ATTACHMENT 3

Economic Impact Assessment

Location IQ

LOCATIQN

Epiq Lennox, New South Wales

Economic Impact Assessment

Prepared for Clarence Property Group

16th November 2016

TABLE OF CONTENTS

INTRODUCTION

This report presents an independent assessment of the need and demand for Epiq Lennox, a proposed supermarket based centre located in Lennox Head on the Far North Coast of New South Wales. The report also considers the requirements of the local catchment and concludes that a supermarket of 3,400 sq.m and retail specialty shops of 1,470 sq.m, as well as a commercial floorspace component that totals 630 sq.m could be supported.

The proposal is referred to as Epiq Lennox throughout the remainder of this report.

The report is structured and presented in **five (5) sections** as follows:

- **Section 1** details the location of the proposed Epiq Lennox and discusses the context of the site within the Ballina Shire region. The proposed development scheme is also reviewed.
- **Section 2** examines the trade area which is relevant to the proposal, including current and projected population and retail spending levels. A review of the socio-economic profile is also detailed.
- **Section 3** provides an overview of the current and future retail environment within the area surrounding the site.
- **Section 4** outlines our assessment of the sales potential for the proposed Epiq Lennox and then presents an economic impact assessment. Likely trading impacts on other retailers throughout the surrounding region are also considered, as are the employment and other economic impacts, both positive and negative, of the proposal.
- **Section 5** summarises the key findings of the analysis.

EXECUTIVE SUMMARY

The key points of this report, regarding the demand and market scope for the proposed Epiq Lennox, include:

i. Epiq Lennox will form part of the Epiq residential estate, currently being developed in the western portion of Lennox Head, on the Far North Coast of New South Wales in the Ballina Shire.

ii. The site of the proposed Epiq Lennox is located on the north-eastern corner of the intersection of Hutley Drive and the (soon to be constructed) Main Street.

iii. The needs of the local service catchment require approximately 5,500 sq.m of floorspace, including a major full-line supermarket of 3,400 sq.m, retail specialty floorspace of 1,470 sq.m and 630 sq.m of commercial floorspace, including a PAD site of 400 sq.m, on the north-eastern corner of the site. A tavern is also proposed on an adjoining site.

iv. The centre is proposed to also include approximately 282 car spaces, reflecting a provision of 5.1 spaces per 100 sq.m of floorspace, which is comparable with the supermarket based shopping centre benchmark of 5 spaces per 100 sq.m of floorspace.

v. The Lennox Head main trade area population is currently estimated at 9,696 and is projected to increase to 12,690 persons by 2026. This represents a relatively high average annual growth rate of approximately 2.7%, or some 300 persons over the forecast period.

vi. Lennox Head is an emerging residential area, with the most notable residential development being the proposed Epiq residential estate itself. Upon completion, the estate is planned to include some 1,700 new residents (500 lots). The Epiq residential estate is assumed to be developed over the next 5 -10 years, with around 100 lots already developed.

vii. The key primary sector likely to be served by the centre generally contains a younger, more affluent family market of Australian born residents. This profile would have a high affinity with a convenience based supermarket centre, such as the proposed Epiq Lennox.

viii. In addition to the resident population, Lennox Head is a key tourism destination within the Ballina Local Government Area (LGA). Based on information sourced from Tourism Australia, approximately 859,000 tourists visited the Ballina LGA in the year to Jun 2015. Lennox Head itself would attract a proportion of this business. Overnight tourist visitation in Ballina is equivalent to a permanent resident population of around 2,300 persons.

ix. In terms of existing competition, the only retail facilities provided within the main trade area are located in the Lennox Head retail strip along Ballina Street, which includes a small IGA supermarket of around 450 sq.m.

x. Beyond the main trade area, the largest provision of retail facilities are provided within the Ballina Central Business Area (CBA) (Kerr Street and River Street Precinct), 10 km by road from the proposed site. The Ballina CBA incorporates over 95,000 sq.m of retail floorspace, including three sub-regional centres; Ballina Central, Ballina Fair and Bayside Shopping Centre. Aldi and Woolworths supermarkets are also provided.

xi. The proposed supermarket at the Epiq Lennox is projected at $29.7 million or $8,747 per sq.m. A full-line supermarket is provided for every 8,000 – 9,000 persons. The trade area population is well above this level with future residential development adding to demand.

xii. The inclusion of a full-line supermarket of 3,400 sq.m in the proposed Epiq Lennox will provide a convenience shopping destination for residents of the immediate Lennox Head area, with main trade area residents currently having to travel into the Ballina CBA (a 20 km round trip) in order to complete their food and grocery shop.

xiii. The centre would achieve a 23.1% market share of the main trade area spending market on opening in 2018/19, meaning 76.9% of main trade area spending would continue to be directed to other facilities.

xiv. All competitive impacts are projected at 10% or less. Each of these impacts will be one off impacts resulting from the opening of the proposed Epiq Lennox. These centres will benefit in the future from population growth within the main trade area and more broadly in the Ballina region.

xv. The projected impacts on retailers throughout the Ballina Shire likely to result from the proposed Epiq Lennox will not threaten the viability or continued operation of any facilities.

xvi. The proposed centre will create employment, both during the construction period and, more importantly, on an ongoing basis once the development is complete and operational. In total, some 273 jobs are likely to be provided both directly and indirectly as a result of the proposed Epiq Lennox. A number of youth employment opportunities will be created with retail developments generally employing a large number of younger staff.

xvii. The key points to note regarding the proposed Epiq Lennox include:

- The centre will create a convenience shopping destination for local residents that will include a major full-line supermarket and a complementary provision of specialty floorspace in a centralised location.

- Currently, no supermarket facilities are provided within the main trade area, with residents having to undertake a 20 km round trip in order to complete their food and grocery shopping needs.

- The development will create additional employment, both during the construction period, and more importantly, on an ongoing basis once the project is completed and operational.

xviii. It is concluded that the combination of the substantial positive economic impacts from the proposal, serve to more than offset the trading impacts that could be anticipated for a small number of the existing retail stores in the region. Further, the impacts would not threaten the viability of any of these retailers or centres.

1 SITE LOCATION AND PROPOSED DEVELOPMENT

This section of the report reviews the regional and local context of the proposed Epiq Lennox site in Lennox Head and provides an overview of the proposed development scheme.

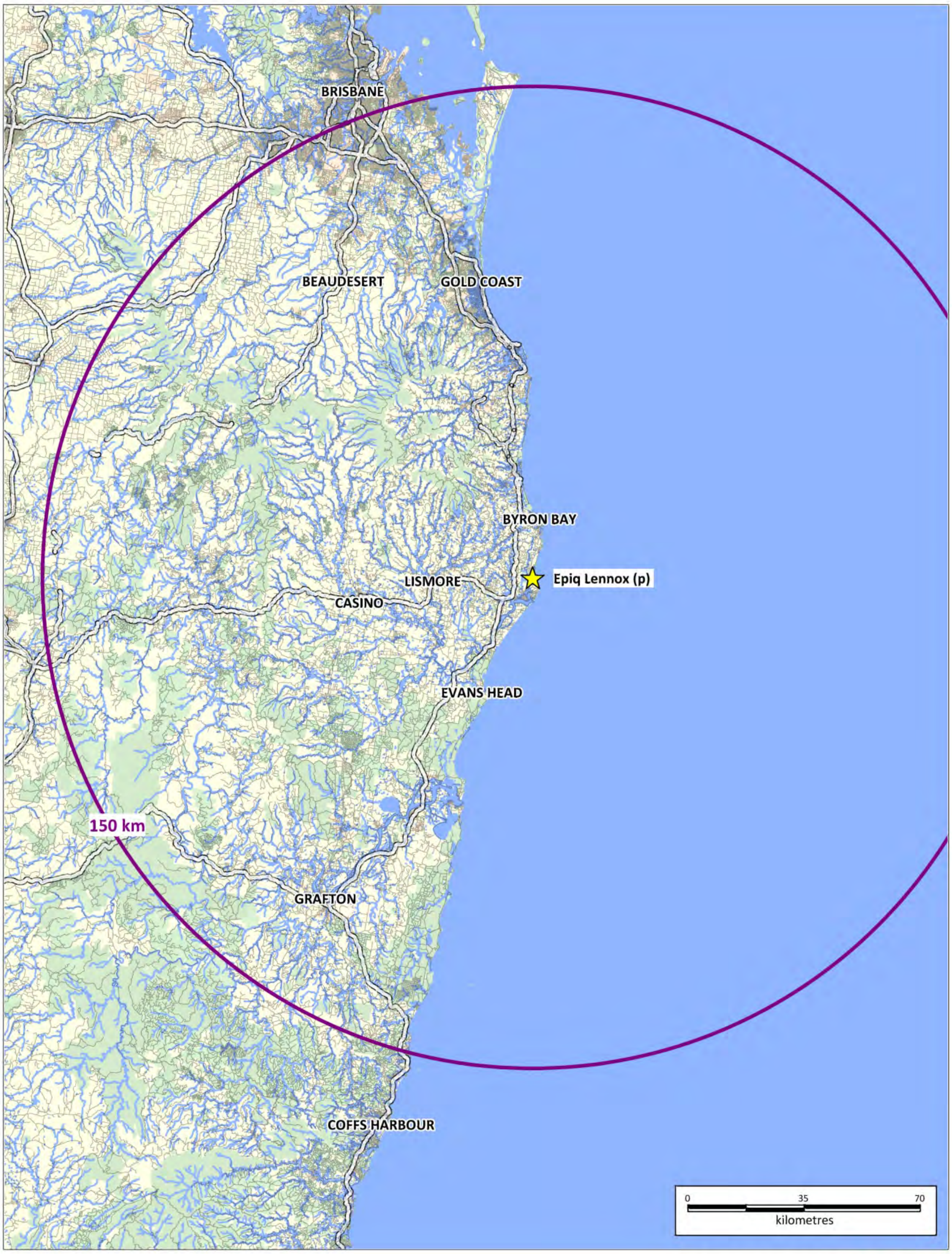
1.1 Regional Context

i. Epiq Lennox will form part of a larger residential release area, known as the Epiq Residential Estate, currently being developed in Lennox Head.

ii. Lennox Head is located on the Far North Coast of New South Wales in the Ballina Shire. The township is situated 10 km to the north of the Ballina Urban Area and some 100 km south of Surfers Paradise. It is a major residential and tourist destination.

iii. Ballina is the major retail and administrative destination for Far North Coast residents. Two major highways bypass the town, namely the Pacific Highway and the Bruxner Highway. The Pacific Highway is the major north-south arterial road throughout coastal New South Wales, connecting Sydney in the south to Brisbane in the north. The Bruxner Highway is a major east-west arterial road throughout northern New South Wales that ultimately connects Ballina to Lismore.

MAP 1.1 – EPIQ LENNOX REGIONAL CONTEXT



Map produced by Location IQ using MapInfo Pro Australia Pty Ltd and related data sets.

1.2 Local Context

i. The Epiq Lennox site forms part of the larger master-planned Epiq Residential Estate, located to the south-east of Hutley Drive and to the south-west of Henderson Lane. Clarence Property Group purchased the site in November 2014. Upon completion, the estate is planned to include some 500 residential dwellings (around 1,700 persons) over 80 hectares (refer Figure 1.1). The development of the site commenced in May 2015.

ii. The site of the proposed Epiq Lennox is located on the north-eastern corner of the intersection of Hutley Drive and Main Street (soon to be constructed). Main Street is proposed to connect to Montwood Drive to the south, providing access for residents to the south of the Epiq Residential Estate.

iii. The majority of retailing within the region is provided within the Ballina Central Business Area (CBA), located 10 km to the south-west, with three major centres anchoring the precinct (refer Map 1.2), namely:

— Ballina Fair, anchored by Target and Woolworths.

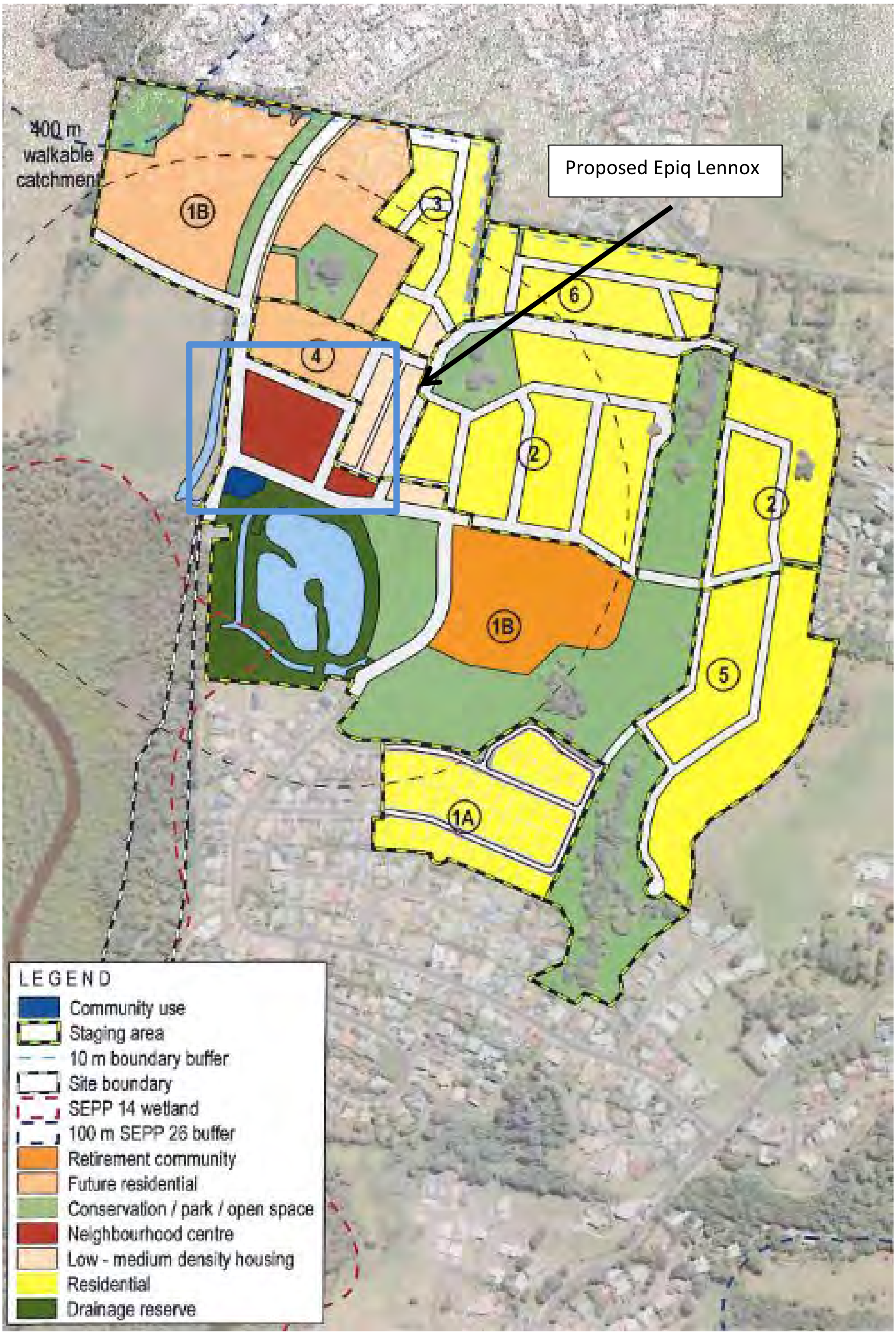
— Ballina Central, containing Big W and Ritchie’s Supa IGA.

— Bayside Shopping Centre, including Kmart and Coles.

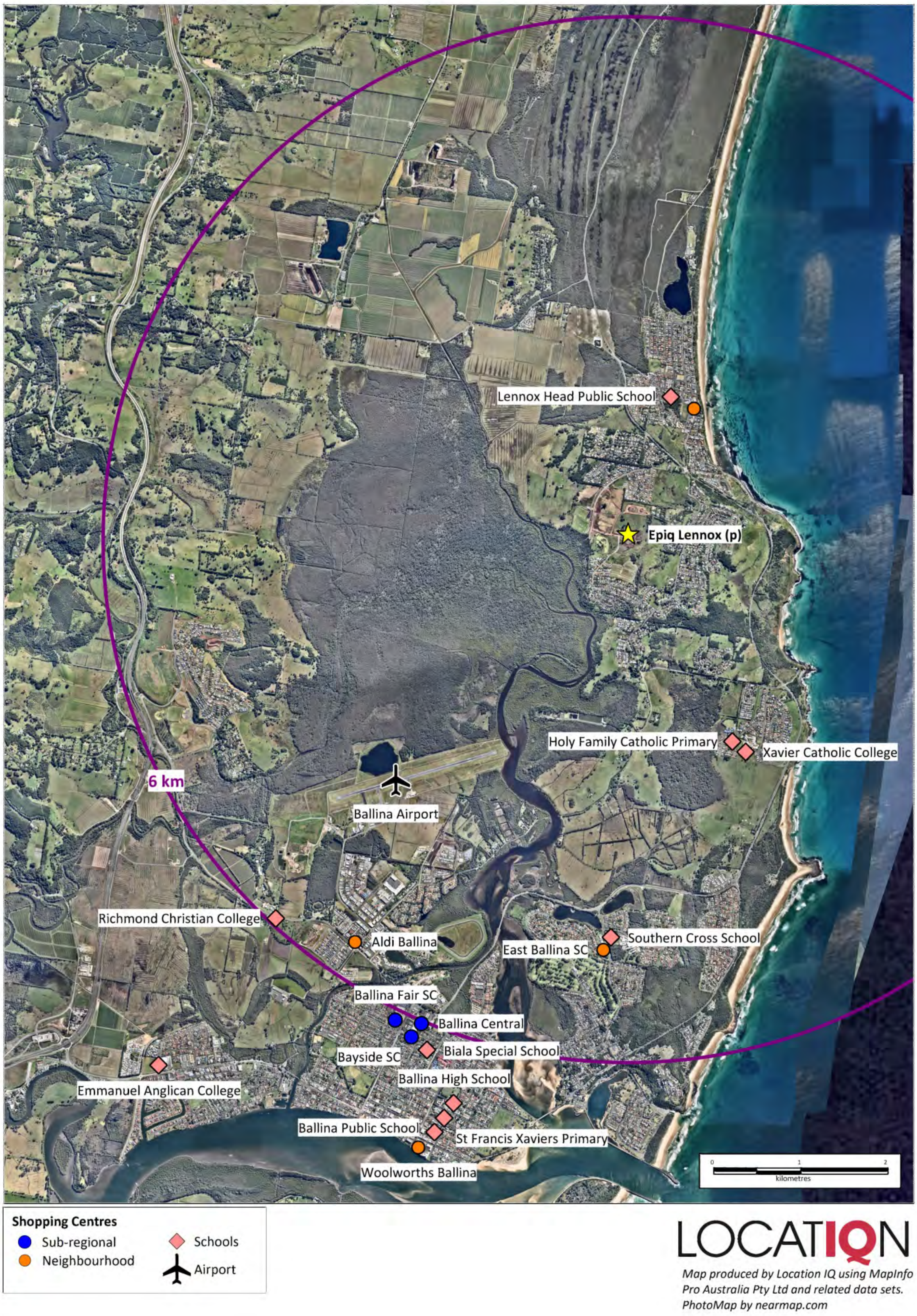
Woolworths and Aldi supermarkets are also provided within the CBA.

iv. Overall, the Epiq Lennox will be provided within the Epiq Residential Estate, and as such, will generally serve the convenience needs of the immediately surrounding residents.

