

Social Impact Assessment

Minmi and Link Road South

February 2010

urbis

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1	Introduction.....	1
1.1	Project and planning context	1
1.2	Director General's Environmental Assessment Requirements	2
1.3	Methodology	3
2	Existing context and community demographics	4
2.1	Local and regional context	4
2.1.1	The location (Minmi/Link Road).....	4
2.1.2	Minmi (suburb).....	5
2.1.3	Local context	5
2.1.4	Current and proposed local estates	5
2.1.5	Regional context.....	6
2.2	Community profile.....	6
2.2.1	Population and age structure	6
2.2.2	Regional demographic forecast.....	8
2.2.3	Birth place and language.....	8
2.2.4	Religion.....	8
2.2.5	Income and employment	9
2.2.6	Occupation and industry.....	10
2.2.7	Family characteristics	11
2.2.8	Dwelling and household composition	11
2.2.9	Projected future dwelling and householder composition.....	12
2.2.10	Transport and car ownership.....	12
3	Review of key local and regional planning documents	14
3.1.1	NSW State Infrastructure Strategy 2008 (Hunter Region)	14
3.1.2	Lower Hunter Regional Strategy	14
3.1.3	Newcastle-Lake Macquarie Western Corridor Planning Strategy 2010 (Final Draft).....	15
3.1.4	Lower Hunter Regional Conservation Plan	16
3.1.5	Lower Hunter Transport Working Group	16
3.1.6	Lower Hunter Integrated Transport Strategy.....	17
3.1.7	Building Liveable Communities in the Lower Hunter Region	18
3.1.8	Lake Macquarie City Council Lifestyle 2020 Strategy	19
3.1.9	The City of Newcastle Community Plan (2006-2010)	20
4	Proposed development.....	22
4.1	Proposed demographic profile	22
4.1.1	Regional and national trends.....	22
4.1.2	New developments in the region	24
4.1.3	Design response to target market	25
4.1.4	Urban form and lot size	25
4.1.5	Dwelling type	26
4.2	Projected population.....	27
4.2.1	Projected population profile	28
5	Social infrastructure audit and provision	29
5.1	Infrastructure audit.....	29
5.2	Local and regional social infrastructure.....	31
5.2.1	Community halls, centres and facilities	31
5.2.2	Places of worship	31

5.2.3	Aged care facilities	31
5.2.4	Medical centres and health services	32
5.2.5	Emergency services	33
5.2.6	Preschool and childcare centres	33
5.2.7	Primary, secondary schools and tertiary education	34
5.2.8	Open space and recreation	34
5.2.9	Transport	36
5.3	Provision for social infrastructure and open space	37
5.4	Draft overview of social infrastructure provision for Minmi & Link Road South.....	37
5.5	Local infrastructure - Section 94 contributions and works in kind	48
5.6	State Infrastructure - Voluntary Planning Agreement.....	50
6	Social impact assessment.....	51
7	Minmi Main Trade Area Analysis	58
7.1.1	Main Trade Area Population.....	60
7.1.2	Main Trade Area Expenditure	60
7.2	Retail Potential	61
8	Conclusion	64
Appendix A	Local and regional infrastructure	65
A.1	List of relevant local and regional infrastructure.....	66
A.2	Map of local social infrastructure	69
Appendix B	Open Space	70
B.1	Map of regional open space	71
B.2	Map of local open space	72
B.3	List of open space	73
Appendix C	Population projections	76
FIGURES:		
Figure 1	– Site location map	4
Figure 2	– Comparison of DoP projections and the profile of similar Hunter developments	25
Figure 3	– Projected population profile	28
Figure 4	– Local social infrastructure	30
Figure 5	– Local open space network.....	35
Figure 6	– Regional open space network	36
Figure 7	– Minmi Main Trade Area and Competition	59

TABLES:

Table 1 – Northern Lands: Director General’s Environmental Assessment Requirements (August 2010)	2
Table 2 – Current and proposed estates in the vicinity of the Minmi/Link Road site.....	5
Table 3 – Population base and age structure	7
Table 4 – Male, Female and Aboriginal and Torres Strait Islander population percentages.....	7
Table 5 – Projected change in age structure: Newcastle SSD (% Cumulative Change).....	8
Table 6 – Religious affiliation in 2006	9
Table 7 – Income (Population aged 15 years and over) from the 2006 Census.....	9
Table 8 – Total percentage of persons in labour force in 2006.....	10
Table 9 – Workforce characteristics (Employed persons aged 15 years and over)	10
Table 10 – Family types for communities in the Northern Lands.	11
Table 11 – Dwelling types: surrounding suburbs vs. Newcastle – Outer West SLA	12
Table 12 – Projected change in household composition: Newcastle SSD (% Cumulative Change).....	12
Table 13 – Predicted infrastructure needs identified in the Newcastle-Lake Macquarie Western Corridor Planning Strategy	15
Table 14 – Projected change in age structure: Newcastle and Hunter Region (% Cumulative Change).....	22
Table 15 – Projected change in household composition: Newcastle SSD (% Cumulative Change).....	23
Table 16 – Sample populations from new developments in the region.....	24
Table 17 – Dwelling types: surrounding suburbs compared with Newcastle – Outer West SLA.....	26
Table 18 – Projected regional population projections – highest growth scenario	27
Table 19 – Projected age profiles for the 2032 population for the Minmi/Link Road concept plan.....	28
Table 20 – Summary assessment of social infrastructure requirements: current and recommended provision (excl. open space and recreation facilities).....	39
Table 21 –Sub catchments of Minmi and Maryland:.....	48
Table 22 – Lake Macquarie Section 94 Contributions Plan – Northlakes (2004).....	49
Table 23 – Blue Gum Hills recreational facilities standard.....	49
Table 24 – Overview of analysis against the Social Impact Policy Matrix (Newcastle Social Impact Assessment Policy)	52
Table 25 – outlines the existing and future population of the Minmi main trade area	60
Table 26 – Local and regional social infrastructure	66

1 Introduction

Urbis has been commissioned by Coal & Allied Industries Limited (Coal & Allied) to carry out a social impact assessment for the Minmi/Link road proposal. The purpose of this study is to assess the impact of the development on the existing surrounding communities and to determine recommendations in relation to the provision of social infrastructure including open space, recreation, community facilities and retail provision in the development area.

This report addresses current and required social infrastructure for the proposed residential development at Minmi/Link Rd, including infrastructure that may be regionally located. It is important to note that the proposed development spans two Local Government Areas being Lake Macquarie City Council (LMCC) and Newcastle City Council (NCC).

The recommendations from this report have informed the master plan design process and also address the social impact requirements outlined in the Director-General's Environmental Assessment Requirements (DGEAR's). The report has been informed by public consultation exercises, document and policy reviews, demographic assessments, population forecasting, key stakeholder inputs and GIS models.

1.1 Project and planning context

It is proposed that the entire Coal & Allied owned Minmi/Link Road and Stockrington sites be rezoned/listed as a 'State Significant Site' (SSS) in Schedule 3 of State Environmental Planning Policy (Major Development). A draft Schedule 3 listing has been prepared with the Concept Plan Application.

