

City of Casey Endeavour Hills Town Centre Council Land Commercial Feasibility Study

Site Assessment Report (STAGE 1)

Prepared for City of Casey
By MacroPlan Australia Pty Ltd

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1 Executive Summary

Study Context

1. MacroPlan Australia Pty Ltd (the Author) was commissioned by the Department of Planning and Community Development (DPCD) with funding from the Expert Assistance Program to provide an assessment of Council owned land within the Endeavour Hills Town Centre (the Site) for the City of Casey (Council). This report includes analysis of the greater Town Centre, comprised of the Site, the Endeavour Hills Shopping Centre (the Shopping Centre), and a detached McDonald's.
2. The Author was commissioned to undertake the study in three parts, outlined below. This is stage one of the study.

Stage One –Assessment of Existing Site Conditions

- Identification of development principles and key success factors
- Review of urban design principles, evaluation of proposed structure plan and various options for redevelopment
- Survey and analysis of traffic and car parking conditions
- A review of demographics for the local area and surrounding statistical local areas (SLAs)
- Retail analysis for current and future demand at the Shopping Centre
- Exploration of potential mixed use opportunities and possible developable land parcels within the Town Centre
- Evaluation of planning options in policy context
- **Key deliverable:** Site Assessment Report

Stage Two- Feasibility Assessment

- Evaluation of legal matters regarding Council land holdings, leasing and possible joint venture options
- In-depth analysis of preferred development strategy with regards to overall Centre design, traffic engineering considerations and contribution to the local community
- Benefit derived from the inclusion of diverse housing stock
- Finalisation of overall strategy with concrete for implementation steps for possible land sequencing strategy, land disposal
- **Key deliverable:** Feasibility Report and draft Project Report

Stage Three-Land Transaction Advisory and Disposal Options

- **Key deliverables:** Final Report and presentation to Council on redevelopment options

- This report includes an assessment of: current site conditions; the Town Centre and its contribution to Endeavour Hills' role as a Major Activity Centre; current and future floorspace requirements; critical areas for improvement and candidate uses; assessment of the existing road network; proposed options for redevelopment.

Site Assessment

- The Town Centre has a combined site area of 106,891.3sqm. The land distribution is as follows:

Table 1. Town Centre Land Distribution

Site	Area
	Sqm
Council land	25,535.06
Shopping centre (excl. Raymond McMahon Blvd.)	79,816.60
McDonalds	1,539.60
Casey Community Health	2,205.84
Total	109,097.10

Source: City of Casey, 'Endeavour Hills Town Centre Technical Paper' (2005)

Table 2. Leisure Precinct Floorspace Area

Site	Area
	Sqm
Library	730*
Neighborhood Centre	613
Gymnasium	397
Multipurpose hall	417
Main sports hall	1,402
Youth resource centre	315
Crèche	90
Amenities	36
Extension	105
Foyer	86
Total	4,191

Source: City of Casey, 'Endeavour Hills Town Centre Technical Paper' (2005)

*Including 112sqm 2007 expansion

- There is an additional 2,205.84sqm plot of land east of the Town Centre, across Raymond McMahon Boulevard, which is owned by the Department of Human Services and utilised for Casey Community Health Centre. This site is included in some of the proposed options for redevelopment of the hairpin bend along Raymond McMahon Boulevard.
- The subject site is accessible from Raymond McMahon Boulevard. The Site includes pedestrian laneways from the Shopping Centre which can be accessed from Matthew Flinders Avenue and Heatherton Road.

7. This study has investigated and provides analysis with regards to the following broad areas:

- An initial assessment of the subject site;
- The proposed redevelopment plans set out by the Hansen Partnership Pty Ltd (2006) and Council's Urban Design Framework (2008);
- Urban form and land capacity;
- Civic and community uses;
- Access and connectivity; and
- Traffic engineering and car parking.

8. The following issues have been identified at the initial workshops as principles for redevelopment and as key success factors. The following issues act as guidelines for site assessment:

- Defining the critical mass/activity volume driver(s);
- Forming a community 'heart';
- The presence of an anchor – community or retail based;
- The 'Main Street' concept;
- Presence of physical open space;
- Ease of access for bikes;
- Quality of linkages/integration;
- The physical connection between the Site and the Shopping Centre (long-term benefits);
- Potential mixed use development (residential/community housing, community, commercial);
- Future role of active and passive recreational uses;
- Retail diversity and 24 hour activation (i.e. potential entertainment focus);
- Potential for affordable housing developments with possible retirement living.

Conclusions & recommendations/suggested actions

9. These key findings are presented as an outcome of this study and the context and supporting research for each are presented correspondingly.

Conclusions

- **The Town Centre plays a strong retail role for the local community with three supermarkets and a discount department store anchor located within the Shopping Centre. The Town Centre is located in an established area with limited space for growth due to low forecasted population growth rates and strong competition from nearby shopping centres; demand for retail and community facilities is expected to increase in line with the forecasted average annual population growth rate of 0.43% between 2009 and 2031 within the defined trade area.**
- **At present, the commercial and community precincts are well-visited but opportunities**

exist to expand the Town Centre mixed use role, with such changes to realistically occur on the Council owned land. However it would be preferable for some physical restructuring of the Shopping Centre to improve the connection between this centre and the community precinct. Coordination with the Shopping Centre operator presents a challenge but investment in these requirements is essential for the health, social wellbeing and economic prosperity of communities.

- A number of areas for improvement exist within the design of the Town Centre. These issues are focussed around the disconnect in form associated with the fall of the land and structural design, and the lack of accessibility to and within the Town Centre. The resulting lack of synergy between the community and commercial precincts restricts the Town Centre from functioning as a 'civic heart', and its ability to provide increased social benefits for the local community.
- The need for affordable housing and an increase in diverse housing stock has been established for the greater area of the City of Casey. Endeavour Hills represents an ageing population that may benefit from higher density living located close to amenity retail. The Town Centre may be an appropriate site for development in the long term (10+ years) when a clear vision for the two precincts has been established.
- Key issues for redevelopment include simplification of the road network within the Town Centre and improvement of the hair pin bend along Raymond McMahon Boulevard. The options for improvement identified within the UDF have been discussed in this study and each analysed with regards to engineering and land use requirements and potential benefits. Further analysis is required to determine a preferred redevelopment option that optimises the community gain per dollar spent.
- Key recommendations for Town Centre enhancement include the creation of public open space or a 'Town Square', activation of the Shopping Centre's blank facade which faces the community precinct, inclusion of more pedestrian laneways and simplification of the surrounding road network (including the hair pin bend along Raymond McMahon Boulevard).

Next Steps

- Review all legal documents and considerations to identify any and all constraints on potential land development, purchase, sale and leasing agreements.
- Obtain estimates for the proposed road network improvements and weigh the costs of each scenario against the benefits derived.
- Complete a feasibility assessment to determine the net community benefit of all proposed development scenarios, estimating the financial requirements and social benefit of the key issues of each scenario.
- Identify a preferred overall redevelopment scenario and identify a recommended timing and implementation strategy.

2 Introduction

This section provides an overview of the study context and structure of this document and highlights information sources obtained by the Author as the basis of this study.

2.1 Study context

The Author was commissioned by the Department of Planning and Community Development (DPCD) with funding from the Expert Assistance Program to provide analysis of conditions within the Town Centre for the City of Casey. This report (Stage 1) provides a background Site Assessment Report and consideration of structure plan options for Council land, the greater Town Centre and the surrounding road network.

The Site (Council owned land) is accessible from Raymond McMahon Boulevard and by pedestrian and vehicular links with the adjacent Shopping Centre. The Shopping Centre can be accessed from Raymond McMahon Boulevard, Matthew Flinders Avenue and Heatherton Road.

The Site has approximately 92 car parking spots directly west of Council facilities with additional car parking located throughout the Town Centre, including an underutilised car park at Raymond McMahon Boulevard and Matthew Flinders Avenue which is currently utilised for Shopping Centre parking. The property line for Council land divides this car park with use by the shopping centre operator is agreed under a Section 173 agreement signed in 1989.

Details of the Site and the existing situation are provided in Section 3 of this study.

2.2 Purpose

Scope of this study

This study provides analysis of the Site, the Town Centre and proposed redevelopment options. This report identifies a preferred development strategy with this scenario to be evaluated further in a subsequent feasibility study and overall project report. In particular, this study builds on a number of existing design and development feasibility studies undertaken by others, specifically those by the City of Casey and the Hansen Partnership, which are referred to in this study.

This study provides the following information:

- Background research pertaining to Casey demographics, regional and local economic role and community needs
- Comprehensive assessment of the Site (i.e. the library, leisure centre, Neighbourhood Centre and skate park)
- Evaluation of the Shopping Centre, including feedback from the centre operator and evaluation of the potential for development options
- Analysis of proposed redevelopment options and an outline of additional options proposed in collaboration with SMEC Urban and GTA Consultants

This study directly addresses and provides recommendations for the eight key elements as laid out in the Endeavour Hills Community and Leisure Precinct Urban Design Framework:

1. Improve the hair pin bend at Raymond McMahon Boulevard
2. Establish a link between Heatherton Road and Raymond McMahon Boulevard via the eastern side of the Shopping Centre
3. Establish a new range of mixed use activities
4. Extend the leisure centre
5. Relocate the Neighbourhood Centre
6. Provide a new, multipurpose community space
7. Improve the function and appearance of public open space and facilities
8. Improve bus stop locations and bus access

2.3 Site Specifications

Council owns a 25,535.06sqm site located along Raymond McMahon Boulevard at the southeast corner of the Town Centre. Located on site are a library, leisure centre (managed by the YMCA), Neighbourhood Centre and skate park.

There is a 14 metre fall between the northern and southern ends of the community precinct, having a distinct effect on the overall connectivity of Council facilities. The buildings are generally one storey high with the exception of the leisure centre which increases to approximately three stories at its southern end due to the fall of the land; the Neighbourhood Centre is located in the undercroft of this building.

These facilities are well utilised but are not easily accessible due to weak links with the Shopping Centre and a convoluted road network. The Neighbourhood Centre has especially poor links with an immediate need identified to increase its visibility and to provide better accessibility with special consideration for the elderly and disabled.

Figure 1. Endeavour Hills Town Centre



2.4 Land Use Mix

2.4.1 Library

The Endeavour Hills Library was constructed in June 1985 and renovated and extended to 730sqm in 2007. The library backs up to a considerable drop (approximately 4-5m), which forms a physical barrier with both the Shopping Centre and The Terrace shops in the rear of the Site, located directly across Raymond McMahon Boulevard. The library provides a variety of services for the community including book loan, a collection of Arabic, Chinese and Greek magazines, televisions with videogame consoles and the provision of computers and internet access.

2.4.2 Leisure Centre

Endeavour Hills Leisure Centre, managed by the YMCA on behalf of the City of Casey, aims to promote a healthy lifestyle through a variety of activities. Facilities include a 500sqm health club, multiuse two-court basketball stadium and gymnastics hall, group fitness studio, spin studio, child care centre and Occasional Care Centre and a community room with an attached kitchen. The child care centre operates from 9am-12pm and is run by fully licensed staff to provide care whilst parents complete their work out. Staff reports that there is need for an expanded basketball stadium/gymnasium and group fitness studio as all facilities are in high demand.

2.4.3 Skate Park

The Endeavour Hills skate park is located next to the leisure centre but has no formal affiliation with the YMCA. It is one of nine skate parks located throughout the City of Casey and run by Council's Recreation Planning Department. The skate park benefits from the underutilised car park next door which isolates it from the nearby residences and duly protects residents from the noise generated by its use.

2.4.4 Neighbourhood Centre

The Endeavour Hills UnitingCare Neighbourhood Centre is auspiced by the Uniting Church and is managed by volunteers to provide a caring, nurturing and learning centre for all members of the community. It provides care and classes for three year olds to seniors, focusing on adult learning. With consideration for the large proportion of Casey residents who were born overseas, the Neighbourhood Centre delivers a range of affordable classes and activities including English, computer, craft, recreational exercise and friendship groups.

2.5 Car Parking and Transportation Links

Ample free parking is provided in the at grade car park located due west of Council facilities (accessed from Raymond McMahon Boulevard). Additional free car parking is located throughout the Town Centre.

The Site can also be accessed by pedestrians utilising buses 842, 845, 859 and 861 which stop at the Shopping Centre entrance at Matthew Flinders Avenue.

2.6 Site Assessment Methodology

2.6.1 Overview

The findings presented in this report were reached after a multilayered process of analysis and evaluation by MacroPlan and subconsultants SMEC Urban (urban design) and GTA Consultants (traffic engineering), all experts in their respective fields. The methodology of the survey is grounded in the basic standards of the role of state and local governments and their interaction with the private market, derived in large measure from the City of Casey's policies and strategies.

The survey does not rate the quality of government services or individual retail strategy but rather the real world experience of the existing town centre as experienced by individuals. The experience of the town centre can be affected by state, as well as non-state, stakeholders, including the private operators on site and of neighbouring businesses. Thus, the ratings generally reflect the interplay of a variety of stakeholders, both governmental and nongovernmental to result in the synergistic end goal of maximising the use of the Site for the local community benefit.

2.6.2 Ranking System

In an effort to utilise a transparent system of analysis, a number of issues were identified within the four broad categories of connectivity, public space, community facilities and retail/other. These issues and categories provide the basis for quantifying the relative merit of each structure plan and arriving at a succinct conclusion.

These issues were evaluated using a number of indicators that are measured by both quantitative and qualitative data. Sources of data include, but are not limited to, economic figures arrived at by MacroPlan through feasibility studies; interpretation of land form and analysis of structural design by SMEC Urban; observation and measurement of traffic patterns and needs by GTA Consultants; site sizing and legal documentation provided by Council; interpretation by Norton Rose.

The issues are rated on a 7-point scale with 3 representing the most desirable situation and -3 the least desirable. Each issue is given equal weight to arrive at an overall score for each category which is then assigned a broad status of good (2, 3), satisfactory (-1, 0, 1) or unsatisfactory (-2, -3). The categories and issues rated as unsatisfactory were flagged for further analysis and as potential issues for redevelopment and improvement within the structure plan options.

2.7 Policy Context

This report has been carried out in the framework of council and state policies in an effort to incorporate existing community values and business strategies with planning goals set out by the Victorian government.

The documents supplied by Casey at the commencement of this study – Endeavour Hills Town Centre Draft Structure Plan and Background Report; Endeavour Hills Community and Leisure Precinct Urban Design Framework – were given special consideration as well as the long-term plans of Melbourne 2030 and policy initiatives of Melbourne @ 5 million.

The Author has undertaken a review of a Council's policies to gain a well-rounded understanding of Casey's strategies for land use, business and employment, and the provision of community services.

For the complete policy and literature review, refer to Annexure 1 – 3.

2.8 References

This study incorporates information and data from the following sources:

- Endeavour Hills Town Centre Structure Plan: Draft Background Paper, City of Casey with the Hansen Partnership Party Ltd, December 2006
- Endeavour Hills Town Centre Draft Structure Plan, City of Casey with the Hansen Partnership Party Ltd, December 2006
- Endeavour Hills Community and Leisure Precinct Urban Design Framework, City of Casey, October 2008
- Leisure Centre Expansion Design Concepts, Suters Architects 2009
- Leisure Facilities and Development Plan, City of Casey 2008
- Australian Shopping Centre Database, Property Council of Australia, July 2009
- Census Data and Community Profiles, Australian Bureau of Statistics
- Various policies and Strategies, City of Casey
- Melbourne 2030, State Government of Victoria
- Melbourne @ 5 Million, State Government of Victoria

2.9 Pecuniary Interest

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The Author confirms that neither MacroPlan Australia Pty Ltd nor the signatory to this report has any pecuniary interest that could reasonably be regarded as being capable of affecting that person's ability to give an unbiased opinion, or that would conflict with a proper assessment. The Author maintains this position until the purpose for which this study is being undertaken is completed.

2.10 Study limitations

The views contained in this report are those of the Author and reflect the most current available market information regarding acceptable land development arrangements in line with prevailing planning practices and market conditions.

This document does not constitute a legal opinion or financial advice. The Author encourages the owner to seek independent legal opinion in relation to the views expressed in this document particularly suggested development deal structures.

3 Economic & Retail Analysis

The following section presents an overview of economic factors and the retail demand at both the regional and local level for the City of Casey and Endeavour Hills. The demand for the Shopping Centre is analysed in the greater framework of the municipality, taking into account a variety of socio-demographic factors to forecast demand in order to quantify the potential of increased traffic to community facilities as a result of interlinking with the Shopping Centre.

This section includes an analysis of the current balance between market and underlying demand in order to provide centre sizing recommendations that maximise economic and community benefit. Estimates of the likely demand for retail floorspace within the Site based on the capacity of the local population are cited as well.

The primary source of demand for retail at the Centre is derived from the immediate residential area of Endeavour Hills. However, an activity centre also draws trade from other residential developments which equate to a Main Trade Area (MTA), which is comprised of both the Primary Trade Area (PTA) and a Secondary Trade Area (STA). Defining a MTA is influenced by the frequency and density of households using the centre. Typically a boundary for a MTA ends where there is a notable decline in the market share of the retail tenancies at a centre, which is restricted by the existence of competing centres.

Residents within the MTA generally provide the source with between 60% - 90% of retail sales, depending on the centres position within the retail hierarchy.

3.1 Local Context

The suburb of Endeavour Hills is 15.7 sqkm in area and located in the northwest region of the City of Casey, approximately 35km from the Melbourne CBD. The estimated resident population for the City of Casey as of 30 June 2008 was 238,336 persons¹; as of the 2006 census, the population of Endeavour Hills is 25,005 persons.²

Endeavour Hills is surrounded by the neighbouring centres of Dandenong, Narre Warren and Knox Central. Dandenong has been designated as a CAD under Melbourne @ 5 Million, and has the key role of supporting Melbourne Central Business District by providing CBD-type jobs, a strong retail sector and increased high density residential development.

Knox and Fountain Gate are designated PACs under Melbourne 2030. Melbourne's twenty-five PACs are characterised by:

- A mix of activities that generate high numbers of trips, including business, retail, services and entertainment
- Being generally well-served by public transportation (or the potential to be)
- A very large catchment covering several suburbs
- The potential to grow and support intensive housing developments

¹ Australian Bureau of Statistics, Cat. No. 3235.0 - Population by Age and Sex, Regions of Australia, 2007

² Australian Bureau of Statistics, 2006 Census of Population and Housing, Endeavour Hills (SSC 21257)

3.2 Definition of Activity Centres

Melbourne 2030's Activity Centres Strategy defines activity centres as vibrant hubs where people shop, work, meet, relax and often live. Usually well-served by public transport, they range in size and intensity of use from local neighbourhood strip shopping centres to universities and major regional shopping malls. They are a central part of *Melbourne 2030*, which will encourage more development into activity centres to foster more sustainable, more vibrant communities and will be the focus of major change over the next 30 years. The following Activity Centres have been identified in the region surrounding the subject site:

Central Activities District (CAD): *Dandenong*

Principal Activity Centres (PAC): *Narre Warren (Fountain Gate), Knox Central, Cranbourne*

Major Activity Centres (MAC): *Endeavour Hills, Berwick, Casey Central, Hampton Park*

It is important to understand the role and function of the above centres in the region and how they work together given their dependence on the same infrastructure. In particular, there is a need to encourage an economic and industry structure that is appropriate for the entire south-east region in order to ensure efficiency in infrastructure provision. This requires provision of a diverse mix of employment, housing and services to meet the needs of residents and workers across the south-east.

Endeavour Hills has been identified as a Major Activity Centre (MAC) in *Melbourne 2030* and as a centre for urban consolidation. MACs are defined by their likeness to PACs but serve a smaller catchment area and support the larger centres. The assessment for future retail demand and floorspace analysis takes into consideration the status of these regional activity centres within and near the City of Casey.

Endeavour Hill's MAC status supports the Centre as a sub-regional centre with over 86 retailers and 1,800 car parking spaces. It is anchored by a Coles, Safeway, Big W, Aldi and Dan Murphy's with a variety of fashion, food and general retailers including banks and Australian Post.

3.3 Definition of Trade Areas

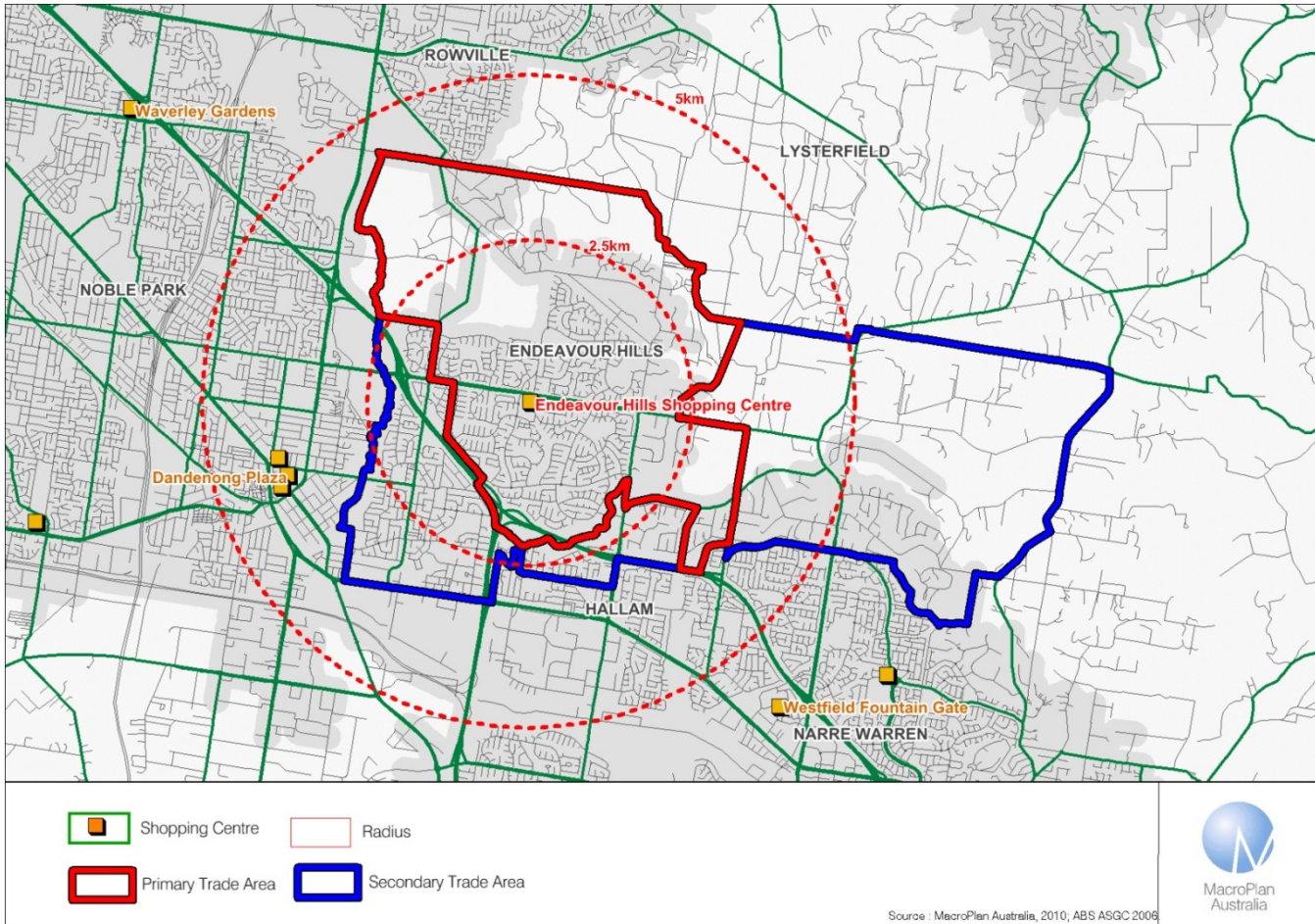
MacroPlan has considered a number of factors in the formulation of trade areas for the Centre, including infrastructure, natural and existing barriers, existing competition and the intended function and scope of the centre.

Taking the above into account, the Centre is influenced by the following key factors:

- The strong convenience role the centre has for the immediate surrounding residents
- The location of the centre, which is easily accessible for local residents utilising the adjacent Council facilities
- The tenant mix featuring supermarkets and a major DDS, but duly the absence of a major department store and of higher end specialty retail

Therefore, the Centre's trade area has been defined to include primary and secondary trade areas that are reflective of the source of the majority of trade. The trade areas are defined in the map below.

Figure 2. Endeavour Hills Main Trade Area



Source: Property Council Australia, MacroPlan Australia

- The Primary Trade Area (PTA) includes the immediate area of Endeavour Hills roughly based upon a 2.5km radius, running along the Monash Freeway in the south and extending north to Wellington Road.
- The Secondary Trade Area (STA) extends slightly south to Princes Highway and east to Beaconsfield Emerald Road.

As a food and groceries shopping destination, the Centre is able to serve the PTA effectively due to possessing both a Coles and Safeway, although its ability to serve the STA is limited by other nearby centres and by the lack of a competitive advantage to draw in consumers

3.4 Competitive Centres Network

In December 2009, the Makris Group purchased the Endeavour Hills Shopping Centre for approximately \$100M from ING Retail. MacroPlan and Council have recently conferred with Makris who has confirmed there are no current plans to expand the Shopping Centre or to integrate better with Council land/facilities. However, they have identified their desire to investigate possible extensions to the retail floorspace in the medium term (5+ years).

While the Centre is centrally located within Endeavour Hills with few other retail options existing in the immediate area, the Centre is limited in its catchment and capacity for growth by competition in both the north and south which provide greater retail diversity and entertainment options.

The Centre is limited by competing shopping centres in the neighbouring suburbs, notably those of Narre Warren, Dandenong and Knox.

Table 3. Competitive Centres Framework

Centre	Retail GLA	Anchor Tenants	Distance from EHSC
	Sqm		km
<u>Main Activity Centre</u>			
Endeavour Hills			
- Endeavour Hills Shopping Centre	30,355	Big W, Coles, Safeway, Aldi, Dan Murphy	-
<u>Principle Activity Centres</u>			
Narre Warren			
- Westfield Fountain Gate	132,118	Big W, Kmart, Target, Safeway, Coles, Bi-Lo	8.6
Chadstone			
- Chadstone the Fashion Capital	124,076	Myer, David Jones, Target Kmart, Coles, Woolworths	20.0
Knox Central			
- Knox Shopping Centre	112,544	Myer, Target, Kmart Coles, Toys 'R' Us	14.6
<u>Central Activities District</u>			
- Dandenong Plaza	64,600	Myer, Coles, Safeway Target, Kmart	4.0

Source: Property Council Australia, MacroPlan Australia

Dandenong

Located approximately 4km west of the Endeavour Hills Town Centre, Dandenong Plaza is a sub-regional centre and the Endeavour Hills Shopping Centre's closest competition. Dandenong Plaza features 170 specialty stores spread across three levels comprising 64,600sqm GLAR with 3,300 car parks. Major tenants include: Myer, Coles, Safeway, Target and Kmart. The greater variety of specialty retail and major department store paired with the convenience of grocery stores and DDSs limits the westerly catchment of the Shopping Centre.