FIGURE 1.1 – EPIQ RESIDENTIAL ESTATE PLAN



MAP 1.2 – EPIQ LENNOX LOCAL CONTEXT



1.3 Proposed Development

i. Clarence Property Group are proposing the development of a convenience shopping centre anchored by a supermarket and a provision of supporting specialty shops.

ii. In order to service the convenience shopping requirements of the local catchment, the proposed centre could support:

— A supermarket of 3,400 sq.m.

— Specialty floorspace totalling 1,470 sq.m.

— Non-retail/commercial floorspace that comprises 630 sq.m, including a PAD site of 400 sq.m and 230 sq.m of supermarket office floorspace.

iii. A tavern is also proposed on an adjoining site.

iv. In total, the centre proper would include around 5,500 sq.m of floorspace. This is larger than the masterplan approval for a centre of 4,000 sq.m at the site.

v. The centre will be easily accessible via Hutley Drive, a major linking road throughout the locality. Upon completion of the proposed development, Hutley Drive will link to North Creek Road to the east, providing both regional and local access to the proposed site.

vi. The proposed Epiq Lennox (refer Figure 1.2) will be provided in a U-shape format, with the supermarket provided at the eastern corner of the site and the retail specialty floorspace provided to the west of the supermarket.

vii. A total of 282 car spaces will be provided at the centre, which equates to a car park provision of 5.1 spaces per 100 sq.m of floorspace, which is comparable with the typical provision provided at supermarket based shopping centres of 5 spaces per 100 sq.m of floorspace.

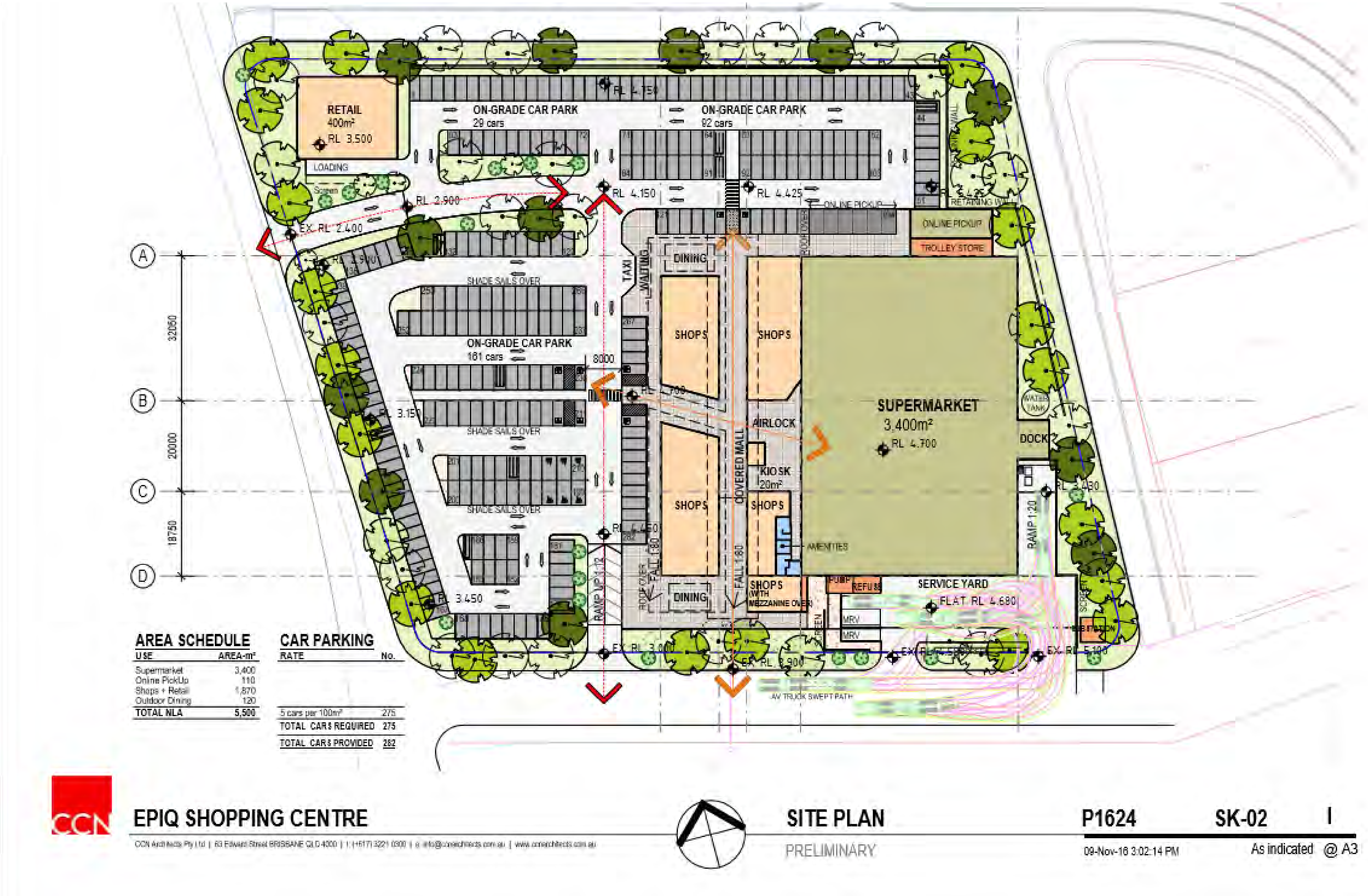
viii. Overall, the proposed development would offer a high degree of customer amenity and convenience to residents of the Epiq Residential Estate by way of its easily accessible location and simple design.

TABLE 1.1 – EPIQ LENNOX PROPOSED COMPOSITION

Tenant/ Category	Proposed Centre GLA (sq.m)	Proposed Centre % of Total
Majors		
Supermarket	3,400	61.8%
Retail Specialty	1,470	26.7%
Total Retail	**4,870**	**88.5%**
Non-retail*	630	11.5%
Total Centre	**5,500**	**100.0%**

** Includes 400sq.m PAD site and 230 sq.m of supermarket office floorspace*
Source : Clarence Property Group

FIGURE 1.2 – EPIQ LENNOX SITE PLAN



2 TRADE AREA ANALYSIS

This section of the report outlines the trade area likely to be served by the proposed Epiq Lennox including the current and projected population and retail spending levels. An overview of the socio-economic profile of the trade area population is also provided.

2.1 Trade Area Definition

i. The trade area for the proposed Epiq Lennox development has been defined taking into account the following key considerations:

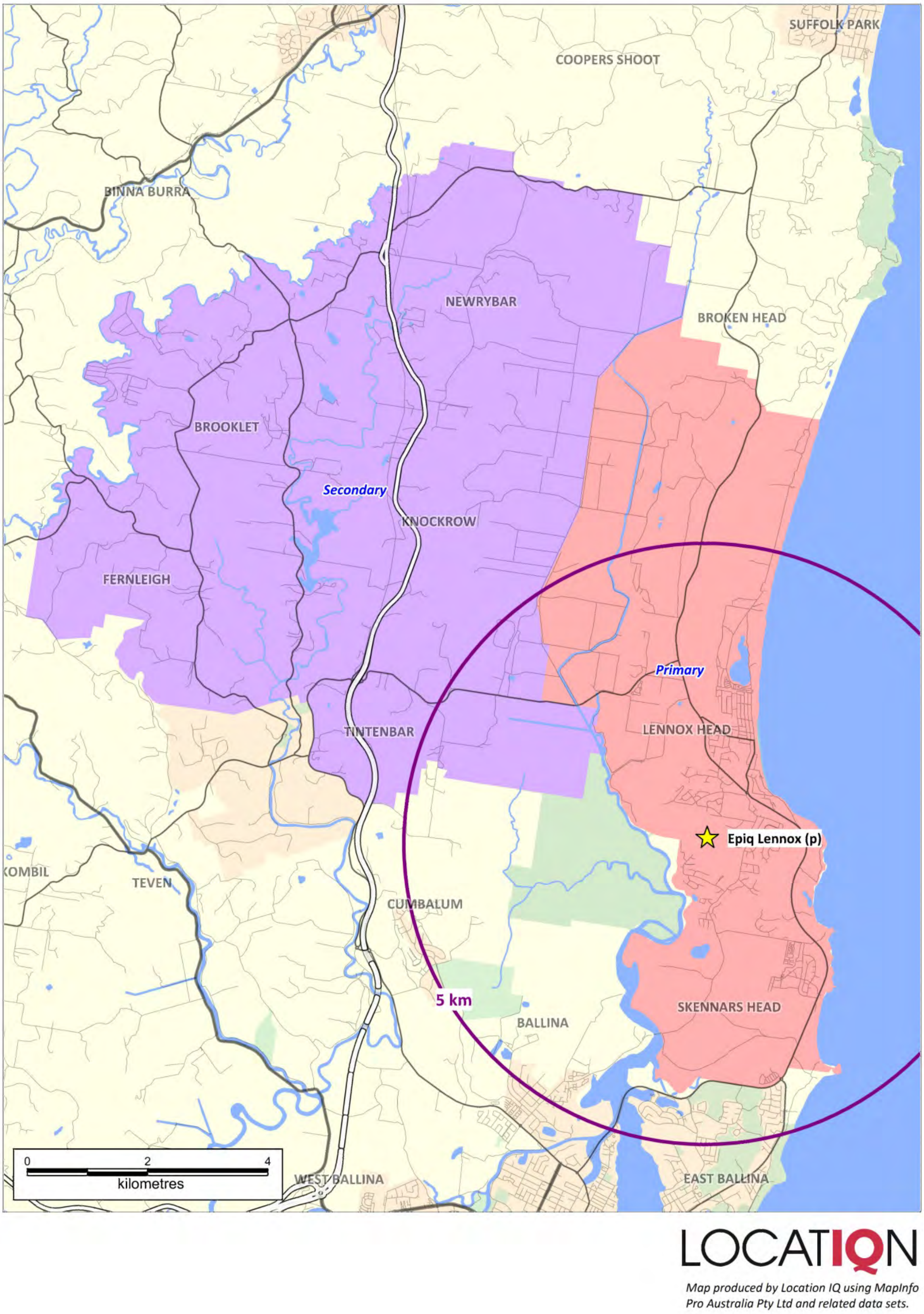
   - The scale and composition of the proposed development which will be anchored by a supermarket of 3,400 sq.m.
   - Regional and local accessibility.
   - The pattern of urban development.
   - Significant physical barriers.

ii. Map 2.1 illustrates the defined trade area likely to be served by the proposed Epiq Lennox. The trade area has been defined to include a primary sector and a secondary sector, as follows:

   - The **primary sector** extends some 6 km to the north of the site and includes Lennox Head, Skennars Head and parts of Broken Head.
   - The **secondary sector** includes areas immediately to the east and the west of the Pacific Motorway and mainly consists of rural residential land. The secondary sector extends 10 km north to south and 8 km east to west.

iii. The primary and secondary sectors in combination are referred to as the Epiq Lennox main trade area throughout the remainder of this report. The Epiq Lennox main trade area generally extends 14 km north to south and 12 km east to west. The area is restricted by retail facilities within the Ballina CBA to the south.

MAP 2.1 – EPIQ LENNOX MAIN TRADE AREA



2.2 Main Trade Area Population

i. Table 2.1 details the current and projected population levels by sector for the Epiq Lennox main trade area. This information is sourced from the following:

- The 2006 and 2011 Census of Population and Housing undertaken by the Australian Bureau of Statistics (ABS).

- New dwelling approval statistics sourced from the ABS over the period from 2006/07 to 2014/15, which indicates that an average of 59 new dwellings have been approved annually over this period (including 52 dwellings in the primary sector).

- Population projections prepared at the Small Area Forecast information (SAFi) level by .id Consulting.

- Population projections prepared at a small area level by Forecast id for Ballina Shire Council.

- Information provided by Clarence Property Group on the planned lot development within the Epiq Lennox Residential Estate over the next five years.

- Investigations by this office into residential developments planned or underway in the area.

ii. At the time of the 2011 Census, the population within the Epiq Lennox main trade area was 9,140, including 7,590 persons in the primary sector. The population in the main trade area has increased by around 76 persons (or 1.2%) annually over the 2006 – 2011 Census periods.

iii. Since the 2011 Census, the population growth rate in the main trade area is estimated to have increased slightly to a rate of around 110 persons annually, with the current main trade area population estimated at 9,690, including 8,090 persons in the primary sector.

iv. Population growth in the primary sector between the 2011 and 2016 period will be largely driven by residential development in the Epiq Lennox Residential Estate, comprising 500 dwellings. Stage 1 (comprising around 100 dwellings) of the development is already complete with the remainder expected to completed within 5 – 10 years.

v. A number of other residential developments are currently planned or underway within the main trade area, including:

- The Outlook (primary sector), located immediately west of the Epiq Lennox Residential Estate, has received development application approval for a total of 168 lots, to be completed over two stages. First homes are projected to be complete by 2018, with the remainder of the estate to be completed by 2026.

- Reservoir Hill Estate (primary sector), located immediately to the north-east of Epiq Lennox Residential Estate, to the north of Henderson Lane, has received rezoning approval from the NSW Department of Planning and Environment for 150 lots. First homes are anticipated at the site by 2019, with the estate projected to be completed post 2026.

- Skennars Head Coastal Village (primary sector) is a planned urban renewal area of 163 hectares in Skennars Head. The site located to the north of Angels Beach Drive and to the west of The Coast Road. Rezoning of the land was approved in 2013 by the NSW Joint Regional Planning Panel. No development applications have been lodged as yet for residential development of this land. Due to uncertainty regarding timing and size of the development, residential development is not projected to proceed over the forecast period (i.e. post 2026).

- The North Creek Road development area (located on the north-western corner of the intersection of North Creek Road and Montwood Drive) comprising 3.23 hectares is planned for residential development in the longer term. The site is proposed to be rezoned from RU2 (Rural Landscape Zone) to R3 – Medium Density Residential Zone.

vi. Limited population growth is expected to occur within the secondary sector.

vii. Based on the information outlined above, the Epiq Lennox main trade area population is projected to increase to 12,690 by 2026 (including 10,990 persons in the primary sector). This represents an increase of 2,900 persons over the 2016 – 2026 period (or 290 persons per annum), with over 95% of this growth planned within the key primary sector.

viii. A full-line supermarket is typically provided for every 8,000 – 9,000 persons in Australia. The main trade area population is clearly large enough to support such a supermarket, particularly given the distance to the closest full-line supermarkets, being a round trip of 20 km.

TABLE 2.1 – EPIQ LENNOX MAIN TRADE AREA POPULATION, 2006 - 2026

Trade Area Sector	**Estimated Resident Population** 2006	2011	2016	**Forecast Population** 2019	2021	2026
Primary Sector	7,140	7,590	8,090	8,615	9,365	10,990
Secondary Sector	1,620	1,550	1,600	1,630	1,650	1,700
Main Trade Area	**8,760**	**9,140**	**9,690**	**10,245**	**11,015**	**12,690**
		Average Annual Change (No.) 2006-2011	2011-2016	2016-2019	2019-2021	2021-2026
Primary Sector		90	100	175	375	325
Secondary Sector		-14	10	10	10	10
Main Trade Area		**76**	**110**	**185**	**385**	**335**
		Average Annual Change (%) 2006-2011	2011-2016	2016-2019	2019-2021	2021-2026
Primary Sector		1.2%	1.3%	2.1%	4.3%	3.3%
Secondary Sector		-0.9%	0.6%	0.6%	0.6%	0.6%
Main Trade Area		**0.9%**	**1.2%**	**1.9%**	**3.7%**	**2.9%**
Australian Average		*1.5%*	*1.5%*	*1.4%*	*1.3%*	*1.2%*

All figures as at June
All figures are based on 2011 SA1 boundary definition with the exception of 2006 which is based on 2006 CCD boundary definition. 2006 and 2011 ERP is calculated using 2011 enumeration factor.
Sources : ABS; Forecast.id; SAFi by .id

TABLE 2.2 – MAIN TRADE AREA NEW DWELLING APPROVALS, 2006/07 – 2014/15

Sector	Primary Sector	Secondary Sector	Main TA
New Houses			
2006/07	29	2	31
2007/08	29	1	30
2008/09	26	2	28
2009/10	31	6	37
2010/11	43	2	45
2011/12	16	4	20
2012/13	21	3	24
2013/14	31	4	35
2014/15	48	15	63
Total New Houses	**274**	**39**	**313**
Average	***30***	***4***	***35***
Other Dwellings			
2006/07	12	2	14
2007/08	40	2	42
2008/09	27	8	35
2009/10	14	0	14
2010/11	37	2	39
2011/12	10	2	12
2012/13	2	2	4
2013/14	33	2	35
2014/15	22	0	22
Total Other Dwellings	**197**	**20**	**217**
Average	***22***	***2***	***24***
Total Dwellings			
2006/07	41	4	45
2007/08	69	3	72
2008/09	53	10	63
2009/10	45	6	51
2010/11	80	4	84
2011/12	26	6	32
2012/13	23	5	28
2013/14	64	6	70
2014/15	70	15	85
Total Dwellings	**471**	**59**	**530**
Average	***52***	***7***	***59***

Source: ABS

LOCATIQN

2.3 Socio-Economic Profile

i. Table 2.3 summarises the socio-economic profile of the Epiq Lennox main trade area population compared with the non-metropolitan New South Wales and Australian benchmarks. This information is based on the 2011 Census of Population and Housing.

ii. Key points to note regarding the socio-economic profile of the Epiq Lennox main trade area population include:

– Residents earn income levels that are higher than the non-metropolitan New South Wales average on a per capita and household basis. The most affluent residents reside in the primary sector, where household income levels are 11.5% above average.