The Concept Plan for a residential subdivision of the Minmi/Link Road site will apply to the entire 520ha Minmi/Link Road and for conservation land transfer to the 1561Ha Stockrington site. The key parameters for the future development of the site are as follows:

- Dedication of 1561Ha of conservation land (Excludes 300ha biodiversity offset land to be transferred to RTA and then to DECCW) to the New South Wales Government (NSWG) that is identified in the Lower Hunter Regional Strategy and Lower Hunter Regional Conservation Plan, comprising 1544Ha at Stockrington site and approximately 17ha of the Minmi/Link Road site.
- Dwelling yield of 3,300 dwellings over 520ha. Two village areas are included in the Concept Plan, and these will provide support facilities, including retail premises, to the new and existing communities.
- Indicative development staging. The number of lots and extent of staging for release areas will be largely dictated by the service infrastructure requirements as well as responding to market forces.
- The provision of associated infrastructure to support the new community and enhance surrounding infrastructure.
- Torrens title subdivision of the Minmi/Link Road site, which will enable:
 - Dissection of land on either side of the F3 Freeway and to separate the development lot from the conservation land.
 - The transfer of approximately 17ha of land (included in the 1561Ha noted above) at Minmi/Link Road to the north of the Minmi NSW Fire Brigade facility to the NSWG for conservation purposes.

Approval will not be sought under the Concept Plan for a specific lot or road layout. An indicative lot layout will indicate how the dwelling yield of 3,300 dwellings could be achieved on the site.

Similarly, approval will not be sought under the Concept Plan for subdivision or construction of individual houses. However, the desired future character of the proposed concept plan will be included in Urban Design Guidelines. Urban Design Guidelines will be prepared to inform the Concept Plan in

respect of urban form, built form, open space and landscape, access and movement, and visual impact of the site.

It is proposed to dedicate land for conservation purposes as part of the Major Project Application via a Voluntary Planning Agreement (VPA) between Coal & Allied and the NSWG in accordance with s.93F of the Environmental Planning & Assessment Act, 1979 (EP&A Act).

The proposed Concept Plan and a Plan showing the proposed development and conservation areas, is included in the Environmental Assessment (EA) prepared by Urbis.

A Concept Plan has been prepared for Minmi/Link Rd which will enable key site parameters associated with land use, infrastructure delivery and timing, and environmental conservation to be resolved upfront, with subsequent detailed stages being submitted for approval progressively.

1.2 Director General's Environmental Assessment Requirements

In August 2010, the DGEAR's were issued for the northern lands. Those requirements having particular regard to social planning and infrastructure are outlined in Table 1 below.

Table 1 – Northern Lands: Director General's Environmental Assessment Requirements (August 2010)

Key DGEAR Requirement	Urbis Social
General Requirements	(8) The likely scope of developer contributions between: <ul style="list-style-type: none"> (a) the proponent and Newcastle City Council and Lake Macquarie City Council; (b) the proponent and State Government agencies for provision of State infrastructure in accordance with Planning Circular PS 07-018 (Infrastructure Contributions); and (c) if relevant, any public benefits to be provided with the development.
Key Assessment Requirements	<p>Urban Design, development controls and land uses:</p> <p>(2) Demonstrate how the proposed land uses and development controls complement surrounding existing land uses and the proposed conservation lands.</p> <p>Social Impact and Social Infrastructure:</p> <ul style="list-style-type: none"> ▪ Assess the social impact of the proposal on surrounding communities. ▪ Identify additional demand created by the proposal for services and infrastructure including public transport, open space, recreation facilities, retail facilities and social and community facilities, based on an analysis of the existing and projected demographic profile of the locality. Demonstrate that an appropriate level of social infrastructure is provided to meet the needs of the future population arising from the development, including through identification of appropriate services and facilities. Where relevant this should be through negotiation with State or local government agencies and should inform the scope of infrastructure contributions. ▪ Identify opportunities to meet the demand for a range of housing types including seniors affordable housing. ▪ Commercial/Retail development – identify and justify the configuration and extent and likely floor space yield of any commercial retail uses, and consider its impact on nearby existing and proposed retail/commercial centres
Consultation	<p>An appropriate and justified level of consultation should be undertaken. Where consultation has already been undertaken this should be documented.</p> <p>Consultation must be undertaken with the following relevant agencies and mineral resource titleholders:</p> <ul style="list-style-type: none"> ▪ Newcastle City Council ▪ Lake Macquarie City Council ▪ Department of Environment, Climate Change and Water ▪ NSW Office of Water ▪ Roads and Traffic Authority ▪ NSW Transport

Key DGEAR Requirement	Urbis Social
	<ul style="list-style-type: none"> ▪ Department of Industry and Investment ▪ Mine Subsidence Board ▪ NSW Heritage Council ▪ Department of Health ▪ Department of Education and Training ▪ Hunter-Central Rivers Catchment Authority ▪ Hunter Water ▪ Local Aboriginal Land Councils ▪ Utility and infrastructure providers ▪ Emergency Services, including the Ambulance Service of NSW, the State Emergency Services, Rural Fire Service and NSW Fire Brigades ▪ Donaldson Coal Pty Ltd ▪ Newcastle Coal Company Pty Ltd ▪ Oceanic Coal Australia Limited ▪ AGL (SG) operations Pty Ltd ▪ Daracon Engineering Pty Ltd

1.3 Methodology

The following tasks have been undertaken in the preparation of this study:

- An overview of the existing context and current population, socio-demographic profile and forecasts of estimated resident population.
- A review of key background documents and relevant State and Council strategies and policy documents.
- An assessment and analysis of the proposed development and its implications, in particular demographic change.
- An audit of the existing supply of social infrastructure (local and regional) and mapping of these facilities including:
 - Open space and recreation
 - Community facilities (libraries, community centres, halls)
 - Schools and childcare centres
 - Health and social service facilities (hospitals and medical centres)
 - Retail facilities
- The identification of key social infrastructure opportunities, including additional provision of community infrastructure or contributions to be considered as part of the redevelopment.
- Assessment of potential social impacts, both positive and negative, resulting from the development and the identification of any mitigating actions or monitoring mechanisms to minimise negative impacts or enhance positive outcomes.

2 Existing context and community demographics

This section provides an overview of the development context, including key social, demographic and geographic characteristics of Minmi/Link Road and the surrounding local and regional areas. The demographic analysis compares Minmi, Cameron Park and Fletcher against Lake Macquarie and Newcastle LGA and New South Wales (state)¹. The review also considers Council's key social planning and policy documents and other significant State policy documents to contextualise the current and future socio-economic environment of the region and local communities.