The Shopping Centre includes a significantly greater range of stores, diversity in price point and convenience than the Endeavour Hills shopping centre, notably due to the presence of a major department store (Myer). Dandenong Plaza also offers entertainment options, including a six-screen Reading Cinema (opened 2008) and a significant restaurant and takeaway offer.

Narre Warren

The Westfield Fountain Gate shopping centre is located approximately 8.6km southeast of Endeavour Hills Shopping Centre in central Narre Warren. It is a major regional centre with 11 major tenants and 310 specialty stores with a total centre GLAR of 132,118sqm and 5,200 car parking spaces. It features an Aldi, Coles, Safeway and Liquorland, Harris Scarfe department store, Target, a food court and specialist stores for health, fitness, electronics, etc. The Fountain Gate shopping centre also incorporates approximately 5 restaurants and a 10 screen Village Cinema.

The provision of major supermarkets paired with greater diversity of specialty retail, a major department store and the benefit of entertainment options (i.e. restaurants and a cinema), the Fountain Gate shopping centre limits Endeavour Hills' trade catchment from the south and also caps its future potential growth due to such close proximity. Purchased by Westfields in December 1997, it is a considerably newer and more modern facility and provides customers with greater choice and a different experience than the local Endeavour Hills Centre.

Chadstone

Chadstone the Fashion Capital, one of Australia's oldest and largest shopping centres, is located approximately 20km northwest of Endeavour Hills. A super regional centre with extension plans, the centre currently has 530 stores and current total GLAR of 124,076sqm with 8 major tenants occupying 74,467 of that. Chadstone provides higher-end department stores Myer and David Jones and DDSs Target, Kmart and Best & Less, supermarkets Coles and Woolworths, in addition to 50 high-end national and international designer boutiques. The centre's entertainment offerings include a 16-screen Hoyts Megaplex, AMF Bowl, Borders Books and Music Cafe, and a variety of other cafes and restaurants.

Chadstone's long-standing reputation within fashion retail makes it a target destination for shoppers. While its offerings are at the higher-end of the market compared to that of Endeavour Hills' and therefore may attract different consumers, the variety in retail offer and price points provides an enticing alternative to the Endeavour Hills Centre with the benefit of entertainment options.

Knox

Knox Central has been identified as a PAC and includes the super regional shopping centre, Knox Shopping Centre. It has a total GLAR of 112,544sqm and major department store, Myer, DDSs Target and Kmart, and supermarket Coles. Knox Central also provides 358 specialty retail stores and entertainment options with an AMF Bowl and a 15-screen Village Cinema.

Demographic and Socio Economic Analysis of Trade Areas

The demographic and socioeconomic overview includes an assessment of the trade areas characteristics including a profile of residents, household structure, incomes, employment status etc. This part of the report also estimates existing and projected populations.

Key findings at the time of the 2006 Census were that both the PTA and STA had an age distribution mimicking that of the greater metropolitan Melbourne area and while an overwhelming portion of the residents of Casey are family households living in detached houses, there is a lack of young families which signifies a relatively slow population growth rate and weaker retail demand within the MAC framework.

Having defined the primary and secondary trade areas, census data aggregated at the CCD level has been synthesized to produce the following indicators:

Table 4. Key Demographic Performance Indicators

	Primary Trade Area	Secondary Trade Area	Casey - Hallam SLA	Casey LGA	Metropolitan Melbourne	Victoria
Headline Indicators (2006)						
Population and Households						
Persons	25,424	17,300	49,701	214,921	3,592,645	4,932,460
Households	7,581	5,899	15,778	68,906	1,283,218	1,781,666
<i>Average Household Size</i>	3.35	2.93	3.15	3.12	2.80	2.77
Socio-Economic Snapshot						
Income and Wealth						
Median Individual Income	\$23,056	\$20,234	\$21,790	\$25,595	25,012	23,712
<i>variation from Metropolitan Melbourne</i>	-7.8%	-19.1%	-12.9%	2.3%	-	-
Median Household Income	\$62,230	\$46,582	\$53,879	\$57,968	56,108	53,144
<i>variation from Metropolitan Melbourne</i>	10.9%	-17.0%	-4.0%	3.3%	-	-
Occupation by Sector						
White Collar	42%	34%	37%	39%	52%	50%
Blue Collar	39%	48%	45%	42%	29%	31%
Service Sector	19%	17%	18%	19%	19%	19%
Age Distribution						
0-4 years	6%	6%	6%	8%	6%	6%
5-14 years	15%	15%	15%	17%	13%	13%
15-24 years	18%	15%	17%	14%	14%	14%
25-54 years	44%	40%	43%	45%	44%	43%
55-64 years	10%	11%	10%	9%	10%	11%
65-74 years	5%	7%	6%	4%	7%	7%
75+ years	3%	6%	4%	3%	6%	7%
Family Types						
Couple family with children	61%	49%	56%	55%	48%	47%
Couple family without children	25%	29%	26%	28%	34%	36%
One parent family	13%	21%	17%	16%	15%	15%
Other family	1%	2%	1%	1%	2%	2%
Family Household	88%	75%	82%	82%	72%	71%
Non Family Household	12%	25%	18%	18%	28%	29%
Tenure Type						
Owner	35%	33%	32%	25%	37%	37%
Purchaser	51%	41%	48%	56%	26%	25%
Renter	14%	25%	20%	19%	1%	1%
Other	0%	1%	0%	1%	0%	0%
Dwelling Type						
Separate House	97%	88%	92%	92%	73%	78%
Semi-detached	1%	5%	3%	4%	11%	9%
Flat, Unit, Apartment	2%	7%	4%	4%	15%	13%
Other	0%	0%	0%	0%	1%	1%
Birthplace						
Australia	50%	56%	50%	64%	64%	70%
Overseas	50%	44%	50%	36%	36%	30%

Source: ABS, 2006 Endeavour Hills Community Profile Cat. No. 2001.0

The PTA has a current population of approximately 25,424 and the STA population estimated at 17,300 for a combined main trade area of approximately 42,724 persons. Within the PTA, white collar and blue collar workers comprise approximately equal amounts of the work force with a larger portion of blue collar workers in the STA. The median individual income within the PTA is below the Melbourne average, while median household income is tantamount in variation but above the Melbourne average. Within the STA, average individual and household incomes are notably 19.1% and 17.0% below the metropolitan Melbourne averages.

The greatest proportion of the population is in the 25-54 years bracket and while 88% of residents are part of a family household, only 6% of residents are 0-4 years and 13% 5-14 years, signifying a more mature family structure and indicative of a slower population growth rate and spending patterns.

Notably, residents within the PTA are split precisely 50/50 between being born in Australia and overseas. The STA and Statistical Local Area (SLA) of Casey-Hallam present similar ratios.

3.5 Population Projections

The population levels within the surrounding Statistical Local Areas (SLAs) are detailed in the table below, spanning a 15 year period into 2026. These projections are sourced from the ABS and were prepared for the Commonwealth Department of Health and Ageing. These growth rates are then applied to the relevant areas within the Casey trade area to forecast population.

Table 5. Regional Population Growth

	2010	2011	2016	2021	2026
Estimated Resident Population					
Casey (C) - Berwick	99,169	100,008	103,762	106,960	109,652
Casey (C) - Hallam	52,757	52,920	53,672	54,247	54,564
Total	151,926	152,928	157,434	161,207	164,216
Average Annual Change (No.)					
	2010-11	2011-16	2016-21	2021-26	
Casey (C) - Berwick	839	751	640	538	
Casey (C) - Hallam	163	150	115	63	
Total	1,002	901	755	602	
Average Annual Change (%)					
	2010-11	2011-16	2016-21	2021-26	
Casey (C) - Berwick	0.8%	0.7%	0.6%	0.5%	
Casey (C) - Hallam	0.3%	0.3%	0.2%	0.1%	
Total	0.7%	0.6%	0.5%	0.4%	

Source: ABS Department Health and Ageing, 2009.

The population levels within the trade area for a District Centre at the subject site are detailed in the table below.

Table 6. Trade Area Population Forecast

	2009	2010	2011	2016	2021	2026	2031
Estimated Resident Population							
Primary Trade Area	25,705	25,790	25,869	26,237	26,518	26,673	26,744
Secondary Trade Area	18,454	18,693	18,841	19,504	20,066	20,532	20,941
Main Trade Area	44,159	44,483	44,711	45,741	46,584	47,205	47,685
Average Annual Change (No.)							
	2009-10	2010-11	2011-16	2016-21	2021-26	2026-31	
Primary Trade Area	85	80	74	56	31	14	
Secondary Trade Area	239	148	133	112	93	82	
Main Trade Area	324	228	206	169	124	96	
Average Annual Change (%)							
	2009-10	2010-11	2011-16	2016-21	2021-26	2026-31	
Primary Trade Area	0.3%	0.3%	0.3%	0.2%	0.1%	0.1%	
Secondary Trade Area	1.3%	0.8%	0.7%	0.6%	0.5%	0.4%	
Main Trade Area	0.7%	0.5%	0.5%	0.4%	0.3%	0.2%	

Source: ABS Department Health and Ageing. MacroPlan Australia, January 2010

3.6 Retail Expenditure Analysis

Retail Definition

The expenditure profile for the trade area has been developed according to retail spending categories from the MarketInfo database. The expenditure profile of residents varies across Australia and is determined primarily by income. MacroPlan have identified regional spending profiles within the study area based on the aggregation of MarketInfo small area retail estimates (i.e. built up from CCD level). These retail spending categories have been divided into five retail groups:

In the Strategy, retail floorspace and spending is divided into three product categories, namely Food, Non-Food and Services. These three categories are defined as follows:

Table 7. Retail Group and Retail Categories

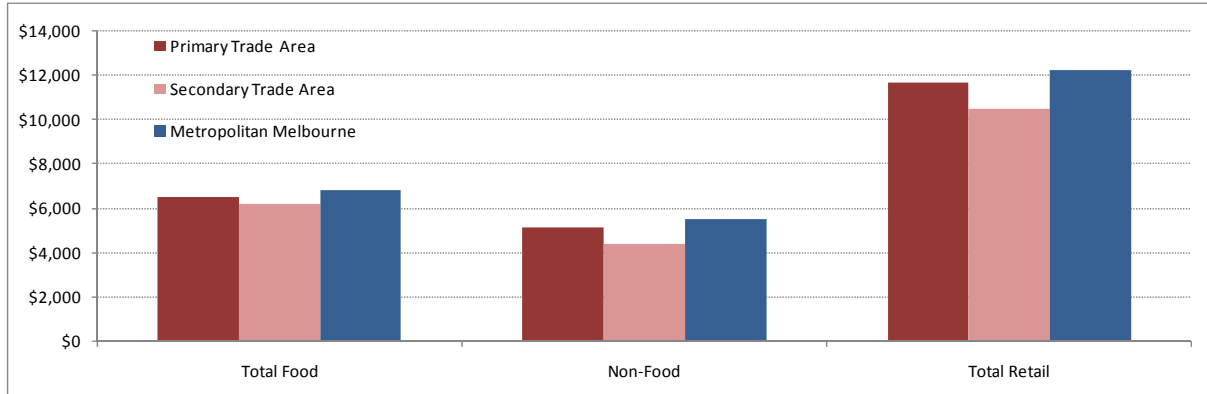
RETAIL GROUP	RETAIL CATEGORIES
FOOD	
Food Retailing	spending at supermarkets and food specialties on take-home food, groceries and liquor
Food Catering	spending for catering purposes including at cafes, restaurants and take-away food outlets.
Non-food	includes all non-food based retail products including clothing, apparel, homewares, leisure goods and bulky merchandise
Services	includes spending on dry cleaning, hairdressers, video hire, clothing alterations etc.

Retail Expenditure Analysis

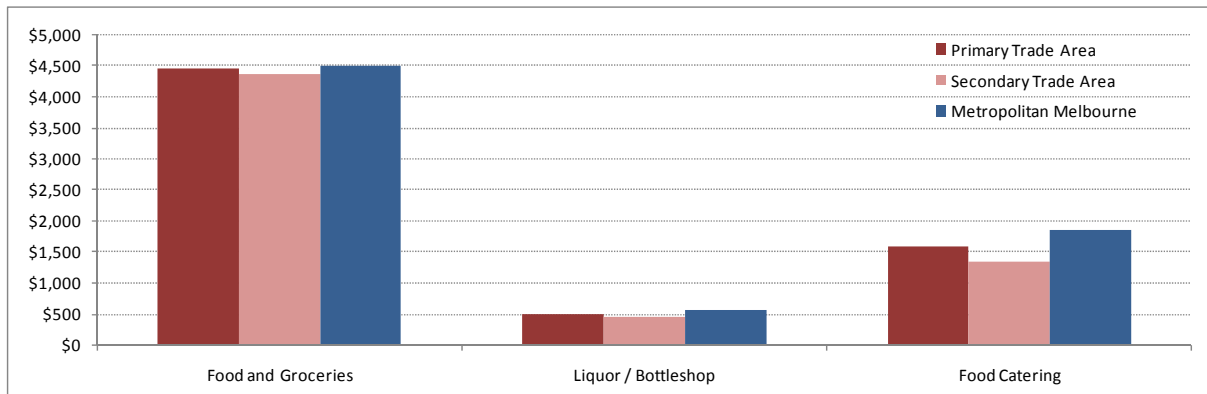
The figures below present a comparison of the retail expenditure characteristics per capita of trade area residents with metropolitan Melbourne averages based upon the most recent data from the ABS. As detailed, the average per capita spend on retail goods is very slightly below the metropolitan Melbourne averages, with greater disparity in the STA.

Figure 3. Retail Spend by Retail and Food

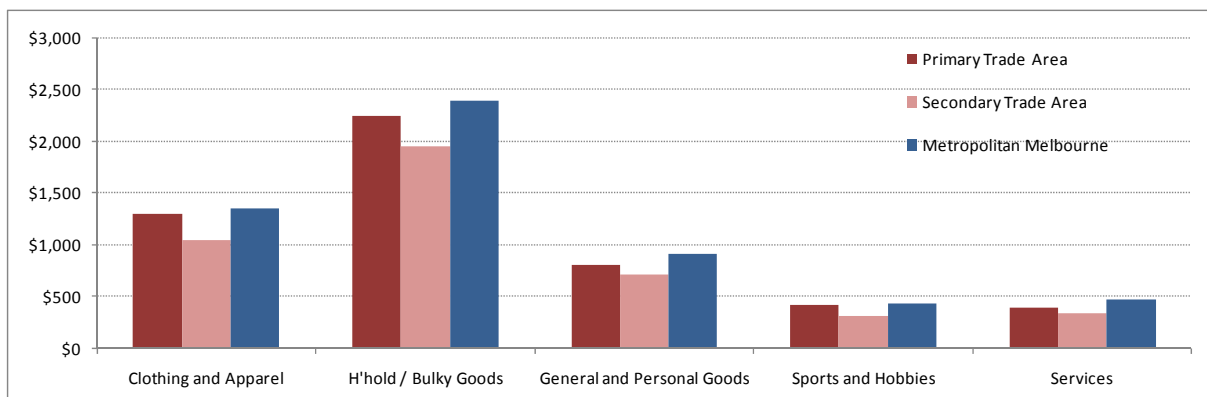
Total Retail



Food Retail



Non Food Retail



Source: MarketInfo, MacroPlan Australia, January 2010

Applying these per capita spending levels to the forecast population for the MTA presented earlier, the table below summarises the total retail expenditure pool for the trade area population from 2009, forecasted until 2031.

With the population expected to increase minimally within both the PTA and STA, the expenditure pool within this sector is forecast to increase moderately, averaging 1.7% growth per annum until 2031.

The retail expenditure pool generated by the trade area is currently \$499.5 million, including \$302.9 million generated within the PTA. By 2031, the total expenditure pool is expected to increase \$217.4 million from current levels.

Table 8. Expenditure Pool by Trade Area

	Primary Trade Area	Secondary Trade Area	Main Trade Area
Retail Expenditure (\$m)			
2009	302.9	196.6	499.5
2010	308.0	201.8	509.8
2011	313.2	206.1	519.3
2012	318.4	210.5	528.8
2013	323.6	214.9	538.5
2014	329.0	219.3	548.3
2015	334.4	223.7	558.1
2016	339.9	228.2	568.1
2021	367.8	251.3	619.1
2026	396.4	275.4	671.8
2031	426.2	301.0	727.2
Expenditure Growth (\$m)			
2010-11	5.1	4.3	9.5
2011-16	31.8	26.4	58.3
2016-21	28.0	23.1	51.0
2021-26	28.6	24.1	52.7
2026-31	29.8	25.6	55.4
2010-31	118.2	99.2	217.4
Expenditure Growth (%)			
2010-11	1.7%	2.1%	1.9%
2011-16	1.7%	2.1%	1.8%
2016-21	1.6%	1.9%	1.7%
2021-26	1.5%	1.8%	1.6%
2026-31	1.5%	1.8%	1.6%
2010-31	1.6%	1.9%	1.7%

Source: MarketInfo, MacroPlan Australia, January 2010

The table below distinguishes the MTA expenditure pool by key commodity group. As detailed below, groceries and liquor are to remain strong in the future averaging 1.4% growth per annum until 2031. Most other commodities are also expected to experience low growth, with the greatest increase in household/bulky goods.

Table 9. Total Expenditure Pool by Retail Category

	Groceries and Liquor	Food Catering	Clothing and Apparel	H'hold / Bulky Goods	General and Personal Goods	Sports and Hobbies	Services
Retail Expenditure (\$m)							
2009	218.2	65.9	53.1	95.8	16.3	33.9	16.4
2010	222.2	67.1	54.0	98.8	16.6	34.5	16.7
2011	225.8	68.1	54.9	101.6	16.8	35.1	17.0
2012	229.4	69.2	55.7	104.6	17.1	35.6	17.2
2013	233.0	70.3	56.6	107.6	17.4	36.2	17.5
2014	236.6	71.4	57.5	110.6	17.6	36.8	17.8
2015	240.3	72.5	58.3	113.8	17.9	37.3	18.0
2016	244.0	73.6	59.2	117.0	18.2	37.9	18.3
2021	262.4	79.1	63.6	134.1	19.5	40.7	19.7
2026	280.8	84.6	68.1	152.9	20.9	43.6	21.1
2031	299.6	90.2	72.6	173.8	22.2	46.5	22.4
Expenditure Growth (\$m)							
2010-11	3.6	1.1	0.9	2.9	0.3	0.6	0.3
2011-16	21.8	6.5	5.2	18.2	1.6	3.4	1.6
2016-21	18.4	5.5	4.4	17.1	1.3	2.8	1.4
2021-26	18.4	5.5	4.4	18.8	1.3	2.8	1.4
2026-31	18.8	5.6	4.5	20.9	1.4	2.9	1.4
2010-31	77.4	23.1	18.6	75.0	5.7	11.9	5.8
Expenditure Growth (%)							
2010-11	1.6%	1.6%	1.6%	2.9%	1.6%	1.6%	1.6%
2011-16	1.6%	1.5%	1.5%	2.9%	1.5%	1.6%	1.5%
2016-21	1.5%	1.5%	1.5%	2.8%	1.4%	1.5%	1.5%
2021-26	1.4%	1.4%	1.4%	2.7%	1.3%	1.4%	1.4%
2026-31	1.3%	1.3%	1.3%	2.6%	1.3%	1.3%	1.3%
2010-31	1.4%	1.4%	1.4%	2.7%	1.4%	1.4%	1.4%

Source: MarketInfo, MacroPlan Australia, January 2010

3.7 Floorspace Requirements

Table 10. Floorspace Requirement by Tenancy Type – Primary Trade Area

Primary Trade Area	2010	2011	2016	2021	2026	2031	Growth 2010-21	Growth 2010-31
Population	25,790	25,869	26,237	26,518	26,673	26,744	728	954
Food retailing								
Supermarkets	9,026	9,054	9,183	9,281	9,336	9,360	255	334
Food retail specialties	3,868	3,880	3,936	3,978	4,001	4,012	109	143
Food catering	6,447	6,467	6,559	6,630	6,668	6,686	182	239
Total food	19,342	19,402	19,678	19,889	20,005	20,058	546	716
Non-Food retailing								
Dept. stores / DDS	7,737	7,761	7,871	7,955	8,002	8,023	219	286
Non-food specialties	9,026	9,054	9,183	9,281	9,336	9,360	255	334
Bulky goods	16,763	16,815	17,054	17,237	17,337	17,384	473	620
Total Non-food	33,527	33,630	34,108	34,473	34,675	34,767	947	1,241
Retail services								
Retail services specialties	3,868	3,880	3,936	3,978	4,001	4,012	109	143
Total retail floorspace	56,737	56,913	57,721	58,340	58,681	58,837	1,602	2,099

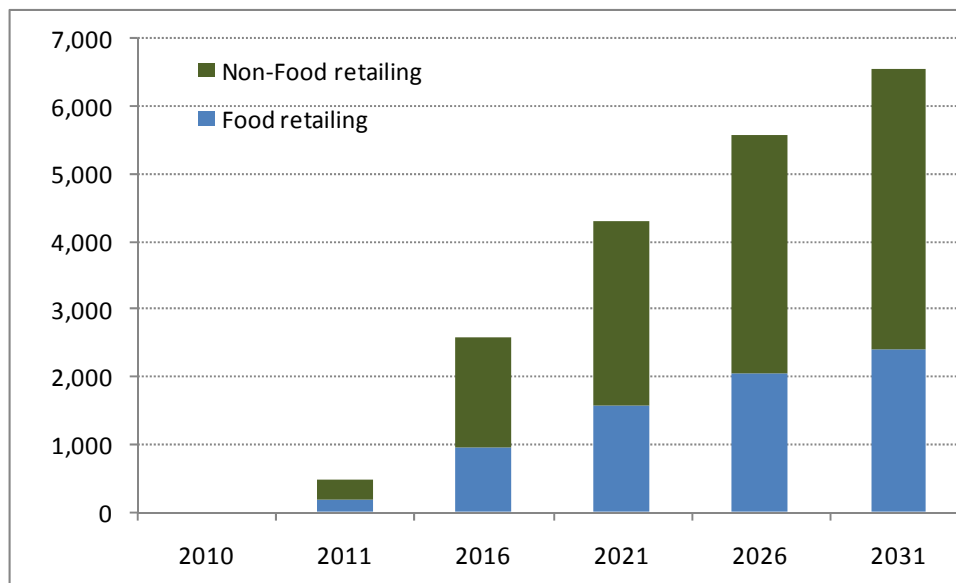
Source: MacroPlan Australia, January 2010

Table 11. Floorspace Requirement by Tenancy Type – Main Trade Area

Main Trade Area	2010	2011	2016	2021	2026	2031	Growth 2010-21	Growth 2010-31
Population	44,483	44,711	45,741	46,584	47,205	47,685	2,101	3,202
Food retailing								
Supermarkets	15,569	15,649	16,009	16,304	16,522	16,690	735	1,121
Food retail specialties	6,672	6,707	6,861	6,988	7,081	7,153	315	480
Food catering	11,121	11,178	11,435	11,646	11,801	11,921	525	800
Total food retailing	33,362	33,533	34,306	34,938	35,404	35,764	1,576	2,401
Non-Food retailing								
Dept. stores / DDS	13,345	13,413	13,722	13,975	14,161	14,305	630	961
Non-food specialties	15,569	15,649	16,009	16,304	16,522	16,690	735	1,121
Bulky goods	28,914	29,062	29,732	30,280	30,683	30,995	1,366	2,081
Total non-food	57,828	58,124	59,464	60,559	61,366	61,990	2,731	4,162
Retail services								
Retail services specialties	6,672	6,707	6,861	6,988	7,081	7,153	315	480
Total retail floorspace	97,862	98,363	100,631	102,485	103,851	104,906	4,622	7,044

Source: MacroPlan Australia, January 2010

Figure 4. Main Trade Area Cumulative Floorspace Demand (sqm)



Source: MacroPlan Australia, January 2010

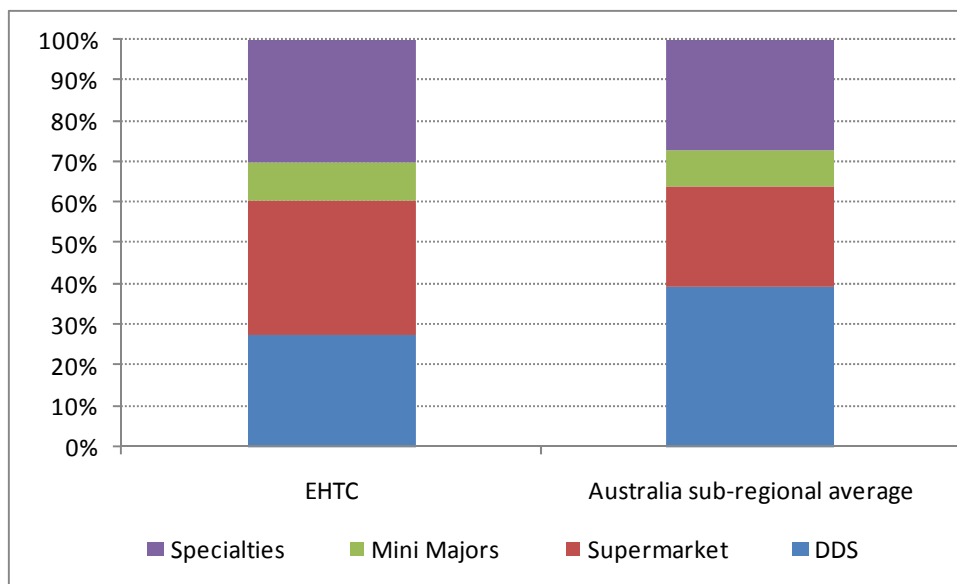
3.8 Key Findings

The key findings from the preceding analysis can be summarised as follows:

- The centre suffers from physical shortcomings in terms of its layout and connection between precincts within the town centre, as well as being dated in its presentation.
- The retail centre performs slightly below national average in terms of turnover per square metre; however its supermarket mix is strong and balanced in terms of giving customers an attractive offer.
- There is limited potential for Endeavour Hills Town Centre to serve a larger trade area, with strong competition from major regional centres such as Dandenong and Narre Warren.

The Endeavour Hills Town Centre is a sub-regional centre, anchored by a Big W DDS. In addition to the DDS, the centre provides a very strong supermarket offer well above a similar national benchmark.