– The average age of residents is slightly younger than the non-metropolitan New South Wales benchmark, with younger residents residing within the primary sector.

– Home ownership levels are higher than the benchmark across the main trade area.

– The main trade area is predominantly Australian born.

– The household profile of trade area residents also varies between the sectors, with a large traditional family market (i.e. couples with dependent children) residing in the primary sector and a larger retiree population (i.e. couples without children and lone persons) residing in the secondary sector.

iii. Overall, the key primary sector generally contains a young, affluent family market. This profile would have a high affinity with a convenience based supermarket centre, such as the proposed Epiq Lennox.

TABLE 2.3 – EPIQ LENNOX MTA SOCIO-ECONOMIC PROFILE, 2011 CENSUS

Characteristics	Primary Sector	Secondary Sector	Main TA	Non Metro NSW Average	Aust Average
Income Levels					
Average Per Capita Income	$32,985	$29,466	$32,391	$29,579	$34,201
Per Capita Income Variation	11.5%	-0.4%	9.5%	n.a.	n.a.
Average Household Income	$86,978	$78,002	$85,464	$72,680	$87,928
Household Income Variation	19.7%	7.3%	17.6%	n.a.	n.a.
Average Household Size	2.6	2.6	2.6	2.5	2.6
Age Distribution (% of Pop'n)					
Aged 0-14	21.7%	20.6%	21.5%	19.4%	19.3%
Aged 15-19	6.7%	6.1%	6.6%	6.6%	6.5%
Aged 20-29	8.0%	5.4%	7.6%	10.9%	13.8%
Aged 30-39	11.9%	8.8%	11.4%	11.3%	13.8%
Aged 40-49	16.5%	16.4%	16.5%	13.4%	14.2%
Aged 50-59	16.1%	18.8%	16.5%	13.9%	12.8%
Aged 60+	19.2%	23.8%	20.0%	24.4%	19.6%
Average Age	38.4	41.1	38.9	40.1	37.9
Housing Status (% of H'holds)					
Owner/Purchaser	75.2%	76.3%	75.4%	71.3%	69.3%
Renter	24.8%	23.7%	24.6%	28.7%	30.7%
Birthplace (% of Pop'n)					
Australian Born	87.2%	85.6%	86.9%	88.5%	73.9%
Overseas Born	12.8%	14.4%	13.1%	11.5%	26.1%
• Asia	1.1%	2.7%	1.4%	1.6%	7.6%
• Europe	6.6%	6.9%	6.7%	6.1%	9.4%
• Other	5.1%	4.8%	5.1%	3.8%	9.1%
Family Type (% of Pop'n)					
Couple with dep't children	50.0%	43.9%	48.9%	40.7%	45.3%
Couple with non-dep't child.	5.4%	8.6%	5.9%	7.0%	7.7%
Couple without children	24.6%	29.4%	25.4%	25.7%	23.0%
Single with dep't child.	8.7%	7.4%	8.5%	10.6%	9.2%
Single with non-dep't child.	3.0%	3.3%	3.1%	3.5%	3.5%
Other family	0.5%	0.7%	0.5%	0.9%	1.1%
Lone person	7.9%	6.7%	7.7%	11.7%	10.2%

Sources : ABS Census of Population and Housing 2011

LOCATIQN

iv. Table 2.4 outlines the key changes between the 2006 and 2011 Census periods across the Epiq Lennox main trade area. As shown, the biggest differential is the average age of residents, which increased quite substantially by 6.3% compared with the benchmark change of 2.6%.

TABLE 2.4 – EPIQ LENNOX MTA SOCIO-ECONOMIC PROFILE COMPARISON

	Epiq Shopping Centre MTA			Non Metro NSW Benchmark		
Characteristics	2006	2011	Change (%)	2006	2011	Change (%)
Income Levels						
Average Per Capita Income	$25,724	$32,391	25.9%	$23,056	$29,579	28.3%
Average Household Income	$69,847	$85,464	22.4%	$57,128	$72,680	27.2%
Age						
Average Age	36.6	38.9	6.3%	39.1	40.1	2.6%
Birthplace (% of Pop'n)						
Australian Born	88.7%	86.9%	-1.8%	89.2%	88.5%	-0.7%
Overseas Born	11.3%	13.1%	1.8%	10.8%	11.5%	0.7%
Household Size & Structure						
Average Household Size	2.7	2.6	-2.8%	2.5	2.5	-0.8%
Couple with dep't children	50.7%	48.9%	-1.8%	42.3%	40.7%	-1.6%
Housing Status (% of H'holds)						
Owner/Purchaser	74.6%	75.4%	0.9%	72.2%	71.3%	-0.9%
Renter	25.4%	24.6%	-0.9%	27.8%	28.7%	0.9%

Sources : ABS Census of Population and Housing 2006 & 2011

2.4 Trade Area Retail Spending

i. The estimated retail expenditure capacity of the Epiq Lennox main trade area population is based on information sourced from MDS Market Data Systems. MDS utilises a detailed micro-simulation model of household expenditure behaviour for all residents of Australia.

ii. The MDS model takes into account information from a wide variety of sources, including the regular ABS Household Expenditure Survey, National Accounts Data, Census Data and other information. MarketInfo estimates used in this analysis are based on the 2014 release, benchmarked against the latest National Accounts Data, released by the ABS.

iii. In New South Wales, Queensland and Victoria, the MarketInfo estimates of retail spending that are prepared independently by MDS are commonly used by all parties in Economic Impact Assessments.

iv. Chart 2.1 illustrates the retail expenditure levels per person across the Epiq Lennox main trade area compared with the non-metropolitan New South Wales averages. Retail spending per person is higher across all categories except general retail, with total retail spending 6.6% higher than the benchmark. All figures presented in this report are in constant 2016 dollars and include GST.

v. Table 2.5 outlines the retail expenditure levels generated by the Epiq Lennox main trade area population. The total retail expenditure level of the main trade area population is currently estimated at $147.7 million. This level is projected to increase at an average annual rate of around 3.9% to $215.8 million by 2026.

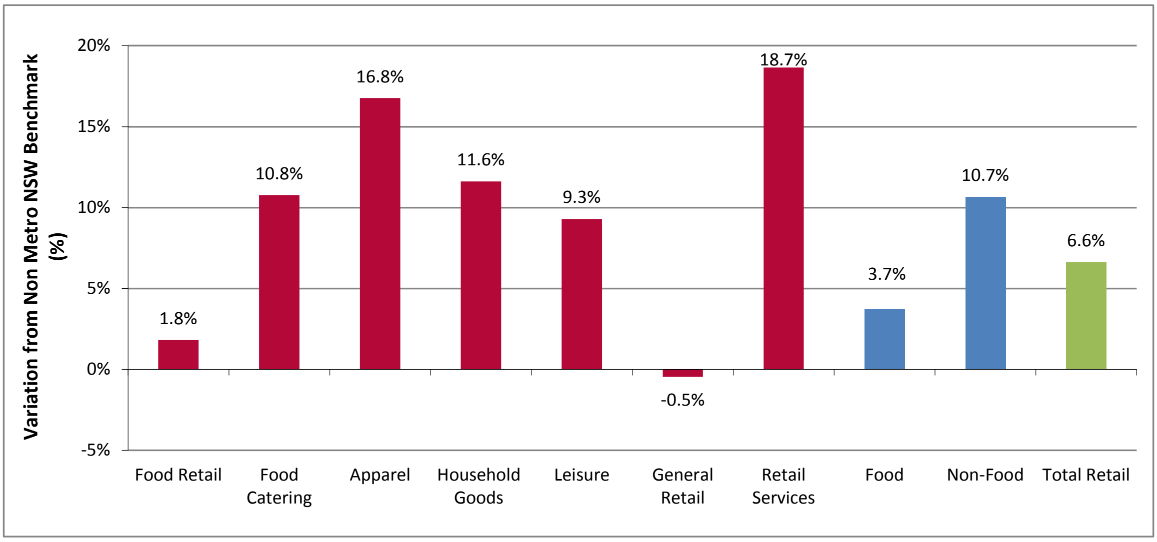
vi. The projected growth rate of the retail spending market of 3.9% per annum for the Epiq Lennox main trade area takes into account the following:

- Real growth in retail spending per capita of 1.0% annually over the period to 2026. This is in keeping with the typical trends generally evident throughout New South Wales and Australia over long-term periods.

– Main trade area population growth of around 2.7% per annum.

vii. Table 2.6 presents a breakdown of retail spending by key commodity group, indicating the largest spending market is food and liquor at $64.6 million, representing 43.7% of the total retail spending market.

CHART 2.1 – EPIQ LENNOX MTA PER CAPITA RETAIL EXPENDITURE, 2014/15



Source : Marketinfo

TABLE 2.5 – EPIQ LENNOX MTA RETAIL EXPENDITURE, 2016 – 2026

Y/E June	Primary Sector	Secondary Sector	Main TA
2016	123.4	24.3	147.7
2017	126.5	24.6	151.1
2018	130.8	25.1	155.9
2019	135.2	25.5	160.7
2020	141.2	26.0	167.2
2021	149.0	26.5	175.5
2022	156.5	27.0	183.5
2023	163.6	27.5	191.1
2024	171.0	28.0	199.0
2025	178.7	28.5	207.2
2026	186.8	29.0	215.8
Expenditure Growth			
2016-2019	11.8	1.3	13.0
2019-2021	13.8	0.9	14.8
2021-2026	37.8	2.5	40.3
2016-2026	63.4	4.7	68.1
Average Annual Growth Rate			
2016-2019	3.1%	1.7%	2.9%
2019-2021	5.0%	1.8%	4.5%
2021-2026	4.6%	1.8%	4.2%
2016-2026	4.2%	1.8%	3.9%

**Constant 2015/16 dollars & Including GST*
Source : Marketinfo

TABLE 2.6 – EPIQ LENNOX MTA RETAIL EXPENDITURE BY KEY COMMODITY GROUP, 2016 - 2026

Y/E June	Food & Liquor	Food Catering	Apparel	H'hold Goods	Leisure	General Retail	Retail Services
2016	64.6	18.9	15.0	26.6	6.9	11.0	4.7
2017	65.9	19.4	15.4	27.3	7.0	11.3	4.8
2018	67.8	20.1	15.9	28.2	7.3	11.7	4.9
2019	69.8	20.7	16.4	29.1	7.5	12.1	5.1
2020	72.4	21.6	17.1	30.4	7.8	12.6	5.3
2021	75.8	22.7	18.0	31.9	8.2	13.3	5.6
2022	79.1	23.8	18.8	33.4	8.6	13.9	5.9
2023	82.2	24.8	19.6	34.9	9.0	14.5	6.1
2024	85.4	25.9	20.5	36.4	9.4	15.1	6.4
2025	88.7	27.0	21.4	37.9	9.8	15.8	6.6
2026	92.1	28.2	22.3	39.6	10.2	16.5	6.9
Expenditure Growth							
2016-2019	5.2	1.8	1.4	2.5	0.6	1.0	0.4
2019-2021	6.1	2.0	1.6	2.8	0.7	1.2	0.5
2021-2026	16.3	5.5	4.3	7.7	2.0	3.2	1.4
2016-2026	27.5	9.2	7.3	13.0	3.4	5.4	2.3
Average Annual Growth Rate							
2016-2019	2.6%	3.0%	3.1%	3.0%	3.1%	3.1%	3.1%
2019-2021	4.3%	4.7%	4.7%	4.7%	4.7%	4.7%	4.7%
2021-2026	4.0%	4.4%	4.4%	4.4%	4.4%	4.4%	4.4%
2016-2026	3.6%	4.0%	4.1%	4.0%	4.1%	4.1%	4.1%

**Constant 2015/16 dollars & Including GST*
Source : Marketinfo

LOCATIQN

2.5 Tourist Market

i. In addition to the resident population, Lennox Head is a key tourism destination within the Ballina Local Government Area (LGA). Based on information sourced from Tourism Research Australia, the Ballina Shire Council recorded 859,000 international and domestic night visitors in 2014/15. Overnight tourist visitation is equivalent to a permanent resident population of around 2,300 persons.

ii. Lennox Head itself would attract a proportion of this business, projected to account for approximately 10% - 15% of retail sales.

3 COMPETITIVE ENVIRONMENT

This section of the report provides a summary of the existing and proposed competitive developments surrounding the proposed Epiq Lennox.

i. The relevant competition to Epiq Lennox is generally provided within the Ballina Urban Area.

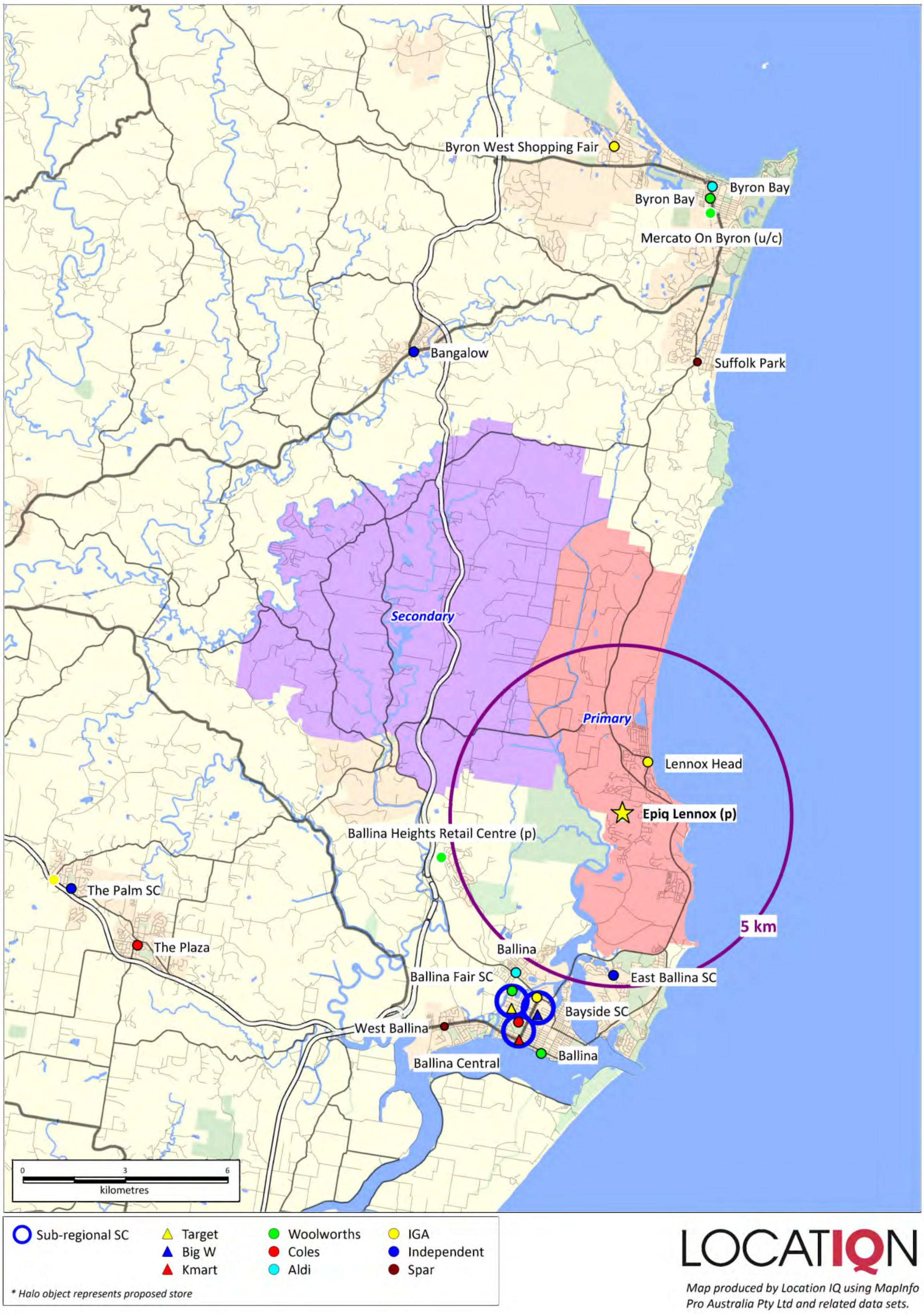
ii. Table 3.1 provides a summary of the composition of existing facilities, which were previously illustrated on Map 2.1.

TABLE 3.1 – COMPETITIVE CENTRES

Centre	Shopfront GLA (sq.m)	**Anchor Tenants**	Dist. From Centre (km)
Sub-regional Shopping Centres			
Ballina CBA	*95,900*		10.0
• *Kerr St Precinct*	*39,300*		
- Ballina Fair	16,100	Target (2,979), Woolworths (3,600)	
- Ballina Central	14,200	Big W (6,610), Ritchie's Supa IGA (3,761)	
- Bayside SC	9,000	Kmart (4,425), Coles (3,900)	
• *River St Precinct*	*25,000*	Woolworths (2,500)	
Other Ballina			
• *East Ballina SC*	*2,100*	FoodWorks (200)	
• *West Ballina*	*2,500*	SPAR (500)	
• *Other*	*27,000*	Aldi (1,450)	
Byron Bay CBA	*29,600*		20.0
• Byron West Shopping Fair	3,200	Supa IGA (1,800)	
• Aldi Byron Bay	1,400	Aldi (1,350)	
• Other	25,000	Woolworths (2,254)	
Supermarket Based Shopping Centres			
Lennox Head	4,300	IGA (450)	1.0
Suffolk Park	1,500	SPAR (700)	14.0
Bangalow	4,500	FoodWorks (300)	21.0
The Plaza, Alstonville	7,200	Coles (1,600)	25.0
The Palm SC, Wollongbar	1,400	FoodWorks (400)	30.0

Source: Australian Shopping Centre Council Database

MAP 3.1 - EPIQ LENNOX MAIN TRADE AREA AND COMPETITION



3.1 Within Main Trade Area

<u>Lennox Head Retail Precinct</u>

i. The Lennox Head retail precinct (primary sector) is generally provided along Ballina Street and Pacific Parade, located 1 km to the north-east of the proposed Epiq Lennox. A small IGA foodstore of 450 sq.m anchors the precinct.

ii. Table 3.2 details the number of shopfronts by category provided along the Lennox Head Retail Precinct. In total, the retail strip contains around 63 shopfronts, with nearly 73% of traders being retail specialty tenants. There is a high proportion of food catering and apparel stores provided, given the waterfront location which attracts the tourist market.