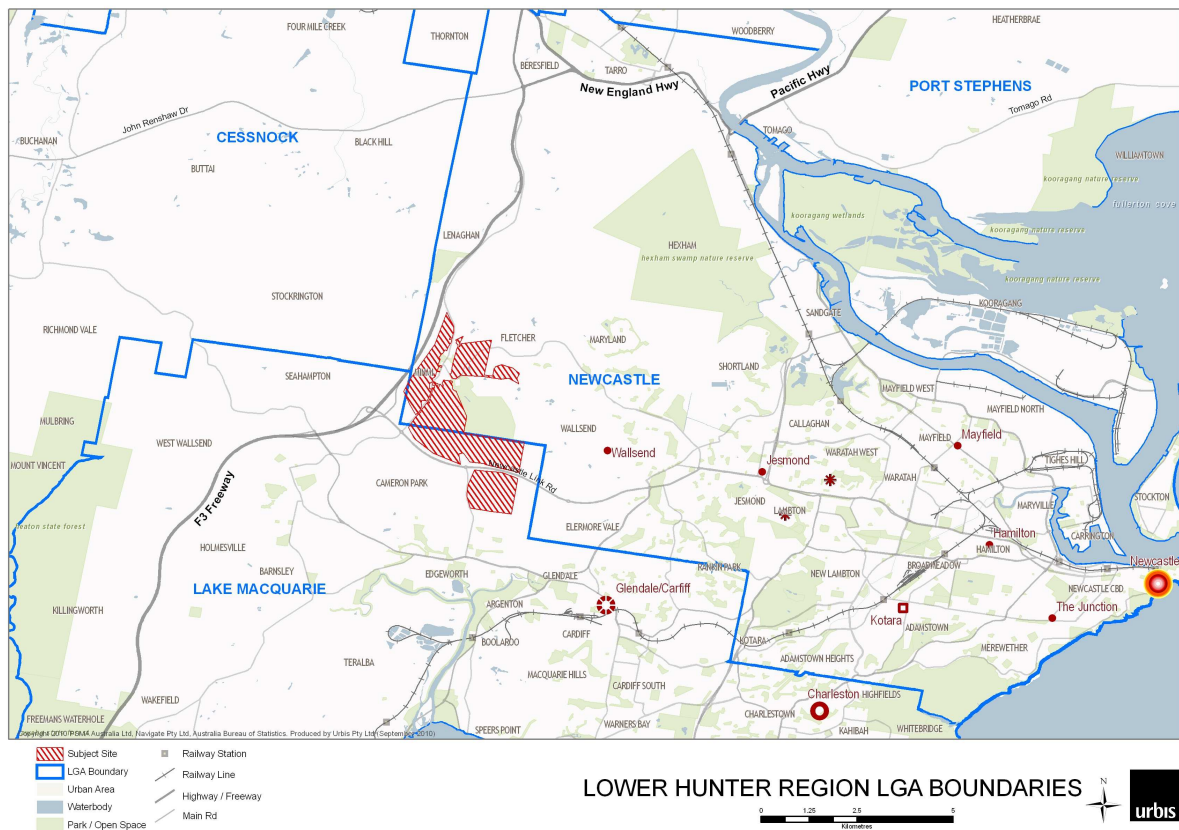
The subregion can be defined as comprising both the Northern Ward of the Lake Macquarie Council area and the more rural, westernmost areas of Newcastle City Council area ("Ward 4"). The suburb of Glendale, which is not part of the Northern Ward, but is part of the Lake Macquarie LGA, has also been included as it is within close proximity to the site.

2.1 Local and regional context

2.1.1 The location (Minmi/Link Road)

The Minmi/Link Road site is owned by Minmi Land Pty Ltd, a wholly owned subsidiary of Coal & Allied Industries Ltd and comprises approximately 537ha. The site surrounds the existing community of Minmi and connects to the community of Cameron Park in the South with and with Fletcher in the North East.

Figure 1 – Site location map



¹ Data has been derived from the 2006 ABS Census

2.1.2 Minmi (suburb)

Minmi is an historic mining town with a current population of approximately 732 people. The town is situated in a valley, with the F3 Freeway to the west, Blue Gum Hills Regional Park to the east, and Hexham Swamp wetland to the north. The immediate hinterland surrounding the Minmi Township is generally cleared of dense vegetation, and is primarily covered by low groundcover and shrubbery. The Minmi area has a distinctive character, comprising:

- A generally rural setting with large allotments surrounding the smaller township allotments;
- Dense bushland vegetation of the Blue Gum Hills Regional Park and surrounding land; and,
- Steep and undulating topography

The Minmi/Link Road estate features a similarly variable terrain. In particular, the Minmi site slopes are highly variable and are generally reflective of a terrain that has been modified by past mining activity. The Link Road North and Link Road South areas are primarily bushland with moderate to steep undulating terrain.

The district character of the built environment is comprised of:

- Single storey dwellings along Woodford Street;
- Dwellings positioned on hillsides; and,
- Dwellings are predominantly timber clad and fibro with metal roofs with evidence of more recent brick construction dwellings.

2.1.3 Local context

The Minmi/Link Road adjoins the existing Minmi township and surrounded by a number of smaller sized suburbs that include Cameron Park and Fletcher. Larger town centres in the district are located further east and south of the site and include Maryland, Wallsend, Glendale and Edgeworth.

Minmi/Link Road is in close proximity to the emerging Glendale/Cardiff renewal corridor that is identified in the Lower Hunter Regional Strategy (LHRS), and a number of new residential subdivisions have been approved to the north, south and east. These subdivisions will contribute to providing some of the 69,000 dwellings called for in the LHRS to be accommodated within new release areas, such as Cameron Park and Britannia Estate. Minmi/Link Road will connect these new release areas, while still respecting the F3 Freeway as the residential/urban development boundary of the Newcastle Metropolitan area.

2.1.4 Current and proposed local estates

There are a total of four local (current and proposed) estates within close proximity to Minmi/Link Road. These estates can be seen in Figure 4 and Appendix A. Table 2 below outlines the number of residential lots (current and proposed) within these estates as well as the services and facilities to be provided.

Table 2 – Current and proposed estates in the vicinity of the Minmi/Link Road site

Estate	Developer	Lots	Services and facilities
Northlakes, Cameron Park	McCloy Group	Around 900 lots remaining to be developed	Those services and facilities proposed include a total of four local parks, two multi-purpose centres, a retail and commercial area and two retirement villages and a primary school. Already established is a child care centre, children's playground areas and a large number of walking/cycle trails.

Estate	Developer	Lots	Services and facilities
The Sanctuary, Fletcher	Landcom	Initially approved with 700 residential lots with an additional 139 lots proposed. 88 lots have been released to date.	It is noted that in exchange for the increased development footprint that a community centre and sports complex will be built. This will include two sporting fields, two netball courts, two tennis courts and a playground.
The Outlook, Fletcher	North West	930 lots in Community Title	It is proposed that The Outlook estate will provide parkways and walk ways, picnic areas and BBQ equipment as well as tennis courts. There are also 8 super lots the proposed use of which is currently not identified.
Hidden Waters, Fletcher	Mirvac	271 lots in Community Title	Stages 1 and 2 of the development have been completed and are currently selling. Stage 3 is currently under construction and includes the provision of 5000m ² of public Local Parkland with play facilities

2.1.5 Regional context

Minmi/Link Road is located in the Lake Macquarie LGA and Newcastle LGA, approximately 145 kilometres north of Sydney and approximately 17 kilometres north-west of the Newcastle City Centre and is located in the Lower Hunter Region.

The Lower Hunter Region's vegetation is of bio-geographic significance as it supports a transition between the northern and southern flora and fauna communities of the Region. The LHRS and draft Lower Hunter Regional Conservation Plan recognise the importance of large vegetation areas being linked via habitat corridors. Two major conservation corridors have been identified running through the Region, including the Watagan Ranges to Port Stephens Corridor, which is identified as a highly significant link between southern sandstone ranges and the coastal heaths and wetlands of Port Stephens.

2.2 Community profile

The following community profile analysis provides an overview of the local (Minmi, Cameron Park and Fletcher) and regional (Maryland and Wallsend) populations, and offers a comparison against the Newcastle and Lake Macquarie LGAs and NSW (state).

2.2.1 Population and age structure

Table 3 below, represents the age distribution of those suburbs located within close proximity to the Minmi/Link Road site (Minmi, Fletcher and Cameron Park), the closest regional town centres of Maryland and Wallsend, the Newcastle and Lake Macquarie LGAs and NSW state. Table 3 shows that the local suburbs of Minmi, Fletcher and Cameron Park have a higher proportion of 5-14 year olds than that of Wallsend and Maryland (regional centres), Lake Macquarie LGA, Newcastle LGA and NSW (state). The suburb of Wallsend, Lake Macquarie and Newcastle LGAs and NSW (state) all have an extremely high proportion of persons aged over 65 years when compared to those suburbs located within close proximity to the Minmi/Link Road site.