Figure 5. Centre Composition



Source: MacroPlan Australia, January 2010

The Town Centre is located within an established area, and hence there is limited growth available within the trade area to capture additional expenditure beyond gradual urban consolidation.

Therefore, the broad factors which will determine the likely scope for the future of the town centre, sales and growth are those which drive trade area retention and the ability of the centre to further attract visitation.

In its current configuration, it is unlikely that the Town Centre would be able to increase its performance given the centre is generally less attractive to prospective customers than surrounding competitors. However, the centre is able to serve a substantial and solid trade area,

and can continue to drive market penetration into this market having regards for the following critical elements:

- Strong supermarket anchors, providing three major chain supermarkets will continue to attract strong convenience shopping.
- Major DDS anchor supporting the centre to reinforce its major activity centre status.
- Easily accessible, together with good provision of car parking.

With limited ability for expansion from a retail perspective, the Town Centre has the ability to generate the higher levels of recurring activity required based on a more diverse balance of key mixed use components which are paramount to sustain and maximise economic and community benefits, including improved recreation, entertainment and social elements. The figure below details the key components of a successful mixed use town centre.

Figure 6. Town Centre Mixed Use Components



Source: MacroPlan Australia

While the preceding sections have outlined limited opportunities for the Town Centre to expand in terms of core retail, the following section focuses on the social and community infrastructure requirements.

Currently the Town Centre performs a strong retail function. There is potential to enhance the Town Centre mixed use role, with such changes likely to occur on Council owned land within the centre. However it is necessary that some physical redevelopment of the Shopping Centre take place to improve the connection between the southern end of the centre and the established (and future) community facilities.

Facilitation of such a redevelopment and investment in Council land is essential in the centre creating a net community benefit.

An expanded mixed use and entertainment facility are unlikely to lead to an expanded catchment of the Town Centre, however the centre would experience a commensurate increase in the community utilisation of the centre.

4 Urban Design Analysis

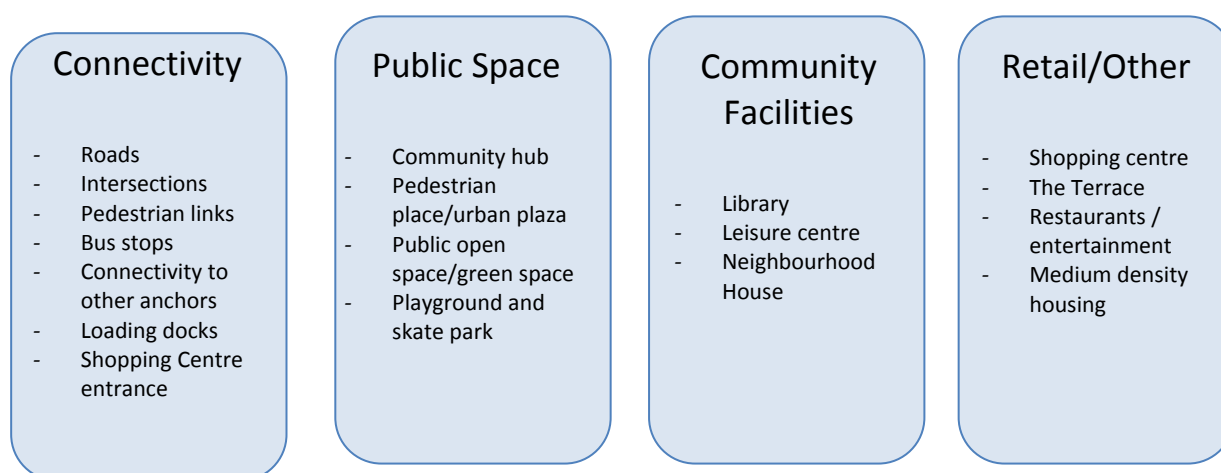
4.1 Overview

Urban designers SMEC Urban have provided an overview as to the purpose and elements of a structure plan and an urban design framework and what these documents are to accomplish for an identified subject site. The Endeavour Hills Town Centre Draft Structure Plan and the Endeavour Hills Community and Leisure Precinct Urban Design Framework (UDF) have been reviewed according to these standards and for the effectiveness of the overall vision they provide. Refer to Annexure 2 for the complete urban design literature review.

Based upon the above options, SMEC prepared two alternative options that combine improvements within the Town Centre with road works to simplify the intersection at Raymond McMahon Boulevard.

Each of the proposed options for redevelopment have been assessed for the benefits they would bring to the Town Centre in the following specific areas:

Figure 7. Urban Design Assessment Methodology



Source: MacroPlan, 2010

4.2 Going forward - Overview of the Inherited Site Issues

The composition of the Endeavour Hills Town Centre currently represents an obstacle for future integration of various land uses that contribute to the liveability and social activities of the centre. The loss of community space has roots in larger issues of the modern society such as:

- Loss of social values of urban open spaces
- Decline of the public realm
- Privatization of public life and spaces
- Invented shopping centre “indoor streets”
- Information technology revolution and its influence on public life

4.3 Principles for Redevelopment

To position the project on healthy legs, a number of the above-mentioned aspects should be addressed while providing physical amenities for the proposed redeveloped town centre.

- The physical connection between centre and Council facilities (long-term benefits)
- Forming a community 'heart'
- The presence of an anchor – community or retail based
- The 'Main Street' concept
- Quality of linkages/integration
- Potential mixed use development (residential, community, commercial)
- Defining the critical mass/volume driver(s)
- future role of active and passive recreational uses;
- Presence of physical open space ease of access for bikes
- Retail diversity and 24 hour activation (entertainment focus)
- Potential for housing with possible retirement living

4.4 Structure Plan & UDF Analysis

Refer to Annexure 6 and 7 for development options maps.

A complete analysis of the Structure Plan an UDF Options is provided overleaf.

Table 12. Review of the current Endeavour Hills Town Centre Draft Structure Plan (City of Casey 2006)

Category	Issue	Case	Location / Function	Connectivity/Usability	Overall Assessment	Score (-3 - +3)
Connectivity	Roads	Heatherton Road – proposed road upgrade to “Urban Boulevard” with the pedestrian crossing ~120m east of the intersection with Mathew Flinders Avenue	Driving speed will need to be reduced to accommodate new profile and function.	Slower speed at crossings will create a safer environment for pedestrians. Existing and future residents and visitors will both benefit from such a connection and therefore increase patronage to the Shopping Centre.	Considering there are no other anchors to the north of the Shopping Centre there is no other benefit from it other than an increase shopping centre visitors and from there percentage of people possibly going through and into the community centre facilities. Investment can be costly.	2
	Intersections	Raymond McMahon Boulevard intersection with the Shopping Centre ring road was redesigned into a ‘t’ intersection to simplify bus, car, shopping loading and parking transit.	“T” intersection was suggested at the high contour to avoid DHS land and parking.	Visibility and manoeuvrability of large vehicles can potentially be difficult due to the steep road climbing both ways towards the intersection.	Unless land is graded down few meters to achieve level connection, the location and shape of the intersection can potentially be hazardous.	0
	Pedestrian Links	Proposed pedestrian links go via main bus arrival point at the north west corner of the Shopping Centre and the shortest connection to the community facilities is through the Shopping Centre.	Proposed pedestrian links are long and spatially (distance and level difference) disjointed. Majority of links connect at best two entry points. Others are 200-300m long between two destinations.	Disjointed entrances of various community facilities together with the level difference make this pedestrian network hard to use and navigate.	Better connectivity could be provided if ancillary functions of the centre are congregated with their entrances closer to each other as well as in close proximity to a mode of public transport.	0
	Bus Stops	Proposed bus stop is surrounded by Town centre fringe growth (commercial mix use)	Bus stop location can possibly be better connected to community hub to service various age and interest groups	Proposed bus stop is not related to Pedestrian Place /Urban Plaza which is the financial and aesthetic focus of this plan	Disjointed investments in this plan make hard to be serviced by simple bus stop and may need to be reassessed and relocated	1
	Parking	Parking servicing community buildings is not greatly revised. Minor car park near loading docks of the Shopping Centre was removed together with the Shopping Centre ground level and first floor parking at the south of the building. The Terrace parking is also reduced to accommodate retail expansion	Current parking is servicing community buildings and confirmation is required for reduced shopping centre parking.	Parking around all community facilities is slightly reduced	There is no improvement in parking provision if disjointed anchors are taken in consideration therefore it appears that it would be required to commute between them by car. The Terrace parking may not be sufficient for the increased retail area	-1
	Connectivity to other important anchors	Link to the St Paul Apostle school Link to the bus interchange Link to “ The Terrace ” Link to the Urban Plaza	Link to the St Paul Apostle school is appropriate and connected to the new bus station Bus interchange is far from the community facilities and most convenient link is through the Shopping Centre Link to “ The Terrace ” connects via the urban plaza through to the Shopping Centre Link from community facilities to the Urban Plaza is either over the ramp along the Shopping Centre or through the levels of library	Provided Physical separation Good Poor	Overall links provided are not incidentally leading over the Urban Plaza (which would be the usual way of capturing interest), one has to have it as a destination in order to get there.	0
	Loading docks	3 major loading docks are affected with this design proposal	Current loading docks location is conflicting with new land use/ activities planned for the area	Significant remodelling of the Shopping Centre needs to be done in order to accommodate reverse location of loading docks.	Such exercise is costly and requires large structural and organisational change in reorienting approx 50% of major retailers layout to provide yet another entrance to the Shopping Centre and not connect to all community facilities.	-3

	Shopping Centre Entrance	Two major shopping centre entrances and few access points when arriving via car.	Entrances were located in accordance with 1970 American model of the Shopping Centre design where parking is of the main access road and entrance is a drop of points. Second entrance is directly connected to the bus interchange.	Entrances work for the Shopping Centre and are not assisting a community hub.	Proposed additional shopping centre entrance will largely affect current shopping centre operations. If centre operators are not interested to invest change will be impossible.	-3
Public Space	Community Hub	Upgraded community hub will increase in m2 offer internally in all separate buildings	Function and current access to each building will not change.	Connectivity between different community facilities is not provided and focus is given to future commercial development and shopping centre expansion in vicinity.	The community hub is underdeveloped and the future urban plaza is not providing an adequate link.	-2
	Pedestrian Place/urban plaza	Urban Plaza is located amongst 3 current large loading docks of which 2 are to be relocated and one is to remain operational in conjunction with the pedestrian movement	Remaining loading dock central to the urban plaza pedestrian movement will present health and safety hazard considering surface damage, reverse driving, disposal of compacted recycling cardboards, product storage and delayed evacuation from the pedestrian zone.	Poor connectivity with all other community activities of the area will present limited use and poor visitation to the Plaza. Further it can present safety and usability issues in different time of the day.	Plaza should have a better relationship to entrances of all Community Facilities. Located at the rear, the existing location of the pedestrian place does not promote accessibility to community facilities.	-2
	Public Open Space/green space	Other than street trees no additional open spaces are planned for this Structure Plan.	-	-	Number of location and opportunities presented themselves to improve overall landscape/ green area m ²	-3
	Playground and skate park	Proposed location of the skate park is surrounded with circular road and the location is a possible safety concern	General proximity to other Community Facilities is recommended.	Proximity of cars and scatters may cause conflict in land use.	Better location of the skate park will be recommended	-3
Community Facilities	Library	Future three storey extension of the library facilities	Library location remains the same. Additional bus stop may contribute to the visitation numbers of larger community even though visibility and information about the community offer should be well displayed as the link is not obvious.	Connection through the Shopping Centre can improve connectivity and usability of library space.	Funding will confirm future development of the library	3
	Leisure Centre	Leisure Centre extension is already on its way and will not largely encroach on the open space surrounding other Community Facilities.	Location and function remains the same with extended services.	Leisure centre will also benefit from additional bus stop and improvement/ relocation of the community house		
	Neighbourhood House	Not specified				
Retail / Other	Shopping Centre	Shopping centre will experience large loading area redesign	Loading area redesign will go in conjunction with relocation of all other elements of large retail shop design	With appropriate investment redesign of shopping centre can be achieved.	Large retail/bulky goods design guidelines from DPCD is recommending shopping centres should have active street frontage, therefore relocating loading zones may be an unnecessary additional investment.	-3
	The Terrace	Local shopping centre is proposed to be upgraded with additional retail expansion	The Terrace's current parking area will be reduce to accommodate additional retail expansion	It will provide a better retail mix	If parking is resolved additional retail expansion could be achieved	2
	Restaurants / Entertainment	Not specified				
	Medium Density Housing	Medium density housing is proposed to be attached to south east wall of the Shopping Centre	Solar aspect of the houses will be limited and they will be fully built on top of the garage.	There will be limited access to the houses and no allocated open space. Potential shopping centre expansion is directly opposite –the proposed housing block	Overall medium density housing can be better located elsewhere	-3

Source: SMEC Urban, February 2010

Table 13. Endeavour Hills Community and Leisure Precinct Urban Design Framework (City of Casey 2008)

Category	Issue	Case	Location / Function	Connectivity/Usability	Overall Assessment	Score (-3 - +3)
Connectivity	Roads	Figure 7 –Medium change option for Improvements to Raymond McMahon Boulevard	Medium change option presents a feasible option and does not largely interfere with the ownership pattern	Traffic solution is simplified and provides clear “T” intersection	Solution is feasible and implementable	3
	Intersections	Intersection with Raymond McMahon Boulevard and the north connection road on the east side of the Shopping Centre	Good	Provided	Good	3
	Pedestrian Links	3.3 Pedestrian network plan represents the need for pedestrian connection through the leisure centre or between the leisure centre and the library	Well noted	In conjunction with new bus stops noted pedestrian connections will be valuable	Good	2
	Bus Stops	Two new bus stops are proposed	To improve connectivity and usability of the Community Centre and other surrounding services	Good	Good	3
	Parking	Access to parking from Raymond McMahon Boulevard	Access to parking is improved	intersection can be further simplified and use of the vegetated reserve can be avoided	Additional work with traffic engineer will help to delivered best solution	1
	Connectivity to other important anchors	Connectivity between all Community Centre buildings	Focus is brought to the south of the Shopping Centre where all community activities are	Emphasis was given to better supply Community Centre	Good	1
	Loading docks	No change to existing loading docks	-	-	-	-
	Shopping Centre Entrance	No change to existing Shopping Centre Entrances	-	-	-	-
Public Space	Community Hub	Not being detailed in this report	-	-	-	-
	Pedestrian Place/urban plaza	Not being detailed in this report	-	-	-	-
	Public Open Space/green space	Not being detailed in this report	-	-	-	-
	Playground and skate park	Not being detailed in this report	-	-	-	-
Community Facilities	Library	Proposed Library extension Option 2	Good	Good	Can be developed in proposed form	3
	Leisure Centre	Proposed Leisure Centre extension Option 2	Good	Good	Can be developed in proposed form	3
	Neighbourhood House	Proposed Neighbourhood Centre redevelopment Option 2	Good	Good	Can be developed in proposed form	3
Retail / Other	Shopping Centre	Not being detailed in this report	-	-	-	-
	The Terrace	Proposed The Terrace redevelopment Option 2	Parking redesign and additional retail space is provided	Can be developed	Parking access need to be simplified so it doesn’t conflict with Raymond McMahon Boulevard “T” intersection	2
	Restaurants / Entertainment	Not being detailed in this report	-	-	-	-
	Medium Density Housing	Not being detailed in this report	-	-	-	-

Source: SMEC Urban, February 2010

4.5 Alternative Options

All options fail to create the desired civic space within the Town Centre according to the identified Principles for Redevelopment.

In response, two alternative options were developed by SMEC Urban focussing on the creation of a 'civic heart' and the creation of linkages between the civic and commercial precincts and with the greater community.

The future of the Endeavour Hills public open space was considered with significant development of the council land and minor Shopping Centre reconstruction. The redevelopment intent of the proposed options capitalises on the potential of Council land with complementary uses and synergy incorporated throughout the greater Town Centre.

Incorporating the identified urban design principles, the development options are proposed to provide maximum benefit to Council land and services.

Intended major works are as follows:

- Raymond McMahon Boulevard realignment and intersection redesign
- Review of the Bus interchange in front of the Shopping Centre
- Introduction of the new bus stop south of the Shopping Centre
- Introduce new network of pedestrian link

Figure 8. Redevelopment Option 1



Source: SMEC Urban, February 2010

Table 14. Review of the proposed Endeavour Hills Town Centre Option 1

Category	Issue	Case	Location / Function	Connectivity/Usability	Overall Assessment	Score (-3 - +3)
Connectivity	Roads	Raymond McMahon Boulevard alignment is simplified to accommodate easy bus navigation through the Site.	Better road alignment can be easily accommodated as it is traversing council land.	Legible road network with slow traffic, improve patronage to the town square and improve safety for cars and pedestrians.	Change will improve connectivity to and from the town square and facilitate ease of organising public events at the square	2
	Intersections	Raymond McMahon Boulevard is redesign to accommodate simplified “T” intersection	“T” intersection is proposed to be located at the lower contour to minimise driving hazard	It provides better and more legible road network	DHS’s land used for parking will need to be addressed	3
	Pedestrian Links	Proposed pedestrian links south of the Shopping Centre	Proposed pedestrian links network is not an integral part of the Shopping Centre and can be utilised at any time irrelevant of the Shopping Centre opening hours. Well connected links leading to various entry points with appropriate vegetative visual buffer.	The space is easy to navigate and consolidation of the car park encourages crossover of patronage.	Better connectivity is provided as the ancillary functions of the centre are congregated with their entrances closer to each other as well as in close proximity to a mode of public transport.	3
	Bus Stops	Proposed bus stops are surrounded by Community hall and small shops and links to the school. Serves the upgraded leisure centre, hospital and strip shopping.	Two new bus stop locations to provide better connectivity to the community facilities and to service various age and interest groups	Proposed bus stops are well served with pedestrian links and connects well to the Town Square	The pedestrian friendly links encourage use of public transport whilst activating the Town Square, it will also encourage various age groups to use the Town Square along with various community amenities that surround it	1
	Parking	Parking is re-organised on the periphery of the Town Square The Terrace parking is reduced to accommodate for a bus stop and shelter	Currently each amenity has its own parking, it is proposed to consolidate parking so as to encourage the crossover of patronage and discourage use of cars over short distances	The parking is well connected by pedestrian links while appropriate landscaping will provide visual and acoustic buffers	Parking is consolidated in one place and patrons are encouraged to walk to their destinations. This reduces the total area covered with grey asphalt with random car parking whilst improving the visual amenity with the introduction of landscaping elements and buffers	2
	Connectivity to other important anchors	Link to the St Paul Apostle school Link to the bus interchange Link to “ The Terrace ” Link to the Town Square	Link to the St Paul Apostle school is appropriate and connected to the new bus station Bus stop at community facilities well linked with pedestrian network Link to “ The Terrace ” connects via leisure centre and further towards the second bus stop Direct Link from shopping centre and community facilities to the Town Square	Provided Physical connection Good Good	A network of pedestrian friendly links connect all amenities to each other and the Shopping Centre increasing patronage and passive surveillance	2
	Loading docks	No loading docks are affected with this design proposal				0
	Shopping Centre Entrance	Three major shopping centre entrances and few access points when arriving via car.	Entrances cover major arrival points including one from the southern end which connects to the Town Square	The Shopping Centre does not turn its back to the community hub	Proposed additional shopping centre entrance will encourage patronage of the Shopping Centre whilst providing options to people	-3
Public Space	Community Hub	Leisure Centre extension and connection to both library and existing leisure centre.	Function and current access to each building will be improved.	All community facilities are well connected.	The Community hub overlooks the Town Square and the buildings are substantially refurbished to improve the overall usability. The location of additional commercial /business space ensures a mixed use of the space.	1

	Pedestrian Place/urban plaza	Town Square is centrally located and is enclosed by Public buildings and the Shopping Centre	Central location well served by pedestrian links, arrival point.	Central location ensures well connected and active open space with opportunities for passive surveillance at all times of the day.	Plaza has a better relation to the entrance points to all Community Facilities; it is surrounded with activities and provides choices once one is in the centre. Driving and parking to and from the Town Square is easy.	3
	Public Open Space/green space	Additional Open space appropriately planted to act as visual and acoustic buffer	Vegetated screen buffer at the blank facade of the Shopping Centre with ground level parking. Current expanse of grey asphalt is now green.	Increased visual amenity.	Improved overall landscape/ green area in m2,	1
	Playground and skate park	Proposed location of the skate park along a blank facade of the Shopping Centre	The Skate park with rock climbing wall activates an existing Shopping Centre blank wall	Location on one side does not conflict with other uses	Skate park is not isolated but part of the Town Square	1
Community Facilities	Library	No extension of the library is proposed with this plan, following Council's advice and lack of finances.	Library location remains the same.	Connection through the Shopping Centre will improve connectivity and usability of library space.	Additional bus stop will contribute to increased visitation numbers from larger community with proper visibility from the Public Plaza which is the arrival point.	3
	Leisure Centre	Leisure Centre extension is already on its way and will not largely encroach on the open space surrounding other Community Facilities	Location and function remains the same with extended services.	Leisure centre will also benefit from additional bus stop and improvement/ relocation of the community house. Leisure centre will provide outdoor sitting area and additional walk through the building connecting east and west.	Good design and built form of the centre will improve quality of the Town Square open space and shelter visitors. Proposed built form will activate the Town Square and improve visitation to the centre.	3
	Neighbourhood House	New significant well visible corner building with accompanied Town Square and landscape	New community hall was needed to provide gathering place for variety of the community functions	Great corner location with good architecture can provide excellent exposure. Proximity to new proposed bus stop will improve visitations and provide amenity for all community, various users and events.	New community hall is well located and well serviced	2
	Restaurants	Restaurant is proposed at the first floor of the Shopping Centre outdoor parking and adjacent to the Shopping Centre building	First floor location will allow nice terrace views and secluded ambient. It will also serve as the active façade to the ramp rear entrance to the Shopping Centre connecting Town Square and existing shopping centre.	Restaurant was a needed and complementary hospitality offer for this area and will provide nice mix to the existing community facilities.	Primarily restaurant will be overlooking the Town Square and have great views during public events, performances and outdoor movie screening sessions. Restaurant will improve overall safety of the area and provided after hour surveillance.	2
Retail / Other	Shopping Centre	Shopping centre will have an additional ramp entrance	Additional entrance located at the south served by a restaurant with outdoor seating facility and adjacent small shops/kiosks	The ramp will connect the entrance from the Town Square	Additional patronage will feed into the Town Square	-3
	The Terrace	Current The Terrace layout is not largely revised	Improvement will happen with the simplified parking entrance and exit including well lit bus stops and resting area- shelter.	The terrace will operate as usual	No significant changes proposed	1
	Cafe / Entertainment	Outdoor seating café as part of the Leisure Centre	Fulfilling current deficit of an eatery to the South of the Shopping Centre and serving the Community Hub	The cafe overlooks the Public Plaza activating its northern edge	Good	1
	Medium Density Housing	Not specified				-3

Source: SMEC Urban, February 2010

Figure 9. Redevelopment Option 2



Source: SMEC Urban, February 2010

Table 15. Review of the proposed Endeavour Hills Town Centre Option 2

Category	Issue	Case	Location / Function	Connectivity/Usability	Overall Assessment	Score (-3 - +3)
Connectivity	Roads	Raymond McMahon Boulevard alignment is simplified to accommodate easy bus navigation through the Site.	Improved road alignment can be easily accommodated as it is traversing council land.	Legible road network with slow traffic, improve patronage to the town square and improve safety for cars and pedestrians.	Change will improve connectivity to and from the town square and facilitate ease of organising public events at the square	1
	Intersections	Raymond McMahon Boulevard is redesign to accommodate a new roundabout intersection.	Intersection is proposed to be located <u>at the lower contour</u> to minimise driving hazard; roundabout slope may cause issues for bus turning circle.	It provides improved and more legible road network	DHS's land used for parking will need to be addressed	1
	Pedestrian Links	Proposed pedestrian links south of the Shopping Centre including ramped access and a new main thoroughfare to link the community and commercial precincts.	Proposed pedestrian links are not an integral part of the Shopping Centre and can be utilised at any time irrelevant of the Shopping Centre opening hours. Well connected links leading to various entry points with appropriate vegetative visual buffer along existing blank facades.	The space is easy to navigate and consolidation of the car park encourages crossover of patronage.	Better connectivity is provided as the ancillary functions of the centre are congregated with their entrances closer to each other as well as in close proximity to a mode of public transport.	-1
	Bus Stops	No bus stops recommended	-	-	-	-
	Parking	Parking is not specified and requires further design	Currently each amenity has its own parking, it is proposed to consolidate parking so as to encourage the crossover of patronage and discourage use of cars over short distances	The parking is well connected by pedestrian links while appropriate landscaping will provide visual and acoustic buffers.	The Town Square consolidates parking and encourages patrons to walk to their destinations. This reduces the total area covered with grey asphalt with random car parking whilst improving the visual amenity with the introduction of landscaping elements and buffers	2
	Connectivity to other important anchors	Link to "The Terrace" Link to the Town Square	Link to "The Terrace" along main thoroughfare. Direct Link from shopping centre to community facilities and Town Square via the two storey ramp.	This is not of utmost importance and providing good accessibility may be difficult.	A network of pedestrian friendly links connect all amenities to each other and the Shopping Centre increasing patronage and passive surveillance	-1
	Loading docks	Impact on loading docks – requires relocation	Potential relocation of loading docks for Big W to north or east	It will interfere with current entrances, parking, and visual aspects.	Preferred relocation of loading for Big W to the east and Coles to the west.	-3 (expensive exercise)
	Shopping Centre Entrance	Three major shopping centre entrances and few access points when arriving via car.	Entrances cover major arrival points including one from the southern end which connects to the Town Square	The Shopping Centre should not turn its back to the community hub	Proposed additional shopping centre entrance will encourage patronage of the Shopping Centre whilst providing options to people	1 (expensive exercise)
Public Space	Community Hub	Leisure Centre extension and connection to both library and existing leisure centre.	Function and current access to each building will be improved.	All community facilities are well connected.	The Community hub overlooks the Town Square and the buildings are substantially refurbished to improve the overall usability. The location of additional commercial /business space ensures a mixed use of the space.	3

	Pedestrian Place/urban plaza	Town Square is centrally located and is semi-enclosed by Public buildings and the Shopping Centre	Central location well served by pedestrian links, arrival point.	Central location ensures well connected and active open space with opportunities for passive surveillance at all times of the day.	Plaza has a better relation to the entrance points to all Community Facilities; it is surrounded with activities and provides choices once one is in the centre. Driving and parking to and from the Town Square is improved significantly	3
	Public Open Space/green space	Additional Open space appropriately planted to act as visual and acoustic buffer	Vegetated screen buffer at the blank facade of the Shopping Centre with ground level parking.	Increased visual amenity.	Improved overall landscape/ green area in m2,	TBC
	Playground and skate park	Skate park is not incorporated in this design		Find appropriate location for it		TBC
Community Facilities	Library	Second storey above library is required	Access provided to new pedestrian mall between shopping centre and civic precinct.	Connection created between the two precincts (structural issues noted)	Subject to funding	TBC
	Leisure Centre	Leisure Centre extension is already on its way and will not largely encroach on the open space surrounding other Community Facilities	Location and function remains the same with extended services.	Leisure centre will also benefit from additional bus stop and improvement/ relocation of the community house. Leisure centre will provide outdoor sitting area and additional walk through the building connecting east and west.	Good design and built form of the centre will improve quality of the Town Square open space and shelter visitors. Proposed built form will activate the Town Square and improve visitation to the centre.	3
	Neighbourhood House	New significant well visible (corner building with accompanied Town Square and landscape) to be located on site, additional information required	New community hall was needed to provide gathering place for variety of the community functions.	Great corner location with good architecture can provide excellent exposure. Proximity to new proposed bus stop will improve visitations and provide amenity for all community, various users and events.	New community hall is well located and well serviced	
Retail / Other	Shopping Centre	Shopping centre will have an additional two storey ramp entrance	Additional entrance located at the south provides a direct route from sheltered parking.	The ramp will connect the entrance from the Town Square	Patrons will have the ability to move between the Town Square and the Shopping Centre	
	The Terrace	Current The Terrace layout is not largely revised	Improvement will happened with the simplified parking entrance and new pedestrian link.	The terrace will operate as usual	No significant changes proposed	
	Restaurants / Entertainment	Not specified				
	Medium Density Housing	Not specified				

Source: SMEC Urban, February 2010

4.6 Interpretation & Summary

Various studies have been completed for the Endeavour Hills Town Centre. However, they all lack a coherent vision for the Town Centre that bridges both the community and commercial precincts and links the Town Centre with the surrounding area.