TABLE 3.2 – LENNOX HEAD RETAIL PRECINCT

Categories	**Lennox Head Retail Precinct**
Foodstore	1
Retail Specialty Stores	
Food & Liquor	8
Food Catering	17
Apparel	9
Household Goods	0
Leisure	1
General Retail	4
Retail Services	6
Total Retail Specialty	**45**
Entertainment	0
Non-Retail	14
Vacancy	3
Total Specialty	**62**
Total	**63**

** Includes ground floor shopfronts only*
Source: Based on site inspection, July 2016

LOCATIQN

3.2 Ballina CBA

i. Retail facilities in the Ballina CBA are of most relevance to the proposed Epiq Lennox and are located approximately 10 km to the south-west of the site. In total, the Ballina CBA provides around 95,900 sq.m of retail floorspace, primarily focused along Kerr Street.

ii. The largest component is the Kerr Street precinct, which is anchored by three sub-regional shopping centres, providing nearly 40,000 sq.m of retail floorspace. The Kerr Street precinct contains:

— Ballina Fair is located on the western side of Kerr Street. The centre encompasses around 16,100 sq.m of floorspace and includes a Target discount department store and Woolworths supermarket, in addition to a Best Less mini-major and 54 specialty shops. According the *Mini Guns 2015* (Shopping Centre News), the centre is estimated to achieve sales of $101 million, with 2.2 million visitors per year.

— Ballina Central (14,200 sq.m) is situated on the eastern side of Kerr Street and to the north of Bayside Shopping Centre. The centre is anchored by a Big W discount department store and Ritchie's Supa IGA.

— Bayside Shopping Centre is positioned to the east of Kerr Street and to the south of Ballina Central. The centre contains 9,000 sq.m of retail floorspace and is anchored by a Kmart discount department store and a Coles supermarket, together with First Choice Liquor.

— Total retail sales across the Kerr Street precinct are estimated at $220 million, including three discount department stores and three full-line supermarkets. As such, the Ballina CBA is focus for retail facilities within the broader Ballina Shire region.

iii. The River Street precinct provides around 150 retail shops, including a number of national tenants, such as Dominos Pizza, Chemmart Pharmacy, Rockmans and the four major national banks (i.e. Commonwealth, ANZ, NAB and Westpac). A Woolworths supermarket of 2,500 sq.m anchors the precinct.

iv. Aside from the major retail precinct surrounding Kerr Street and River Street, there are three other smaller retail precincts serving the Ballina CBA. These include:

— A large format retail centre in North Ballina, some 2 km to the north of Ballina Central. The centre, which is 11,000 sq.m in size, is anchored by a Harvey Norman. An Aldi supermarket is also provided in North Ballina.

— A small retail centre of around 2,000 sq.m serves residents of East Ballina. The centre is anchored by a small FoodWorks foodstore of 200 sq.m.

— Ballina West Shopping Centre, a 2,500 sq.m convenience shopping centre anchored by a SPAR supermarket of 500 sq.m.

3.3 Supermarket Based Centres

i. Apart from supermarkets provided in the Lennox Head retail precinct and the Ballina CBA, a range of supermarkets are provided throughout the broader Ballina region. These include:

— A SPAR supermarket of 700 sq.m is located 14 km to the north, at Suffolk Park. A small range of convenience based retail stores are also provided.

— Byron Bay is a major tourist and resident location, provided some 20 km to the north. A free-standing Woolworths supermarket of 2,254 sq.m is the major anchor tenant within the precinct, which also contains Aldi and IGA supermarket at Byron West. Byron Bay also contains an extensive range of food catering, apparel and retail services tenants, give that it serves a large resident and tourist market.

— A FoodWorks foodstore of 300 sq.m is situated at Bangalow, 21 km to the north.

— A Coles supermarket of 1,600 sq.m anchors The Plaza in Alstonville, 25 km to the south-west.

— A FoodWorks foodstore of 400 sq.m is located within the town of Wollongbar, 30 km to the west.

3.4 Proposed Developments

i. Apart from the Epiq Lennox development, there are no further proposed retail developments within the main trade area.

ii. Proposed retail developments beyond the main trade area include:

– A development application was lodged for the Ballina Heights Retail Centre as part of the Ballina Heights residential estate. The shopping centre was proposed to total 4,242 sq.m with a Woolworths supermarket of 3,400 sq.m as the anchor tenant. As of June 2016, the development application was withdrawn for the development. As such, it is not assumed to proceed over the forecast period.

– Ballina Fair Shopping Centre has received development approval for a retail specialty floorspace expansion of 223 sq.m that will include an enclosed dining hall. The proposed development is projected to be completed by 2017/18.

– The Mercato on Byron in Byron Bay is currently under construction. As part of this mixed use development, the free-standing Woolworths supermarket of 2,254 sq. m will be demolished and replaced with a Woolworths supermarket of 3,800 sq.m, as well as a range of specialty stores and a nine screen cinema complex.

– Habitat at North Beach in Byron Bay is a mixed use development including a retail component with frontage onto Bayshore Drive. The development is currently under construction and upon completion April 2017, will include six retail tenancies, with commercial floorspace provide on the upper level.

3.5 Summary

i. The nearest and most relevant major retail precinct to a convenience based shopping centre at Epiq Lennox is the Ballina CBA, where three major full-line supermarkets (i.e. 3,000 sq.m or greater) are provided (namely Woolworths at Ballina Fair, Coles at Bayside Shopping Centre and Ritchie's Supa IGA at Ballina Central) as well as smaller freestanding Woolworths and Aldi supermarkets.

ii. There are no other known competitive developments planned to occur within the region aside from a small expansion at Ballina Fair.

4 ASSESSMENT OF POTENTIAL FOR RETAIL FACILITIES

This section of the report considers the sales potential for the retail component of the proposed Epiq Lennox, as well as the likely trading and other impacts that can be anticipated following the construction of the proposal.

4.1 Sales Overview

i. In order to assess the potential economic benefits and impacts that may arise from the development of the proposed Epiq Lennox, the sales level which the development is projected to achieve is outlined.

ii. The sales performance of any particular retail facility, be it an individual store or a collection of stores provided in a shopping centre or precinct, is determined by a combination of the following critical factors:

- The composition and quality of the facility, including the major trader or traders; the specialty mix; centre layout and configuration; ease of accessibility and parking; and the overall feel of the centre.

- The size of the available catchment which the facility serves.

- The locations and strengths of competitive retail facilities.

iii. The sales potential for the retail component of the proposed Epiq Lennox, which is planned to be anchored by a supermarket of 3,400 sq.m and around 1,470 sq.m retail specialty floorspace, is now considered taking into account these factors.

4.2 Supermarket Sales Potential

i. The proposed Epiq Lennox will include a supermarket of 3,400 sq.m. Supermarkets generate sales primarily from the food and groceries market, as discussed and measured in Section 2 of this report.

ii. Table 4.1 details the potential sales for the proposed Epiq Lennox supermarket. The calculations in this table go through a series of steps, commencing with the available expenditure that is of relevance to supermarkets, namely food and grocery spending; assessing the share of expenditure which all supermarkets are likely to achieve; and then concluding with the likely sales which trade area supermarkets can expect to generate.

iii. The assessment detailed in Table 4.1 is based on the experience of many comparable analyses in locations throughout both New South Wales and Australia. Projected sales are detailed for the proposed Epiq Lennox supermarket of 3,400 sq.m. Supermarkets are defined as grocery and dry goods stores of at least 500 sq.m. Smaller foodstores (i.e. less than 500 sq.m), such as the IGA at Lennox Head, are excluded from this analysis.

iv. The analysis in Table 4.1 is as follows:

- For the main trade area defined earlier in this report, the total food and grocery spending market is projected at $55.7 million for the year to June 2016. The food and grocery spending market for the main trade area population is projected to grow to $60.2 million (in constant 2016 dollar terms) by 2019 and to $79.5 million by 2026 (in constant 2016 dollars).

- Typically in Australia, approximately 75% of food and grocery expenditure is directed to supermarkets and major foodstores (i.e. grocery stores greater than 500 sq.m), not including small corner stores, convenience stores and milk bars. This ratio does vary from location to location depending on the provision of such facilities and the socio-economic profile of the trade area population. In the defined Epiq Lennox main trade area, the proportion of spending to supermarkets is estimated at 70%.

- The next step in the analysis is to estimate the likely proportion of food and grocery expenditure which can be retained by main trade area supermarkets; specifically the proportion of expenditure that can be retained by the existing and proposed supermarket facilities within the main trade area as compared with the spending directed to supermarkets immediately beyond the main trade area.

- Given that there are currently no existing supermarkets provided in the main trade area, all food and grocery spending is being directed to supermarkets beyond the main trade area (i.e. within the Ballina CBA and Byron Bay). After the development of the proposed supermarket at Epiq Lennox, the level of retained food and grocery spending is projected to increase to 59.7% in 2018/19 (66.5% in the primary sector and 25% in the secondary sector).

- This means that 40.3% of main trade area resident supermarket spending, equating to $17.0 million, will still escape the main trade area to supermarkets within the Ballina CBA and Byron Bay.

- Additionally, an estimated 10% of total supermarket sales are likely to be attracted from beyond the defined main trade area.

v. The steps detailed above generate the annual estimates of food and grocery spending available to the proposed supermarket at Epiq Lennox. On this basis, after opening of the Epiq Lennox development, the food and grocery spending retained by the proposed supermarket is $28.0 million in 2018/19. These projected figures do not include retail inflation, thus the increase shown over this time period reflects real growth.

vi. Finally, in order to estimate the total likely sales volume available to the proposed supermarket at Epiq Lennox, additional components of sales other than food and grocery are taken into account. The major component of sales other than food and grocery sales that supermarkets typically include are general merchandise and non-food items. Non-food items typically generate around 6% of total store sales for modern supermarket chains.

vii. On this basis, the proposed supermarket at Epiq Lennox is projected to achieve sales of $29.7 million or $8,747 per sq.m in 2018/19, with sales increasing to $40.0 million by 2025/26.

viii. Taking the above into account, there is clearly demand for a new supermarket of 3,400 sq.m at the proposed Epiq Lennox. The projected sales level of $8,747 per sq.m would be in line with the typical sales level achieved by full-line supermarkets in similar locations within non-metropolitan New South Wales markets.

ix. The inclusion of a supermarket of 3,400 sq.m at the site would provide a highly convenient food and grocery offer for current and future residents of the Lennox Head area, with residents currently forced to drive into the Ballina for their weekly food and grocery shopping needs (a 20 km round trip). Main trade area residents would still continue to use the Ballina CBA for their higher order shopping needs as well as some supermarket shopping, depending on their brand preferences (all of the national supermarket chains are represented within the Ballina CBA).

TABLE 4.1 – SUPERMARKET SALES POTENTIAL, 2016 – 2026

	Financial Year			
	2016	2019	2021	2026
Total Food & Grocery (F&G) Spending*				
Primary Sector	46.3	50.4	55.3	68.5
Secondary Sector	9.4	9.8	10.1	11.0
Main Trade Area	**55.7**	**60.2**	**65.4**	**79.5**
F&G Spending to Supermarkets				
Primary Sector (@ 0% incr. to 70% in 17/18)	0.0	35.3	38.7	48.0
Secondary Sector (@ 0% incr. to 70% in 17/18)	0.0	6.9	7.1	7.7
Main Trade Area (@ 0% incr. to 70% in 17/18)	**0.0**	**42.1**	**45.8**	**55.6**
F&G Spending Retained by TA Smkts				
Primary Sector (@ 66.5% in 18/19)	0.0	23.4	25.7	31.9
Secondary Sector (@25% in 18/19	0.0	1.7	1.8	1.9
Main Trade Area (@ 59.7% in 18/19)	**0.0**	**25.2**	**27.5**	**33.8**
F&G Sales from Beyond TA (@10% in 18/19)	0.0	2.8	3.1	3.8
Total F&G Sales for TA Smkts	**0.0**	**28.0**	**30.6**	**37.6**
General Merchandise Sales (@6% in 2018/19)	0.0	1.8	2.0	2.4
Total TA Smkt Sales	**0.0**	**29.7**	**32.5**	**40.0**
Smkt Floorspace in TA (sq.m)**	0	3,400	3,400	3,400
Average Trading Level ($/sq.m)	n.a.	8,747	9,560	11,753

**Constant 2015/16 dollars & Including GST*
*** There are no existing supermarkets (of >500 sq.m) within the MTA currently*

LOCATIQN

4.3 Total Centre Sales Potential

i. The proposed Epiq Lennox will be anchored by a supermarket of 3,400 sq.m, in addition to 1,470 sq.m of retail specialty floorspace.

ii. Table 4.2 provides a summary of the projected sales by component for the proposed Epiq Lennox development in 2018/19. All sales forecasts include GST and are presented in constant 2016 dollar terms (i.e. excluding retail inflation).

iii. Projected sales for the proposed Epiq Lennox development in 2018/19 are $36.3 million (in constant 2016 dollar terms), with the proposed supermarket achieving sales of $29.7 million.

iv. Based on an indicative composition and inspection of existing supermarket based shopping centre retail facilities within the area, the proposed retail specialty floorspace at the proposed Epiq Lennox is projected to achieve sales of around $5,058 per sq.m. The planned 1,470 sq.m of retail specialty floorspace is projected to achieve sales of $7.4 million (i.e. 1,470 sq.m of retail specialty shop floorspace multiplied by $5,058 per sq.m).

v. The retail specialty offer planned at the proposed Epiq Lennox will complement the supermarket in serving the convenience shopping needs of local residents.

vi. The centre would achieve a 23.1% market share of the main trade area spending market on opening in 2018/19, meaning 76.9% of main trade area spending would continue to be spent beyond the main trade area.

TABLE 4.2 – PROJECTED CENTRE SALES, 2018/19

Tenant/ Category	GLA (sq.m)	Forecast Sales* ($'000)	 ($/sq.m)
<u>Majors</u>			
Supermarket	3,400	29,738	8,747
Total Retail Spec.	<u>1,470</u>	<u>7,435</u>	<u>5,058</u>
Total Retail	**4,870**	**37,173**	**7,633**
Non-retail/Commercial	630		
Total Centre	**5,500**		

**Constant 2015/16 dollars & Including GST*
*** Including GST*

LOCATIQN

4.4 Sales Impacts

i. This sub-section of the report outlines the likely sales impacts on competitive retail facilities as a result of the development of the retail component of the proposed Epiq Lennox.

ii. It is important to note that impacts outlined in this report are indicative as it is difficult to precisely project the sales impact of the opening of a new store/centre on existing retail facilities. A number of factors can influence the impact on individual centres/retailers, including but not limited to:

- Refurbishment/improvements to existing centres.
- Expansions to existing centres.
- Loyalty programs of existing retailers.
- The existing centre mix and how it competes with the proposed development.

iii. For all these reasons and other similar factors, sales impacts outlined in this report should be used as a broad indication.

iv. Table 4.3 outlines projected sales impacts from the retail component of the proposed Epiq Lennox. The steps involved in assessing the sales and impacts on competitive centres are presented as follows:

- **Step 1**: Estimate sales levels for existing centres in the 2016 financial year.
- **Step 2**: Project sales for existing and proposed centres in the 2018/19, the first full year of trading for the proposed Epiq Lennox. These projections allow for retail market growth and new retailers/centres. All sales projections in 2019 are presented in constant 2016 dollars (i.e. excluding inflation).
- **Step 3**: Outline the change in sales at each centre in 2019 as a result of the development of the proposed Epiq Lennox. Again, all sales are expressed in constant 2016 dollars.

- **Step 4**: Show the impact on sales in 2019, both in dollar terms and percentage of sales.

v. The proposed Epiq Lennox is projected to record sales of $37.2 million in 2018/19. The key information is outlined in Table 4.3 and is summarised as follows:

<u>Impacts on Centres Within the Main Trade Area</u>

- The Lennox Head retail strip is anticipated to be impacted by around $2.6 million, or 10%. Key points to note in relation to the impact of the proposed development on the Lennox Head retail strip are:
  - The Lennox Head retail strip does not fulfil the weekly food and grocery shop of surrounding residents, given that no full-line supermarket is provided.
  - As detailed in Table 3.2, the Lennox Head retail strip predominantly comprises food catering and non-retail facilities. In total, there are around 63 tenants in the strip, of which the vast majority will not be impacted. The subject development in comparison will only include 12 specialty shops.
  - There are 12 tenants in the Lennox Head retail precinct which are identified as having potential impacts, including the IGA, butcher, deli, convenience store, pharmacy, Cellarbrations, Bottle Mart, the newsagency, fruit shop and bakery.
  - The pharmacy is the only current pharmacy within the defined trade area serving a population level of 8,000 – 9,000 persons. Typically one pharmacy for every 3,800 residents in Australia, meaning at least two pharmacies could be supported within the Epiq Lennox catchment currently, with more supportable over time.
  - Typically one liquor outlet is provided for every 3,000 residents. As such, at least three outlets are supportable within the Epiq Lennox

catchment by 2018/19, with only two outlets provided (Bottle Mart adjoining the Lennox Hotel and Cellarbrations in the Lennox Head retail strip), indicating that a third outlet is supportable within the catchment.

- Of the remaining tenants, impacts will be below 10%, including for the apparel, takeaway food stores, beauty salons, cafes and non-retail stores. The impacts on the cafes/takeaway stores will ultimately depend on which tenants locate at the subject site.
- These facilities are generally provided to serve the immediate population and the large tourist market due to the beach side location along Pacific Parade and Ballina Street. As such, the projected impact of $2.6 million will not affect the long term viability of the strip.

Impacts on Centres Beyond the Main Trade Area

- The largest impact in dollar terms is projected on the Kerr Street precinct in the Ballina urban area, with the proposed Epiq Lennox projected to impact the precinct by around $22.3 million or 9.4%. A large proportion of this impact is likely to come off three major full-line supermarkets, namely; Woolworths at Ballina Fair, Coles at Bayside Shopping Centre and Ritchie's Supa IGA at Ballina Central. These supermarkets are likely to be trading well and the projected impact will not affect the long term viability of these stores, with these impacts at less than 10% and within the normal competitive range. Further, retailers within the Kerr Street precinct will benefit from growth across the broader Ballina region, outside of the Epiq Lennox main trade area.

- A smaller impact of around $5.0 million or 6.5% is projected on the River Street precinct. Again, the majority of this impact is likely to come off the Woolworths store, with this supermarket also likely to be trading well and, as such, the long term viability will not be impacted.