Table 3 – Population base and age structure

Community	Minmi	Fletcher	Cameron Park	Wallsend	Maryland	Newcastle LGA	Lake Macquarie LGA	NSW
Base population 2006	732	1,935	3,719	11,799	7,595	141,753	183,138	6,549,177
0-4 years	9% (63)	12% (226)	10% (376)	6% (720)	8% (600)	6% (8,261)	6% (10,668)	6%
5-9 years	11% (80)	10% (185)	10% (368)	6% (729)	9% (668)	6% (7,982)	7% (12,005)	7%
10-14 years	13% (92)	9% (170)	9% (330)	6% (726)	9% (661)	6% (8,076)	7% (13,200)	7%
15-19 years	7% (53)	6% (123)	6% (240)	6% (700)	8% (592)	7% (9,320)	7% (12,879)	7%
20-24 years	5% (39)	4% (87)	4% (151)	7% (800)	6% (448)	8% (12,436)	6% (10,278)	7%
25-29 years	4% (32)	6% (115)	6% (233)	6% (735)	7% (501)	7% (10,155)	5% (8,654)	6%
30-34 years	8% (61)	12% (237)	10% (354)	6% (724)	8% (577)	7% (9,960)	6% (10,685)	7%
35-39 years	8% (61)	11% (205)	10% (384)	6% (724)	8% (615)	7% (9,608)	7% (11,986)	7%
40-44 years	9% (66)	8% (162)	8% (306)	7% (821)	8% (623)	7% (9,802)	7% (12,769)	7%
45-49 years	6% (42)	6% (120)	7% (268)	6% (760)	8% (592)	7% (9,954)	7% (13,576)	7%
50-54 years	6% (43)	6% (110)	5% (192)	7% (779)	7% (532)	6% (9,164)	7% (12,720)	7%
55-59 years	5% (39)	5% (88)	5% (203)	6% (727)	5% (395)	6% (8,125)	7% (12,432)	6%
60-64 years	4% (30)	2% (48)	3% (129)	5% (582)	3% (266)	5% (6,498)	6% (10,535)	5%
65 years +	4% (31)	3% (58)	5% (186)	19.3% (2,272)	7% (516)	16% (22,412)	17% (30,753)	14%

Source: ABS Census, 2006

Other key demographic statistics include male, female and Aboriginal and Torres Strait Islander population percentages within each nominated area. Table 4 below shows that there is a similarity between the percentage of males and females across those local and regional suburbs when compared with Newcastle and Lake Macquarie LGA as well as NSW (state). With regard to the percentage of Indigenous persons within the nominated areas of comparison, Minmi (suburb) was relatively low when compared to other suburbs, both LGAs and NSW (state).

Table 4 – Male, Female and Aboriginal and Torres Strait Islander population percentages

Person characteristics	Minmi	Fletcher	Cameron Park	Wallsend	Maryland	Newcastle LGA	Lake Macquarie LGA	NSW (state)
Male	50.1%	51.2%	49.4%	47.5%	49.2%	48.8%	48.9%	49.3%
Female	49.9%	48.8%	50.6%	52.5%	50.8%	51.2%	51.1%	50.7%
Aboriginal and Torres Strait Islander	1.4%	2.7%	2.3%	2.7%	2.7%	2.1%	2.3%	2.1%

Source: ABS Census, 2006

2.2.2 Regional demographic forecast

Table 5 below provides an overview of the projected change in age structure for the Newcastle SSD (statistical sub-division). It can be seen that between 2011 and 2036 there will be a shift towards an ageing population within the Newcastle SSD. There is a significant decrease in persons aged 18 to 39 as well as a slight decrease in those aged 17 years and below. An ageing population across the Newcastle SSD will have implications for social infrastructure and impact and should be taken into consideration.

Table 5 – Projected change in age structure: Newcastle SSD (% Cumulative Change)

Age Group (years)	2011	2016	2021	2026	2031	2036
0–4	-0.1%	-0.2%	-0.3%	-0.5%	-0.6%	-0.8%
5–11	-0.5%	-0.7%	-0.8%	-1.0%	-1.1%	-1.3%
12–17	-0.5%	-1.0%	-1.2%	-1.3%	-1.3%	-1.4%
18–39	-0.5%	-1.3%	-2.2%	-3.2%	-4.0%	-4.6%
40–64	+0.5%	+0.1%	-0.6%	-1.3%	-1.8%	-2.1%
65–84	+0.7%	+2.4%	+4.2%	+6.0%	+7.1%	+7.5%
85+	+0.5%	+0.8%	+0.9%	+1.2%	+1.8%	+2.8%

Source: NSW Department of Planning Household and Dwelling Projections: 2008

2.2.3 Birth place and language

At the time of the 2006 Census, 90.0% of Minmi residents stated they were born in Australia. This figure was slightly lower at Fletcher (88.5% of residents born in Australia), Cameron Park (88.1%), Maryland (86.9%), Wallsend (84.8%), Lake Macquarie (85.4%) and Newcastle (82%). These percentages are relatively high when compared to that of NSW (69.0%). England was the second most common response to place of birth across all suburbs, both LGAs and NSW. It is evident that the local and regional population is predominately from Anglo Saxon backgrounds.

With regard to language spoken at home, English was the principal answer across all locations with the following comparable percentages:

- Minmi: 97.0% English
- Fletcher: 91.8% English
- Cameron Park: 93.6% English
- Wallsend: 89.3% English
- Maryland: 91.2% English
- Newcastle LGA: 87.8% English
- Lake Macquarie LGA: 93.2% English
- NSW: 74.0% English

2.2.4 Religion

Table 6 below provides an overview of the percentage of persons who nominated a religious affiliation at the time of the 2006 Census. Across all suburbs, both LGAs and the state of NSW the top three most common responses were Anglican, Catholic and 'No Religion'.

Table 6 – Religious affiliation in 2006

Religious affiliation	Minmi	Fletcher	Cameron Park	Wallsend	Maryland	Newcastle LGA	Lake Macquarie LGA	NSW (state)
Anglican	35.7%	30.7%	28.8%	27.3%	27.7%	25.0%	27.6%	21.8%
Catholic	16.9%	25.3%	24.1%	23.5%	25.1%	26.1%	22.9%	28.2%
No Religion	14.8%	12.9%	13.8%	13.9%	14.8%	16.3%	15.5%	14.3%

Source: ABS Census, 2006

It is evident that the most common religious affiliation across the study areas is Anglican. It is noted that the Newcastle LGA as a whole and the state of NSW both have a higher proportion of Catholics than Anglicans.

2.2.5 Income and employment

Table 7 below provides an overview of the median individual, household and family incomes across those focus suburbs compared to Newcastle LGA, Lake Macquarie LGA and NSW (state).

Table 7 – Income (Population aged 15 years and over) from the 2006 Census

Income	Minmi	Fletcher	Cameron Park	Wallsend	Maryland	Newcastle LGA	Lake Macquarie LGA	NSW (state)
Median individual income (\$/weekly)	443	651	543	359	471	409	394	461
Median household income (\$/weekly)	1,121	1,639	1,351	724	1,119	885	922	1,036
Median family income (\$/weekly)	1,155	1,656	1,398	968	1,201	1,132	1,102	1,181

Source: ABS Census, 2006

Minmi's median individual income of \$443 per week is slightly lower than the NSW median income of \$461 per week, but higher than the Newcastle LGA median of \$409 per week and the Lake Macquarie median of \$394 per week. It is evident that both Fletcher and Cameron Park have a population with a considerably higher weekly individual (\$651 and \$543 respectively), household (\$1,639 and \$1,351 respectively) and family (\$1,656 and \$1,398 respectively) income rate than those surrounding suburbs, both LGAs and the state.. Wallsend has the lowest weekly incomes for individuals (\$359), households (\$724) and families (\$968).