An urban design framework sets out an integrated design vision for the desired future development of urban places. It translates the broad aims of municipal strategic statements (MSSs) and planning schemes to practical urban design action at the local level. A review of each component of the Endeavour Hills UDF options reveal that each fails to meet the objectives of an urban design framework on many accounts. The three options focus on improving roads but no consideration has been given to the components within the Town Centre. Whilst the Draft Structure Plan (City of Casey and the Hansen Partnership, December 2006) address the expansion of the leisure centre and issues of accessibility, it fails to provide concrete recommendations for an integrated town centre.

All of the proposed options fail to take into multiple issues set out in Casey policies. These issues include:

- Building the economic competitiveness of Endeavour Hills and Casey according to the Activity Centres Strategy and in line with Melbourne 2030
- A long-term vision for community and business development to meet C21 goals
- Attracting business and building employment in line with the business strategies; and
- Developing attractive public open space and a people-focused shopping centre according to Casey Image Strategy ideals.

In response, SMEC Urban has prepared two additional options that include development proposals for the Town Centre and improvements for the road network. These alternatives are rooted in policy objectives and incorporate traffic engineering ideas from the UDF to increase accessibility, amenity and value derived by the community. These options have been assessed against the same criteria as the UDF options to quantify the overall improvements of each and to highlight areas which may provide the greatest increase in community benefit.

In addition to the hair pin bend along Raymond McMahon Boulevard, priorities for improvement include:

- Linkages between the commercial and community precincts; and
- The creation of an urban plaza or public open space.

While the Draft Structure Plan and Endeavour Hills UDF fail to address these issues, the options proposed by SMEC Urban include the following remedies:

- The creation of multiple pedestrian thoroughfares within the Town Centre and to The Terrace Shops across Raymond McMahon Boulevard;
- Activation of the Shopping Centre's blank facade (facing the community precinct) through the relocation of the skate park with the addition of a climbing wall and/or creation of a vegetative barrier;
- Potential relocation of the loading dock and check-outs at the retailers facing the community precinct (i.e. Coles, Big W, the Reject Shop);
- Creation of an urban plaza/public open space with various options for linkages to the residual Town Centre and surrounding community.

5 Transport, Access and Connectivity

5.1 Overview

The existing subject site is approximately 25,535.06sqm and is located on Raymond McMahon Boulevard. It is used to provide community services and facilities, including a library, a leisure centre, a neighbourhood house and a skate park.

To the north west of the subject site is the Shopping Centre. The Shopping Centre contains approximately 27,000sqm of floorspace including three supermarkets and one DDS.

To the north east of the subject site is the Terrace Shops. The Terrace contains approximately 1,200sqm of floor space containing retail, food and drink and office uses.

To the south of the subject site is a cluster of medical centre and office uses whilst beyond the Town Centre are low density residential buildings.

The location of the subject site and the surrounding environs is shown in Figures 3 and 4.

Figure 10. Subject Site and its Environs



Source: GTA Consultants (Reproduced with Permission from Melway Publishing Pty Ltd)

Figure 11. Subject Site and Environs – Aerial Image



Source: GTA Consultants (PhotoMap courtesy of NearMap Pty Ltd)

5.2 Existing Road Network

Adjoining Roads

Heatherton Road

Heatherton Road functions as a primary arterial road and is listed as a Road Zone (Category 1) in the Casey Planning Scheme. It is a two-way divided road aligned in an east - west direction with two lanes in each direction. Heatherton Road provides the primary link between Endeavour Hills and the Monash Freeway and Dandenong to the west.

Heatherton Road carries approximately 35,000 vehicles per day.³

Matthew Flinders Avenue

Matthew Flinders Avenue functions as a Major Road (Council). It is a two-way road aligned in a north – south direction, configured with a single lane in each direction. Kerbside parking is not permitted in the vicinity of the Endeavour Hills Town Centre. Matthew Flinders Avenue provides a connection between Heatherton Road and the subject site via Raymond McMahon Boulevard.

Matthew Flinders Avenue carries approximately 3,000 vehicles per day.⁴ It is noted that this traffic volume was recorded south of Raymond McMahon Boulevard and traffic volumes adjacent to the Town Centre would be expected to be significantly higher.

³ Based on VicRoads SCRAM data

⁴ Based on traffic volume data provided by City of Casey

Raymond McMahon Boulevard

Raymond McMahon Boulevard functions as a Collector Road (Council). It is a two-way road aligned in a north – south direction, configured with a single lane in each direction. Kerbside parking is not permitted in the vicinity of the Endeavour Hills Town Centre. Raymond McMahon Boulevard provides access to the subject site from both the east and the south.

Raymond McMahon Boulevard carries approximately 7,500 vehicles per day.⁵ It is noted that this traffic volume was measured east of the Town Centre and traffic volumes in the vicinity of the Leisure Centre would be expected to be significantly higher.

⁵ Based on traffic volume data provided by City of Casey

The adjoining roads are shown in the figures below.

Figure 12. Heatherton Road (Looking West)



Figure 13. Heatherton Road (Looking East)



Figure 14. Matthew Flinders Avenue (Looking North)



Figure 15. Matthew Flinders Avenue (Looking South)



Figure 16. Raymond McMahon Boulevard (Looking West)



Figure 17. Raymond McMahon Boulevard (Looking East)



Surrounding Intersections

The following intersections currently exist in the vicinity of the Site:

- Heatherton Road / Matthew Flinders Avenue (signalised)
- Matthew Flinders Avenue / Raymond McMahon Boulevard (roundabout).

5.3 Accident Statistics

A review of the reported accident casualty history for the roads and intersections adjoining the subject site has been sourced from VicRoads accident database. The 'CrashStats' database includes all reported casualty accidents since 1987.

A summary of the accidents for the last available five year period (1 January 2004 – 31 December 2008) is presented in the table below.

Table 16. Casualty Accident History

Location	Accident No.		
	Fatality	Serious Injury	Other Injury
Intersection of Heatherton Road and Matthew Flinders Avenue	0	7	3
Heatherton Road between Safehaven Rise and Matthew Flinders Avenue	0	0	1
Matthew Flinders Avenue between Heatherton Road and Raymond McMahon Boulevard	0	1	1

Source: GTA Consultants (VicRoads)

A total of 13 casualty accidents have been recorded during the nominated five year period in the vicinity of the subject site. It is noted that 10 of these accidents (seven serious) have occurred at the intersection of Heatherton Road and Matthew Flinders Avenue. Whilst this is considered to be a high level of accidents it is noted that there has been only one accident at this intersection since December 2006 (to December 2008) indicating that some measures may have been implemented to improve the safety of this intersection.

5.4 Car Parking

Supply

GTA Consultants compiled an inventory of car parking within the Endeavour Hills Town Centre. The car parking areas considered are illustrated in Figure 2.9. The inventory identified a total of 1,830 car parking spaces.

Figure 18. Surveyed Car Parking Areas



Source: GTA Consultants

Demand

Parking demand surveys were undertaken by GTA Consultants within the nominated area during peak midday periods on Friday 4 and Saturday 5 February 2010.

The peak results are summarised in Table 16 and further illustrated in Figure 21.

Table 17. Summary of Peak Public Parking Demand Surveys

Street	Between	Area	Supply	Demand		Minimum Vacancies
				Fri 5/02	Sat 6/02	
Off-street	South of Raymond McMahon Blvd.	A	147	6 trucks	6 trucks	147
Off-street	Library / Leisure Centre car park	B	92	20	33	72
Off-street	Neighbourhood Centre car park (south side)	C	12	9	3	3
	Neighbourhood Centre (east side)		12	4	4	8
Off-street	The Terrace Shopping Centre	D	56	35	33	21
Off-street	Endeavour Hills S.C. car park (east side open area)	E	140	25	35	115
Off-street	Endeavour Hills S.C. car park (rear loading area)	F	13	11	14	2
Off-street	Endeavour Hills S.C. car park (upper level open area)	G	85	61	66	24
Off-street	Endeavour Hills S.C. car park (upper level undercover)	H	315	302	270	13
Off-street	Endeavour Hills S.C. car park (lower level undercover)	I	487	263	194	224
Off-street	Endeavour Hills S.C. car park (lower level open area)	J	170	5	1	165
Off-street	McDonalds and KFC	K	104	74	70	30
Off-street	Endeavour Hills S.C. car park (north side open area)	L	197	161	135	36
Total			1,830	970	858	860

Source: GTA Consultants

Table 6 indicates that public on-street car parking demands in the nominated area are low, with peak demands equal to an occupancy rate of 53% (860 vacancies). This was particularly the case in the at-grade shopping centre car parks near the subject site (car parking areas A and J) which experienced car parking demands of less than 5% (312 vacancies).

The demand within the Shopping Centre car parks (i.e. areas A and E – L) reflect a car parking ratio of approximately 3 spaces per 100sqm GLA (based on an approximate GLA of 30,355sqm). Such a car parking ratio is comparable to other similar sized retail centres (average and 85th percentile demands of 3.2 and 3.95 spaces per 100sqm GLA⁶) and indicates that the Site is currently operating at typical level.

The centre currently has a supply of car parking equating to approximately 6 car spaces per 100sqm of GLA, indicating an oversupply of parking across the centre. Figure 19 demonstrates that car park areas A, J and F are generally underutilised.

It is noted that car parking area A, at the time of undertaking the survey was occupied by 6 trucks. It is understood that Council are in the process of addressing this potentially unlawful use of the land.

⁶ Based on car parking demand surveys undertaken at several shopping centres undertaken within Metropolitan Melbourne with floor areas 20,000 – 40,000sqm GLA

Figure 19. Existing Car Parking Demands



Source: GTA Consultants

Table 18. Road Based Public Transport Provision

Service	Route Nos	Route Description	Distance to Nearest Stop (m)	Significant Destinations On Route	Frequency
Bus	842	Fountain Gate to Endeavour Hills	Within shopping centre bus depot	Heatherton Road and Fountain Gate Shopping Centre	3 services per day
Tram	845	Dandenong to Mossgiel park	Within shopping centre bus depot	Heatherton Road and Dandenong Railway Station	21 services per day
	849	Dandenong to Mossgiel park via Gleneagles Drive	Within shopping centre bus depot	Power Road and Dandenong Railway Station	21 services per day
	861	Dandenong to Endeavour Hills	Within shopping centre bus depot	Matthew Flinders Avenue, and Dandenong Railway Station	19 services per day

Source: GTA Consultants

Pedestrian Infrastructure

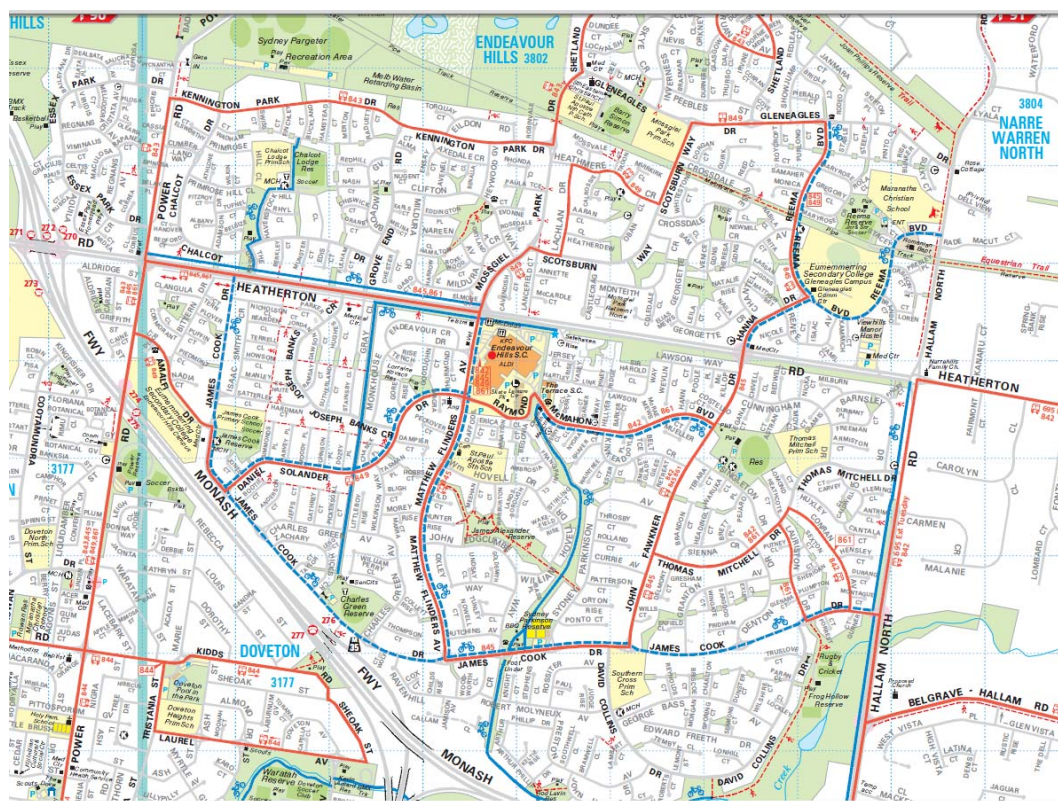
Pedestrian paths are generally located on both sides of the surrounding road network along with limited connections between the Endeavour Hills Shopping Centre, Terrace Shops and Leisure Centre / Library / Community Centre. It was noted that no pedestrian pathways currently exist along either side of Raymond McMahon Boulevard between Erica Close and Matthew Flinders Avenue.

In addition, signalised crossing points are provided on each leg of the Heatherton Road / Matthew Flinders Avenue intersection with painted pedestrian pathways provided at various locations within the Endeavour Hills Shopping Centre car parking area.

Cycle Infrastructure

Figure 23 illustrates the existing bicycle routes within the vicinity of the subject site. It is considered that the Site is reasonably accessibly by bicycle.

Figure 21. Existing Bicycle Paths



Source: City of Casey, TravelSmart Map; GTA Consultants

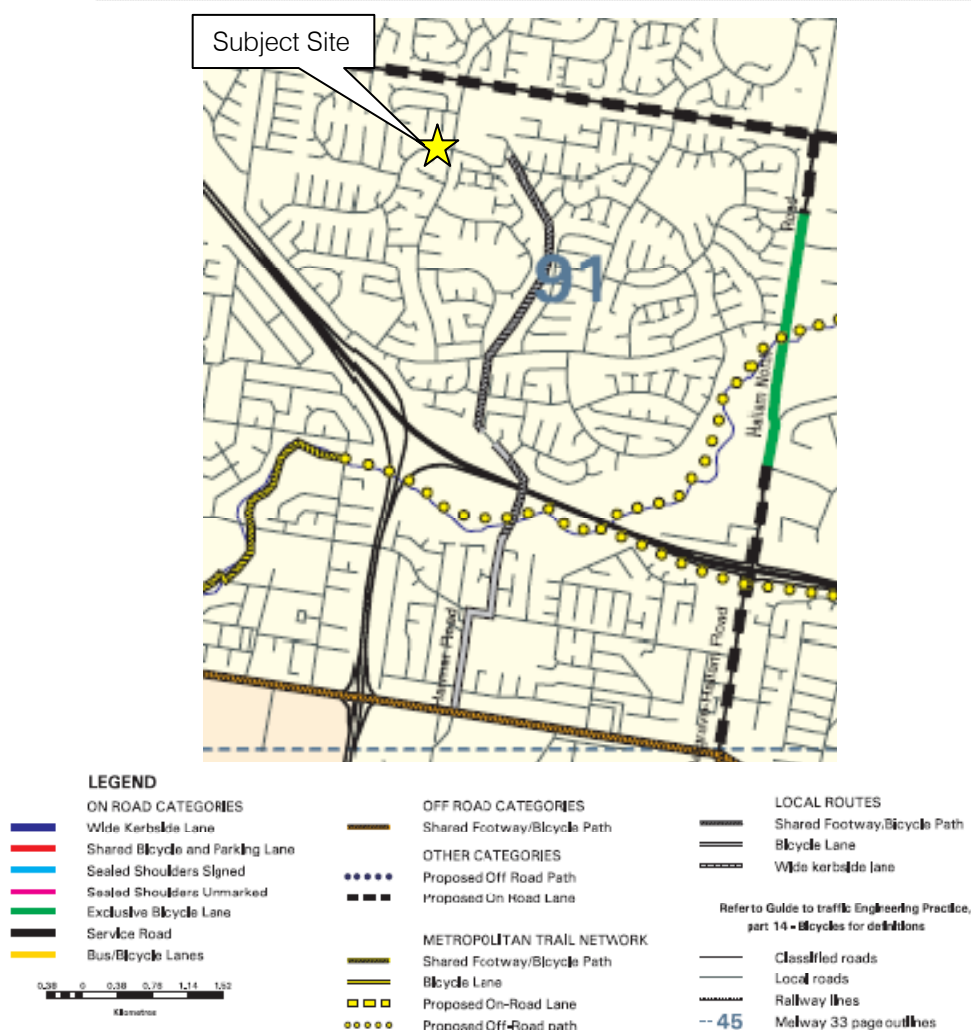
VicRoads Principle Bicycle Network (PBN)

The Principal Bicycle Network (PBN) is a network of arterial cycling routes in metropolitan Melbourne:

- The PBN currently consists of approximately 3,500 kilometres of existing and proposed on-road and off-road bicycle routes. So far, approximately 1,200 kilometres of the network has been completed.
- VicRoads has primary responsibility for managing the development of the PBN.
- Bicycle facilities on the PBN are implemented by VicRoads and local councils depending on whether they are on an arterial or local road.

The following map shows the existing and proposed on and off road bicycle facilities making up the PBN in the vicinity of the subject site.

Figure 22. Cycling Infrastructure



Source: VicRoads, 2010

5.6 Interpretation of Proposed Road Changes within the UDF Structure Plans

A design response to each of the eight key projects identified a number of projects and options for addressing the issues identified. The design responses and projects pertaining to transport (i.e. key projects 1, 2 and 8) are described in further detail as follows.

5.6.1 Improvements to Raymond McMahon Boulevard

The hairpin bend in Raymond McMahon Boulevard was identified as a safety issues for motorists and pedestrians due to road layout and intersection design.

Three options for improving the safety and function of this section of road were identified, with each option leading to a different urban form outcome for the western side of the Precinct and the Endeavour Hills Activity Centre.

Option 1 – No Change to Raymond McMahon Boulevard

Option 1 retains the geometry of the existing Raymond McMahon Boulevard, but attempts to improve the intersection by formalising the existing access arrangement.

The main elements of this option include:

- Permanently closing the eastern car parking access located closest to Raymond McMahon Boulevard by removing the temporary barrier and installing a raised landscaping area.
- Re-arranging traffic devices and other traffic measures to improve the intersection for large vehicles, specifically buses.
- Providing an additional access point to the Terrace Shops at the eastern edge of the Endeavour Hills Shopping Centre parking area.

This option is illustrated below.

Figure 23. Minimal Change Option for the alignment of Raymond McMahon Boulevard



Source: Endeavour Hills Community and Leisure Precinct Urban Design Framework, 2008

Option 2: - Minimal Change to Raymond McMahon Boulevard

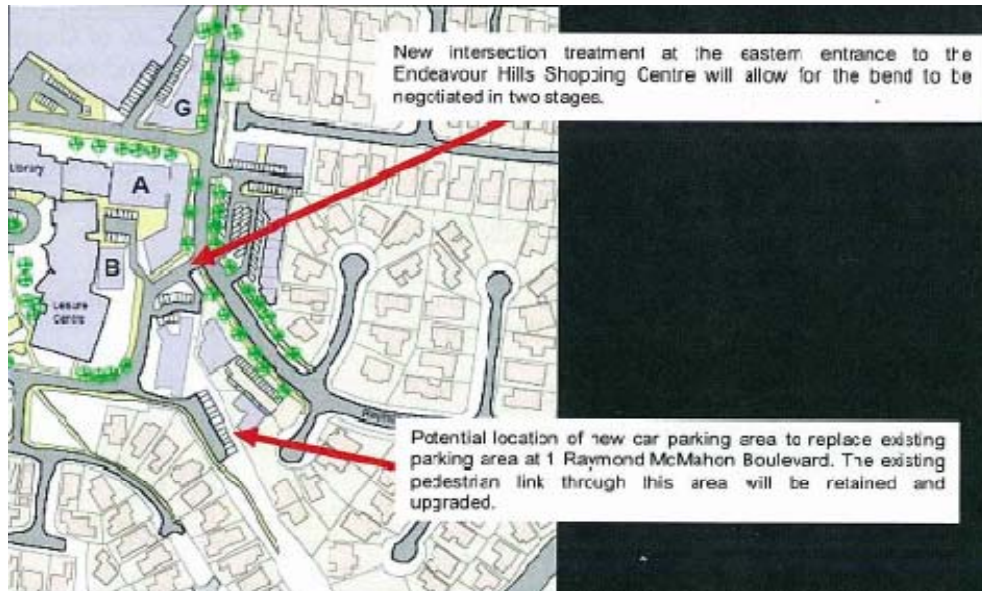
Option 2 proposes to straighten out the existing hair pin bend so that it can be negotiated in two stages. This option requires the partial use of land at 1 Raymond McMahon Boulevard.

This option will marginally:

- Ease the constricted geometry of the road width for vehicle traffic.
- Ease the severity of the problematic hair pin bend.
- Improve the visibility of oncoming traffic at access points in close proximity to the hair pin bend, including the Endeavour Hills Shopping Centre eastern access point.

This option is illustrated below.

Figure 24. Medium Change Option for the alignment of Raymond McMahon Boulevard



Source: Endeavour Hills Community and Leisure Precinct Urban Design Framework, 2008

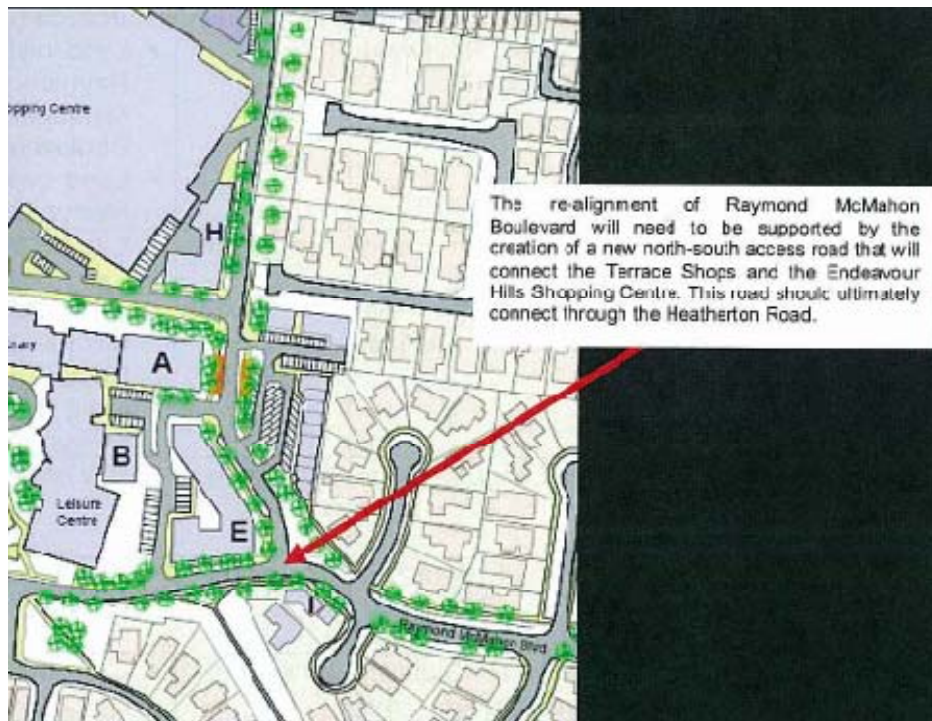
Option 3: - Substantial Change to Raymond McMahon Boulevard

Option 3 proposes substantial change by straightening the road alignment of the Raymond McMahon Boulevard. This option was considered to comprehensively address the problems associated with the current hair pin bend in the alignment of Raymond McMahon Boulevard. Further, this option substantially contributes to the creation of a more user friendly street based environment.

This option would require the use of properties at 1 Raymond McMahon Boulevard and 6 Merryn Close.

The proposed realignment is illustrated below.

Figure 25. Substantial Change Option for the alignment of Raymond McMahon Boulevard



Source: Endeavour Hills Community and Leisure Precinct Urban Design Framework, 2008

5.6.2 Eastern Link Road from Raymond McMahon Boulevard to Heatherton Road

To improve access and traffic management, provision of a new road connection along the eastern boundary of the Endeavour Hills Shopping Centre was proposed.