- The total impact on the Ballina CBA is anticipated to be in the order of $27.3 million, or 5.6%. This level of impact would not threaten the viability of retailers within the CBA.

- Suffolk Park, which is anchored by a SPAR of 700 sq.m, would be minimally impacted by the proposed development due to its small offer.

- All other sales impacts are less than 5% on other facilities in the Ballina Urban Area.

- Byron Bay, situated 20 km to the north, is projected to be impacted by approximately $2.3 million (or 1.3%) as a result of the proposed development, the majority of which will fall on the Woolworths supermarket. It is important to note, as was discussed in Section 3.4, that the Woolworths supermarket will relocate to the proposed Mercato development, which is currently under construction. The projected sales impacts from the Mercato impact are likely to fall on the other retail facilities within the Byron Bay urban area, with minimal impact on Lennox Head or the Ballina CBA.

vi. It is important to note that each of these impacts will be one off impacts resulting from the opening of the proposed Epiq Lennox. Each of these centres/retailers are likely to benefit in the future from population growth within the Lennox Head trade area but also the broader Ballina CBA. Sales for most centres in 2019 will still be above 2016 levels after the proposed development, except the Kerr Street Precinct and the Lennox Head retail strip.

vii. Overall, the proposed Epiq Lennox development will not impact on the viability or continued operation of any retail facility in the Ballina CBA. The proposed development will provide a convenience shopping destination for residents of the growing Lennox Head area, with main trade area residents still travelling into the Ballina for their higher order retail needs.

viii. A concept plan has already been approved for a 4,000 sq.m retail centre development at the site. The subject development of 5,500 sq.m is only slightly larger than the concept approval.

TABLE 4.3 – EPIQ LENNOX PROJECTED CENTRE IMPACTS, 2018/19

	Unit	**Estimated 2016**	**Projected 2019** Pre Dev.	Post Dev.	**Impact 2019** $M	%
Epiq Shopping Centre Site	*$M*	*n.a.*	*n.a.*	*37.2*	*n.a.*	*n.a.*
Sub-regional Shopping Centres						
Ballina CBA						
• Kerr St Precinct	$M	219.9	235.8	213.5	-22.3	-9.4%
• River St Precinct	$M	72.0	77.2	72.2	-5.0	-6.5%
Other Ballina Urban Area						
• East Ballina SC	$M	10.3	11.1	10.5	-0.6	-5.0%
• Ballina West SC	$M	12.8	13.7	13.5	-0.2	-1.5%
• Other	$M	143.8	154.1	153.4	-0.8	-0.5%
Supermarket Based Centres						
Lennox Head retail strip	$M	23.5	25.6	23.0	-2.6	-10.0%
Suffolk Park	$M	9.0	9.8	9.5	-0.2	-2.5%
Byron Bay	$M	169.3	184.2	181.9	-2.3	-1.3%

**Constant 2015/16 dollars & Including GST*

4.5 Employment and Consumer Impacts

i. The development of the proposed Epiq Lennox will result in a range of important economic benefits which will be of direct benefit to the local community. These key positive employment and consumer impacts will include the following:

- A convenience shopping destination for local residents that will include a supermarket and a complementary provision of specialty floorspace in a centralised location. The development is projected to employ around 258 persons as summarised in Table 4.4. Taking a conservative view and allowing for an estimated 10% of the total increase to be as a result of the reduced employment at existing retail facilities, the net additional jobs are estimated at 232.

- The additional 232 permanent retail employees would earn an average annual wage of around $28,800 as sourced from the ABS. This represents an additional $6.7 million in salary and wages for the local economy, directly as a result of the proposed development.

- Further jobs would be created from the supplier induced multiplier effects as a result of the retail jobs for the on-going running of the retail component of the proposed Epiq Lennox. Jobs created are full-time equivalent jobs, which may include both full-time and part-time positions. In total, some 221 jobs are projected to be created in the broader community, based on ABS Input/Output Multipliers (refer Table 4.5).

- The proposed Epiq Lennox will create a substantial number of additional jobs, both for the construction and related industries during the construction phase of the development and for the economy generally once the development is completed.

- The estimated total capital costs for the construction of the development are approximately $15 million. By using the appropriate ABS Input/Output Multipliers that were last produced in 1996/97 and a deflated estimated total capital cost of construction of $15 million (i.e. in 1996/97 dollars), it is estimated that the construction period of the proposed Epiq Lennox would create some 105 jobs (refer Table 4.6).

- The additional construction jobs (105), would result in a further 168 jobs in the broader community based on ABS Input/Output Multipliers (refer Table 4.6).

- In total some 273 jobs are likely to be created both directly and indirectly as a result of the construction of the proposed Epiq Lennox.

TABLE 4.4 – ESTIMATED PERMANENT EMPLOYMENT

Type of Use	Estimated Employment Per '000 sq.m	Epiq Shopping Centre Change in GLA (sq.m)	Epiq Shopping Centre Employment (persons)
Supermarket	50	3,400	170
Retail Specialty Floorspace	60	1,470	88
Total Centre[1]		**4,870**	**258**
Net Increase[2]			**232**

1. Excludes non-retail components.
2. Net increase includes an allowance for reduced employment levels at impacted centres estimated at 10% of the total increase

TABLE 4.5 – ESTIMATED EMPLOYMENT IMPACT

Original Stimulus	Direct Employment	Supplier Employment *Multiplier Effects*	**Total**
Centre Employment[1]	232	221	453

** Employment totals include both full-time and part-time work*
1. Indicates the estimated number of net additional ongoing jobs as a result of the proposed development
Source : Australian National Accounts: Input-Output Tables 1996-97

TABLE 4.6 – ESTIMATED CONSTRUCTION EMPLOYMENT IMPACT

Original Stimulus	Estimated Capital Costs ($M)[1]	Direct Employment	Supplier Employment *Multiplier Effects*	**Total**	
Construction of Project	15.0	105	168	273	Job Years[2]

** Employment totals include both full-time and part-time work*
1. Adjusted by inflation and productivity to 1996/97 Dollars
2. Indicates the estimated number of jobs over the life of the construction project plus ongoing multiplier effects, for the equivalent of one year
Source : Australian National Accounts: Input-Output Tables 1996-97

5 NEEDS ANALYSIS

The final section of this report summarises the key conclusions of the impact analysis for the proposed Epiq Lennox.

'Need' or 'Community Need' in a planning sense is a relative concept that relates to the overall wellbeing of a community. A use is needed, for example, if it would, on balance, improve the services and facilities available in a locality. The reasonable demands and expectations of a community are important, therefore, in assessing need.

A number of important factors that relate to need, particularly economic need, include:

- Population and supermarket supply and demand.
- Consumer trends.
- Impacts on existing retail facilities.
- Location.
- Net community benefits.

5.1 Population and Supermarket Supply and Demand

i. There are currently 9,690 persons residing in the Epiq Lennox main trade area, including 8,090 persons within the primary sector. A population of this size is typically served by a convenience focussed retail centre, anchored by a supermarket.

ii. This demand for a convenience shopping destination will increase in the future, with the main trade area population projected to increase to 12,690 by 2026.

iii. Typically, a population of around 8,000 – 9,000 persons is required to support a full-line supermarket. This indicates that one full-line supermarket is currently supportable within the main trade area, with none currently provided to support a population of nearly 10,000. The tourist market would generate additional demand for such facilities.

iv. The inclusion of a supermarket of 3,400 sq.m in the proposed Epiq Lennox will provide a convenient supermarket shopping destination for residents of the growing Epiq residential estate, with main trade area residents currently travelling into the Ballina CBA (a 20 km round trip) in order to undertake their weekly food and grocery shop.

5.2 Tavern/Motel

i. Map 5.1 highlights the current provision of taverns/hotels throughout the surrounding region based on a desktop assessment. The locations of these outlets are based on information sourced from the Liquor Licence List obtained from the New South Wales Office of Liquor, Gaming and Racing.

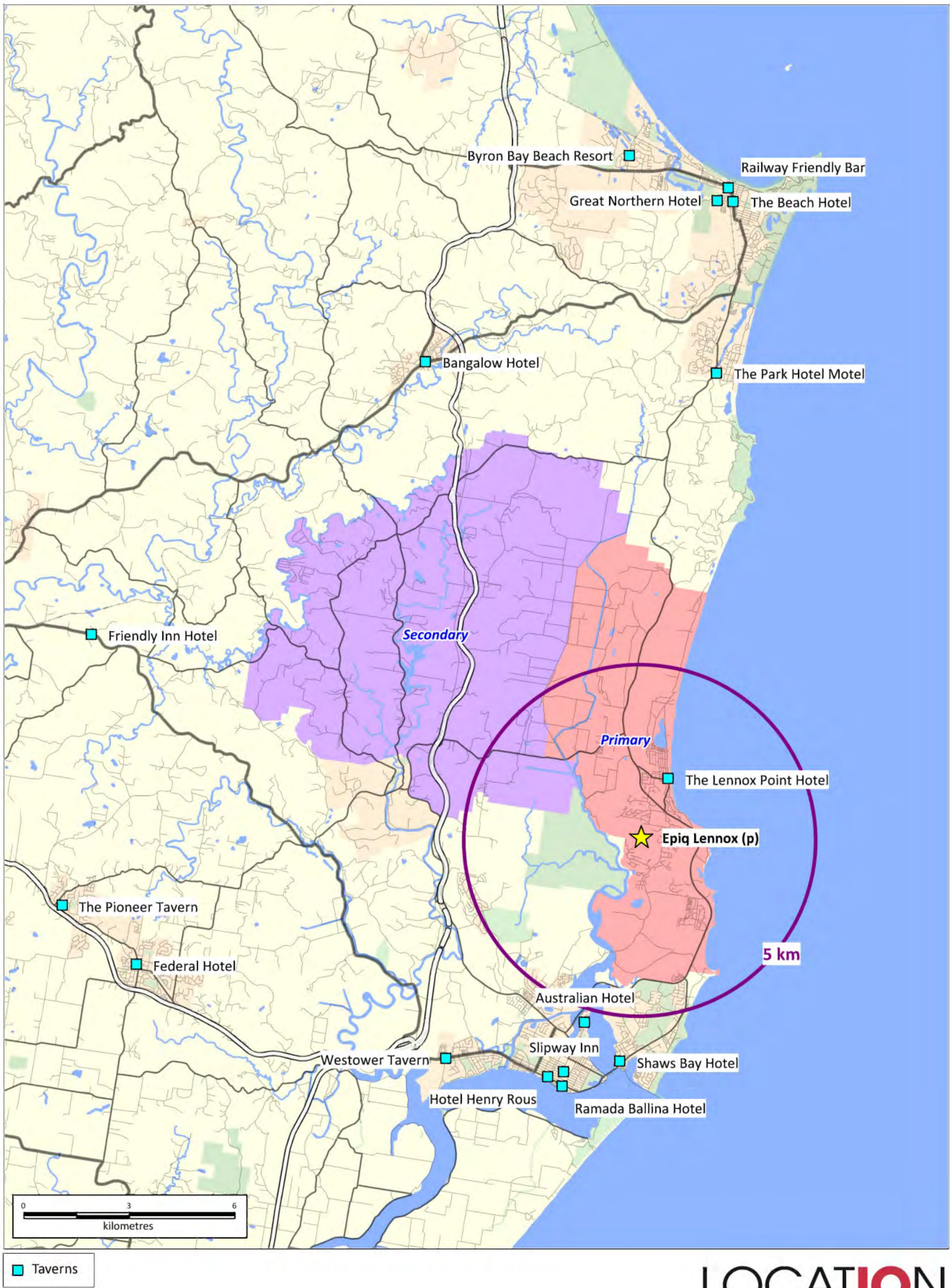
ii. A number of taverns/hotels are provided throughout the region, with the majority provided in and around the Ballina Urban Area and Byron Bay. The closest tavern to the proposed Epiq Lennox site is The Lennox Hotel, situated 2 km to the north-west along Pacific Parade.

iii. A tavern/hotel typically requires a catchment population of around 6,000 – 7,000 in order to be successful. This does not take into account tourism numbers, which would increase demand for hotel. As stated previously, the Ballina Shire Council recorded 859,000 international and domestic night visitors in 2014/15. Lennox Head itself would attract a proportion of this business.

iv. This suggests that two taverns could be supportable within the Epiq Lennox main trade area. The Lennox Hotel is the only hotel currently provided, indicating scope for a further hotel site within the main trade area.

v. Taverns typically vary in size from around 300 sq.m up to 2,000 sq.m. In addition, significant car parking is required given that these facilities act as destinations for the surrounding population.

MAP 5.1 – EXISTING TAVERNS



Map produced by Location IQ using MapInfo Pro Australia Pty Ltd and related data sets.

5.3 Population and Supermarket Supply and Demand

i. There is a strong need for a wider choice of convenient shopping facilities within close proximity to the homes of main trade area residents, with consumers visiting supermarkets two to three times a week on average.

ii. Over the past decade, there has been an increasing trend towards convenience shopping. This trend has been largely driven by broader social trends that have resulted in consumers becoming more time poor. These social trends include:

- Longer working hours.
- An increase in the number of women in the labour force.

iii. Time pressures are ranked at the top of the list of issues that consumers face when undertaking their regular food and grocery shopping.

iv. As a result of the increasing time pressures that consumers face when it comes to food and grocery shopping, there is growing demand for convenience shopping facilities to meet the needs of local residents.

v. The main trade area population would demand a convenient supermarket destination, particularly given the large number of families many of whom are likely to have two working parents residing within the area.

5.4 Impacts on Existing Retailers

i. The analysis of impacts provided in the previous section of this report shows the projected impacts on other retailers throughout the area from the development of the Epiq Lennox would not threaten the viability or continued operation of any centres. The impacts are all less than or equal to 10%, within the normal competitive range.

ii. Each of these impacts will be one off impacts resulting from the opening of the proposed Epiq Lennox, with the centres/retailers are likely to benefit in the future from population growth within the Ballina region over time.

iii. The impacts for the proposed supermarket based development are only likely to be experienced by other facilities in the short-term, and these centres stand to benefit from market growth after these impacts have been absorbed.

5.5 Location

i. The subject site has been designated for a retail centre of 4,000 sq.m. The subject development is only 1,500 sq.m larger, reflecting the need for a full-line supermarket.

ii. Given that there are currently no existing full-line supermarket facilities provided within the main trade area, residents currently have to travel to the Ballina CBA, over 10 km to the south-west, in order to undertake a supermarket shop. The provision of a full-line supermarket based centre within the Epiq residential estate will reduce the number of trips made by residents of the main trade area for this type of shop.

iii. Given that Ballina CBA is the focus for higher order retail within the region, residents of the main trade area will still visit these retail facilities regularly for non-food expenditure. The Ballina CBA also serves the tourist market.

iv. As such, retail facilities at the proposed Epiq Lennox would be well positioned to serve convenience needs of the growing Epiq residential estate and immediately surrounding trade area.

5.6 Net Community Benefits

i. It is the conclusion of this report that a substantial net community benefit will result from the development of the proposed Epiq Lennox. Offsetting the trading impacts on some existing retailers, there are very substantial positive impacts including the following:

   - The creation of a convenience shopping destination for local residents that will include a full-line supermarket and a complementary provision of specialty floorspace in a centralised location.

- The reduction in travel time and savings in petrol consumption. Smaller shopping is usually undertaken 2 – 3 times a week, meaning the subject development will result in substantial time and petrol savings.

- The creation of additional employment which will result from the project, both during the construction period, and more importantly, on an ongoing basis once the development is complete and operational. In total, some 273 jobs are likely to be provided both directly and indirectly as a result of the proposed Epiq Lennox. This includes a number of youth employment opportunities with retail developments generally employing a large number of younger staff.

ii. It is concluded that the combination of the substantial positive economic impacts serve to more than offset the trading impacts that could be anticipated for a small number of the existing retail stores, particularly supermarkets, in the region. Further, the impacts would not threaten the viability of any of these retailers or centres.

Location IQ
02 8248 0100
Level 6, 56 Pitt Street
Sydney, NSW 2000
www.locationiq.com.au

Newton Denny Chapelle

SURVEYORS PLANNERS ENGINEERS

ATTACHMENT 4

Engineering Services Report

Newton Denny Chapelle

• JOHN NEWTON B. Surv. M.I.S. Aust. • TONY DENNY B. Surv. (Hons), M.I.S. Aust. • DAMIAN CHAPELLE BTP, CPP

Engineering Services Report

Modification to Concept & Project Plan Approval for
Mixed Residential / Commercial Development
Epiq Supermarket Precinct
Concept Approval 07_0026
Stage 2 and Stage 6

Upon:
Lot 54 DP 1222919

At Epiq Estate
Lennox Head

ON BEHALF OF:

Clarence Property Corporation Pty Ltd

Our Reference: 2014/351

Date: November 2016

Newton Denny Chapelle
CONSULTING SURVEYORS & PLANNERS

• P O Box 1138, Lismore, N.S.W. 2480 • Phone (02) 6622 1011 • Fax (02) 6622 4088 DX7779 Lismore
• Email office@newtondennychapelle.com.au • Also at: Cassino Court, 100 Barker St., Casino N.S.W. 2470 • Phone/Fax (02) 6662 5000

Revision History

REVISION #	DATE	DESCRIPTION	ORIGINATOR	APPROVED
A	17/11/2016	Issued for Use	CP	DC

ABN: 18 094 689 845

1/31 Carrington Street,
PO Box 1138, Lismore
NSW 2480

Telephone: (02) 6622 1011
Fax: (02) 6622 4088

office@newtondennychapelle.com.au
http://www.newtondennychapelle.com.au

Newton Denny Chapelle
CONSULTING SURVEYORS & PLANNERS

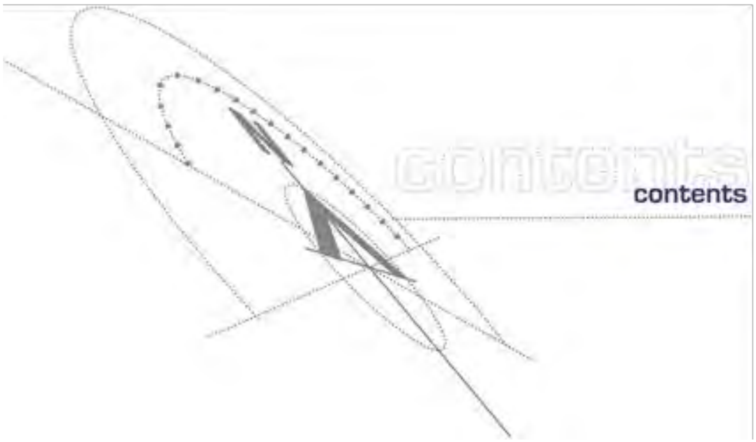


Table of Contents

Appendices	
Appendix A	**Architectural Lennox Head Retail Centre Concept Plan** - CCN Architects Plan P1624-SK-02-E

Note: Please also refer to the Concept Plans attached with the modification

1 Introduction

Newton Denny Chapelle has been engaged by Clarence Property Corporation Ltd to prepare an Engineering Services Report to accompany a modification to the 07_0026 Concept Approval. The development has previously been known as Pacific Pines and is now referred to as Epiq Lennox. Epiq is located at Lot 54 DP1222919, Lennox Head, NSW.