Unemployment across the Newcastle LGA (7.3%) and Lake Macquarie LGA (6.7%) is considerably higher than that of those surrounding suburbs of Minmi (5.5%), Fletcher (3.7%), Cameron Park (3.2%) and Maryland (5.0%), with the exception of Wallsend (7.6%). This is the same when compared to the NSW state average of 5.9%.

Table 8 following demonstrates the workforce characteristics of the selected local and regional suburbs, compared with Newcastle LGA, Lake Macquarie LGA and NSW (state).

Table 8 – Total percentage of persons in labour force in 2006

Labour force	Minmi	Fletcher	Cameron Park	Wallsend	Maryland	Newcastle LGA	Lake Macquarie LGA	NSW (state)
Employed full-time	58.7%	60.9%	62.0%	56.3%	58.7%	56.4%	56.2%	60.8%
Employed part-time	28.9%	28.5%	28.7%	30.2%	29.9%	30.3%	30.8%	27.2%
Unemployed	5.5%	3.7%	3.2%	7.6%	5.0%	7.3%	6.7%	5.9%

Source:

Table 8 above shows a similarity with regard to the full-time employment rate across all suburbs, with Fletcher (60.9%) and Cameron Park (62.0%) being considerably higher than the average for both Newcastle and Lake Macquarie LGAs. The percentage of persons who stated that they were employed part-time was comparable across all locations.

2.2.6 Occupation and industry

The following table provides an overview of the occupation type/workforce characteristics across local and regional suburbs which can be compared to that of Newcastle LGA, Lake Macquarie LGA and NSW. Furthermore, the following explains the most common type of industry of those employed, across the nominated areas.

Table 9 – Workforce characteristics (Employed persons aged 15 years and over)

Occupation	Minmi	Fletcher	Cameron Park	Wallsend	Maryland	Newcastle LGA	Lake Macquarie LGA	NSW (state)
Professionals	13.8%	19.1%	12.9%	16.2%	13.9%	24.1%	18.1%	21.2%
Technicians and trades workers	21.1%	16.6%	18.2%	17.4%	17.9%	14.4%	17.3%	13.6%
Clerical and Administrative workers	12.8%	18.2%	18.1%	15.1%	17.0%	14.5%	15.3%	15.4%
Community and Personal Service Workers	11.6%	8.6%	7.8%	10.1%	9.4%	9.9%	9.0%	8.6%
Labourers	10.4%	6.5%	9.8%	12.1%	11.5%	9.6%	10.4%	9.5%
Sales Workers	9.5%	11.6%	12.9%	11.4%	10.4%	10.4%	11.2%	9.7%
Managers	9.8%	11.9%	10.4%	7.9%	8.5%	9.8%	10.0%	13.6%
Machinery Operators and Drivers	9.5%	6.7%	8.4%	8.7%	9.4%	5.8%	7.1%	6.4%

Source: ABS Census, 2006

Table 9 above provides an overview of workforce characteristics for the nominated areas. The most common occupation for employed persons in Minmi is technicians and trades workers. Other surrounding local and regional suburbs also have a high proportion of technician and trades workers when compared to NSW. Overall, there are a lower percentage of persons who stated 'professional' as

their occupation across local and regional suburbs when compared to the NSW average. Newcastle LGA had a higher than average percentage of professionals when compared to the NSW state.

The hospital industry is the most common industry of employment of people residing in Minmi (5.5%), Cameron Park (4.7%), Fletcher (6.0%), Wallsend, (5.1%) and Maryland (5.4%). This was also the same for Newcastle LGA. The most common industry of employment for Lake Macquarie LGA and NSW was School Education (5.1% and 4.4% respectively).

2.2.7 Family characteristics

Table 10 below summarises the proportion of families that fall in to each of the Census category types.

Table 10 – Family types for communities in the Northern Lands.

Family type	Minmi	Fletcher	Cameron Park	Wallsend	Maryland	Newcastle LGA	Lake Macquarie LGA	NSW (state)
Couple families with children	57.8%	65.4%	59.2%	38.9%	54.1%	40.1%	43.6%	46.2%
Couple families without children	29.9%	28.8%	30.6%	37.6%	29.5%	37.4%	38.4%	36.0%
One parent families	12.7%	6.0%	9.5%	21.5%	15.9%	19.2%	16.8%	16.1%

Source: ABS Census, 2006

The proportion of families classified as 'couple families with children' is significantly higher in Minmi at 57.4%, Fletcher (65.1%), Cameron Park (59.2%) and Maryland (54.1%) than in Newcastle (40.1%), Lake Macquarie (43.6%) or NSW (46.2%). The suburb of Wallsend has a significantly lower number of 'couple families with children' (38.9%) compared to all other nominated areas. Those suburbs located close to the Minmi/Link Road subject site, namely Minmi (12.7%), Fletcher (6.0%) and Cameron Park (9.5%), have a lower number of 'one parent families' when compared to Newcastle LGA (19.2%), Lake Macquarie LGA (16.8%) and NSW (16.1%). The most significant statistic to note is the high proportion of 'one parent families' within Wallsend (21.5%) compared to all other nominated areas.

2.2.8 Dwelling and household composition

According to the 2006 Census, there are 226 occupied dwellings in Minmi. A high proportion of these (97.3%) are separate houses compared with 73.3% separate houses in the Newcastle LGA, 87% in Lake Macquarie LGA and 69.7% in NSW. The proportion of separate houses within Fletcher and Cameron Park are similar to that of Minmi, at 97.7% and 97.0% respectively. Although, Maryland and Wallsend also have a higher proportion of separate houses when compared to both Newcastle and Lake Macquarie LGAs and NSW they do have a higher percentage of semi-detached/terrace/town houses than Minmi, Fletcher and Cameron Park (5.0% and 12.6% respectively).

With regard to ownership, Minmi had 22.1% of dwellings that were fully owned, which is low compared to Newcastle (32.1%), Lake Macquarie (38.6%) and NSW (33.2%). However, a high proportion (60.2%) of dwellings are in the process of being purchased compared to 28.4% in Newcastle, 33.4% in Lake Macquarie and 30.2% for NSW (state). Within the suburb of Minmi, a relatively low proportion (11.9%), are being rented compared to Newcastle (32.1%), Lake Macquarie (21.9%) and Australia (27.2%).

We note that in comparing the built form in the surrounding areas of the site (Table 11, column A) with Newcastle – Outer West SLA (Table 11, column B) that there are significant differences in the built form.

Table 11 – Dwelling types: surrounding suburbs vs. Newcastle – Outer West SLA

Dwelling Type	A	B
	Minmi, Fletcher, Maryland and Cameron Park ¹	Newcastle – Outer West SLA ¹ (% dwelling type) (occupancy rate ²)
Separate house	94.7%	85.7% (2.7)
Semi-detached, row or terrace house, townhouse etc	3.2%	9.2% (1.8)
Flat, unit or apartment	2.1%	4.9% (1.6)
Other dwellings	0.00%	0.3% (2.0)
Overall occupancy rate (total)	3.0	2.6

Source: ¹ABS Census 2006; ²ABS Census 2006 and Urbis;

2.2.9 Projected future dwelling and householder composition

The NSW Department of Planning's calculations for Newcastle (Table 12) indicate that there is projected to be a decrease in the proportion of families in the Statistical Subdivision (SSD) by 2021 (-1.2%) and a somewhat more significant decrease by 2036 (-2.9%). There is projected to be a corresponding increase in the proportion of lone person households. This is likely to be reflective of the projected increase in older persons in the SSD (table 3). While these trends will be felt differently in different parts of Newcastle and Lake Macquarie, the broader LGA trends are likely to have an influence on the demographic makeup of an incoming population.