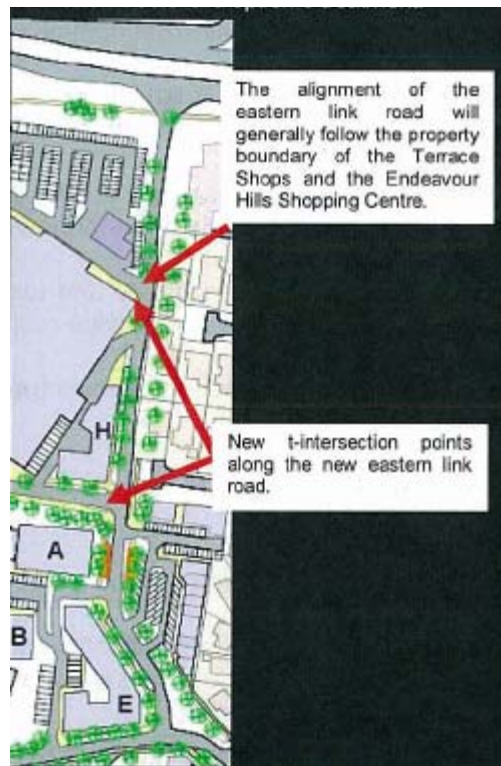
The new eastern link road between the Precinct and Heatherton Road would seek to:

- Provide a formal direct north-south link between Heatherton Road and the Community and Leisure Precinct.
- Assist in removing through traffic from the front of the Endeavour Hills Shopping Centre. This will allow the owner to develop a more pedestrian-friendly and outward focussed retail offer to the north of the centre.
- Improve access to the service road that links to the service docks and loading bays to the south of the Endeavour Hills Shopping Centre. This service road will form a new T-Intersection with the eastern link road.
- Improve the safety of pedestrians and cyclists that use the eastern car park as an informal link between the Precinct and Heatherton Road.

It was considered desirable for the intersection of the Eastern Link Road and Heatherton Road to provide for 'full access' (subject to approval from VicRoads and design considerations). If this was not possible, 'left in / left out' access arrangements was to be considered instead.

The proposed ultimate design of the new eastern link road is illustrated in Figure 20 with its potential southern connection, subject to the Raymond McMahon Boulevard improvement option, illustrated in Figures 21-23.

Figure 26. Ultimate Eastern Link Road Design - Raymond McMahon Boulevard Option 3



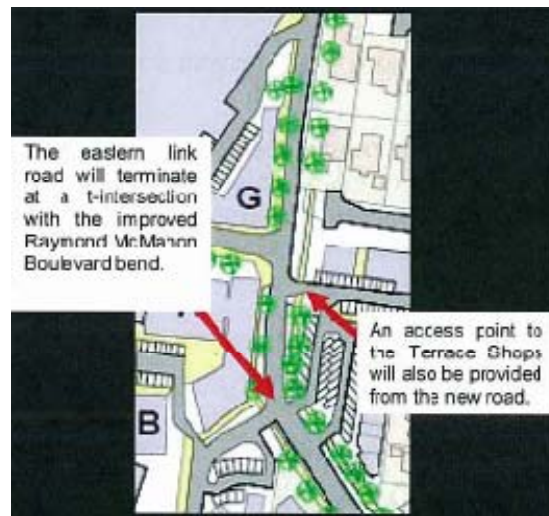
Source: Endeavour Hills Community and Leisure Precinct Urban Design Framework, 2008

Figure 27. Eastern Link Southern Connection - Raymond McMahon Boulevard Option 1



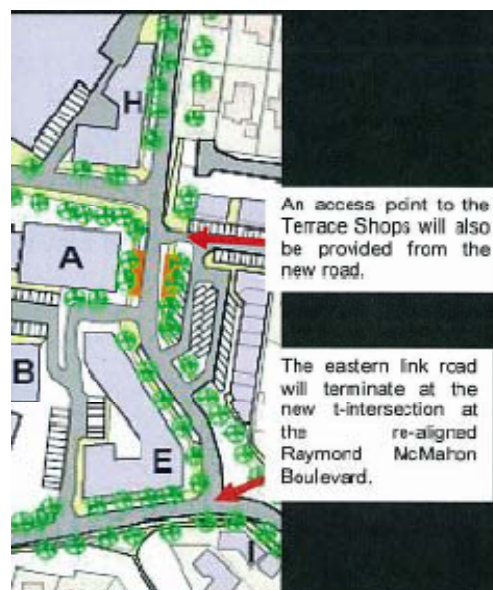
Source: Endeavour Hills Community and Leisure Precinct Urban Design Framework, 2008

Figure 28. Eastern Link Southern Connection - Raymond McMahon Boulevard - Option 2



Source: Endeavour Hills Community and Leisure Precinct Urban Design Framework, 2008

Figure 29. Eastern Link Southern Connection - Raymond McMahon Boulevard Option 3



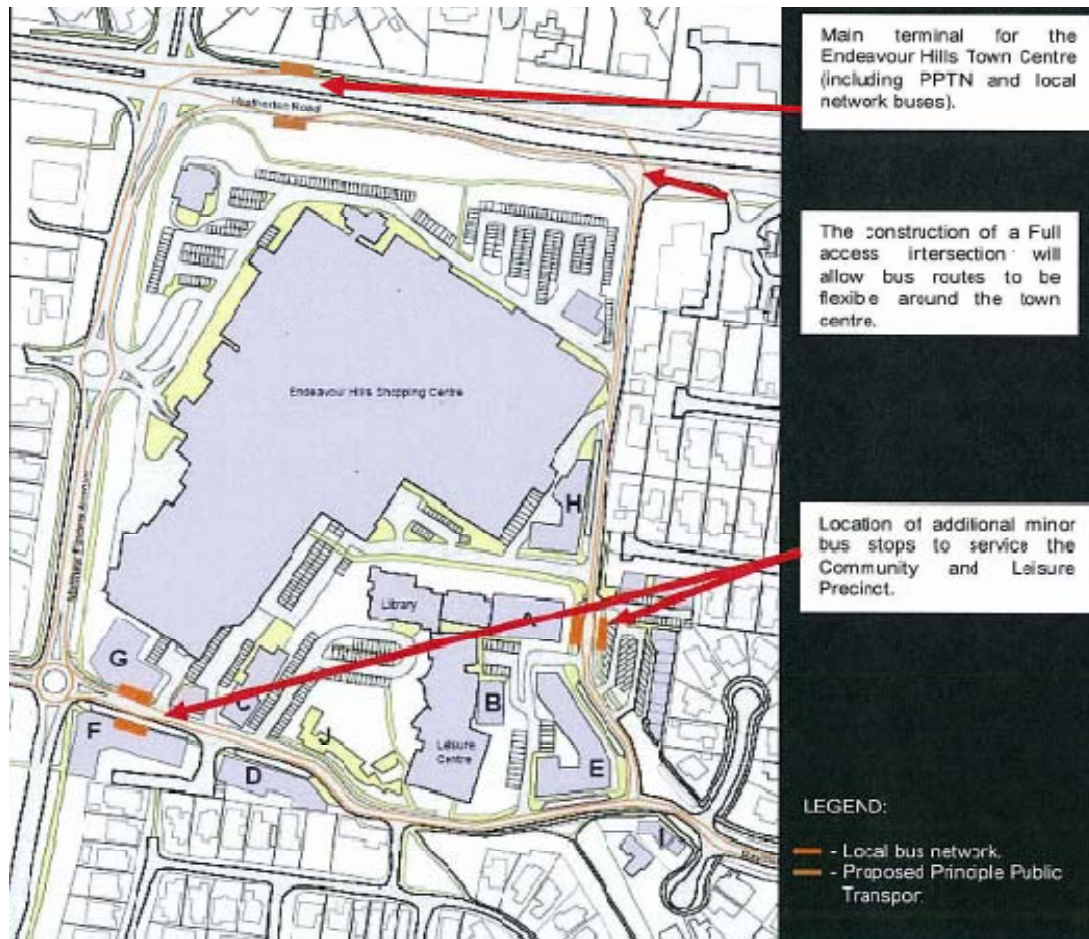
Source: Endeavour Hills Community and Leisure Precinct Urban Design Framework, 2008

5.6.3 Bus Stops and Access

The UDF identified that there were currently no safe locations along the edge of the community precinct for a bus stop and as a result, no bus stops directly service the Precinct.

As the community precinct evolves over time to allow more safe locations for bus stops, the bus route and bus stop plan illustrated in Figure 32 could be considered.

Figure 30. Bus Stop and Route Plan for the Endeavour Hills Town Centre



Source: Endeavour Hills Community and Leisure Precinct Urban Design Framework, 2008

This plan would allow a central bus interchange for all bus routes to be established at Heatherton Road. This will allow local residents to access the city-wide public transport system in a safe and efficient manner.

5.6.4 Summary

Based on a review of the proposed works described in both the Endeavour Hills Town Centre Structure Plan and the Endeavour Hills Community and Leisure Precinct Urban Design Framework, Tables 17-19 have been prepared to summarise the findings and provide a review of the recommendations.

Table 19. Draft Structure Plan Background Report - Review of Recommendations

Issue	Proposed Works / Recommendation	GTA Assessment
Pedestrian and Cycle Access and Mobility	Provide bicycle and pedestrian paths along the south side of Heatherton Road.	A shared path is currently present on the south side of Heatherton Road in the vicinity of the Town Centre.
	Create a footpath along the north side of Heatherton Road.	A footpath exists west of Mossgiel Park Drive. There is considered to be limited benefit in extending this footpath further to the east as no direct access is provided from the adjoining properties.
	Provide a new pedestrian path along Raymond McMahon Boulevard between Matthew Flinders Avenue and the leisure centre.	Agree.
	Install convenient and safe bicycle parking within the Town Centre.	Agree.
	Establish defined bicycle lanes along Raymond McMahon Boulevard, Mossgiel Park Drive and Matthew Flinders Avenue.	Agree.
	Establish direct pedestrian pathways through car parking areas.	Agree, to be identified in association with the broader design.
Vehicle Access and Mobility	Install roundabout at the intersection of Raymond McMahon Boulevard, Terrace Shops and Shopping Centre south-eastern entry (at the hairpin turn).	Agree, subject to future road alignment and land availability.
	Address safety issues relating to the hairpin bend of Raymond McMahon Boulevard.	Agree.
	Review internal traffic circulation within the Centre.	Agree, to be identified in association with the broader design.
Public Transport	Upgrade existing bus stop in the Shopping Centre's western car park.	Agree.
	Review of the existing bus service with bus providers, Council and State Government.	Agree.
	Identify an appropriate location for a new bus stop within the Town Centre.	Subject to a review of the broader design.
	In conjunction with surrounding municipalities lobby DoI and the local bus service provider (Grenda) to incorporate Endeavour Hills in a regional or metropolitan orbital bus route such as the 'SmartBus' routes.	Agree.

Table 20. Draft Structure Plan - Review of Recommendations

Proposed Works / Recommendation	GTA Assessment
New internal loop road to the eastern edge of the Centre to enhance connectivity to Raymond McMahon Boulevard to the south and the related community facilities.	Agree, a new internal loop road would improve connection between the various components of the Town Centre. It is unlikely that any new connection to Heatherton Road would gain support from VicRoads.
Raymond McMahon Boulevard to be improved through the installation of a roundabout at the 'hairpin' bend and new pedestrian paths to improve safety and legibility for all.	Agree, subject to future road alignment and land availability. This option is considered to be the second most desirable outcome (behind Option 3 from the UDF which required a full realignment of Raymond McMahon Boulevard) as it would address the existing safety and manoeuvrability concerns without the cost and land associated with Option 3. Notwithstanding, the viability of this option would be subject to the future road alignment and land availability.
Relocate the local stop to the southern community precinct on Raymond McMahon Boulevard and a longer term regional stop on Heatherton Road as part of the Principal Public Transport Network.	The future bus stop location will be dependent on the ultimate access Community Facilities. Should a regional bus line be provided along Heatherton Road, a new bus stop should be incorporated.
Provide direct pedestrian and cycle paths along all existing streets, in linear open spaces radiating from the Town Centre and through existing car parking areas.	Pedestrian and cycle paths should be provided on all Collector Streets and above.

Table 21. Urban Design Framework - Review of Recommendations

Issue		Proposed Works / Recommendation	GTA Assessment
Improvements to Raymond McMahon Boulevard	Option 1	Permanently closing the eastern car parking access located closest to Raymond McMahon Boulevard by removing the temporary barrier and installing a raised landscaping area.	This option is considered to formalise the existing temporary measures in place however is not considered to address the base safety and manoeuvrability concerns. It would be the cheapest of all solutions and would not require additional land. This option is considered to be the least preferred.
		Re-arranging traffic devices and other traffic measures to improve the intersection for large vehicles, specifically buses.	
		Providing an additional access point to the Terrace Shops at the eastern edge of the Endeavour Hills Shopping Centre parking area.	
	Option 2	Straighten out the existing hair pin bend so that it can be negotiated in two stages. This option requires the partial use of land at 1 Raymond McMahon Boulevard.	This option will marginally: <ul style="list-style-type: none">Ease the constricted geometry of the road width for vehicle traffic.Ease the severity of the problematic hair pin bend.Improve the visibility of oncoming traffic at access points in close proximity to the hair pin bend, including the Endeavour Hills Shopping Centre eastern access point. Notwithstanding the above, this option is considered to only partially address the issues at this intersection. This option is would be the third most desirable option behind Option 3 and the roundabout suggested in the Structure Plan.
	Option 3	Option 3 proposes substantial change by straightening the road alignment of the Raymond McMahon Boulevard. This option would require the use of properties at 1 Raymond McMahon Boulevard and 6 Merryn Close.	This option is considered to comprehensively address the problems associated with the current hair pin bend in the alignment of Raymond McMahon Boulevard. Further, this option substantially contributes to the creation of a more user friendly street based environment. This option is the preferred option however it requires a significant amount of work to achieve.
		Create a new north-south access road that will connect the Terrace Shops and the Endeavour Hills Shopping Centre. This road would ultimately connect through to Heatherton Road (via the Eastern Link Road).	
Eastern Link Road	Provide a formal direct north-south link between Heatherton Road and the Community and Leisure Precinct.	Agree, a new internal loop road would improve connection between the various components of the Town Centre.	
	The intersection of the Eastern Link Road and Heatherton Road to provide for ‘full access’ (subject to approval from VicRoads and design considerations). If this was not possible, ‘left in / left out’ access arrangements was to be considered instead.	It is unlikely that any new connection to Heatherton Road would gain support from VicRoads.	
Bus Stop and Access	Provide a central bus interchange for all bus routes to be established at Heatherton Road to allow local residents to access the city-wide public transport system in a safe and efficient manner.	Should a regional bus line be provided along Heatherton Road, a new bus stop should be incorporated.	
	Construct a full access intersection to Heatherton Road (Eastern Loop Road) to allow bus routes to be flexible around the Town Centre	It is unlikely that any new connection to Heatherton Road would gain support from VicRoads.	
	Locate additional minor bus stops to service the Community and Leisure Precinct.	The future bus stop location will be dependent on the ultimate access Community Facilities.	

5.7 Interpretation & Summary

5.7.1 Overview

Based on recent site visits, an inception meeting and workshop, a review of the previous reports for the Site (Structure Plan and UDF) a number of transport opportunities and issues associated with the Endeavour Hills site have been identified.

The following provides a summary of the broad transport issues and opportunities that have been identified.

5.7.2 Existing Issues

Car Parking

It was observed on-site and through subsequent surveys that significant amounts of existing car parking was currently underutilised. This car parking could potentially assist to off-set any future development proposals. The main areas noted were to the south and east of the Shopping Centre (areas A, E, I and J) which recorded a peak demand of approximately 30%, representing some 650 vacancies across this area.

Conservatively assuming that the current Endeavour Hills Shopping Centre increased in car parking demand to a rate in line with the 85th percentile rate for this size Centre (3.95 spaces per 100sqm), this would result in an increase in car parking demand of approximately 290 spaces. Such an increase in demand, having account for the existing vacancies within other areas of the Shopping Centre (some 105 spaces), would reduce the above surplus in these areas to 465 spaces.

Vehicular Circulation

During on-site observations, it was noted that there is a lack of vehicular connection around the Shopping Centre precinct. This was also identified through the previous Structure Plan and UDF work which proposed to address it through the introduction of a potential future north-south link along the eastern side of the Shopping Centre which would connect directly to Heatherton Road.

Such a connection would essentially create a loop road around the centre and significantly improve access between the front of the Shopping Centre / Heatherton Road and the Leisure Centre area and southern car parking areas. However, it is considered unlikely that a direct connection to Heatherton Road would be supported by VicRoads and as a result, it is recommended that any north-south link be aligned to connect with the existing Heatherton Road access point.

In addition, the main entrance into the Shopping Centre from Matthew Flinders Avenue was observed to be complicated with numerous movements (including both bus and pedestrian) occurring. As part of the redevelopment process, it is recommended that this area be addressed if possible. This may include the relocation or redesign of the existing bus stop.

Pedestrian and Cycle Access

On-site observations and the previous reports have identified that there is a lack of convenient pedestrian access across and within the area, including:

- No pedestrian footpaths provided along Raymond McMahon Boulevard between the leisure centre and Matthew Flinders Avenue.
- There is a lack of clear access into the southern end of the Shopping Centre.
- The grade of the existing pedestrian path between the leisure centre car park and the neighbourhood house would pose access issues for a number of patrons.
- Limited cycle facilities exist within the Town Centre.
- The grade across the Site restricts access between the leisure centre / library and the Shopping Centre.

In order to address the above issues, it is recommended that pedestrian and cycle paths be provided along all roads classified as 'Collector' roads or above. In addition, clear pedestrian paths should be provided throughout the Town Centre conveniently linking key destinations with bicycle parking to be provided in safe and convenient locations.

Public Transport

Access to the existing bus stop on the western side of the Shopping Centre is considered to be confusing and creates the potential for conflict between buses and cars moving through this area. In addition, the location of bus stops throughout the centre does not provide convenient access to the community precinct.

As a result, consideration should be given to providing / relocating a bus stop directly in the vicinity of the Leisure Centre precinct as part of the proposed works. The exact location will be dependent upon the ultimate configuration of the access points and road network.

Should a regional bus route be provided along Heatherton Road in the future, it is recommended that a bus stop be provided adjacent to the Shopping Centre on Heatherton Road.

Raymond McMahon Boulevard

The existing 'hairpin' bend intersection at the northeast corner of the leisure centre is both confusing and difficult to negotiate. Through the previous work done in the area, four possible treatment options were identified. These are described and assessed as follows:

5.7.3 UDF Structure Plan Options

Option 1: Minimal Change (UDF)

Whilst this option does not make significant changes to the existing Raymond McMahon Boulevard configuration, it does recommend the following alterations to improve the safety and operation:

- Permanently closing the eastern car parking access located closest to Raymond McMahon Boulevard by removing the temporary barrier and installing a raised landscaping area.
- Re-arranging traffic devices and other traffic measures to improve the intersection for large vehicles, specifically buses.
- Providing an additional access point to the Terrace Shops at the eastern edge of the Endeavour Hills Shopping Centre parking area.

This option is considered to formalise the existing temporary measures in place however is not considered to address the base safety and manoeuvrability concerns. It would be the cheapest of all solutions and would not require additional land.

Option 2: Medium Change (UDF)

This option proposes to straighten out the existing hair pin bend so that it can be negotiated in two stages. This option requires the partial use of land at 1 Raymond McMahon Boulevard.

This option will marginally:

- Ease the constricted geometry of the road width for vehicle traffic.
- Ease the severity of the problematic hair pin bend.
- Improve the visibility of oncoming traffic at access points in close proximity to the hair pin bend, including the Endeavour Hills Shopping Centre eastern access point.

Notwithstanding the above, this option is considered to only partially address the issues at this intersection.

Option 3: Substantial Change (UDF)

Option 3 proposes substantial change by straightening the road alignment of the Raymond McMahon Boulevard. This option would require the use of properties at 1 Raymond McMahon Boulevard and 6 Merryn Close.

This option is considered to comprehensively address the problems associated with the current hair pin bend in the alignment of Raymond McMahon Boulevard. Further, this option substantially contributes to the creation of a more user friendly street based environment.

Option 4: Roundabout (Structure Plan)

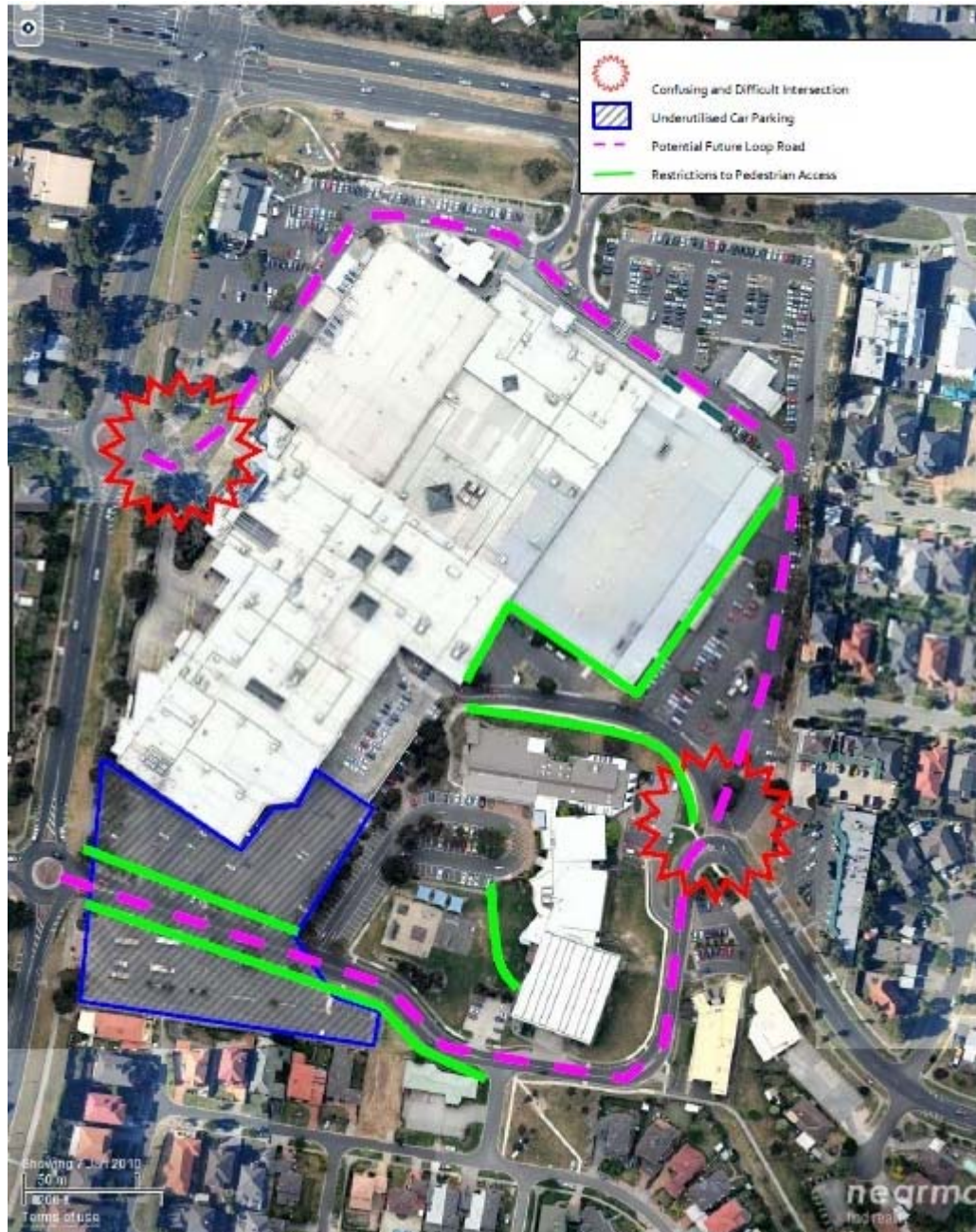
The Structure Plan recommended the installation of a roundabout to address the existing hair pin bend. Subject to the future road alignment and land availability (if necessary), this option was considered to be desirable as it would address the existing safety and manoeuvrability concerns without the cost and land requirements associated with Option 3.

Preferred Option

Whilst Option 3 represents the most desirable treatment, it is considered that such a treatment may be impractical given the significant realignment and the associated land and costs required.

Of the remaining three options, the proposed roundabout is considered to represent the preferred design outcome as it will allow a safe and convenient intersection between Raymond McMahon Boulevard and the potential future North-South Road.

Figure 31. Identified Issues and Opportunities



Source: GTA Consultants, 2010

6 Housing Assessment

This section provides an analysis of the housing market within Casey and an overview of that for metropolitan Melbourne. It includes demographic analysis with special consideration for housing affordability and an ageing population. This section concludes with recommendations for the appropriateness of housing stock within the Endeavour Hills Town Centre.

Refer to Annexure 4 for a detailed policy review.

6.1 The Issue of Housing Affordability

Access to affordable housing is a key issue for households and forms an integral part of the Victorian State Government's Melbourne 2030 planning policies.

Housing affordability is an issue nationally, with an increasing proportion of the nation's population under housing stress. Housing affordability issues persist due to a number of economic demand and supply pressures. That is; the greater the number of households experiencing 'household stress', the greater the impact on propensity to spend. Anecdotally this leads to a greater reliance on credit for household spending.

The major pressures include population growth, declining household size and a subsequent increase in the number of households, the increase of real housing costs over time and the fall in supply of housing stock. Exacerbating the overall shortage is the lack of availability of both social housing and housing at the low-cost end of the private rental market.

'As a compounding factor in the affordability issue, Melbourne has experienced substantial population growth during the period 2001- 2006, which has changed and increased consumer demand, and contributed to the increased price of median detached housing during the period. A number of new development trends have also emerged during this period, such as lifestyle focused development and the growth of apartment and higher density housing outside of the CBD.

A number of factors have contributed to exponential growth in demand for housing in recent years. These are:

- Increasing population: more need for housing;
- Deregulation of finance industry which has made access to finance easier for many people and families either to buy their own home or invest;
- Sustained low interest rates which has increased consumer and lender confidence;
- Ageing population: leads to decrease in household sizes, therefore more households required;
- Increased wealth: ageing population, homeowners asset value increase, superannuation is realised; and
- An increase in property prices.

