DCP 2013, Safer by design: NSW Police Guidelines and Section 79C (1) of the EP&A Act 1979.

5.3.2. Economic Impact Assessment

An Economic Impact Assessment has been prepared by Urbis and is submitted at **Appendix O**. This report examines the potential impacts the proposed centre expansion may have on the retail hierarchy within the locality and benefits to the local community.

In summary, the report concludes:

- The proposed expansion may achieve sales in the order of \$129 million reflecting an uplift of \$25.7 million by 2019 compared to what may otherwise be achieved if the development did not go ahead. The impact analysis demonstrates that this will draw:
 - \$4.3 million from competing centres within the trade area,
 - \$16.3 million from other centres in the vicinity of the trade area, and
 - \$4.9 million from other centres throughout metropolitan Sydney including Sydney CBD, Hornsby, Blacktown and Parramatta.
- The potential impact of the proposed expansion is expected to be spread across a wide range of centres and retailers which draw trade from the trade area. The majority of competing centres are expected to achieve higher sales in 2019 (post impact) than 2015 levels. However, Oakhill Shopping Village is projected to maintain current trading levels (i.e. not increase).
- The extension is considered to result in a number of economic benefits including:
 - Provides local residents with a broadened supermarket choice and a wider range of retail facilities with enhanced parking provision,
 - The greater choice will also promote greater competition, with possible benefits for keener prices and better quality,
 - The non-retail land uses will contribute to wellbeing within the community and broaden the range of activities provided at Cherrybrook,
 - Reduces car usage and promotes sustainable transport modes as it reduces the need for local residents to travel greater distances to access other retail centres,

 Additional employment for approximately 132 staff during the construction phase and 149 full time, part time and casual staff during the operational phase.

The report concludes, inter alia:

Having regard to the above factors, we are of the opinion that the proposed expansion of the Cherrybrook Village Shopping Centre would not threaten the viability of any existing retail centre or precinct, and is therefore supportable from an economic perspective. In fact, the range of facilities available to the local community will be enhanced by the expansion of Cherrybrook Village.

5.4. SITE SUITABILITY

Cherrybrook Village Shopping Centre is well suited to accommodate the proposed expansion for the following reasons:

- The site is zoned B2 Local Centre which support the provision of commercial land uses on the site,
- The site is within an established area, and as such electricity, telephone, water and sewerage services are readily available,
- The proposed land uses are consistent with the use and function of the existing development located on the site being the Cherrybrook Village Shopping Centre,
- The site is located in an accessible location in close proximity to public transport. A number of bus stops are located within close proximity of the site along Shepherds Drive and Macquarie Drive,
- The proposed additions do not detract from the adjacent locally heritage listed parkland. The proposed additions have been designed to positively respond to the heritage character of the area and provide visual interest to streetscape and area.

5.5. CONSULTATION AND PUBLIC SUBMISSIONS

Consultation has been undertaken with Hornsby Shire Council on two occasions in July 2015 and August 2016. A response to the feedback obtained from the August 2016 meeting is summarised at **Section 2.1** of this Report.

This Development Application will be notified/ advertised in accordance with the provisions of the Hornsby DCP 2013. Any submissions received by the public, relevant stakeholders and state authorities will be considered by the applicant and responded to where necessary.

5.6. THE PUBLIC INTEREST

The proposed expansion is considered to be in the public interest for the following reasons:

- Incorporates a number of non-retail land uses including a gymnasium, child care centre and medical centre which is considered to broaden the facilities available at Cherrybrook to serve the immediate residential community,
- Provides an enhanced retail offering specifically with an additional supermarket that will encourage local residents to shop locally as opposed to travelling to neighbouring centres located at greater distances from the site,
- Improves the appearance of the centre through the integration of interesting architecture, articulated car parking walls and new landscaping and tree planting along the Shepherds Drive streetscape,
- The proposal includes a number of improvements to the vehicular and pedestrian access into and throughout the site, including:
 - A new vehicular accessway along Shepherds Drive to address queuing impacts at the existing roundabout at Shepherds Drive and Kenburn Avenue,
 - A series of new pedestrian crossings to the centre to provide safe and legible pedestrian access to the centre, particularly for patrons arriving by public transport or walking and cycling.
- The proposal will create a significant amount of jobs during the construction and operational stages including approximately 132 staff during the construction phase and 149 full time, part time and casual staff during the operational phase.

Therefore, the proposal is considered to be in the public interest, particularly due to the history of commercial and retail uses that have existed at this site.

6. CONCLUSION

This Statement of Environmental Effects has been prepared on behalf of Mirvac Real Estate (the Applicant) to accompany a development application relating to the expansion and reconfiguration of the existing Cherrybrook Village Shopping Centre.

The proposal has been assessed in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* and is considered appropriate for the following reasons:

- The proposed additions generally comply with the relevant objectives and controls of the relevant environmental planning instruments, including Hornsby LEP 2013 and DCP 2013 and relevant state environmental planning policies,
- The proposed child care centre is located within the 100m bushfire buffer area. An assessment of the
 proposal against the performance criteria under 'Planning for Bushfire Protection' has been undertaken
 and identifies overall compliance with no specific construction requirements,
- The proposed works are considered to be a modest addition to the existing centre and would not
 dominate the adjacent heritage items in terms of scale and character nor obscure any significant views,
- Proposes a comprehensive landscaping and replanting strategy with new indigenous native trees (based on Sydney Blue Gum High Forest Species) and more shrub and ground layer species compared to the existing situation,
- Incorporates improvements to vehicular and pedestrian access into and throughout the centre. The
 proposed new accessway along Shepherds Drive is considered to address existing traffic queuing issues
 at the existing roundabout entry/ exit to the site. New pedestrian crossings will provide safe and legible
 access to the site while encouraging sustainable travel to/ from the site,
- The proposal incorporates additional retail and non-retail facilities to serve the immediate residential community,
- The proposed additions to do not impact upon the retail hierarchy and will generally result in negligible impact on competing retail centres.

For the reasons outlined above, the proposed development is considered acceptable for the site and surrounding context, and worthy of approval by Hornsby Shire Council.

DISCLAIMER

This report is dated 12 September 2016 and incorporates information and events up to that date only and excludes any information arising, or event occurring, after that date which may affect the validity of Urbis Pty Ltd's (**Urbis**) opinion in this report. Urbis prepared this report on the instructions, and for the benefit only, of Mirvac (**Instructing Party**) for the purpose of Development Application (**Purpose**) and not for any other purpose or use. To the extent permitted by applicable law, Urbis expressly disclaims all liability, whether direct or indirect, to the Instructing Party which relies or purports to rely on this report for any purpose whatsoever (including the Purpose).

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All surveys, forecasts, projections and recommendations contained in or associated with this report are made in good faith and on the basis of information supplied to Urbis at the date of this report, and upon which Urbis relied. Achievement of the projections and budgets set out in this report will depend, among other things, on the actions of others over which Urbis has no control.

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This report has been prepared with due care and diligence by Urbis and the statements and opinions given by Urbis in this report are given in good faith and in the reasonable belief that they are correct and not misleading, subject to the limitations above. This page has been intentionally left blank



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