Table 12 – Projected change in household composition: Newcastle SSD (% Cumulative Change)

Household type	2011	2016	2021	2026	2031	2036
Single parent family	+0.2%	+0.3%	+0.0%	-0.1%	-0.2%	-0.3%
One family household	+0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%
Multiple family household	+0.0%	+0.1%	+0.1%	+0.1%	+0.1%	+0.1%
<i>Total family household</i>	-0.3%	-0.7%	-1.2%	-1.7%	-2.4%	-2.9%
Group household	-0.2%	-0.5%	-0.5%	-0.6%	-0.7%	-0.7%
Lone person household	+0.5%	+1.2%	+1.8%	+2.4%	+3.1%	+3.7%

Source: NSW Department of Planning Household and Dwelling Projections: 2008

2.2.10 Transport and car ownership

Car ownership in the areas of Minmi and Cameron Park, as in Fletcher and Maryland, is significantly higher than in Newcastle LGA, Lake Macquarie LGA and NSW. A large proportion of households in these areas own two cars. In Minmi, the proportion of two car households is 41%, compared with 45% in Maryland, 35% in Cameron Park and 59% in Fletcher. 31% of households across Newcastle LGA own two cars, and this figure is 35% in Lake Macquarie LGA and 34% across in NSW owning two cars.

21% of households in Minmi own 3 cars or more, compared to 20% in Cameron Park, 19% in Fletcher , 17% in Maryland. These are higher than the 10% in Newcastle LGA, 9% in Lake Macquarie LGA and 11% in NSW that own three cars.

The proportion of households without a car is significantly lower in Minmi (3%), Cameron Park (1%), Fletcher (1%) and Maryland (3%), than in Newcastle (15%), Lake Macquarie (9%) and NSW (12%).

Census data for 2006 indicates that no one at Minmi used any form of public transport to travel to work, with 68.9% travelling to work as the driver of a car (compared to 56.3% in NSW as a whole), 6.4% as passengers (5.7%), 2.4% in trucks and 0.9% travelling by bicycle. The remainder either worked from home (3%) or didn't attend work on the date in question.

3 Review of key local and regional planning documents

This section of the report considers current local and state policy – statutory, non-statutory and strategic, that are relevant to the site and proposed development, providing an overview of the planning environment of the Lower Hunter Region, Lake Macquarie and Newcastle LGA local government areas.

The NSW Government - regional, local government and regional development organisations have a number of strategic action plans that apply to the future population projections and social infrastructure requirements of the region in particular, these include:

- NSW State Infrastructure Strategy 2008 (Hunter Region)
- Lower Hunter Regional Strategy 2006-2031
- Lower Hunter Regional Conservation Plan
- Lower Hunter Transport Working Group
- Lower Hunter Integrated Transport Strategy
- Building Liveable Communities in the Lower Hunter Region
- Newcastle-Lake Macquarie Western Corridor Planning Strategy 2010 (Final Draft)
- Lake Macquarie City Council Lifestyle 2020 Strategy
- The City of Newcastle Community Plan (2006-2010)

3.1.1 NSW State Infrastructure Strategy 2008 (Hunter Region)

The NSW State Infrastructure Strategy (SIS) was published in 2008. The SIS identifies the Hunter region as a larger contributor to the NSW economy and identifies the Lower Hunter and Newcastle in particular as the key drivers behind economic growth. The Hunter contributes 33% of NSW exports and Newcastle contains the world's largest coal export port. The key industry sectors are mining, agriculture, wine production, tourism and the equine sector, with recent developments in defence and aerospace. Important to the continued economic expansion of the Hunter will be the accommodation of a third coal loader at the port of Newcastle and also the diversification of the economic base, moving away from primary and secondary industry towards a wide range of services industries.

With the projected increase in population in the Lower Hunter alone expected to be 160,000 new residents by 2031, the SIS outlines current and proposed infrastructure requirements through to 2018 and places each development into one of three categories; Human Services, Justice & Transport, Electricity and Water. Important Human Services, Justice and Transport developments for the region include:

- Maitland TAFE College – Trade School
- Accommodation reconfiguration and fit out of Berry Park aged care facility
- Hunter Expressway
- Pacific Highway F3 to Raymond Terrace

The SIS confirms that an urban development program for the Lower Hunter region will monitor the development of residential, commercial and industrial land to ensure that supply meets demand.

3.1.2 Lower Hunter Regional Strategy

The Lower Hunter Regional Strategy (LHRS) was first published by the NSW Department of Planning in 2006 and was reaffirmed by the NSW Cabinet in 2009. The LHRS applies to the 5 local government

areas (LGAs) of Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens. The primary purpose of the LHRS is to ensure that adequate land is available and appropriately located to sustainably accommodate the projected housing and employment needs of the Lower Hunter region over the next 25 years. Strong emphasis is placed upon strengthening vibrant centres and corridors that support Newcastle as the regional city whilst working in concert with the Lower Hunter Regional Conservation Plan to maintain and protect the region's sensitive environments and biodiversity.

The LHRS sets targets for growth in the region over the next 25 years of 160,000 more residents, 115,000 new homes and 66,000 new jobs.

It is envisaged that 80,000 new homes will be required to meet the growing population and 35,000 to meet current housing demand. Greater opportunities will be afforded to developing sites in urban infill areas and on existing zoned but undeveloped sites, limiting the development of new greenfield sites that are expensive to connect to current infrastructure. Employment growth is anticipated to primarily occur in urban centres and designated employment lands with minimal growth occurring in dispersed employment areas.

3.1.3 Newcastle-Lake Macquarie Western Corridor Planning Strategy 2010 (Final Draft)

The Newcastle-Lake Macquarie Western Corridor Planning Strategy 2010 provides a broad framework to guide urban expansion and conservation in the Newcastle and Lake Macquarie western corridor. The Strategy predicts that there will be approximately eight dwellings per hectare (8,000 dwellings), plus up to 1,500 hectares of employment lands in the identified areas.

The Strategy also implements a number of the Lower Hunter Regional Strategy housing and employment actions, such as ensuring that future rezoning proposals are consistent with the identified urban footprint, and that the design of new release areas incorporates sound neighbourhood planning principles. The planning principles and development criteria have been established through consideration of existing planning documents, broad constraints analysis, existing settlement parameters and consultation with key stakeholders. This criteria provides guidance for the planning and development of urban land within the corridor to enable more sustainable and effective land uses.

This Strategy focuses on the significant role that the regional and subregional conservation corridors play as environmental assets and emphasises the importance of their conservation for future generations. The Strategy states that future development will require supporting infrastructure. Sections four and five of the planning Strategy identify the key state and local infrastructure requirements for roads, public transport, power, water/sewer, education, emergency services, health and recreational areas.

There are a number of proposed infrastructure requirements for the western corridor. These new initiatives, upgrades and expansions will enhance the accessibility of services for local and regional residents, including future residents of Minmi/Link Road. The Strategy outlines the infrastructure needs and location criteria and Table 13 below summarised the nominated predicted infrastructure needs for the region and possible locations.

Table 13 – Predicted infrastructure needs identified in the Newcastle-Lake Macquarie Western Corridor Planning Strategy

Type of Infrastructure	Predicted need
Health (Hunter New England Area Health Service)	Expansion to existing Community Health Centres. The locations either side of the Newcastle Link Road are confirmed.
Regional Recreation	There are opportunities for those proponents adjoining the Blue Gum Hills Regional Park to consult with DEECW's Parks and Wildlife Group about possible embellishment opportunities with regard to passive recreation. This regional park is located adjacent to the subject site at Minmi.