6.1.1 Defining and Measuring Levels of Household Affordability

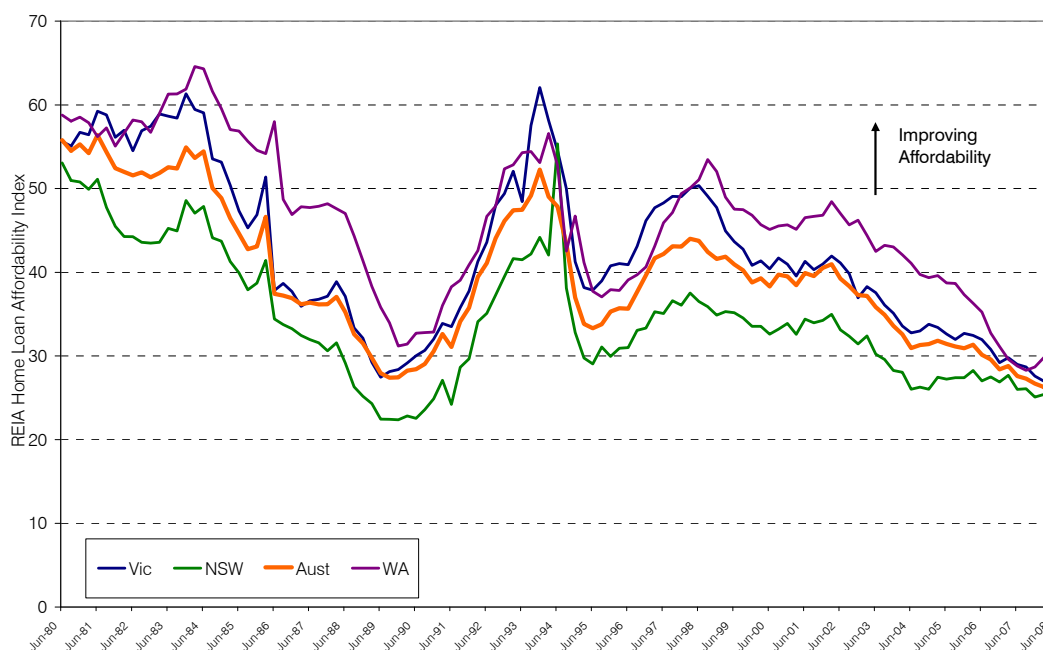
Household affordability measures the financial outcome for a household given they are renting or purchasing the dwelling they wish to occupy. There are a number of ways to measure this outcome; the Real Estate Institute of Australia (REIA) Home Loan Affordability Index and Housing Stress by Household Income Costs are detailed below.

REIA Home Loan Affordability Index

The REIA Home Loan Affordability Indicator is a ratio of median family income to average new loan repayments. The REIA Index divided by 10 shows the number of times that median family income exceeds average home loan repayments in a period. An increase in the REIA Affordability Index represents improved affordability.

According to the REIA Index, housing affordability continues to decline in Australia. With significant interest rises recently, continued house and land price growth (caused by infrastructure cost pressures, lagged provision particularly at fringe locations and historically low interest rates) has seen affordability deteriorate further in recent months reaching levels not seen since the late 1980's. The 1980's housing affordability crisis was due to high interest rates (i.e. up to 18% on a home loan) as such the crisis abated when rates returned to normal levels, which is not the case today.

Figure 32. REIA Housing Affordability Index (June 1980- June 2008)



Source: MacroPlan Australia, 2008

Housing Stress

Although there is no nationally recognised standard for identifying households with housing affordability problems, one of the more often used benchmarks is the concept of 'housing stress'. This is calculated by identifying households with lower incomes (those in the first four of ten income deciles, or the bottom 40% of the income distribution) that have housing costs above 30% of their disposable income.

It should be noted that many higher income households also pay more than 30% of their income on housing costs. These have been excluded from the group identified as having affordability problems as such households often have the discretion to reduce their housing costs by reducing their mortgage repayments or moving to a place with lower costs.

Rental Market Affordability

Another measure specific to the rental market is prepared by Victoria's Department of Human Services (DHS). The DHS defines Rental Market Affordability as the proportion of lower income households (i.e. those receiving Centrelink incomes) that spend less than 30 per cent of their income on rent. This indicator seeks to estimate the affordability of rental accommodation for lower income households. It is based on rental supply data collected by the Residential Tenancies Bond Authority (RTBA).

In the December 2009 quarter, around 18.4% of rental dwellings in the South Eastern region were considered affordable for lower income households. This represents a decrease of approximately 3.5% from 2008 (at which 22% of rental dwellings were considered affordable) but remains well above the metropolitan Melbourne average, where just 8.8 % of rental dwellings were considered affordable during the December 2009 quarter.

6.1.2 Market Typologies

MacroPlan's analysis demonstrates that Casey has historically been affordable relative to metropolitan Melbourne. In 2007, the median house price in Casey was \$280,000 compared to a metropolitan average of \$375,000.

However, the dominance of separate housing in Casey is the result of a demand push / pull; that is, as demand for low density housing continues, additional supply is delivered to the market that continually attracts both a homogenous housing stock and market. Consequently, a number of the key market segments are potentially 'locked out' of the Casey housing market, and current housing stock is considered 'unaffordable' for these market segments.

To demonstrate that there is a need to provide accommodation for a greater range of market segments, MacroPlan has developed a housing market typologies matrix. This matrix identifies eight key market segments that are considered to require affordable housing as well as their typical housing configuration requirements. It also determines the estimated cost of housing (from both a purchasing and rental perspective) based on each segment's requirements, if they were to reside in Casey:

Table 22. Casey Housing Market Typologies

	Housing Requirements	Typical Dwelling Sizing	Affordable	Median	Premium	Weekly Rental cost range
Students	Medium to high density dwellings, less likely to have cars, therefore walking distance to public transport, close or in activity centres/amenities, such as supermarkets, close or easily accessible to educational facilities, 1-2/study bedrooms, small or no yard	50sqm - 100sqm	\$200,000 - \$300,000	\$300,000 - \$400,000	\$450,000+	\$180-220
Low income workers	low-medium density, close to amenities and activity centres, 1 + study-2 bedrooms, small or no yard	75sqm - 125sqm	\$200,000 - \$300,000	\$300,000 - \$400,000	\$450,000+	1 bedroom: \$180-220, 2 bedroom: \$220-280
Young Professionals	low-medium density, close to amenities and activity centres, 1 + study-2 bedrooms, small or no yard, lifestyle focus	75sqm - 125sqm	\$250,000 - \$350,000	\$350,000 - \$450,000	\$500,000+	\$220-280
Young Families	low density, close to amenities, 3+ bedrooms, medium+ size yard	150sqm - 250sqm	\$300,000 - \$400,000	\$500,000 - \$600,000	\$650,000+	\$300+
Mature Families	low density, close to amenities, 3+ bedrooms, small-medium yard	150sqm - 250sqm	\$300,000 - \$400,000	\$450,000 - \$550,000	\$650,000+	\$300+
One parent families	low-medium density, close to amenities, activity centres and community facilities (e.g. childcare and schools) 1 + study-3 bedrooms, small or no yard	100sqm - 200sqm	\$200,000 - \$300,000	\$300,000 - \$400,000	\$450,000+	\$280-340
Empty Nesters / Baby Boomers	low-medium density, close to amenities and activity centres, 1 + study-3 bedrooms, small or no yard	100sqm - 200sqm	\$250,000 - \$350,000	\$400,000 - \$500,000	\$600,000+	\$280-340
Retirees	low-medium density, close to amenities, such as supermarket and public transport 1+ study, possibly 2 bedrooms, small or no yard	75sqm - 150sqm	\$200,000 - \$300,000	\$350,000 - \$450,000	\$550,000+	1 bedroom: \$180-220, 2 bedroom: \$220-280

Source: MacroPlan Australia, 2008

This table reveals that the type of housing product demanded by each market segment identified is different. Aside from Young Families and Mature Families, the remaining six of the eight market segments may not necessarily demand separate, low density housing as characterised by the Casey housing market.

Casey has an opportunity to address these issues and provide for other market segments into the future. In particular, there are opportunities to create higher density housing in locations with high levels of activity that are close to public transport, retail and employment such as Narre Warren. The delivery of such developments will further support the objectives and key policy directions of Melbourne 2030 and the Casey Housing Strategy.

6.2 Supply Assessment

The following section reviews the supply of residential dwellings in Casey to determine whether there is an adequate dwelling mix to meet the needs of current residents in the region.

In the following analysis of supply, MacroPlan have investigated the number of building approvals for residential dwelling types in SLAs of Casey between 2002-03 and 2007-08.

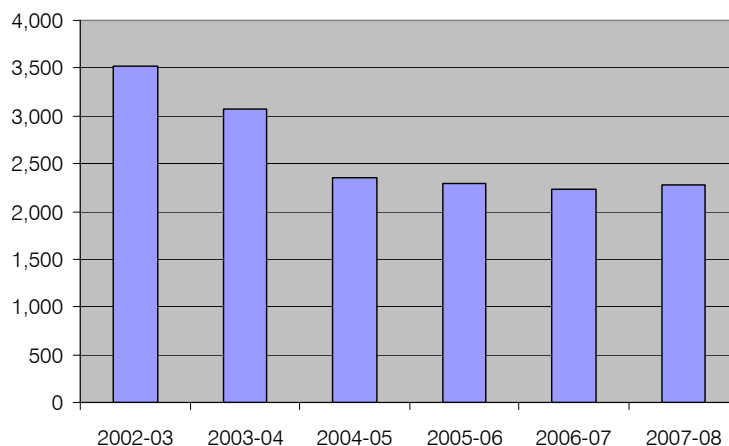
Building Approvals

Building approvals activity is a complementary measure that can provide additional insight into trends and shifts of building activity, and provide a reasonable basis for examining longer-term shifts in housing development across the City of Casey.

Separate Houses

The figure below illustrates the general decline in total new approvals for separate houses in the City of Casey. In 2007/08 there were a total of approximately 2,280 separate house approvals across the City of Casey. This compares to 2002/03 when there were a total of 3,520 building approvals for separate houses, representing a 35% decline over the period. This is indicative of some of the larger residential subdivision developments reaching capacity.

Figure 33. Casey LGA - Separate House Building Approvals, 2000/01–2005/06



Source: ABS 8731.0 - Building Approvals

Semi-detached, Flats, Units and Apartments

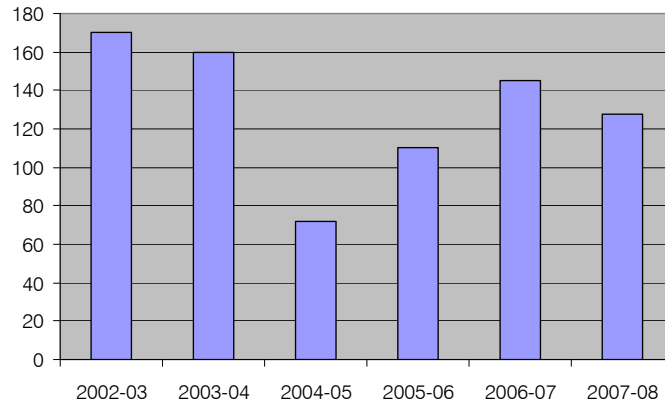
Figure 11 illustrates the fluctuating trend of Other Residential building approvals. In 2007/08 there were a total of approximately 128 other residential building approvals across the City of Casey, namely for semi-detached dwellings, flats, units or apartments. In 2002/03 the total number of other residential building approvals was 170, and decreased to 72 in 2004/05, thereafter slowly increasing again in 2006/07 (145).

These fluctuations could be indicative of the fact that Casey is dominated by separate housing so there could be less demand for flats units and apartments than for separate houses.

Furthermore, the recent increase in other residential building approvals could also be attributed

to several residential subdivisions nearing capacity; therefore there is less land left so smaller dwellings are built to meet demand.

Figure 34. Casey LGA – Other Residential Building Approvals



Source: ABS 8731.0 - Building Approvals

Key Issues

MacroPlan has reviewed the total number of residential approvals by dwelling type. This assessment has shown that there has been a steady decline in the number of building approvals for separate houses in the City of Casey, whilst the number of approvals for other residential dwellings has fluctuated since 2002

The number of separate housing approvals far outnumbers other residential approvals; however the former is showing a significantly declining trend. This could be attributed to residential subdivisions in the area reaching capacity; however the homogeneity of dwelling type approved highlights potential issues for Casey into the future. Provision of one type of dwelling (separate houses) caters to a narrower section of the market, and can thus lock out other market segments that may require smaller, more affordable dwellings

6.3 Housing Market Trends in the City of Casey and Melbourne

Residential Market Overview

Key economic indicators for Casey suggest the region has been growing steadily, with population growth of 4.4% per annum over the 1991 to 2006 period. There has been a change in the distribution in the population, with the proportion of residents aged 55 and over increasing from 10.7% in 1991 to 16.4% in 2006.

Rental Market

MacroPlan have reviewed data provided in the Department of Human Services 'Rental Report' for the December 2009 quarter. The report shows that there has been a 5.9% increase in the number of new rental dwellings in the quarter within metropolitan Melbourne and a 3.6% increase across the state, compared to the same quarter last year. This indicates healthy growth in the housing market across Victoria.

In addition, the report highlights that the trend vacancy rate for Melbourne was at a very low 1.5% (up from 1.2% in December 2008), demonstrating a tight rental market in the metropolitan region but also a very slight but consistent easing of the vacancy rate.

Median Rental Index

The Metropolitan Rent Index (MRI) is also published in the Rental Report prepared by Victoria's Department of Human Services. The MRI is adjusted for seasonal trends and variations between suburb localities and property types and as such is a reliable measure of changes in rental costs over time.

In the December 2009 quarter, the median rent for the South Eastern region of Melbourne (including Dandenong, Casey and Cardinia LGAs) was \$290 per week. This compared to a metropolitan median rent of \$330 per week. Although below the metropolitan average, the average annual change in the South Eastern region was 4.3%, approaching the metropolitan average of 5.0% over the year.

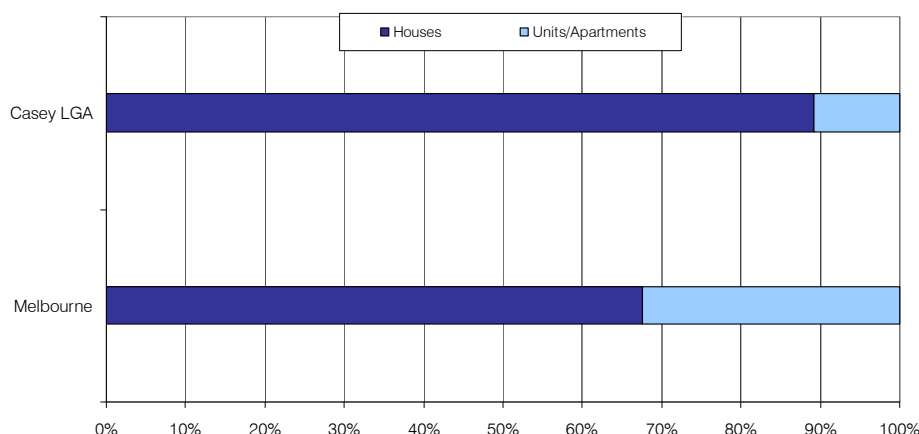
Minimum Housing Diversity

As indicated below, the proportion of Unit and Apartment sales in Casey has been historically below the average compared to metropolitan Melbourne, and houses accounted for a majority, or 89% of all sales in 2007 compared to 68% in Melbourne.

Furthermore, the proportion of Units and Apartments sold in comparison to houses has remained stable in Casey over the past ten years.

This indicates that Casey has a significant lack of housing diversity which is an issue as delivery of a range of housing stock is required to cater for all different market segments.

Figure 35. Proportion of House, Unit and Apartment Sales, Casey LGA & Melbourne 2007



Source: Property Valuer-General Report 2007 (2008) and MacroPlan Australia (2008)

Implications of an Ageing Population

Smaller dwellings are needed to house ageing populations due to forecast decreasing household size, and the propensity for older people to live on their own. In accordance with the Australian Housing and Urban Research Institute (“AHURI”), “population ageing is one of the main drivers of the increased number of smaller household.” The following passage was taken directly from the AHURI Research and Policy Bulletin.⁷

Contrary to widely held assumptions that ageing, low birth rates and low immigration will combine to reduce demand for housing in the future, recent AHURI research (McDonald 2003) has shown that the shift to single person households across all age groups is driving demand for additional and more diverse types of housing in Australia. A continuing and rapid rise in the number of single person households, particularly in major capital cities, is projected for the next two decades.⁸

6.4 Household Structure

The following table outlines the percentage change in household types over time for the four SLAs that form the Casey LGA – Berwick, Cranbourne, Hallam and South. Endeavour Hills is located in the Casey-Hallam SLA.

Table 23. Casey Household Structure: Percentage Change over Time, 1996-2006

	Family households				Non-family households		
	<i>Couple family with no children</i>	<i>Couple family with children</i>	<i>One parent family</i>	<i>Other family</i>	<i>Lone person household</i>	<i>Group household</i>	<i>Other household</i>
% change 1996-2006							
Casey - Berwick SLA	-3.6%	0.5%	3.0%	0.1%	0.8%	-0.1%	2.4%
Casey - Cranbourne SLA	2.8%	-7.6%	4.6%	0.3%	3.9%	-0.2%	2.2%
Casey - Hallam SLA	3.0%	-6.3%	3.1%	0.1%	3.8%	0.2%	1.4%
Casey - South SLA	2.7%	-3.1%	0.7%	-0.2%	-1.0%	-0.5%	3.9%
Casey average	1.0%	-4.2%	3.1%	0.1%	2.5%	-0.1%	2.2%

Source: ABS Census of Population and Housing (2006).

Although analysis has indicated that Casey is largely comprised of Couple Families with Children, the table above also demonstrates that there has been a shift away from this family type over the past decade. Between 1996 and 2006, there was a decline in the proportion of Couple Families with Children by 4.2 percentage points across the City. This is especially the case for Cranbourne and Hallam SLAs. Furthermore, the largest growth occurred in One Parent Families and Lone Person Households over the decade. Furthermore, while 88% of residents are part of a family household, only 6% of residents are 0-4 years and 13% 5-14 years, signifying a more mature family structure and indicative of a slower population growth rate and spending patterns (Section 4.5).

Household Projections for Casey

Household projections have also been assessed for the City of Casey (Berwick-Hallam) SLA up to 2031, based on the ABS Department of Health and Ageing estimates.

These projections are explained in greater detail in Section 4.5 and have been reproduced below.

⁷ Issue 43 May 2004, AHURI Research and Policy Bulletin

⁸ Issue 43 May 2004, AHURI Research and Policy Bulletin, Housing Futures in an Ageing Australia

Table 24. Household Projections, 2006–2031, Casey LGA

	201	201	201	202	202
Casey (Berwick-Hallam)					

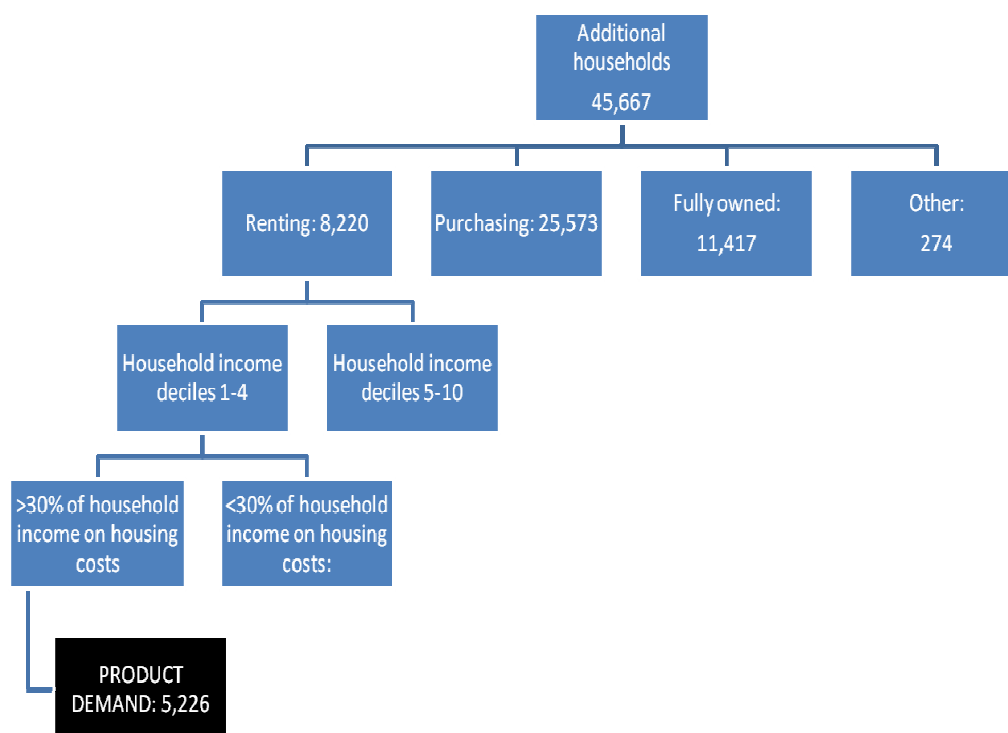
Source: ABS Department of Health and Ageing, 2009

Over this period there will be a projected increase of around 51,000 households across the Casey LGA. A majority (76%) of this growth is expected to occur in Cranbourne (North, West, East and Township) and Berwick (North and South).

Market Sizing

To provide an alternative to the Department of Health and Ageing forecasts (Section 4.5), MacroPlan have also utilised ABS population forecasts to provide more conservative growth rates in the number of households for the City of Casey up to the year 2026. This can be summarised as follows:

Figure 36. Additional households in Casey, 2006–2026



Source: Australian Bureau of Statistics Census of Population and Housing, 2006; MacroPlan Australia 2010

As shown in the figure above, it is expected that there will be an additional 45,667 households that require housing in the City of Casey between 2006 and 2026. Based on the ABS estimates of household tenure composition for Casey in 2006, around 8,494 of these households will be renting and 25,482 will be purchasing.

Of those in Casey's rental market, around 5,226 households will be under 'housing stress' (assuming 2006 estimates) and will therefore demand affordable rental housing. This however, does not account for latent demand from household purchasers that are also under 'housing stress' (around 16,054 households) and would potentially shift into the local rental housing market if supply were available.

It also does not consider that regional demand drivers will result in an increased demand for smaller, high density dwellings in the locality, including:

- Evolving market segments,
- Declining household size,
- Demand from outside of Casey due to increased employment opportunities and
- Lack of supply across the South East region.

These factors would contribute to a further increase in demand for affordable rental housing in Casey.

6.5 Summary

The Rental Market

Regional Melbourne has traditionally been a very tight housing market with low vacancy rates. This is exacerbated by the lack of affordable housing with significant implications for an ageing population, such as that in the City of Casey.

The Department of Human Services 'Rental Report' for the December 2009 quarter reveals a slight mitigation in market shortages with a 5.9% increase in the number of new rental dwellings in the quarter within metropolitan Melbourne and a 3.6% increase across the state, compared to the same quarter last year. This indicates healthy growth in the housing market across Victoria.

In the December 2009 quarter, the median rent for the South Eastern region of Melbourne (including Dandenong, Casey and Cardinia LGAs) was \$290 per week. This compared to a metropolitan median rent of \$330 per week. Although below the metropolitan average, the average annual change in the South Eastern region was 4.3%, approaching the metropolitan average of 5.0% over the year.

The tight rental market in the metropolitan region is expected to continue, with the trend vacancy rate for Melbourne at a low 1.5% in the December 2009 quarter. This problem is exemplified in Casey given there is next to no supply of affordable, high density rental product to meet diverse population demands.

Regional Context

It is important for Local and State Government to acknowledge the consequences of failing to provide a range of housing options for current and future residents. This is especially the case given the significant population growth that is currently occurring and forecast to continue in Melbourne over the coming years, particularly in the Casey-Cardinia Corridor. For the five year period between June 2002-07, Cardinia and Casey had the 4th and 6th fastest annual average growth rates of all Victorian Local Government Areas (LGAs), at 4.7% and 3.7% respectively.

In addition to these considerations, a number of regional drivers will impact on the future demand for smaller, affordable dwellings in the City of Casey, including:

- The evolution of the local housing market. Analysis shows a declining average household size;

- Current housing stock in the City of Casey represents a product mismatch going forward. There is a lack of availability of smaller rental accommodation in Casey that would appeal to emerging market segments including single retirees, young singles, people (particularly adults) with a disability and single fathers. There is also likely to be significant latent demand for this housing product given the current lack of supply across the South East region;
- Proximity to significant educational institutions for the growing South-Eastern region, including Monash University (Berwick Campus) and the Berwick TAFE. These would both generate demand for smaller dwellings from students, as they are both located at the next train station from the Narre Warren train station and are highly accessible by public transport;
- The development of major employment nodes along the Corridor such as Casey C21 Business Park, Cardinia Road Employment Precinct, Fountain Gate Business Park and Casey Technology Park will create greater diversity of employment opportunities in blue and white collar occupations. This will attract greater population diversity to Casey which in turn will generate demand for diversity in housing stock;
- Future developments in community facilities such as the completion of Casey Hospital will further attract key workers to the area, including young singles that will generally require smaller residential dwellings in close proximity to public transport or their place of work.

The above factors will undoubtedly boost the future requirement for smaller, affordable dwellings in Melbourne's southeast.

Market Typologies

MacroPlan have conducted a detailed market segment analysis that will be used to recommend a product mix based on each segment's housing product requirements.

Casey has historically been affordable relative to metropolitan Melbourne. In 2007, the median house price in Casey was \$280,000 compared to a metropolitan average of \$375,000.

However, the dominance of separate housing in Casey is the result of a demand push / pull; that as demand for low density housing continues, additional supply is delivered to the market that continually attracts both a homogenous housing stock and market. Consequently, a number of the key market segments are potentially 'locked out' of the Casey housing market, and current housing stock is considered 'unaffordable' for these market segments.

MacroPlan has developed a housing market typologies matrix that identifies eight key market segments that are considered to require affordable housing as well as their typical housing configuration requirements. This analysis reveals that the type of housing product demanded by each market segment identified is different. Aside from Young Families and Mature Families, the remaining six of the eight market segments may not necessarily demand separate, low density housing as characterised by the Casey housing market.

It should also be noted that there are demand discrepancies within each of these markets. For example, single retirees on pension will require very different housing product to couple retirees living on superannuation.

In summary, the homogenous housing stock typifying Casey means that the needs of a number of key market segments are not being met in the locality. If these issues are not addressed in the planning for future residential developments, there is a risk that the gap between products and market demand will widen in the future.

Market Segments in Detail

MacroPlan has conducted a detailed market, demographic, demand and supply assessment to identify which of the identified market segments are not currently catered for. Some of the key findings from this assessment are summarised as follows:

- Casey has a significantly higher average household size (3.01 compared to 2.66 in Melbourne); this is due to its higher proportion of Couple Families with Children (45% compared to 35% in Melbourne).
- Analysis also demonstrates that there has been a shift away from this family type over the past decade. Between 1996 and 2006, there was a decline in the proportion of Couple Families with Children by 4.2 percentage points across the City.
- There are a relatively high proportion of home purchasers in Casey, with over half (56%) of residents in this category. Renters make up around one-fifth of residents (19%).
- Casey has a significant lack of housing diversity with separate houses accounting for a majority, or 89% of all sales in 2007 compared to 68% in Melbourne. Furthermore, the proportion of Units and Apartments sold in comparison to houses has remained stable in Casey over the past ten years.