The total development site is approximately 80.5ha in size with this modification relating to the area surrounding the proposed neighbourhood centre also referred to as the supermarket precinct. The supermarket precinct is approximately 6.32ha and is located on the western side of the greater development site (refer Figure 1-1).

Figure 1-1 – Epiq Estate Development Site

The supermarket precinct is a mixed use precinct comprising of both commercial and residential allotments.

This report covers the engineering requirements (traffic, earthworks, stormwater and servicing) for the proposed modification. Several elements of the engineering design have already been completed as part of previous approvals (eg stormwater, traffic) issued by Ballina Shire Council for the estate. This report is intended to append the original designs where necessary and also demonstrate that the proposed engineering modifications meet the relevant consent conditions.

2 Report Scope

This report focuses on providing sufficient concept engineering design details to facilitate a thorough understanding of the proposed works. The works covered by this report include new infrastructure for traffic, earthworks, stormwater (quality and attenuation) and servicing provisions for the proposed development.

It is recognised that a subsequent submission of detailed engineering design plans and specifications are required to be made before final approval of the development by Ballina Shire Council. At this stage any minor amendments of the design elements proposed will be addressed to meet any of the concerns raised through the approvals process.

2.1 Reference Documents

The following documents have been used in the preparation of this report:

- Gilbert + Sutherland, *Revised Stormwater Assessment & Management Plan, Pacific Pines Estate, Montwood Drive & Hutley Drive, Lennox Head, New South Wales, July 2014*
- Ballina Shire Council, *Ballina Development Control Plan 2012 - Chapter 3 – Urban Development*
- Cardno Eppell Olsen, *Pacific Pines Estate, Traffic and Transport Statement, November 2011*
- Ballina Shire Council – *Stormwater Management Standards for Development – 2015*
- Ardill Payne and Partners, P*roject Application Stage 1, Engineering Report – Pacific Pines Subdivision*
- Water Services Association of Australia, *Sewerage Code of Australia, WSA 02-2002*
- Geolink, *Water Reticulation Hydraulic Analysis – Addendum Report*
- Geolink, *Investigation of Gravity Sewer Augmentation On Hutley Drive*
- Cardno Eppell Olsen, Pacific Pines Estate, Traffic & Transport Statement, November 2011
- Northern Rivers Local Government – *Development Design Manual*
- Ballina Shire Council, *Development Control Plan - Chapter 13 – Stormwater Management 2006*
- SMEC Urban, *Pacific Pines Estate - Water Reticulation Hydraulic Analysis, March 2012*
- SMEC Urban, *Pacific Pines Estate – Dual Reticulation Analysis, Letter Dated 30 March 2012*

3 Site Description

3.1 Existing Site Conditions

The site primarily consists of cleared land previously used for agricultural activities. The greater site area is currently subject to construction works associated with construction of previous stages of the Epiq development. The previous works undertaken on the site include:

- Stage 1A – 51 Residential allotments on the southern side of the site
- Stage 1B – The extension of Hutley Drive and construction of the sports fields

The supermarket precinct generally grades north east to south west with an average slope of approximately 7.5%. The areas surrounding the precinct can be summarised as:

- Northern Boundary – Is formed by Super Lot 8 and Stage 3. Construction of this area is expected to begin in the short term with the construction approvals currently before Ballina Shire Council.
- Eastern Boundary – Is formed by Stoneyhurst Drive and the future stages of Epiq Estate

- Southern Boundary – Is formed by Main Street constructed as part of Stage 1B
- Western Boundary – Is formed by Hutley Drive constructed as part of Stage 1B

3.2 Description of Previously Approved Development

The supermarket precinct has previously been approved as part of Concept Approval 07_0026. Refer to Figure 3-1.

Figure 3-1- Excerpt from Geolink Illustration C8 Lot Typologies

The approved site consists of 89 dwelling allotments and a 16,410m² commercial area. The previously approved lot configuration is summarised in Table 3-1.

Table 3-1 - Summary of Lot Typologies

Type of Development	Quantity
Rear Lane Lots	79
Small Affordable Lots (450-600m²)	5
Duplex Lots (900m²)	2
Traditional Lots (600-800m²)	2
Traditional Lots (>800m²)	1
Neighbour Centre (Commercial)	16,410m²

3.3 Description of Proposed Modification

The proposed modification includes increasing the commercial area by 4,650m² to approximately 21,060m². The number of equivalent dwellings is expected to decrease by 16 to 73 and a 3,000m² Childcare centre has been repositioned with the neighbourhood centre (refer to Figure 3-2).

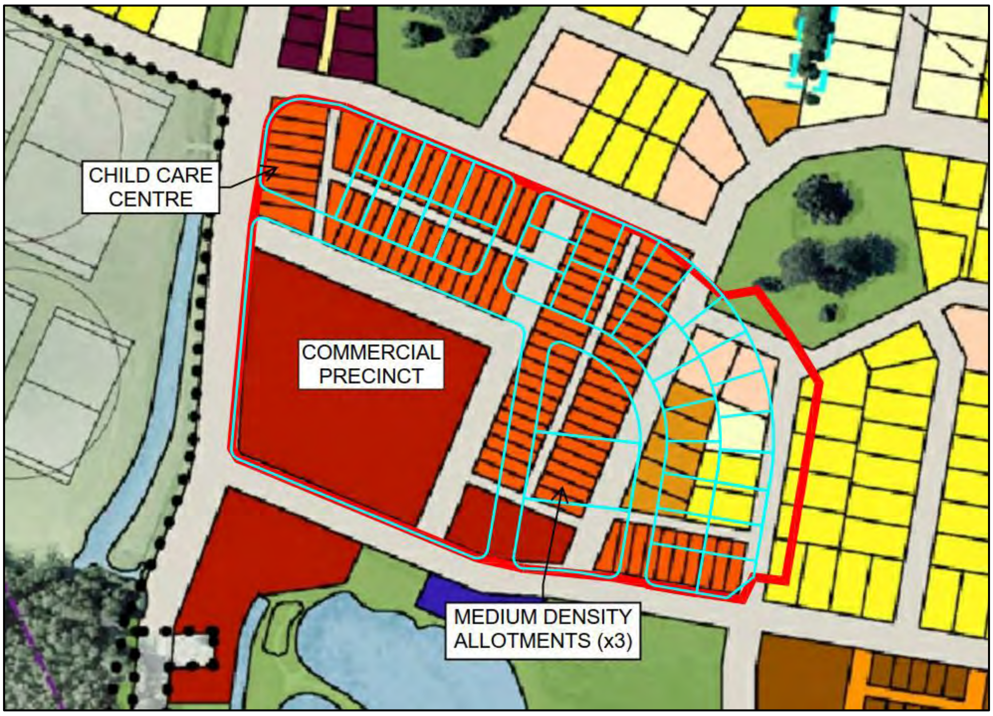


Figure 3-2 Proposed Modification Overlaid on Geolink Illustration C8 Lot Typologies

The proposed modified layout is summarised in Table 3-2.

Table 3-2 - Summary of Modified Lot Typologies

Type of Development	Quantity
Residential Allotments	35
Medium Density Allotments*	3 (6,906m²)
Childcare Centre	1 (3,000m²)
Neighbour Centre (Commercial)	21,060m²

*Based on the maximum density permitted in the zoning of 1 dwelling per 250m² there are 27 equivalent dwellings

4 Bulk Earthworks and Geotechnical Considerations

The construction of the commercial site is expected to involve significant bulk earthwork activities. The site will be levelled to provide a base pad between RL2m to RL5m with the works requiring a maximum cut of approximately 5.7m. Retaining structures to a maximum height of 5.7m will be required along the northern and eastern boundaries.

As per consent condition *C2 – Acid Sulfate Management Plan* an acid sulfate management plan will be prepared during detailed design for all works below 10m AHD.

5 Road Layout and Site Access

Modification to the approved road layout throughout the supermarket precinct is proposed (refer Figure 5-1). Access will primarily be from Hutley Drive and Main Street. The works will require the construction of a portion of Stoneyhurst Drive along the eastern boundary of the site with the roads bounding the remainder of the precinct being constructed as part of previous works.

Figure 5-1 - Modified Site Road Layout

5.1 Road Hierarchy and Pedestrian Access

The road hierarchy for the supermarket precinct and future stages has been updated to reflect the characteristics outlined in the *Northern Rivers Development Design and Construction Manual* and as specified in condition B5 – Road Hierarchy of the current consent. The *Illustration C6* previously approved has also been updated for the supermarket precinct (and future stages) to reflect this condition and to remove confusion surrounding the hierarchy of the road network. A 1.35m wide foot path will also be provided on all local streets where possible in accordance with Ballina Shire Councils current footpath standard.

6 Revised Traffic Assessment

6.1 Background Information

Analysis of the Road network surrounding development has been previously undertaken in 2011[1] by Cardno and further revised in 2014[2] based on additional information supplied by Ballina Shire Council. The existing network capacity and current traffic volumes for the surrounding road network are summarised in Figure 6-1:

Table 2 2014 Surveyed Volumes and Available Capacity

Road Name	Environmental Capacity (Vehicles per Day)	2014 Surveyed Volumes (Vehicles per Day)	Spare Capacity (Vehicles per Day)
Montwood Drive	3,500	1,712	1,788
Henderson Lane	3,500	1,634	1,866

Figure 6-1 - Surveyed Volumes and Available Capacity (Cardno 2014)

[1] Lennox Head - Pacific Pines Estate - Traffic and Transportation Statement prepared by Cardno Eppell Olsen (November 2011)

[2] Letter response to Council RFI dated 10th July 2014 prepared by Cardno (Qld) Pty Ltd

6.1.1 Previous Traffic Assessments

The expected traffic volumes for the development have been previously assessed by Cardno in 2011 and revised in 2014. This assessment was based on the expected development yield outlined in Figure 6-2:

Table 3 Proposed Development Yield

Stage	Residential (Dwellings)	Senior, Assisted and Independent Living (Dwellings)	Commercial and Retail (GFA)
1A	54		
1B	92		4,800
2	154		
3	37	145	
4	77		
5	57		
6	42		
Total	**513**	**145**	**4,800**

Figure 6-2 - Development Yield (Cardno 2014)

Based on the expected development configuration, the daily traffic generation rates and Cardno's self-contained assumptions, the previous assessment determined the number of vehicles per day (vpd) the proposed development would generate. The previous Cardno external traffic figures are summarised in Table 6-1 below:

Table 6-1 - Summary of External Traffic Generation (Cardno 2014)

Cardno Stage	Total External Traffic Generation (vpd)
1A	306
1B	1683
2	924
3	393

4	462
5	342
6	252
Total:	**4362**

6.2 Exceedance of Network Capacity and Council Approval

Cardno previously highlighted that the whole development cannot be serviced by the existing road network alone, with the extension of Hutley Drive required to service the fully developed site. In the Cardno addendum letter dated 10th July 2014 it is highlighted that Cardno Stage 6 (refer Figure 6-3Table 6-1) cannot be released as the capacity of the existing road network is exceeded (ie Henderson Lane and Montwood Drive). To service the fully developed site requires the northern connection of Hutley Drive to be completed.

Figure 2 Network Option 2

Figure 6-3 - Cardno Staging Plan (Network Option 2)

Upon completion of the first 5 stages Cardno estimated the existing network capacity along Henderson Lane and Montwood Drive would be exceeded by 456 vpd (refer Figure 6-4).

Table 5 Network Option 2 Capacity Analysis

	Resultant External Traffic Generation		
Stage	**Montwood Drive**	**Henderson Lane**	**Total**
Capacity	*3,500*	*3,500*	*7,000*
1A	230	77	306
1B	697	986	1,683
2	624	300	924
3	265	128	393
4	312	150	462
5	231	111	342
Existing	1,712	1,634	3,346
TOTAL	**4,070**	**3,386**	**7,456**

Figure 6-4 – Cardno External Traffic Generation

6.3 Previous Exceedance of the Local Traffic Network

As part of previous project approvals the Cardno traffic study has been exhibited with the temporary local road capacity exceedance noted. The exceedance outlined in the report of 456 vpd has been put before the Ballina Shire Council Ordinary Council meeting on the 23rd October 2014. The following documents have been endorsed by Council:

- Geolink Cover Letter dated 17th October 2013
- Lennox Head - Pacific Pines Estate - Traffic and Transportation Statement prepared by Cardno Eppell Olsen (November 2011)
- Letter response to Council RFI dated 10th July 2014 prepared by Cardno (Qld) Pty Ltd

**MINUTES OF THE ORDINARY MEETING OF BALLINA SHIRE COUNCIL
HELD IN THE BALLINA SHIRE COUNCIL CHAMBERS
40 CHERRY STREET BALLINA,
ON 23/10/14 AT 9.00 AM**

9.1 Pacific Pines Development Lennox Head

231014/2 RESOLVED

(Cr Ben Smith/Cr Sharon Cadwallader)

That Council endorses the approval of the Traffic and Transportation Statement for the remaining stages of the Pacific Pines Estate development by staff for the purposes of meeting the Minister for Planning's condition of consent requiring preparation and Council approval of a traffic management plan prior to the release of a construction certificate for Stage 1B of the Pacific Pines Estate.

FOR VOTE - Cr David Wright, Cr Sharon Cadwallader, Cr Keith Williams, Cr Keith Johnson, Cr Ken Johnston, Cr Paul Worth, Cr Robyn Hordern and Cr Ben Smith
AGAINST VOTE - Cr Susan Meehan
ABSENT. DID NOT VOTE - Cr Jeff Johnson

Figure 6-5 - Excerpt from Council Meeting Minutes 23/10/2014

As shown above the temporary exceedance of the local road network by 456 vehicles a day has been approved by Council. This exceedance has been adopted as part of the revised traffic assessment.

6.4 Revised Traffic Generation Rates

The trip generation rates and development configurations outlined by Cardno have been revised based on current RMS standards and Local Traffic Data. The staging, number of dwellings and commercial areas have also been revised based on the current proposed development configuration. The staging and revised development yields are outlined in Figure 6-6 and Table 6-2.

Figure 6-6 – Epiq Estate Proposed Staging

Table 6-2 - Revised Development Yield

Epiq Releases	Revised Proposed Yield			
	Residential (Dwellings)	Medium Density (Dwellings)*	Commercial / Retail (GFA – m²)	Child Care Centre (m²)**
1A	51			
1B				
2 (SL8+ST3)	82			
Supermarket	35	27	5350	3000
3 (ST2+ST6)	120			

*The number of dwellings has been based on the maximum density allowed for the zoning (1 dwelling/250m² - total area 6,906m²)

**The total number of children used for the calculations is 90

6.4.1 Residential Development

The traffic generation rates for the residential component of the development have been adopted in accordance with the local trip generation rates outlined in the Ballina Shire Council Road Contribution Plan.

Table 6-3 - Ballina Shire Residential Trip Generation Rates

Category	Daily Trip Rate
Residential Dwelling (3+ Bedrooms)	6.45 trips/dwelling
Residential Dwelling (1-2 Bedrooms)	3.9 trips/dwelling

The traffic generated by the residential component of the development has been divided into internal and external trips as recommended in Section 3.3.1 of the Guide to Traffic Generating Developments (RMS). In accordance with the RMS, 75% of all trips will travel external to the development with 25% of trips staying within the development. **Table 6-4** outlined the expected daily trips to be generated by the residential component of the development.

Table 6-4 - Daily Vehicle Trips Generated by the Residential Development

Epiq Releases	Residential (vpd)			Medium Density (vpd)		
	I[1]	E[2]	T[3]	I[1]	E[2]	T[3]
1A	82	247	329	0	0	0
1B						
2 (SL8+ST3)	132	397	528.9	0	0	0
Supermarket	56	169	225.8	26	79	105
3 (ST2+ST6)	194	581	774	0	0	0
Totals:	**464**	**1393**	**1858**	**26**	**79**	**252**

[1] Internal Trips

[2] External Trips

[3] Total Trips

6.4.2 Supermarket

The traffic generation rates for supermarkets have been investigated in detail in the "*Trip Generation and Parking Demand of Shopping Centres, Analysis Report, Halcrow for the NSW Roads and Traffic Authority, September 2011*". Halcrow states that the total trip generation rate for a shopping centre is dependent on the retail categories within the centre and proportion of gross leasable floor area (GLFA) each of these categories occupy. The revised retail categories proposed by Halcrow are:

- A(S): Slow trade includes major department stores such as David Jones and Myer, furniture, electrical and whitegood stores
- A(F): Faster trade includes discount department stores such a K-Mart and Target, together with larger specialist stores, eg Lowes, Lindcraft, etc
- A(SM): Supermarket includes stores such as Woolworths, Coles, IGA, Franklins and large fruit markets
- A(SS): Speciality shops / Secondary retail / Automobile services includes smaller retail outlets (eg clothing, jewellery, hairdressers, footwear, fast food, delicatessens, newsagents, sports stores, chemists, service stations, etc)
- A(OM): Offices / Medical / Child Care / Other including medical centres, general business offices, child care, library, etc
- A(C): Cinemas

The GFA for the development has been determined from the CCN Architects plan P1624-SK-02-E (Appendix A). As suggested in Section 3.6.1 of the *RTA Guide to Traffic Generating Developments* a GLFA of 75% of the GFA has been adopted. The areas for each retail component of the supermarket precinct are summarised in Table 6-5.