Type of Infrastructure	Predicted need
Transport	The Strategy states the implementation of roads, rail, pedestrian and cycle links for the region. The continuation of regional cycleway networks are proposed to connect Glendale (transport hub) with other areas including Minmi. A new bus and rail interchange is proposed as part of the emerging Major Regional Centre at Glendale. New and improved road networks are also proposed across the Newcastle-Lake Macquarie region.
Education	On the northern side of Newcastle Link Road it is predicted that an additional 1.35 hectares is required to expand Minmi Public Primary School. A 3-4 hectare site required for a public primary school, with an additional 1 ha required to accommodate students with special needs.
Emergency	One stand alone facility required on a site of approximately 3,000m ² . Preference is along the Newcastle Link Road in the vicinity of the Cameron Park or Minmi Road roundabouts.
Local facilities	Additional recreation areas and community facilities required for new communities. Multi-purpose centres should be co-located with recreation areas or close to main activity nodes. Priority has been given to the use of flatter sites for community land uses such as schools, playing fields and neighbourhood shopping.

3.1.4 Lower Hunter Regional Conservation Plan

The Lower Hunter Regional Conservation Plan (LHRCP) was first published by the NSW Department of Environment, Climate Change and Water in April 2009 and sets out a 25 year program to direct and drive conservation planning and efforts in the Lower Hunter area. The LGAs covered by the LHRCP are the same as those on the LHRS; Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens, with additional jurisdiction over the north east Wyong LGA.

The primary objective of the LHRCP is to compliment the LHRS by:

- describing the conservation values of the Lower Hunter Region
- analysing the current status of biodiversity within the region, and assessing the likely impacts of development on biodiversity
- assessing the biodiversity values of the region, at a landscape scale, and identifying strategic areas for biodiversity protection, enhancement or restoration
- contributing to a practical framework that can secure, improve or maintain biodiversity values as the Hunter grows over the next 25 years
- guiding local level planning with respect to biodiversity, including the development of local biodiversity conservation strategies and the development of new Local Environmental Plans (LEP) that can merit biodiversity certification
- analysing the impacts of the urban development scenarios in the LHRS

The LHRCP is intended to guide biodiversity investment for restoration, repair and management, triggered by a variety of planning processes, including local and state significant development, critical infrastructure projects and property vegetation planning. It is anticipated that the LHRCP will inform biodiversity management in the Lower Hunter region and be consistent with partner strategies at the federal and state level.

3.1.5 Lower Hunter Transport Working Group

The Lower Hunter Transport Working Group (LHTWG) published the third in a series of 3 reports in December 2003. The primary objective of the reports is to recommend changes to the current public transport system that will reverse the recent trend in declining patronage on Lower Hunter public transport services.

As part of the evaluation process, the LHTWG identified a series of problems with the current transport system including “a chronic decline in public transport patronage, particularly in rail services”; spare capacity on major bus routes; a lack of coordination between public and private bus contractors; and perceived lack of community consultation on the decisions pertaining to bus routes and schedules.

In addressing these issues the LHTWG recommended the following key strategic actions:

- development of a Lower Hunter Integrated Transport Plan based on flexibility of fast bus services to link key activity centres and integrated with heavy rail services
- establishment of Hunter Bus and Ferries as a State Owned Corporation with responsibility for bus and ferry services throughout the Lower Hunter including integration with private operators
- implementation of strategic bus corridors developed by the Unsworth review as the foundation for an integrated Lower Hunter bus network
- all heavy rail services to be retained by the State Rail Authority (SRA). However, its services should be reviewed as part of the development of the Lower Hunter Integrated Transport Plan
- development of a Hunter Community Transport Plan to augment public transport services with flexible, effective community transport

The recommendations above are incorporated in the Lower Hunter Integrated Transport Strategy which was published in March 2007. The Working Group is focused on improving transport services across the entire Lower Hunter - which is defined as the Local Government Areas of Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens.

3.1.6 Lower Hunter Integrated Transport Strategy

The Lower Hunter Integrated Transport Strategy (LHITS) was published in March 2007 and sets out the vision for and implementation of a sustainable integrated public transport system for the Lower Hunter Region. Incorporation of a state funded regional transport authority is the first step to achieving the primary objective of an integrated public transport system. The newly created regional transport authority would be guided by the following key principles:

- convenient multi-modal interchanges at key locations
- a strong relationship to demand generating land use in accordance with LHRS
- integrated ticketing across modes and providers
- co-ordinated timetabling
- a geographic focus based on the Local Government Areas (LGAs) incorporated in the Lower Hunter Regional Strategy, i.e. Lake Macquarie, Newcastle, Cessnock, Maitland and Port Stephens, together with connectivity to adjoining areas e.g. Dungog, Singleton and Wyong
- common branding based on the “Hunter” region

An integrated transport system implies quality of infrastructure and coverage to major population centres and we note that the LHITS anticipates integration on a regional and inter-regional scale, being sensitive and proactive to local needs, and their satisfaction via integrated services, transport modes and providers. Key to achieving this is a strong relationship with land use demand, with a focus on connecting the regional city of Newcastle with the major regional centres of Charlestown, Cessnock, Maitland and Raymond Terrace, together with the emerging centres of Morisset and Glendale, and the forecast growth characteristics identified in the LHRS, require a proactive, integrated and co-ordinated approach to transport infrastructure.

The Strategy states that development of Glendale transport interchange will take place over the next two to five years. This will be significant for residents within the proposed Minmi/Link Road site as it will provide a transport hub that will connect to education, health and other services and facilities offered in the region. The Strategy further outlines key Hunter transport infrastructure for the region that will ultimately provide greater accessibility and movement for Minmi residents via foot, road and rail.

3.1.7 Building Liveable Communities in the Lower Hunter Region

The Building Liveable Communities in the Lower Hunter Region (BLC) document was funded by the University of Newcastle Research Association (TUNRA) and first published in 2007. The stated aim of the BLC is to act as a resource for those interested in building liveable communities and “reports on key findings from the current research and aims to highlight design and planning considerations that can be utilised in existing and future planning processes to help create liveable communities across the Lower Hunter Region.”

To achieve the stated aim, the BLC is divided into 4 sections that are designed to make clear:

- the relationship between the built environment and health
- the current context with regard to development
- the research process and outcomes
- recommend design considerations, as identified by current research

The relationship between the built environment and health

There is strong evidence to suggest that the built environment contributes to the sense of individual well being directly by creating a collective sense of place, of community, and a feeling of attachment or belonging. Each of these factors can impact positively upon an individual's health. Moreover, the way cities and towns are designed can affect access to nutritious food, transportation and employment, the ability to feel safe and connected to others, opportunities to exercise, potential exposure to pollutants and toxins, the senses and emotions and memories.

It is essential to create neighbourhoods and communities that are both healthy and liveable for the people within them and developers are increasingly interested and encouraged to build communities that promote health and social well being. Developers are seen by many as central to the development of innovative liveable communities.

The current context with regard to development

Australia is experiencing major challenges to development the foremost of which are increasing migration to coastal communities; ensuring sustainable energy and water supplies; and increasingly complex regulatory environment; and changing population health characteristics with increases in rates of obesity, diabetes, heart disease, and depression. While many of these challenges present obstacles, they also present opportunities for developers to think more creatively about how design and development can address the challenges presented.