Appropriateness of the Site

The need has been established for a more varied and affordable housing stock within the City of Casey. In terms of site development, this specifically relates to affordable, higher-density housing targeted at the ageing population.

The southern side of the Site (i.e. the underutilised car park along Raymond McMahon Boulevard) has been identified as a potential location for housing development. The benefits of this site include amenity to retail and services at the Shopping Centre and the community services provided at the Endeavour Hills Neighbourhood Centre. This is especially important for the retired population, who may have increased difficulty using transportation.

Despite these benefits, issues for concern include a disconnect in the design of the Town Centre and the desirability of the Site for high-density living.

The Town Centre presently experiences a disconnect between the commercial and community precincts. Adding a third component, housing, could potentially further contribute to the lack of synergies within the space.

The Shopping Centre includes major DDS retailers which, while they provide amenity for an ageing population, contribute to a highly commercial environment rather than one of a neighbourhood feel. With the future of the Shopping Centre uncertain (i.e. possibility to add another DDS, department store or entertainment options), it may not be appropriate to add aged living in the immediate future. The community precinct also has a distinct family focus

heightened by the existence of the skate park. The associated noise and potential future recreation development is not complementary to aged living.

It is recommended that efforts focus on enhancing the existing precincts of the Town Centre prior to adding new factors. Whilst aged living may present an incongruity presently, it may be appropriate 5-10 years in the future. Furthermore, high-density housing for individuals, single-parent families or young professionals may be desirable as well and be the preferred option based upon the future development route of the Shopping Centre.

7 Conclusions

Various studies have been completed for the Endeavour Hills Town Centre. However, they all lack a coherent vision for the Town Centre that bridges both the community and commercial precincts and links the Town Centre with the surrounding area.

An urban design framework sets out an integrated design vision for the desired future development of urban places. It translates the broad aims of municipal strategic statements (MSSs) and planning schemes to practical urban design action at the local level. A review of each UDF redevelopment options reveal they all fail to meet the objectives of an urban design framework on many accounts. The three options focus on improving roads but no consideration has been given to the components within the Town Centre. Whilst the Draft Structure Plan addresses the expansion of the leisure centre and issues of accessibility, it fails to provide concrete recommendations for an integrated town centre and fails to create the desired 'civic space'.

Each of the options in the UDF and Structure Plan fail to take into multiple issues set out in Casey policies. These issues include:

- Building the economic competitiveness of Endeavour Hills and Casey according to the Activity Centres Strategy and in line with Melbourne 2030
- A long-term vision for community and business development to meet C21 goals
- Attracting business and building employment in line with the business strategies; and
- Developing attractive public open space and a people-focused shopping centre according to Casey Image Strategy ideals.

In response, SMEC Urban has prepared two alternative options rooted in City of Casey policies and preferred traffic engineering ideas from the UDF. These options provide an overall increase in accessibility, amenity and value derived by the community. These options have been assessed against the same criteria as the UDF and Structure Plan options to quantify the overall quality of the redevelopment elements and highlight areas which may provide the greatest increase in community benefit.

In addition to the hair pin bend along Raymond McMahon Boulevard, the areas targeted as most in need of improvement include:

- Linkages between the commercial and community precincts; and
- The creation of an urban plaza or public open space.

While the Draft Structure Plan and UDF fail to address these issues, the remedies proposed within the SMEC options include:

- The creation of multiple pedestrian thoroughfares within the Town Centre and to The Terrace Shops across Raymond McMahon Boulevard;
- Activation of the Shopping Centre's blank facade (facing the community precinct) through the relocation of the skate park with the addition of a climbing wall and/or creation of a vegetative barrier;

- Potential relocation of the loading dock and check-outs at the retailers facing the community precinct (i.e. Coles, Big W, the Reject Shop);
- Creation of an urban plaza/public open space with various options for linkages to the residual Town Centre and surrounding community.

GTA Consultants have completed analysis for parking requirements for the Town Centre and of the surrounding road network. This work includes taking parking demand surveys and reviewing VicRoads data.

Key issues for redevelopment include simplification of the road network within the Town Centre and improvement of the hair pin bend along Raymond McMahon Boulevard. The options for improvement identified within the UDF have been discussed in this study and each analysed with regards to engineering and land use requirements and other potential benefits. All identified scenarios include a simplified intersection at Raymond McMahon Boulevard and provide residual benefits for an improved overall road network, but further analysis is required to determine a preferred redevelopment option that optimises the community gain per dollar spent.

The need for affordable housing and an increase in diverse housing stock has been established for the greater area of the City of Casey. Endeavour Hills represents an ageing population that may benefit from higher density living located close to amenity retail. The Town Centre may be an appropriate site for development in the long term (10+ years) when a clear vision for the two precincts has been established but development in the short-term (5 years) may contribute to the overall incongruity of the Town Centre and not present a desirable housing option.

The Town Centre plays a role of a retail and community hub for the local community with three supermarkets and a discount department store anchor located within the Shopping Centre. The Town Centre is located in an established area with limited room for growth; demand for retail and community facilities is expected to increase in line with the forecasted average annual population growth rate of 0.43% between 2009 and 2031 within the defined trade area.

At present, the Town Centre performs a significant retail role with a well-visited civic precinct. There is potential to expand the Town Centre's mixed use role with such changes to realistically occur on Council owned land. However, it would be preferable for some physical reworking of the Shopping Centre to improve the connection between this centre and the community precinct. Coordination with the Shopping Centre operator presents a challenge but investment in these requirements is essential for the health, social wellbeing and economic prosperity of communities.

Annexure 1 – General Policy & Literature Review

Introduction

The section includes a review of policies at the state and local level and the identification of those issues most critical to success. These documents have been reviewed to gain a well-rounded understanding of Casey's strategies for land use, business and employment, and the provision of community services. The following matrix summarises the key directions of Council and State policies that are relevant to this study area, including the Endeavour Hills Town Centre Draft Structure Plan and Background Report and Endeavour Hills Community and Leisure Precinct Urban Design Framework.

Key Findings

The Author has undertaken a thorough review of all relevant literature and identified the following broad issues as key to site development.

Council Policies

- **Activity Centres Strategy** – Provides direction for creating highly integrated activity centres that meet social, economic and environmental goals as set out in Melbourne 2030. The document includes population forecasts by Ratio Consultants for population growth for the City of Casey between 2001-2031 that must be refined to gain an accurate picture of the future of Endeavour Hills; the growth rate for the City of Casey is much greater compared to that forecasted by MacroPlan for Endeavour Hills and this disparity could potentially lead to the overestimation of commercial and community service demands and floorspace needs.
- **C21** – Casey's comprehensive long-term strategy is one of Council's most detailed policies in setting out goals for the future, with plans encompassing the next 5 to 100 years (i.e. 2002-3002). It provides clear preferences for building an integrated city development model around consolidated activity centres that maintain a community spirit and uphold the image of Casey as a safe, familial environment in which to live and work.
- **Endeavour Hills Town Centre Draft Structure Plan** – The Structure Plan enumerates the need for change with a focus on the following issues: new pedestrian places; landscaped surrounds; a mix of uses; improved community hub; increased housing; access and mobility; public transport; pedestrian and cycle movement. This report identifies broad areas for change in both the retail and commercial precincts; however, gaps exist in the absence of specific plans that are based upon sound retail spend and population projects.
- **Endeavour Hills Community and Leisure Precinct Urban Design Framework** – This report builds upon issues presented in the Endeavour Hills Town Centre Structure Plan to identify key constraints for development within the Town Centre site. It presents three redevelopment scenarios for the Site, specifically aimed at simplifying the hair pin bend along Raymond McMahon Boulevard, increasing links between the commercial and community precincts and unlocking the potential of underutilised land parcels. While these three options present three viable options, further analysis is required to determine if they present a best case scenario solution.
- **Neighbourhood House and Community Learning Centres Policy** – This document highlights the important role Neighbourhood Houses play within the City of Casey as well as the role limited funding may play in the relocation of the Endeavour Hills Neighbourhood Centre and the effects this may have on programming.

Planning Scheme Policies

- **MSS: Clause 21.03** – One of the key points of the MSS is to focus on the collocation of major commercial and community facilities; this section encourages improvements to all four main employment centres within the City of Casey. This section promotes the Fountain Gate and Cranbourne Activity Centres with an emphasis on their potential for growth. This inherently results in greater competition for the Endeavour Hills Town Centre and as such, should be taken into consideration for redevelopment scenarios for the Town Centre with special regard for limitations on trade areas.
- **Retail Policy (Clause 22.07)** – It names Endeavour Hills as one of the main trading centres within Casey, catering to a population of 50,000-70,000 and meeting the population's day-to-day and weekly shopping needs. It delineates the parameters for Endeavour Hills as a MAC, a destination for DDS, supermarket and specialty retail. The retail policy supports the development of a Town Centre at Endeavour Hills, by facilitating the integration of retail and community uses on the Site.

Table 25. Policy Review Matrix

Type of Policy	Document	Overview	Key Issues	Opportunities	Risks
Council Policies	Activity Centres Strategy	Provides overall direction in building an integrated activity centre with performance criteria for social, economic and environmental goals as set out in Melbourne 2030.	How Casey, and specifically, Endeavour Hills, will remain economically competitive, taking into consideration the number of supermarket based neighbourhood centres.	Forecasts by Ratio Consultants for 2001-2031 indicate significant population and dwelling growth for the City of Casey resulting in a greater catchment area and an increase in retail demand across the municipality. Public transportation links to activity centres (i.e. Fountain Gate) will have increased importance.	Completed in 2002, an updated development strategy that is more specifically linked to Melbourne 2030 goals and is more purposeful in setting out a retail strategy is necessary.
	Business Attraction Policy	Details initiatives to stimulate business investment and to create employment opportunities for Casey residents.	Promoting Casey for new business investment; encouraging investment from existing businesses; securing Government commitment.	Casey's also aspires to not only be a great place to do business but to increase employment, when taken in the framework of Melbourne2030 requires the updating of retail centres to align with more recent policy.	An updated economic plan is required.
	Business Development Strategy	Lays out in general terms the desire to enhance economic prosperity across a broad business base, making Casey a desirable place to live and work.	Fostering a positive business environment, the creation of jobs (specifically employing Casey residents) and diversification of the economy.	The creation of jobs and a moving economy around activity centres requires the long-term commitment of key stakeholders (i.e. Council and business owners).	The 2002-2005 Business Development Strategy is cited as the basis for Council's economic initiative. A current analysis should be undertaken to correctly address present needs and opportunities and also reflect Casey's development within the Casey-Cardinia Growth Corridor, as well as concrete implementation plans and benchmarking mechanisms.
	C21	Correlates with Casey's Corporate Vision to provide a comprehensive long-term strategy with regards to community and business development, specifically maintaining the values and spirit of Casey through the development of activity centres.	Key indicators include: accessibility; identity and image; C21 employment; strengthening communities; business opportunity and development; environment.	Takes into account the value and character of each community, providing Council with tangible information regarding preferences that can be incorporated to Town Square planning options.	-
	Casey Image Strategy	Outlines a framework to achieve a better image in the short, medium and long term coinciding with the urban design principles of Melbourne 2030 and C21.	The strategy encourages the need for enhancement of physical environment within each region of the municipality, and the importance of creating safe, community owned and sustainable development in the future.	Special consideration is given to the '8 Urban Centres', including Endeavour Hills Town Centre, to include a large focus on Public Open Space and People Focused Shopping Centres.	-
	Community Transport Policy	Defines and elaborates on the role of transportation in social policy and in a community health framework.	Focuses on the provision of transportation to local services and within community for those who are 'transport disadvantaged'.	Those who are 'transport disadvantaged' (i.e. those likely to utilise the Neighbourhood Centre services) should have easy access via public transportation.	A plan for transport to retail and the general community centre is not included in the focus on health care centres.
	Endeavour Hills Community and Leisure Precinct Urban Design Framework	Establishes a vision that will support the development of retail, leisure and community uses and spaces within the Town Centre for the next 10 years and beyond.	The framework identifies eight key projects that will play a key role in realising the vision of an integrated, consolidated town centre that can accommodate existing and new facilities.	The UDF identifies three redevelopment scenarios for the Town Centre with different degrees of linkages between the retail and community precincts and levels of development to the hair pin bend along Raymond McMahon Blvd.	The three options do not address many of the linkage issues of the Town Centre.
	Endeavour Hills Town Centre Draft Structure Plan	Produced in collaboration with the Hansen Partnership to provide a long term vision for the Endeavour Hills Town Centre.	The suggested plans for land mix uses, linkages, and development were written to be integrated to Casey's planning scheme for existing retail and associated leisure and community purposes.	The plan sets out new directions for the evolution of the Town Centre in line with Melbourne 2030 to create a more accessible, consolidated Town Centre.	The Structure Plans fails to specifically address many of the existing traffic engineering and Town Centre integration issues.

	Endeavour Hills Town Centre Structure Plan: Draft Background Paper	Produced in collaboration with the Hansen Partnership, it provides the background research that assists in formulating a truncated Draft Structure Plan.	Provides detailed research centred around 10 key elements with strategies, guidelines and priorities for each.	Touches upon numerous possibilities for the development of the centre that increase value to the local community.	The report is broad and lacks specific analysis for the potential demand Centre services that is backed up with valid numerical data.
	Endeavour Hills Town Centre Direction Paper	A brief introduction to existing facilities and identification of the need for improved traffic engineering works.	Intention stated for improvements to community and the creation of a town centre that Council could facilitate in the short-term	Major problems (such as the hair pin bend) were identified but not addressed due to the amount of significant work required.	The creation of a town centre is only briefly addressed as well as the definition of goals and what public access/connectivity should include as well as any concrete plans for improvements to be made and implementation while failing to provide clear development steps.
	Housing Strategy	Presents various issues for the delivery of a 'liveable city' with regards to diversity of housing, socioeconomic factors, environmental concerns, and affordability, amongst other factors.	Research notes a strong preference for the suburban block (family style, 3-4 bedroom houses with large lots) and the ability to 'trade up' within Casey. It also addresses the need of housing relevant to activity centres (in line with Melbourne 2030) and highly increased demand for aged accommodation.	To present housing choices through a range of lot sizes and in new areas (i.e. close to activity centres) and the need to construct significant aged accommodation.	The report was published in 2005, it is unknown whether the strong preference towards suburban development may be mitigated by increased public transportation. Additionally, there is a need for an up-to-date guide for assessing residential facilities for older adults.
	Leisure Facilities & Development Plan – Vol. 1 Sports Facilities Plan	Includes broad research and recommendations across the 14 main key activities	Confirms interest in casual sports activities amongst the adult population (i.e. jogging, swimming, tennis) as well as the need for additional facilities (basketball, gymnastics, BMX, etc.) across Casey.	Identified demand within Endeavour Hills can be accommodated at the leisure centre and contribute to the overall goal of creating an active population and ideal community living space.	-
	Leisure Services Public Policy Objectives	Confirms Council's objective to provide a diverse range of sports and leisure facilities and duly to encourage an active lifestyle.	Casey to provide a range of subsidised leisure facilities across the municipality.	Confirms the partnership with the YMCA at the Endeavour Hills centre and continuing to provide bmx/skate parks.	Policy merely identified objectives without elaboration or providing a plan.
	Medical Centres Policy	Provides advice and guidance to those wishing to establish a medical practice in relation to location, building design and accessibility, amongst other issues.	Specifically, to build medical centres integrated with the community and to create 'vibrant' centres that are easily accessible.	The Raymond McMahon medical centre located southeast of the centre poses potential for integration with community and retail areas, creating a true 'community heart' when paired with improved public transportation.	Fails to elaborate on integration with commercial/retail areas.
	Neighbourhood House and Community Learning Centres Policy	Neighbourhood Centres are established as vital, not-for-profit community resource that offer support and provide skills enhancement in a variety of creative, social and economic endeavours with a focus on vocational and general adult training courses.	Design and construction of Neighbourhood Centre site; funding; the assurance of the continuation of services.	Relocation of the existing Endeavour Hills Neighbourhood Centre may pose funding issues.	-
	Public Art Policy	Provides a vision for a future dynamic arts program with consideration for public art throughout the planning process; considers synergies across C21 and Casey Image Strategy.	Directly states the aim to integrate the natural and built environment and to foster a sense of identity and pride in public open spaces through urban design and possible collaboration with architects and designers.	This policy provides opportunities for the mixing of public open space and public art. It is especially key in designing a 'Town Centre' that fosters a community environment and intermixing of people.	-
	Skate Strategy	A detailed report of consultation findings, analysing the hierarchy of existing facilities and determining the need for additional facilities.	Endeavour Hills was identified as one of the areas with the highest demand for skate and BMX facilities within Casey with a desire for additional program options. The Endeavour Hills skate park was ranked as the 4 th most popular in Casey.	The Endeavour Hills Skate Park was identified as needing an upgrade or to be redeveloped as a sub-regional facility (the preferred option). In light of the redevelopment of Council land, the opportunity exists to move and/or improve the facilities.	-
Planning Scheme	MSS: Clause 21.03 Vision – Strategic	Provides the high level, overall framework plan for the municipality, including land use	Identifies Endeavour Hills as a Major Activity Centre on Council's overall Framework Plan	Defines the role of this activity centre in the hierarchy, which directs the centre's future	-

Policies	Framework	mix, the role of activity centres and key transport routes.		development potential. This policy statement provides a high level framework for the land use mix and development opportunities of the municipality.	
	MSS: Clause 21.05 The Built Up Area	Sets out the high level principles and objectives for the development and consolidation of the built up areas of the municipality.	Directs the use of related policies, such as the retail policy to ensure the hierarchical development of all activity centres.	High level policy, which should be read in conjunction with the Retail Policy and other relevant sections of Council's MSS.	Only provides comments with respect to the extent of retail, in the role of existing activity centres within built up areas. Does not expand on the role of these activity centres.
	MSS: Clause 21.13 Accessibility	Key direction of the MSS encouraging co-location of major commercial and community facilities together.	Endeavour Hills is one of four existing Major Activity Centres within the municipality, which support the two Principal Activity Centres of Fountain Gate and Cranbourne. This policy encourages improvements to co-location of commercial and community facilities wherever possible in an integrated manner. New major facilities are encouraged to locate within the two PACs, both of which have growth potential.	Endeavour Hills MAC is a prime example of the situations that this policy is encouraging opportunities to address. The centre has significant existing commercial and community facilities in the one location, that through site constraints and design lack any real integration and direct links for patrons.	The focus is on the two Principal Activity Centres at Fountain Gate and Cranbourne. Does not provide direction on the role of community facilities in Major Activity Centres going forward.
	Retail Policy (Clause 22.07)	Provides the framework for Municipal wide retail activity and related land use and development proposals. Based on the Activity Centres Strategy.	Identifies Endeavour Hills as a Major Activity Centre to cater for a population of between 50,000 - 70,000 people, servicing their day-to-day and weekly shopping needs.	Sets the parameters for retail at a Major Activity Centre as accommodating a discount department store(s), supermarket(s) and specialties. Identifies the need to better integrate the retail centre at the Site with other existing land uses.	-
	Good Design Policy (Clause 22.15)	Provides direction for high quality urban design for public spaces, located on either private or public land.	Any potential redevelopment of the centre (or part of the centre) must have regard to this policy, with an emphasis on a smooth transition from Council land to public spaces under the ownership of the Shopping Centre.	The design of and development within public spaces should acknowledge local cultural, historic, environmental and climatic factors, and should provide legible and safe pedestrian environments.	-
State Policies	Melbourne 2030: A Planning Update Melbourne @ 5 million	Melbourne @ 5 million is part of a State planning framework that incorporates the latest Victoria in Future population projections (2008) as well as the Victorian Transport Plan. Victoria in Future projections identified a need to accommodate 5 million residents, or 600,000 households across metropolitan Melbourne by 2030. This integrated planning framework highlights the importance of linking transport, jobs and land use planning to accommodate unprecedented population growth in order to reduce journey to work congestion, particularly in the inner and middle rings. Providing a mix of employment, recreation and housing opportunities in designated Activity Centres across metropolitan Melbourne will have positive economic, social and environmental impacts on the community.	Under Melbourne 2030 and Melbourne @ 5 million, Activity Centres particularly in Melbourne's Growth Areas are to accommodate a majority of this growth. As part of the Casey-Cardinia Growth Area, Casey needs to maintain affordability through the provision of housing and provide employment opportunities to reduce travel congestion. As a Major Activity Centre, Endeavour Hills will need to function as an integrated precinct with a significant serviceable catchment. This can be achieved by increasing residential densities in proximity to the Centre at a minimum of 15 dwellings per hectare.	There is a need to improve integration between the existing Community Precinct and the Town Centre. There are opportunities to deliver higher density residential at the south western corner of the precinct that will offer good access to services and transport The ability to service high capacity public transport at the Centre will need to be clarified given it is not located along the rail corridor. It is likely in future that Heatherton Road, to the north of the centre will be serviced by a "Smart Bus" route as a part of the Principal Public Transport Network, which is intended to link with local bus routes which currently exist.	-

Summary

A comprehensive review of policies confirms that Council plans to build the Endeavour Hills Town Centre in line with its status as a MAC and the role of a MAC as defined in Melbourne 2030, whilst retaining its safe and family-oriented characteristic for which Casey has become known. The key issues for development have been identified as follows:

The following key points have been drawn:

- Numerous policies call for a consolidated town centre within Endeavour Hills, yet it remains ambiguous as to how Council can achieve this goal
- It is evident that Council wishes to heighten the value of the Town Centre through an emphasis on the community precinct and its linkages to the retail precinct and the surrounding community, which must be reconciled with the identified to augment and expand community facilities
- Significant consideration must be given to the development of the nearby Fountain Gate (Narre Warren) and Cranbourne Activity Centres and the subsequent constraints this puts on Endeavour Hills' development due to increased competition.

Annexure 2 – Urban Design Literature Review

Elements of a Structure Plan

A Structure Plan is a strategic framework plan for future development of the identified study area.

The primary purpose of a Structure Plan for an Activity Centre is to direct and guide the sustainable growth of the identified precinct in the future.

A good Structure Plan is imperative for a community which is experiencing or expected to experience growth or change. Its key considerations, therefore, include:

- What is a sustainable level of growth or redevelopment?
- Where should this growth occur, and what form should it be?
- What new community services and facilities will be required to support this diverse community?
- Will new housing be provided and will it increase the range of dwelling diversity?
- Where will new recreational and open space opportunities be provided?
- How will the road network need to be improved to accommodate this change?
- How will the existing retail facilities be improved to properly cater for the precinct, and what will this look like and how will it integrate with its surrounds?
- Will the growth/ change create additional employment opportunities and where will this be located?
- How will significant environmental and cultural heritage issues be considered?
- How will work and research already completed by the council be incorporated?
- What planning tools are needed to achieve the implementation?

A Structure Plan should translate these principles and objectives into a 'Plan' which will be presented to council's strategic planning team.

The end report must be thorough in discussing the strategic planning approach to the development of the Plan and its principles. Without this, the 'Plan' lacks substance and transparency, and it will be ultimately difficult to implement or justify.

Elements an Urban Design Framework (UDF)

The modern urban design framework (UDF) is a strategic planning tool that sets out an integrated design vision for the desired future development of urban places. It translates the broad aims of municipal strategic statements (MSSs) and planning schemes to practical urban design action at the local level.

Urban design is essentially about bringing a design approach to how towns and cities or precincts are analysed and developed. It provides a useful tool to enable performance-based

planning to be implemented. A design approach allows ideas to be tested through design and reviewed for their possible impacts or potential synergies.

Urban design concerns are physical solutions for urban problems, a well developed UDF can be a consultative, interactive and responsive process that embraces the notions of:

- Strategy, or the significance of considering individual urban design actions within a broader, strategic framework
- Sustainability, which considers the long-term viability and impacts of development on the economy and ecological systems, natural resources and urban communities
- Synergy, or the advantages of resolving issues of public and private benefit, land use, built form and urban systems in relation to each other, with a high level of coordination
- Responsiveness, or the benefits of considering urban design interventions in relation to 'the particular characteristics, aspirations and cultural identity of the community' and the specific image, built form characteristics and development dynamics of the urban Environment
- Specificity, or the acceptance of each urban situation as unique in time and space, where different degrees of change and intervention are more appropriate than generic solutions
- Quality or the recognition of the importance of well considered visual and functional resolutions to urban issues and situations.

An urban design framework differs from a strategic plan and a masterplan; it combines the direction-setting and coordination aspects of strategic planning with the detailed and practical design process of a masterplan, in three dimensions. It should enable the community to deal more effectively with specific design issues at a practical level. Unlike a masterplan, which only gives a final vision for how an area will develop, an urban design framework should provide flexibility by identifying key principles rather than finite solutions.

A UDF is not a fixed view of the future nor is it a land-use report. It includes a design vision for how a place might develop and should include sufficient detail at key locations so that the vision can be tested for economic and functional viability. It should include sufficient information to allow continuous review of detailed actions within the strategic frame, and to enable councils to assess development proposals.

A completed UDF is the result of a structured process of preparation and consultation. The package typically includes:

- A record of the analysis
- A description of the issues considered
- A framework plan to identify key action areas and important relationships
- A set of development principles
- Visualisations of key design concepts
- Action plans for non-physical opportunities

- An implementation strategy.

Key Characteristics of an Urban Design Framework

Each precinct will have unique characteristics and potential, so the framework process needs to be specifically adapted for that place. However, it is important that each framework is systematic, objective and sufficiently comprehensive to ensure all major issues have been considered.

An Urban Design Framework should:

- Include a comprehensive analysis of context
- Look beyond the individual project and seek to coordinate across projects and opportunities, setting a project in its broader context
- Incorporate and respond to information from existing strategies and studies, such as transport, heritage and neighbourhood character studies
- Respond to all major stakeholders by integrating their interests and concerns
- Incorporate major infrastructure issues and provide design direction for the details within infrastructure construction projects
- Set out an implementation strategy that looks at a range of time scales and generally includes:
 - Long-term strategies and options (say, 10 to 15 years and beyond)
 - Intermediate-term strategies and options (say 3 to 5 years)
 - Short-term actions that can be immediately implemented without compromising long-term objectives present analysis, principles and options for implementation in graphical and written format to a standard suitable for public consultation
- Illustrate existing constraints and available opportunities, identify different options, and provide a record of why particular options are selected referring to key policy objectives, urban design principles, etc.
- Provide a 'layered' response to issues at hand, beginning with the broad contextual issues and principles, and working down to detailed design studies and guidelines for critical locations.