Table 6-5 - Summary of Supermarket Precinct Retail Areas

Use	Revised Retail Category	GFA (m^2)	GLFA (m^2)
Supermarket	A(SM)	3,400	2,550.0
Shops, Kiosk and Commercial	A(SS)	1,750	1,312.5
Offices	A(OM)	200	150.0

Halcrow proposed the following daily and peak hour traffic generation rates for shopping centre sites based on GFLA:

Daily Vehicle Trips (DVT)

Thursday:
DVT = 0.288 A(S) + 0.074 A(F) + 1.455 A(SM) + 0.288 A(SS) + 1.787 A(OM) – 0.167 A(C)
Friday:
DVT = 0.175 A(S) + 0.327 A(F) + 1.171 A(SM) + 0.165 A(SS) + 0.975 A(OM) – 0.702 A(C)

Site Peak Hour Vehicle Trips

Thursday:
PVT = 0.017 A(S) + 0.003 A(F) + 0.137 A(SM) + 0.032 A(SS) + 0.164 A(OM) – 0.011 A(C)
Friday:
PVT = 0.031 A(S) + 0.032 A(F) + 0.134 A(SM) + 0.016 A(SS) + 0.158 A(OM) – 0.033 A(C)

Halcrow also determined that 54% of trips generated by a shopping centre were a single point trip while 46% were linked to another activity (ie visiting another location on the way to or the way home from the shopping centre). Accounting for linked trips within the development a reduction of external trips of 35% has been applied to the shopping centre.

Table 6-6 - Summary of Supermarket Traffic Generation

Supermarket Daily Vehicle Trips (vpd)		
	Gross Trips	Trips with Linked Trip Allowance
Thursday	4356	2832
Friday	3349	2177
Supermarket Peak Vehicle Trips (vph)		
	Gross Trips	Trips with Linked Trip Allowance
Thursday	416	270
Friday	386	251

6.4.3 Child Care Centre

The traffic generation rates for child care centres are outlined in the *RTA Guide to Traffic Generating Developments*. As the final configuration of the facility and the enrolment structure is unknown the worst case traffic generation rates for a pre-school has been adopted for the development. It is also assumed that the centre will have a maximum enrolment of 90 children.

It is considered that the total vehicle per day generated by the child care centre can be approximated as the total sum of the morning and afternoon peak trips (as the traffic during the day will be minimal). An additional allowance of 10% of the total trips has made for staff shift changes and deliveries that are likely to occur during the day. The trips expected to be generated by the Child Care Centre are summarised in Table 6-7.

Table 6-7 - Traffic Generation - Child Care Centre

	Peak Rate	Total Trips vpd
Morning Peak Trips/Child	1.4	126
Afternoon Peak Trips/Child	0.8	72
Staff and Delivery Allowance	-	19.8
		217.8

6.4.4 Traffic Generation and Capacity Summary

This assessment has not considered the fully developed Epiq Estate as the existing Road capacity along Henderson Lane and Montwood Drive is exceeded before the site is fully developed. The assessment has considered the likely short to midterm development of the site (including the previously developed Stages 1A and 1B). The additional traffic forecast to be generated in the midterm is summarised in Table 6-8.

Table 6-8 - Summary of External Traffic Generation

Epiq Releases	Residential (vpd)	Medium Density (vpd)	Commercial / Retail (vpd)	Child Care Centre (vpd)**
1A	247			
1B				
2 (SL8+ST3)	397			
Supermarket	169	79	2832	218
3 (ST2+ST6)	581			
Sub-totals:	**1393**	**79**	**2832**	**218**
Total:	**4522**			

The outcome of the traffic assessment has identified that there will be sufficient capacity to service the proposed shopping centre precinct. The traffic assessment is summarised in Table 6-9 and shows that there is sufficient capacity to service the supermarket precinct (including the previously developed stages).

Table 6-9 - Summary of Revised Traffic Assessment

Capacity of Surrounding Road Network	7,000 vpd
Current Traffic Volumes on Surrounding Road Network	3,346 vpd
Current Excess Capacity of Surrounding Road Network	3,654 vpd
Previously Approved Temporary Increase on surrounding Road Network	7,456 vpd
Current Excess Capacity with Approved Temporary Increase	**4,110 vpd**
Traffic Generated from fully developed Supermarket Precinct (Inc 1A, 1B and SL8+ST3. Exc ST2+ST6)	**3,941 vpd**

As described in the Cardno assessment (10 July 2014) the theoretical capacities of individual links (Henderson Lane or Montwood Drive) may be exceeded at certain times until the construction of Hutley Drive is completed. The exceedance of this theoretical capacity is acceptable as it is considered that the traffic would balance itself out between the access links.

6.4.5 Limits on Future Land Release

The revised traffic assessment has identified that the local road network will exceed its approved capacity during the development of Stage 2 and Stage 6 (developed after the supermarket precinct). The assessment has identified that the existing road network (Henderson Lane and Montwood Drive) has insufficient capacity and the extension of Hutley Drive will be required for further development. The extension of Hutley Drive will increase the capacity of the local road network by 10,000 vehicles per day and is expected to be sufficient to service the entire Epiq Estate.

The development of Stage 2 and Stage 6 is likely to yield 120 residential allotments. Until the construction of the Hutley Drive extension the existing local road network will limit the release of this stage to a maximum of 35 residential lots (refer Table 6-10).

Table 6-10 – Development Limitations due to External Road Network Capacity

Epiq Releases	# Residential Dwellings	Residential (vpd)	# Medium Density Dwellings	Medium Density (vpd)	Commercial / Retail (GFA m²)	Commercial / Retail (vpd)	Child Care Centre (Places)	Child Care Centre (vpd)
1A	51	247	-	-	-	-	-	-
1B	-	-	-	-	-	-	-	-
2 (SL8+ST3)	82	397	-	-	-	-	-	-
Supermarket	35	169	27	79	5350	2832	90	218
3 (ST2+ST6)	35	169	-	-	-	-	-	-
Sub-totals:	**203**	**982**	**27**	**79**	**5350**	**2832**	**79**	**218**
Trips Generated:	**4110**							
Allowable Trips:	**4110**							

6.5 Intersection Upgrades

Cardno identify the intersections at Henderson Lane/North Creek Road and Montwood Drive/North Creek Road require upgrading to a CHR and a CHR(s) to handle the increase in traffic generated by the development. Once upgraded Cardno nominate that these intersection has sufficient capacity to service the fully developed site (ie at the capacity of the road network). These upgrade works are currently being undertaken as part of the Super Lot 8 and Stage 3 works and will be completed prior to the supermarket precinct.

6.6 Traffic Modification to Concept Approval

The traffic assessment outlined in this report is intended to demonstrate that the proposed modifications to the supermarket precinct can be serviced by the existing road infrastructure and address the requirements outlined in Section 5.2 of the *Director-General's Environmental Assessment Report Pacific Pines Estate, Lennox Head – Modification to Concept Plan and Project Approvals*. Table 2 of the *Director-General's* report regarding the upgraded and staging of project has been updated based on:

- The revised traffic assessment outlined in Section 6.4 of this report
- The lot yields outlined in Table 3 of the Revised Traffic assessment by (Cardno 2014) and the assisted living and senior lots outlined in Table 2 of the *Director-General's* report

The amended timing of road and intersection upgrades required in response to revised staging of the project (Director-General Report - Table 2) is provided in Table 6-11.

Table 6-11 – Amended – Director General Table 2: ***Timing of road & intersection upgrades required in response to revised staging of project***

Access Arrangement	Road/Intersection Upgrades Required	Development Yield Potential (approx. external vehicle trips generated)
Vehicles use Montwood Drive (South) & Hutley Drive/Henderson Lane (North)	Upgrade Henderson Lane/North Creek Road and Montwood Drive/North Creek Road intersections. (currently being completed as part of super lot 8 and stage 3 works)	= 5,350m² retail/commercial (2832) = 90 place child care centre (218) = 27 medium density dwellings (79) = 203 residential dwellings (982)
Vehicles use Montwood Drive (South), Hutley Drive/Henderson Lane (North) & Hutley Drive/North Creek Road Intersection	Extend Hutley Drive to North Creek Road with new intersection	= 283 remaining residential lots (1825) = 78 assisted and independent living dwellings (117) = 59 seniors lots (44)

As the traffic generated by the development is dependent on many variables such as the type of shops that make up the neighbourhood centre, it is recommended that a restriction based on the capacity of the surrounding network (7,456 vpd) is adopted in preference to the number of residential lots remaining. Further to the total capacity of the surrounding network a restriction on the traffic on Montwood Drive shall not exceed 3,701 vpd as previously approved by Ballina Shire Council. This will ensure the capacity of surrounding local road network is not exceeded with this traffic study to be revised for each subsequent stage to ensure compliance.

7 Stormwater Management

This section has been prepared as a supplement to the current '*Revised Stormwater Assessment & Management Plan'* prepared by *Gilbert and Sutherland* for the *Pacific Pines Estate* (now referred to as the Epiq Estate). It is intended to address condition C12 of the Concept Approval:

C12 Stormwater Management

All future applications for development on the site are to include a detailed stormwater management plan for the proposal. These management plans shall be consistent with the Stormwater Management Plan required by term B6 of this approval.

Figure 7-1 - Excerpt from Pacific Pines - Concept Approval (MP 07_0026)

The primary purpose of this supplement is to confirm that the proposed stormwater control devices previously detailed by others and installed onsite are sufficient for any proposed changes in the layout of the subdivision. The devices installed onsite are detailed in the previous work undertaken by Gilbert and Sutherland, Geolink, and Ardill Payne and Partners. Should this review indicate that additional devices are necessary to achieve the required targets, the type, size and location of any additional devices will be detailed in this section.

7.1 Stormwater Objectives

The stormwater objectives for the site are defined in Condition B6 of the Pacific Pines – Concept Approval (MP 07_0026), see Figure 7-2 below:

B6 Stormwater Management Plan

The proponent is to prepare a stormwater management plan for the entire site, prepared by a suitable qualified person(s) that includes detailed modelling for both water quality and quantity. The plan shall demonstrate:

1) That the project does not concentrate or lead to an increase in the volume or rate of flow of stormwater discharged from the site over and above pre-development flow conditions; and
2) That the project does not increase the average annual load of key stormwater pollutants in stormwater discharged from the site over and above pre-development conditions.
3) that all stormwater infrastructure is located outside the conservation zone area.

The plan is to be prepared in accordance with the Water Sensitive Urban Design requirements of *Ballina Shire Combined Development Control Plan Chapter 13 – Stormwater Management.*

The stormwater plan is to be submitted to and approved by Council prior to the issue of a Construction Certificate for Stage 1A.

Figure 7-2 - Excerpt from Concept Approval (MP 07_0026) - Stormwater Management Plan

The stormwater infrastructure for the site has previously been sized by *Gilbert and Sutherland* in accordance with the above project approvals. Stormwater attenuation and quality treatment devices have previously been nominated by *Gilbert and Sutherland* to ensure there is no increase in peak flows or the discharge of key stormwater pollutants from the site. This modification will assess the effectiveness of the previously designed control devices and recommend modifications to the system (as required) to ensure these objectives are achieved.

7.2 Stormwater Quality

Gilbert and Sutherland have previously modelled the development in the MUSIC software package to ensure that there is no increase in key pollutant loads post development. The water treatment for the supermarket precinct has been designed as part of the water treatment for the greater site, refer Figure 7-3.

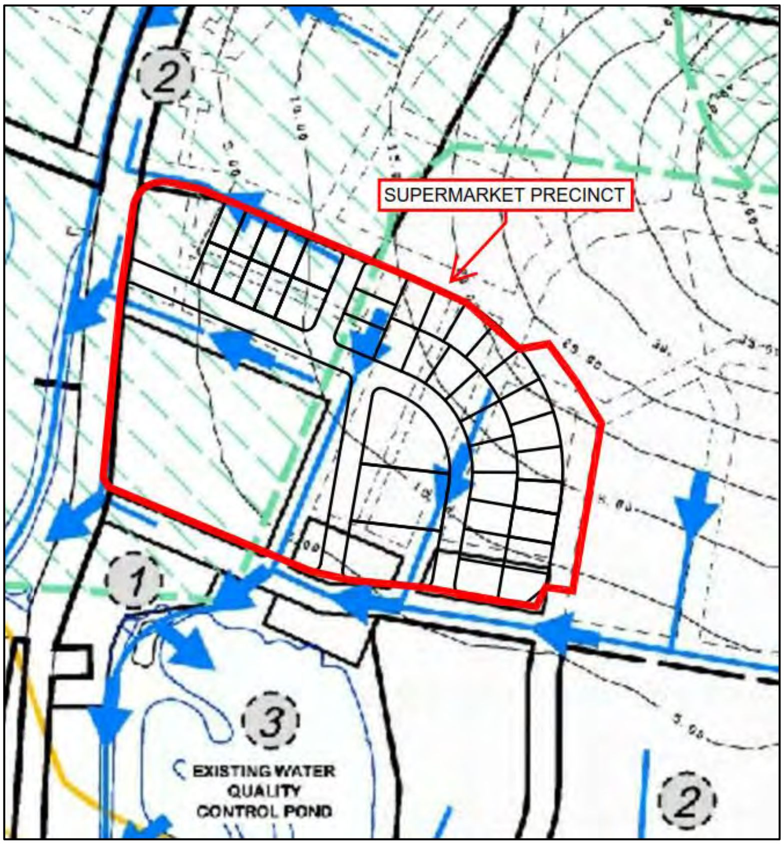


Figure 7-3 - Excerpt from Geolink Illustration C7 - Stormwater Concept Plan

As shown in Figure 7-3 the majority of the supermarket precinct receives primary treatment via a sediment basin (1) before draining to the existing water quality control pond (3). The remaining area bypasses treatment and is discharged into the swale on the western side of Hutley Drive.

7.2.1 Previous Modelling

The previous modelling undertaken by Gilbert and Sutherland has identified the supermarket precinct as being within two post development catchments (catchments 12 and 15), refer to Figure 7-4 and Figure 7-5.

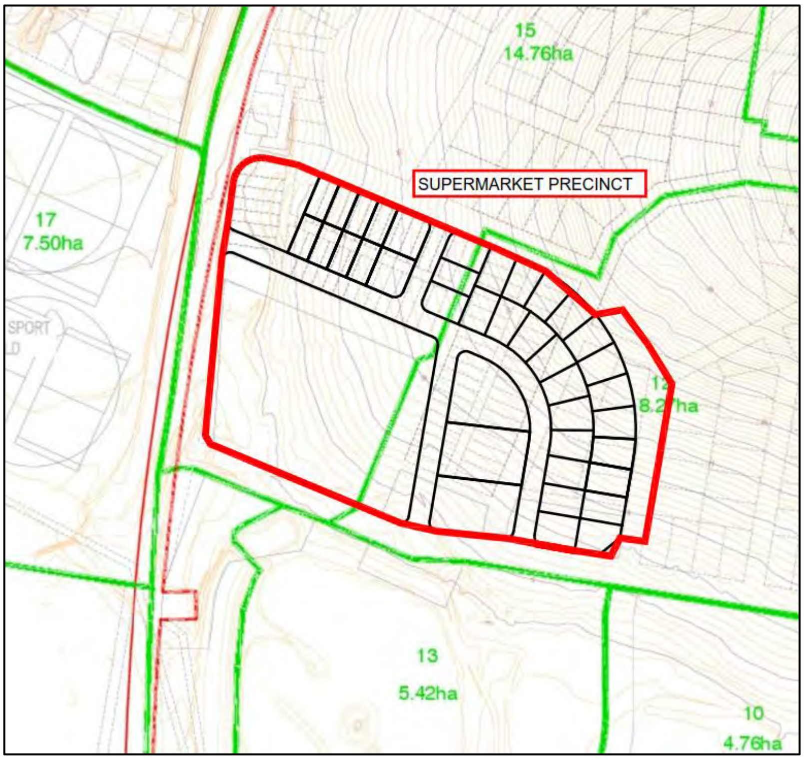


Figure 7-4 - Excerpt from G+S MUSIC Model Catchment Plan - DWG 10734-1.3-D

Catch	Area	Forest	Rural	Urban	Commercial	Townhouse	Totals
1	7.72	0.00	2.02	5.70	0.00	0.00	7.72
2	12.91	0.00	2.41	10.50	0.00	0.00	12.91
3	9.08	0.00	4.27	4.81	0.00	0.00	9.08
4	1.71	0.00	1.71	0.00	0.00	0.00	1.71
5	8.77	0.00	0.91	7.86	0.00	0.00	8.77
6	3.89	0.00	3.89	0.00	0.00	0.00	3.89
7	6.07	0.00	6.07	0.00	0.00	0.00	6.07
8D	7.00	0.00	0.00	7.00	0.00	0.00	7.00
8A	0.71	0.00	0.00	0.71	0.00	0.00	0.71
8B	1.09	0.00	0.00	1.09	0.00	0.00	1.09
8C	3.40	0.00	0.00	3.40	0.00	0.00	3.40
9	4.14	0.00	0.00	4.14	0.00	0.00	4.14
10	4.76	0.00	4.22	0.54	0.00	0.00	4.76
11	6.09	0.00	1.76	4.33	0.00	0.00	6.09
12	8.27	0.00	0.98	6.84	0.45	0.00	8.27
13	5.42	0.00	5.25	0.00	0.17	0.00	5.42
14	3.83	0.00	1.99	1.27	0.57	0.00	3.83
15	14.76	0.00	1.03	12.29	1.44	0.00	14.76
16	6.53	0.00	1.56	4.97	0.00	0.00	6.53
17	7.50	0.00	7.50	0.00	0.00	0.00	7.50
Totals	123.65	0.00	45.56	75.45	2.63	0.00	123.65

Figure 7-5 - MUSIC Catchment Areas - Excerpt from G+S Revised Stormwater Assessment 2014

An excerpt from the MUSIC model for these catchments is shown below in Figure 7-6

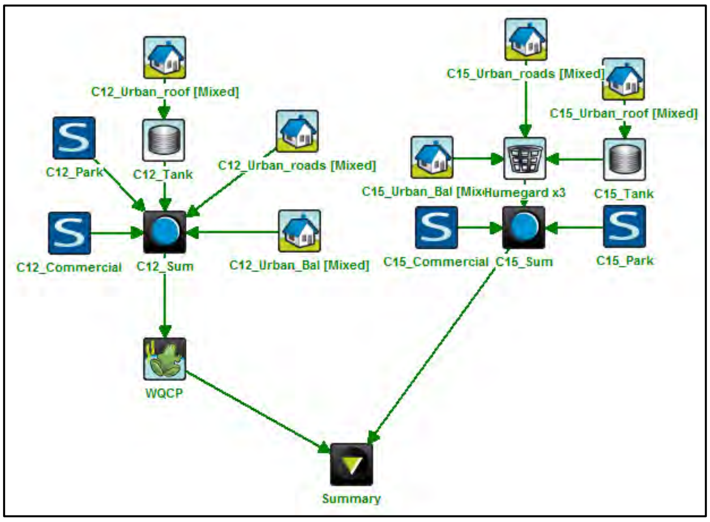


Figure 7-6 - Excerpt from G+S MUSIC Model

Note that the 3 Humegard units modelled as part of catchment 15 are currently being installed as part of the Super Lot 8 / Stage 3 works. The residual loads discharged from the site based on the original approved layout are summarised in Table 7-1.