Review of the Endeavour Hills Draft Structure Plan (Casey 2006)

"The Endeavour Hills Major Activity Centre is an important retail and leisure precinct that is popular within a local catchment primary for its convenience. The City of Casey worked with Hansen Partnership to prepare the following Structure Plan for the Centre, including its existing retail and associated leisure and community services and surrounding residential neighbourhood and open space networks. The purpose of the Structure Plan is to establish a long term vision for the Centre as a basis for future planning and design decision making."

“Endeavour Hill Town Centre Structure Plan has been developed through a traditional consultative process, incorporating a workshop or ‘inquiry by design’ to engage with land owners, stakeholders and the broader community. The process was informed by expertise in planning and design, land economics and transportation...”

- Endeavour Hills Town Centre Structure Plan

Despite such a comprehensive process and the number of professionals involved, the project lacks conceptual merit. Whilst it has not been discussed, it can only be assumed that there was a lack of negotiations/interest in investment from the Shopping Centre operator. Without that relationship, expensive major works required from the Shopping Centre cannot be expected and thus, any concept that revolves around major shopping centre refurbishment cannot be adopted. Coinciding with this, analysis of every particular element in relation with the ‘anchor’ not cooperating to the degree expected will seriously jeopardise feasibility of all other proposed ideas.

Annexure 3 – Transport Literature Review

This annexure references policies and literature listed in Section 3.1 and elaborates on those that are most relevant for transport and road network analysis. It provides an in-depth summary and interpretation of works that have been undertaken specifically for the Town Centre and its relevance for enhancement of the existing road network.

Endeavour Hills Town Centre Structure Plan: Draft Background Report

General

The Structure Plan contains 10 key elements which were identified to assist the realisation of the vision for the Endeavour Hills Major Activity Centre. The elements which are relevant to this Transport Assessment are:

- Pedestrian and Cycle Access and Mobility
- Vehicle Access and Mobility
- Public Transport

Each of these elements identified a number of strategies, design guidelines and priorities to assist in the implementation of the Structure Plan. The relevant elements are described below.

Pedestrian and Cycle Access and Mobility

Strategies

- Prioritise pedestrian access around the Centre with attractive networks, using themed paving in activity areas and paths between the Shopping / community and transport areas.
- Undertake a cycle movement strategy that addresses both local and regional cycling connections for the Activity Centre, and filling the gaps in the existing regional network.
- Define bike lanes to Raymond McMahon Boulevard, Mossgiel Park Drive and Matthew Flinders Avenue.
- Install convenient safe bicycle parking and appropriate amenities for cyclist in the Centre.
- Establish a combined pedestrian and cycling shareway or dual pathway along the south side of Heatherton Road to provide safe walking/ cycling along this primary traffic corridor.
- Undertake improvements to the pedestrian network in accordance with the Disability Access Audit and Safety and Security Audit, in particular the following:
- Provision of a footpath along the north side of Heatherton Road.
- Construction of a new pedestrian path along Raymond McMahon Boulevard between Matthew Flinders Avenue and the Leisure Centre.

- Address problems to lighting and paths around Leisure Centre car park.
- Upgrade lighting and bollards in the open space link behind South Health.
- Improve poor quality pathways in the vicinity of the Terrace Shops.

Design Guidelines

- Address conflicts between pedestrians and cars through design treatments and traffic calming measures to reinforce pedestrian priority and safety.
- Design new footpaths in compliance with Disability Discrimination Act
- Provide and upgrade lighting in accordance with the recommendations of the Lighting Safety Audit to ensure passive surveillance and improve night time safety.
- Select vegetation for new landscaping having regard to maintaining safety and visibility along pedestrian and cycling links.
- Locate Tactile Ground Surface Indicators particularly at key intersections and along the identified key pedestrian routes.
- Site and design directional signage and landscape treatments to mark and define identified precincts, particularly at the entrances to the Centre.

Required Actions / Priorities

- Provide bicycle and pedestrian paths along the south side of Heatherton Road.
- Create a footpath along the north side of Heatherton Road.
- Provide a new pedestrian path along Raymond McMahon Boulevard between Matthew Flinders Avenue and the leisure centre.
- Install convenient and safe bicycle parking within the Town Centre.
- Establish defined bicycle lanes along Raymond McMahon Boulevard, Mossgiel Park Drive and Matthew Flinders Avenue.

Vehicle Access and Mobility

Strategies

- Establish a new junction between Raymond McMahon Boulevard, Terrace Shops and Shopping Centre that rationalises the number of access points in proximity to each other.
- Address safety issues relating to the hairpin turn and lower turn of Raymond McMahon Boulevard through redesign including a roundabout at the junction.
- Prepare a 173 Agreement for the Endeavour Hills Activity Centre which ensures adequate parking is retained for future demand, and the at-grade parking remains in convenient and accessible locations.
- Review internal traffic circulation within the Centre to improve movement and to resolve problem areas in particular around the existing bus terminal, near the petrol station, and at the rear of Big W.

- Rationalise the number of car park access points to Raymond McMahon Boulevard near the Terrace Shops and in close proximity to the Matthew Flinders Avenue intersection.
- Review operations and movement at the Heatherton Road / Matthew Flinders Avenue intersection to determine any traffic management improvement that may be necessary for the future development of the Town Centre.

Design Guidelines

- Design vehicle access ways to provide efficient movement and flow incorporating appropriate landscaping opportunities.
- Vehicle access ways be designed to provide safe crossings for pedestrians.
- Parking layout should ensure a clear vehicle circulation path is maintained around the Shopping Centre.
- The Terrace Shops car park should be redesigned to limit direct crossovers to Raymond McMahon Boulevard and provide internal connection with the existing car parking.
- New directional signage should be sited and designed to define identified precincts and mark the entries to and exits from the Town Centre.

Required Actions / Priorities

- Establish direct pedestrian pathways through car parking areas.
- Install roundabout at the intersection of Raymond McMahon Boulevard, Terrace Shops and Shopping Centre south-eastern entry (at the hairpin turn).
- Address safety issues relating to the hairpin bend of Raymond McMahon Boulevard.
- Review internal traffic circulation within the Centre.

Public Transport

Strategies

- Upgrade existing bus stop with seating, weather protection shelter, rubbish/recycling bins and a wider pavement to improve comfort, safety and protection from the elements.
- Undertake an integrated review of bus services and make a formal request to DOT to review the servicing routes and future transport links to Endeavour Hills.
- In conjunction with the bus services review, identify an appropriate location for a new bus stop in the in the Town Centre that is highly visible and functional.
- Encourage public transport usage through promotion of Travel Smart initiatives by DOT.
- In conjunction with surrounding municipalities lobby DOT and the local bus service provider (Grenda) to incorporate Endeavour Hills in metropolitan bus routes such as the 'Smart Bus'.

Design Guidelines

- Utilise grass adjacent to the western stop to accommodate a wider path, seats and shelters.
- Design and site new bus stops as part of the Town Centre's pedestrian places to ensure a high level of visibility and natural surveillance.
- Ensure the new stop is comfortable and weather protected and includes appropriate lighting, seating, rubbish facilities, route maps and timetabling information.
- Ensure that the new bus stop is designed in compliance with standards outlined by the DOT and DDA and provides appropriate access for those with prams and shopping jeeps.
- Provide clear directional signage to the new bus stop as well as public facilities including toilets, telephones and taxi ranks.

Required Actions / Priorities

- Upgrade existing bus stop in the Shopping Centre's western car park.
- Review of the existing bus service with bus providers, Council and State Government.
- Identify an appropriate location for a new bus stop within the Town Centre.
- In conjunction with surrounding municipalities lobby DOT and the local bus service provider (Grenda) to incorporate Endeavour Hills in a regional or metropolitan orbital bus route such as the 'SmartBus' routes.

7.1.1 Endeavour Hills Town Centre Draft Structure Plan

General

The City of Casey worked with Hansen Partnership to prepare a Structure Plan for the Endeavour Hills Major Activity Centre. The purpose of the Structure Plan was to establish a long term vision for the Centre as a basis for future planning and design decision making.

The primary objectives for the Structure Plan were:

- To create a Town Centre at Endeavour Hills that is a civic focus for the whole community.
- To provide a diverse range of shopping activities to meet the needs of the local community.
- To better integrate community, recreation and retail services so that the whole Centre is more cohesive and unified.
- To improve the design and appearance of the Centre.
- To provide better pedestrian, bus and car access within and into the Centre.

Key Principles

In regards to Access and Mobility, the following key principles were identified:

- To establish a safe, convenient and well lit pedestrian network that ensures connections are provided within the Activity Centre, particularly where gaps currently exist.
- To connect the Town Centre with the local and regional cycling network and ensure that it is safe, convenient and well defined.
- To improve public transport movement and services in and around the Activity Centre.
- To distinguish between local and regional public transport demands through separate bus stops.
- To ensure that the infrastructure supporting public transport usage is well designed and meets the needs of users.
- To maintain safe, convenient and efficient vehicle circulation and car parking within the Town Centre.
- To ensure that people with limited mobility can easily move in and through the Town Centre.
- To ensure that public and pedestrian environments with the Centre are DDA compliant.
- To suitably manage Town Centre service access and delivery in a manner that does not conflict with other modes of movement and is visually amenable.
- To ensure that Heatherton Road is maintained as a principal access and egress to the Centre.
- To rationalise the existing conflicts resulting from the alignment of Raymond McMahon Boulevard.

Key Elements

The Structure Plan, Town Centre and key Access and Mobility elements are summarised as follows and further illustrated in Figures 3.1 – 3.3.

- Access and mobility to be greatly improved for all modes.
- New internal loop road to the eastern edge of the Centre to enhance connectivity to Raymond McMahon Boulevard to the south and the related community facilities.
- Raymond McMahon Boulevard to be improved through the installation of a roundabout at the 'hairpin' bend and new pedestrian paths to improve safety and legibility for all.
- Relocate the local stop to the southern community precinct on Raymond McMahon Boulevard and a longer term regional stop on Heatherton Road as part of the Principal Public Transport Network.
- Provide direct pedestrian and cycle paths along all existing streets, in linear open spaces radiating from the Town Centre and through existing car parking areas.

- Three new pedestrian spaces near the entries to the Shopping Centres north, west and south-east entries and those associated with the community facility. These will have a pedestrian emphasis with priority given to the pedestrian.

Figure 37. Activity Centre Draft Structure Plan

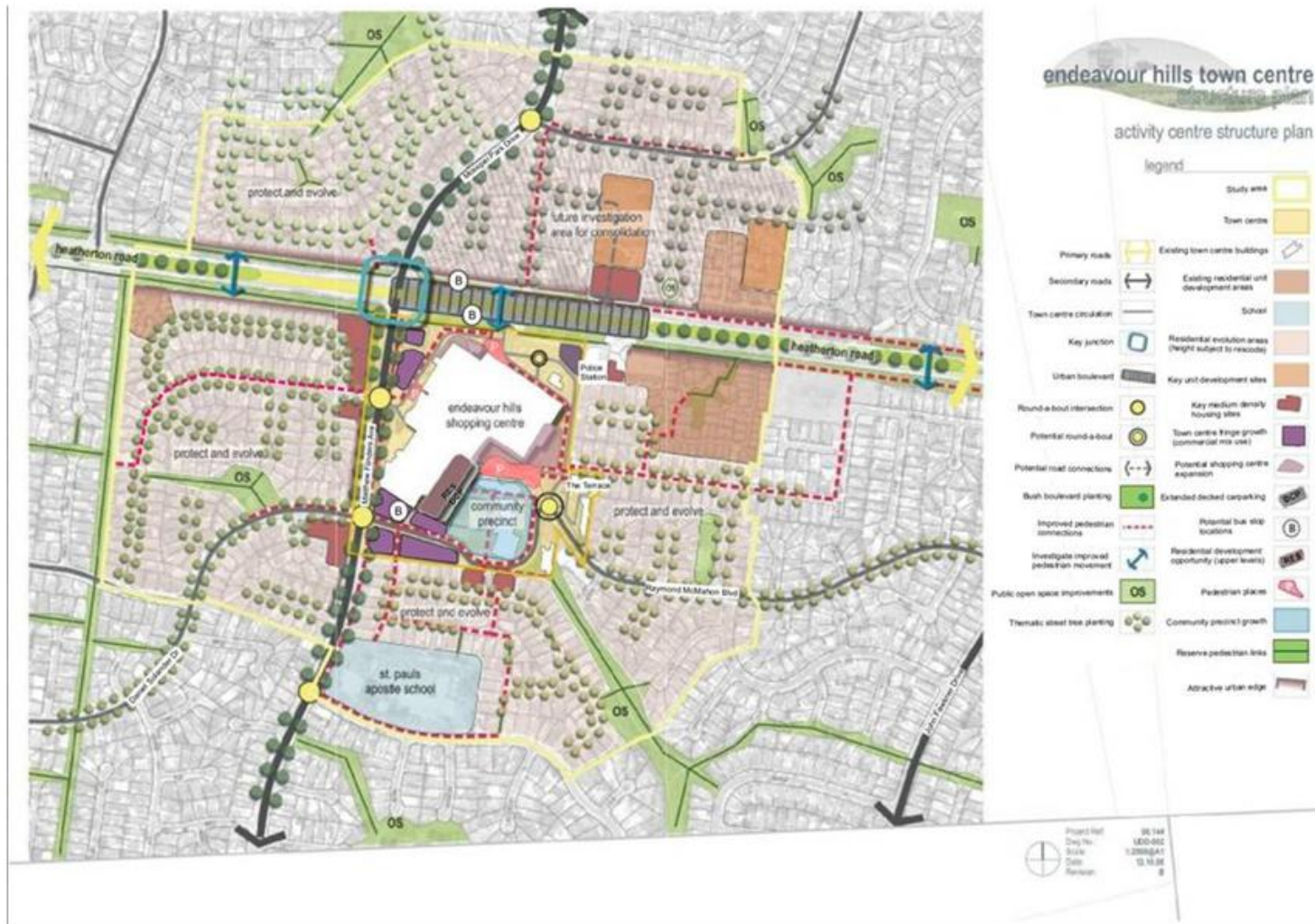
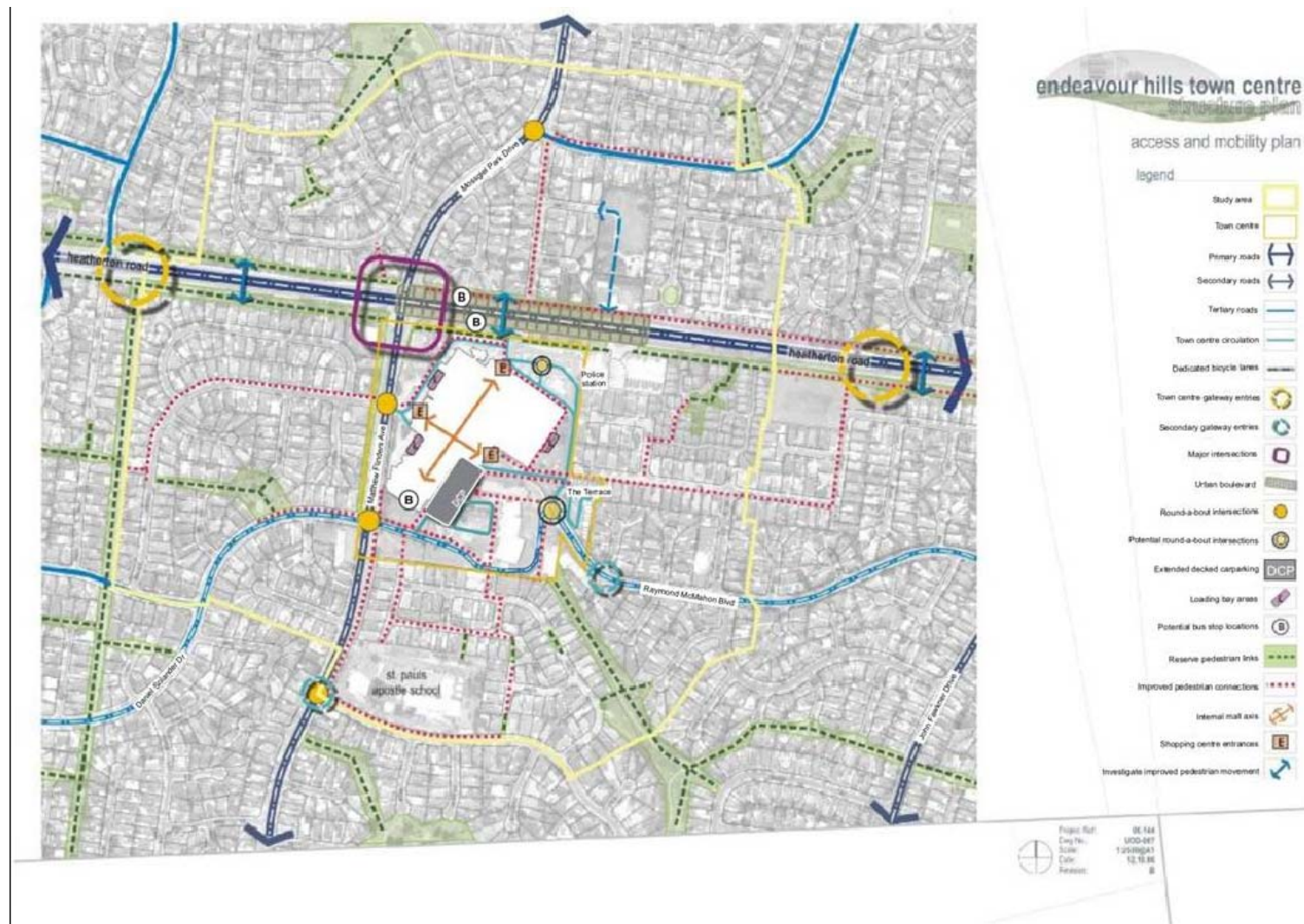


Figure 38. Town Centre Access & Mobility Plan



Endeavour Hills Community and Leisure Precinct Urban Design Framework

General

The Endeavour Hills Community and Leisure Precinct Urban Design Framework established a vision that will assist in creating a community hub that comprises and supports:

- A diverse range of leisure and community activities.
- High quality public spaces that are active, attractive and connected.
- Other commercial and retail uses that complement the core community and leisure uses in the precinct.

Specifically, the Urban Design Framework has identified that the following eight key projects would achieve that above vision:

1. Improve the hair pin bend at Raymond McMahon Boulevard for vehicles, pedestrians and cyclists.
2. Establish a formal link for vehicles, pedestrians and cyclists from Heatherton Road to Raymond McMahon Boulevard via the eastern side of the Endeavour Hills Shopping Centre.
3. Establish a new range of mixed use activity in and around the Precinct, including restaurants, cafes, etc.
4. Extend the Endeavour Hills Leisure Centre.
5. Relocate the Endeavour Hills Neighbourhood Centre.
6. Provide a new multi-purpose community space.
7. Improve the function and appearance of the public open space and facilities, including pedestrian and cyclist access.
8. Improve bus stop locations and bus access around the activity centre.

Annexure 4 – Housing Literature Review

Policy Context - Casey Housing Strategy

The Casey Housing Strategy was developed in 2005 to direct future housing and population growth in the municipality. It includes a policy framework for redevelopments and higher residential densities.

While the Housing Strategy acknowledges the demand to deliver larger lot suburban housing as typically characteristic of suburbs within Casey, there is a need to deliver a range of lot sizes, particularly in new areas to ensure that future residential supply provides equal access to services and meets the needs of a diverse community.

In particular, the Strategy highlights the importance of:

- Integrated medium density development/small lots (a third of new development);
- Housing in close proximity to activity centres, including targeting housing as part of mixed use development (e.g. student housing, Casey Technology Park);

The Strategy also emphasises:

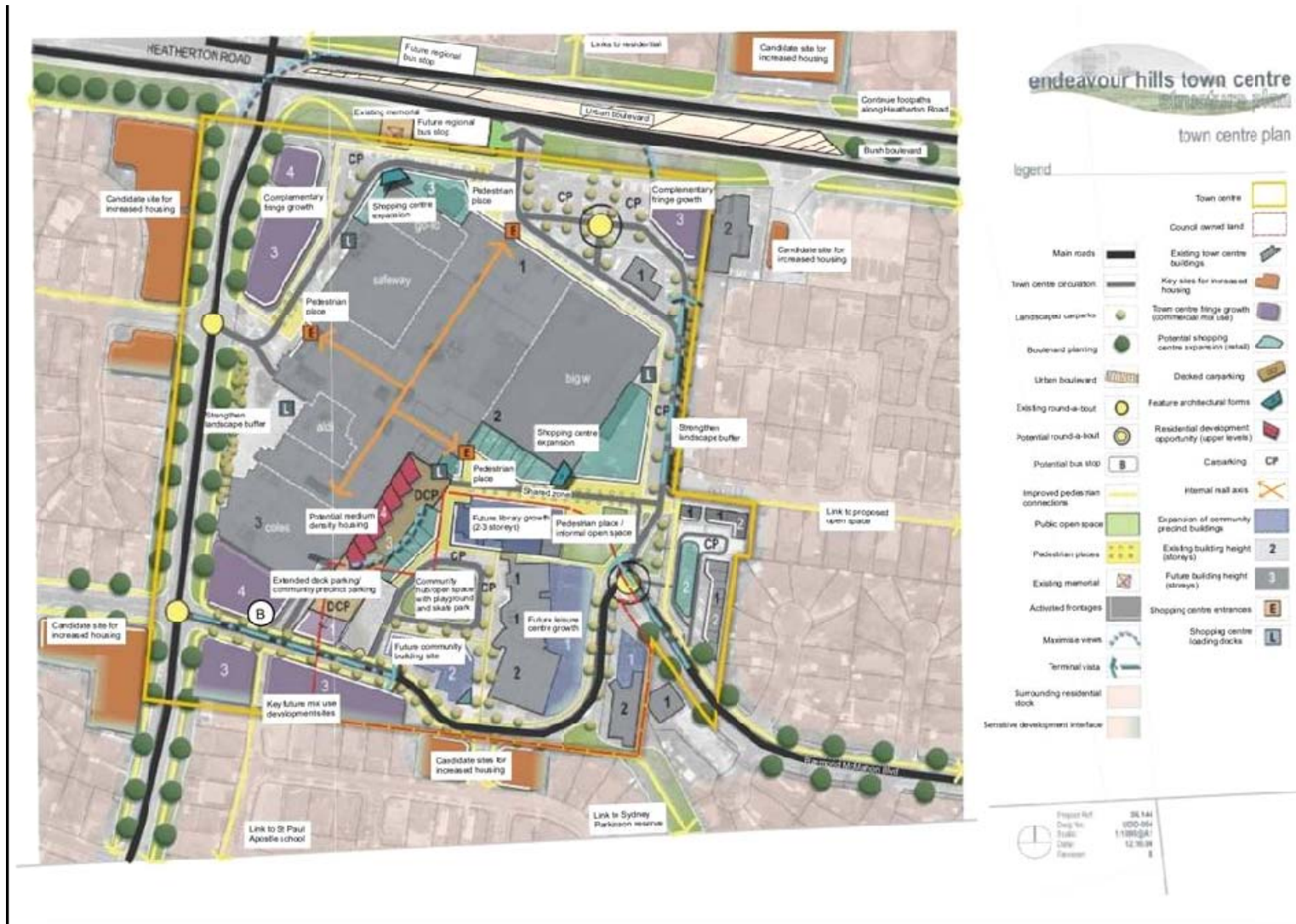
- The need to create higher density housing in and around town centres in order to improve liveability in Casey. As discussed above, Melbourne 2030 encourages these initiatives and recently, Council has prepared and adopted a new structure plan for Fountain Gate to provide the opportunity for a significant level of housing in and around Narre Warren CBD.
- The requirement to provide aged accommodation in response to the ageing population.
- Responding to and supporting policy issues regarding social and affordable housing in Casey, including increase supply of low cost housing through the private rental market, as well as advocating Federal funding opportunities. The adoption of an NRAS investment will allow for Council to foster this opportunity.

These concepts have been acknowledged in the planning for future housing stock at Narre Warren.

Annexure 5 – Endeavour Hills Town Centre



Annexure 6 – Draft Structure Plan

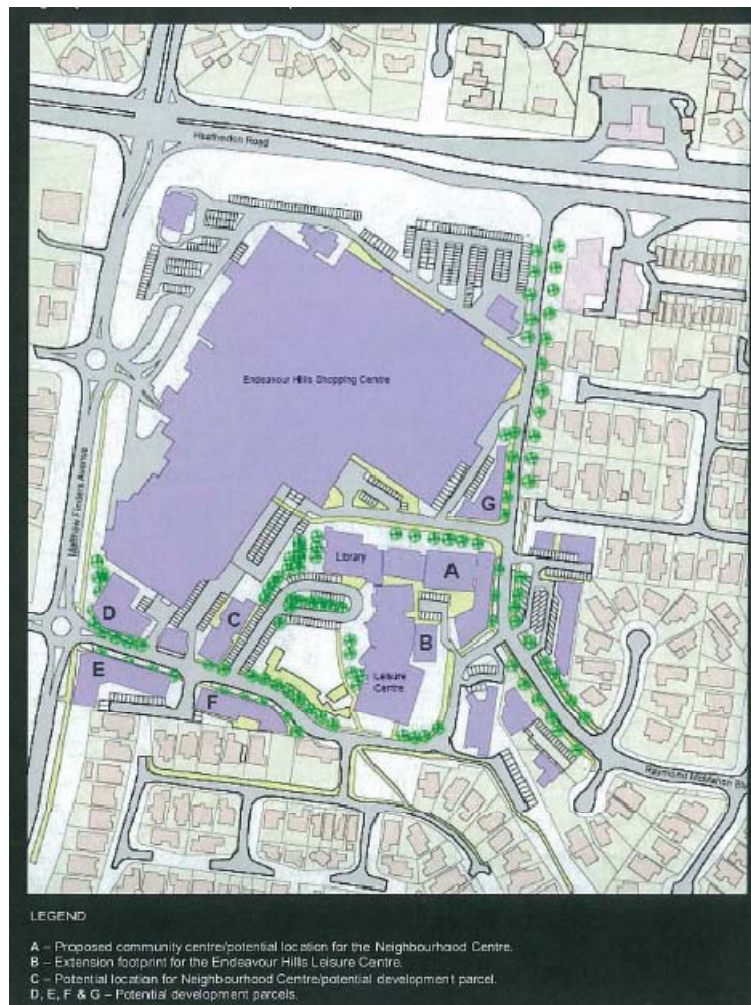


Annexure 7 – Urban Design Framework (UDF) Options

Option 1



Option 2



Option 3



Annexure 8 – Options Prepared by SMEC Urban

Option 1



Option 2