Table 7-1 - Summary of MUSIC Results

Type of Pollutant	Residual Load
Flow (ML/yr)	252
Total Suspended Solids (kg/yr)	27300
Total Phosphorous (kg/yr)	59.1
Total Nitrogen (kg/yr)	407
Gross Pollutants (kg/yr)	839

7.2.2 Revised Modelling

To ensure the proposed modification complies with the conditions of consent the MUSIC modelling for catchment 12 and 15 has been revised to reflect the proposed changes to the supermarket precinct. The proposed modification increases the commercial area by 4,650m² and also decreases the park area by approximately 1000m². It is noted that the previously approved commercial precinct is estimated to be 16,410m² based on the approved plan and has been conservatively modelled previously at 18,900m². The total areas of both catchments stay constant, refer Table 7-2.

Table 7-2 - Revised MUSIC Catchment Areas

Catch	Area	Forest	Rural	Urban	Commercial	Townhouse	Totals
12	8.27	0.00	0.88	7.10	0.29	0.00	8.27
15	14.76	0.00	1.03	11.92	1.81	0.00	14.76

To compensate for the increase in the commercial area (with its associated greater impervious area and higher pollutant generation characteristics) an additional Gross Pollutant Trap (GPT) has been incorporated in the design to treat the commercial area in catchment 15. This area previously discharged into the swale on the western side of Hutley Drive without any prior treatment. Refer to the revised MUSIC model in Figure 7-7.

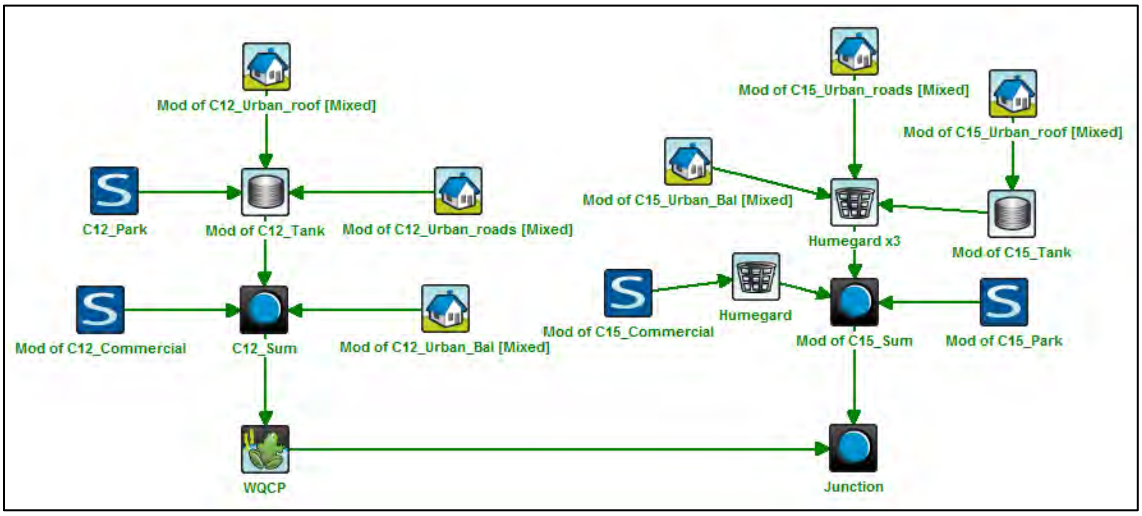


Figure 7-7 - Revised MUSIC Model

The residual pollutant loads calculated by the MUSIC Model are summarised in Table 7-3.

Table 7-3 - Revised MUSIC model results

Type of Pollutant	Residual Load
Flow (ML/yr)	255
Total Suspended Solids (kg/yr)	24700
Total Phosphorous (kg/yr)	56.4
Total Nitrogen (kg/yr)	395
Gross Pollutants (kg/yr)	410

The MUSIC results clearly show that the residual loads for all pollutants produced by the modified development are less than the existing approved development. The proposed modification is considered to fulfil the consent condition requiring no increase in the discharge of post development pollutants as the modification reduces volume of pollutants discharged from that previously approved.

7.3 Stormwater Attenuation

Stormwater attenuation for the greater development site has been assessed by *Gilbert Sutherland* using the Watershed Bounded Network Model (WBNM) computer software. The modelling was conducted over a range of rainfall events up to the 100 year ARI storm. The supermarket precinct forms part of catchments 12 and 15a, refer to Figure 7-8.

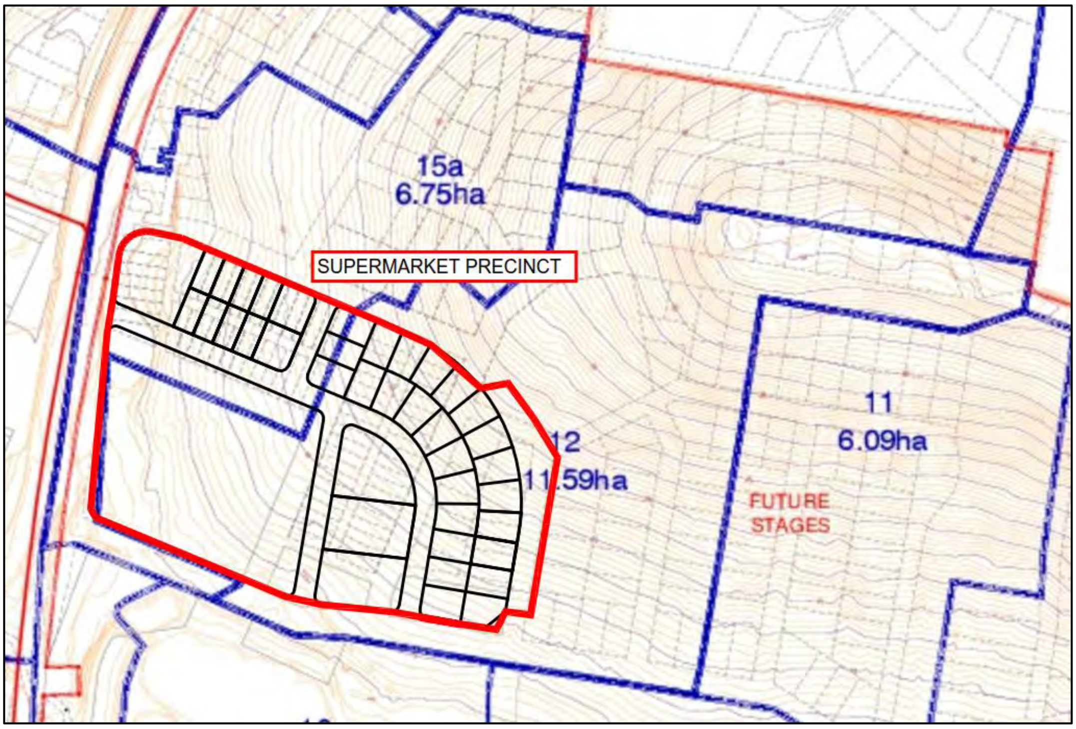


Figure 7-8 - Excerpt G+S WBNM Development Case Catchment Plan

The proposed modification to the existing development primarily involves increasing the commercial area by 4,650m². The approved and modified precincts are compared in Table 7-4.

Table 7-4 - Comparison of Approved and Modified developments

Type of Development	Previously Approved	Modification
Precinct Area	63,200m²	
Neighbour Centre (Commercial)	16,410m²	21,060m²
Park Reserve	800m²	0m²
Childcare Centre	0m²	3,000m²
Estimated Equivalent Dwellings	89	62*
Residential land area	45,360m²	39,140m²
Residential Density (dwellings/ha)	19.62	16.61

*Based on the maximum density permitted in the medium density zoning of 1 dwelling per 250m²

To determine the attenuation requirements for the supermarket precinct the following land use types have been compared:

- Residential Land
- Neighbour centre
- Child care centre

The residential land reduces in area by 6,420m² with the density of the dwellings reducing from that previously approved. It is considered that as the density of the residential area has reduced, the existing modelling is appropriate as the amount of impervious area also decreases with housing density. Additional attenuation will be provided for the increase in the commercial zone and child care centre.

7.3.1 Neighbourhood Centre

The additional attenuation storage volume required for the 4,650m² increase in commercial area has been modelled using the Ilsax hydrological model in the Watercom Drains software program. The pre and post development site has been configured with the catchment characteristics presented in Table 7-5.

Table 7-5 – Commercial Catchment Characteristics

	Paved Area	Supplementary Area	Grassed Area
Pre Development	0%	0%	100%
Post Development	90%	0%	10%

The results from the modelling have determined that 75m³ of attenuation storage is required to ensure that no additional water is discharged from the site across a range of events up to a 100 year ARI storm. The Drains results for the Neighbourhood Centre are presented in Figure 7-9.

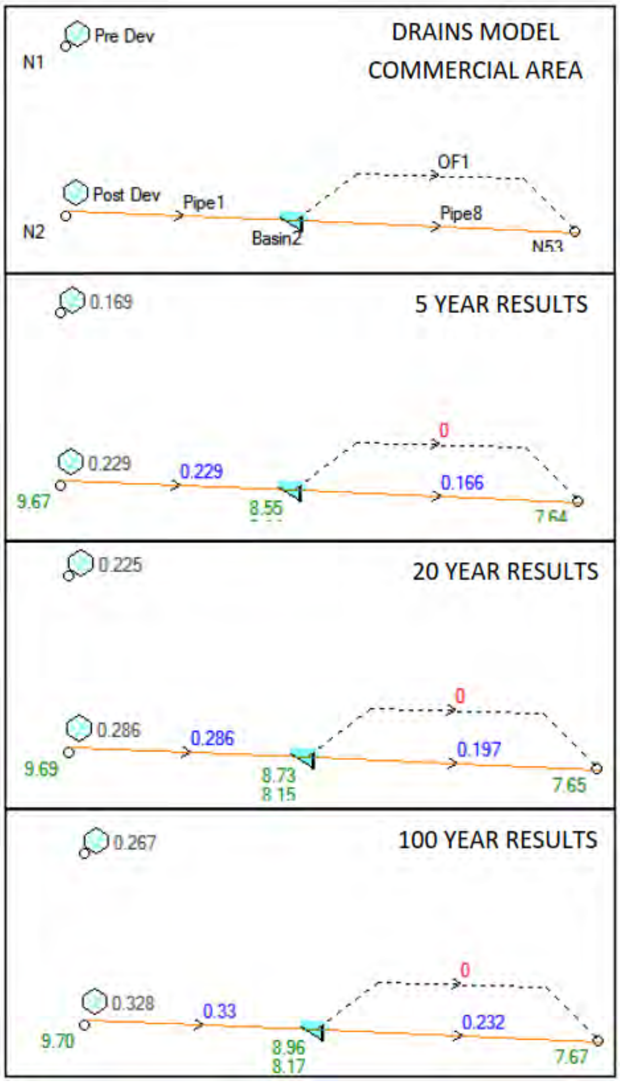


Figure 7-9 - Commercial Zone Drains Results

7.3.2 Child Care Centre

To determine the additional volume of attenuation storage required for the new 3,000m² child care centre the site has been modelled. The pre and post development site has been configured with the catchment characteristics presented in Table 7-6.

Table 7-6 - Child Care Centre Catchment Characteristics

	Paved Area	Supplementary Area	Grassed Area
Pre Development	0%	0%	100%
Post Development	75%	5%	20%

The results of the modelling shows that 40m³ of attenuation storage is required to ensure that no additional water is discharged from the site across a range of events up to the a 100 year ARI storm. The Drains results for the Child Care Centre are presented in Figure 7-10.

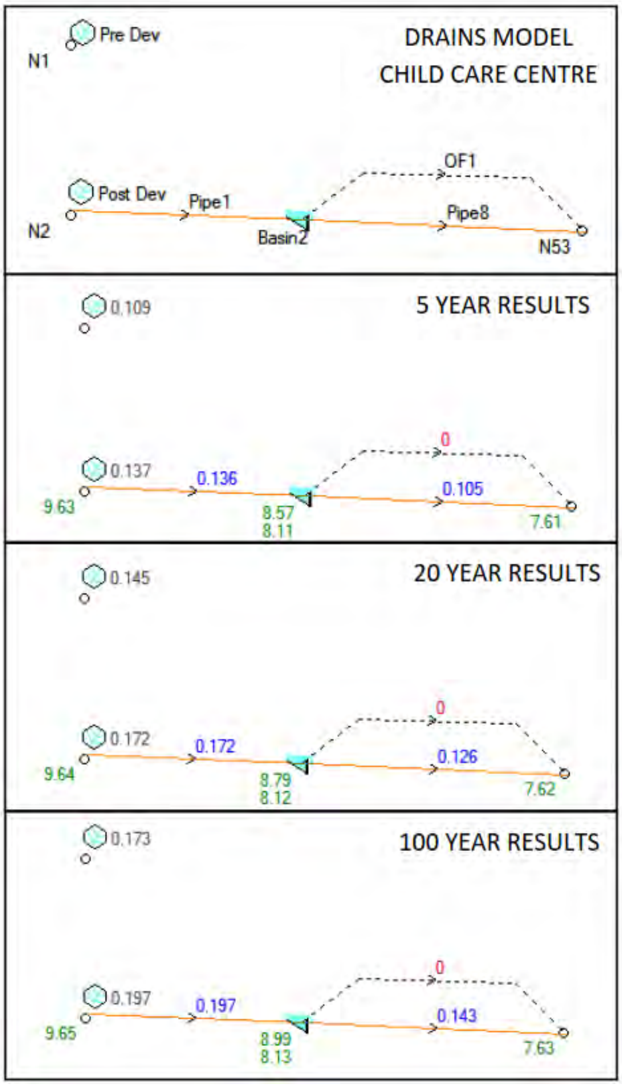


Figure 7-10 - Child Care Centre Drains Results

7.4 Stormwater Summary

The proposed modification of the supermarket precinct can achieve the stormwater objectives outlined in the consent conditions. To ensure no additional pollutants are discharged from the development an additional Gross Pollutant Trap is required. This device is to be installed to treat the stormwater generated from the commercial area within the Gilbert and Sutherland catchment 15. Additional stormwater attenuation is to be provided to ensure there is no increase in post development flows for the 100 year ARI event. The exact volumes of attenuation storage volumes will need to be confirmed based on final building layouts with indicative modelling indicating that 75m³ of storage for the neighbourhood centre and 40m³ for the child care centre is required. All stormwater infrastructure is located outside conservation areas.

8 Sewer Services

All lots in the revised lot layout will be provided with a sewer connection. The north western portion of the site is expected to drain to the existing gravity sewer main in Hutley Drive. The neighbourhood precinct and the remaining portion of the site is anticipated to drain into the trunk main along Main Street. The Hutley Drive gravity main is estimated to have sufficient capacity as the bypass works identified in the *Geolink – Investigation of Gravity Sewer Trunk Main Augmentation on Hutley Drive* are currently being installed with the Stage 1B works.

9 Water Reticulation

9.1 Potable Water Reticulation

The previous modelling undertaken by Geolink (*Pacific Pines Water Reticulation – Addendum Report*) for the development is considered conservative with 36 Equivalent Tenements (ET's) already allowed for in the commercial area. Initial estimates of the modified demand indicate that the total demand for the supermarket precinct is expected to reduce (Table 9-1).

Table 9-1 - Expected Potable Water Demand

Type of Development	Previously Modelled	Previous ET's	Modification	Modified ET's
Residential Dwellings	89 previously approved dwellings	89	62 equivalent dwellings	62
Commercial Area		36	0.005 ET/floor m² (TSC)	26.75
Child Care Centre	-	-	100 people	6
	Totals:	**125**		**94.75**

In alignment with the consent conditions the detailed hydraulic analysis and reservoir performance will be revised during detailed design based on the modified equivalent tenements for supermarket precinct.

9.2 Recycled Water Reticulation

A recycled water reticulation network will be provided within the supermarket precinct. Connection to the greater Lennox Head reticulated water network will be via the recycled water mains within Main Street and Hutley Drive. The servicing plans will be updated to reflect the modified layout and will comply with the Councils *Water Reticulation Specification.*

10 Sediment and Erosion Control

During construction sediment and erosion control measures will be installed to ensure the loss of soil from the site is minimised. All control measures will be installed prior to the commencement of construction and be in accordance with *Managing Urban Stormwater-Soils & Construction Volume 1 (2004)* by Landcom.

Appendix A Architectural Lennox Head Retail Centre Concept Plan

- CCN Architects Plan P1624-SK-02-E

AREA SCHEDULE

USE	AREA-m²
Supermarket	3,400
Mezzanine Offices	200
Shops	1,350
TOTAL RETAIL	4,950
Retail / Commercial	400
TOTAL NLA	5,350

CAR PARKING

RATE	No.
5 cars per 100m²	248
5 cars per 100m²	27
TOTAL CARS REQUIRED	275
TOTAL CARS PROVIDED	282

LENNOX HEAD RETAIL CENTRE

CCN Architects Pty Ltd | 63 Edward Street BRISBANE QLD 4000 | t: (+617) 3221 0300 | e: info@ccnarchitects.com.au | www.ccnarchitects.com.au

SITE PLAN

PRELIMINARY

P1624 SK-02 E

24/06/2016 3:48:43 PM

1 : 750 @ A3

Newton Denny Chapelle
SURVEYORS PLANNERS ENGINEERS

ATTACHMENT 5

Shopping Centre Concept Plan

CCN Architects

AREA SCHEDULE

USE	AREA-m²
Supermarket	3,400
Online PickUp	110
Shops + Retail	1,870
Outdoor Dining	120
TOTAL NLA	5,500

CAR PARKING

RATE	No.
5 cars per 100m²	275
TOTAL CARS REQUIRED	275
TOTAL CARS PROVIDED	282

CCN

EPIQ SHOPPING CENTRE

CCN Architects Pty Ltd | 63 Edward Street BRISBANE QLD 4000 | t: (+617) 3221 0300 | e: info@ccnarchitects.com.au | www.ccnarchitects.com.au

SITE PLAN

PRELIMINARY

P1624 SK-02 I

09-Nov-16 3:02:14 PM

As indicated @ A3