The development sector is encouraged to engage more fully with the local community and local government to identify opportunities to deliver new forms of governance such as corporate citizenship; citizen participation; public-private partnerships and social and environmental capital. Partnering in this way can open up opportunities for identifying innovations in design including walk ability and physical activity into developments. It can lead to building sustainability policy and achieving ‘smart growth’ from the bottom up.

Smart growth is identified as “encouraging the mixed uses, preserving open space and environmentally sensitive areas, and making the development review process more predictable” (American Planning Association, 2006). Examples of this are taking advantage of compact building design; creating walkable neighbourhoods; fostering distinctive, attractive communities with a strong sense of place; strengthening and directing development towards existing communities; and encouraging community and stakeholder collaboration.

The research process and outcomes

Research was initiated as part of a program funded by TUNRA investigating the urban environment and the processes that shape it. The central objective was to establish the importance of the relationship between the built environment, planning and health, and to develop a resource for those interested in building liveable communities. In the first instance the TUNRA identified the key elements of what

constitutes a liveable community and then explored how this could be applied to the Lower Hunter region.

Consultation with the Lower Hunter community members and stakeholders identified four major components that make up a liveable community, physical structures; natural features, service provision; and social principles. To make sense of the various strands of each of the components the findings were examined and synthesised into the following overlapping categories:

- Connectivity – public transport, work, schools, parks, libraries, community facilities
- Sustainability – parks and open space, conserve forests and farm land, protect wildlife
- Accessibility – shops, restaurants, local employment opportunities, health services
- Flexibility – mixed housing types, affordable housing, multiple purpose for land use

One further key finding from the research is that the most opportunistic time to influence developer planning is at the early feasibility stages before the submission of development applications, and that impact assessments, such as Social Impact Assessments, offer best practice in assessing and addressing impacts at the planning stage.

Recommended design considerations

A series of recommendations were made under each of the design principle headings including:

- enhanced design, location and safety of footpaths and shared paths for cycling and walking
- providing associated end use infrastructure such as bike racks, lockers and change facilities
- enhanced connections to services, parks and open spaces
- increased availability of public transport; conservation of energy use; sustainable and local water supply
- protecting water courses and habitats
- waste management
- provision of local services and facilities
- integration and co-location of facilities
- presence of major institutions
- increased availability of open and public space; community engagement
- adaptable housing
- local service diversity
- multi-purpose building use

There were further design considerations identified, but those outlined above provide an overview of some of the considerations identified under each of the design principles. This Report provides planning and design considerations that were taken into account with the preparation of the detailed master plans for the Minmi/Link Road site.

3.1.8 Lake Macquarie City Council Lifestyle 2020 Strategy

The Lifestyle 2020 Strategy provides a vision for the City of Lake Macquarie that focuses primarily on the social, environmental and economic potential of the LGA. The Strategy focuses on four core values, namely:

- sustainability

- equity
- efficiency
- liveability

The Strategy aims to provide the community with a realistic expectation about future development within the city and to reinforce and strengthen Centres so that a wide range of commercial and community services are provide in a timely and accessible manner. The Strategy also aims to provide local employment opportunities for residents, provide a sense of identity for the community and an attractive environment. The overarching strategic directions of the Strategy towards 2020 are:

- a city that is responsive to it's environment
- a well serviced and equitable city
- a well designed and liveable city
- a city of progress and prosperity
- an easily accessible city

The Strategy also provides Strategic Plan Maps and Intent Statements that identify the preferred pattern of development for the City and form a graphic description of how the Strategic Plan's Aims and Directions will be achieved. These maps include; urban structures, movement systems and green systems.

Although the Strategy does not provide direct measures to consider for Minmi, the overarching social and community provisions and expectations stated have been considered in the concept plan for Minmi/Link Road.

3.1.9 The City of Newcastle Community Plan (2006-2010)

This City of Newcastle Community Plan is a City wide planning document that is of particular relevance to Council's social, cultural and recreational services and has built on the previous *Social Plan 200-2005*. The intent of the City of Newcastle Community Plan is to provide a strategic overview of the key community trends and issues that the Newcastle City Council people will need to address and maximise the opportunities of being a sustainable city that people enjoy living in and will want to live in. It also provides a framework to address these issues over a five year period.

Newcastle City Council engaged in rigorous consultation processes to identify key issues. The document provides a succinct overview of all the trends, issues and strategies, summary of the key issues and strategies for each of the 28 discussion papers and a Strategic Plan for the next 5 years. It is stated that this Strategy should be read in conjunction with the Community Plan Discussion Papers.

It is noted that the Community Plan primarily provides guidance for the following areas of Council:

- Recreational Services and Planning
- Library and Cultural Services and Planning
- Human Services and Social Planning

This document identifies key demographic trends impacting on the community, key broader community trends, policies and legislation influencing the community change, key community issues, key strategies and a five year action plan. The Plan also focuses on particular minority groups within the community. The target groups for Newcastle are:

- aboriginal Community
- cultural and linguistic diversity
- children and families

- disability
- gay and lesbian
- men
- senior novocastrians
- women
- youth

The strategic direction of the Plan is set out under five key strategic priorities. These priorities include the description of community benefit, those responsible for actioning and potential partnerships with stakeholders. Those priorities include; ESD Leadership, City Wide Revitalisation, Healthy Lifestyle, a compassionate community and an effective and efficient government.

The City of Newcastle Community Plan outlines a number of key elements to be considered at the planning and design stage of the Minmi/Link Road site. The proposed urban form and proposed housing type and target market for the development considers the groups identified above.

4 Proposed development

The Concept Plan for a residential subdivision applies to the 520ha Minmi/Link Road lands and to a conservation land transfer to 1544Ha of the Stockrington and 17 Ha of Mimi sites. The key parameters relevant to the social/demographic assessment include the following:

- A dwelling yield of 3,300 dwellings over 520ha. Two village areas are included in the Concept Plan that will provide support facilities including retail premises to service the new and existing communities.
- A predicted annual lot release rate of 165 lots per year with the first lots to be released in 2012. Based on this rate, the 3,300 dwelling units will be built by 2032. It is forecast that the first residents will be in occupation by 2013.
- The provision of associated infrastructure in both Newcastle and Lake Macquarie Council local government areas.

It should be noted that approval is not being sought under the Concept Plan for a specific lot or road layout. The indicative lot layout demonstrates how the dwelling yield of 3,300 dwellings could be provided, inclusive of the independent living units and aged care facilities.

It is proposed to dedicate land for conservation purposes as part of the Major Project Application via a Voluntary Planning Agreement (VPA) between Coal & Allied and the New South Wales Government. Much of the social infrastructure and open space will also be considered under a proposed agreement with NCC and LMCC relating to the respective Local Government (LGA) areas.

4.1 Proposed demographic profile

The demographic profile for the new community at Minmi/Link Rd will be influenced by a range of factors, including

- regional and national population trends
- new development in the Hunter Region
- target market and household type and occupancy ratios
- design concept, site constraints and proposed urban form

These factors are considered in the following sections of this report.

4.1.1 Regional and national trends

The NSW Department of Planning's population profile projections for the Hunter Region (Table 14), excluding Newcastle, identify a significant increase in the proportion of residents aged 65 and over by 2036, with a corresponding reduction in the proportion of the population aged below 64. This trend is common in population projections for regional Australia, which is expected to accommodate a significant proportion of the ageing population over the next 20 years.

Table 14 – Projected change in age structure: Newcastle and Hunter Region (% Cumulative Change)²

Age	Newcastle			Hunter region excluding Newcastle		
	Proportion of total population		Proportional Change	Proportion of total population		Proportional Change
	2010	2036	2010-2036	2010	2036	

² http://www.planning.nsw.gov.au/population/pdfs/nsw_state_regional_population_projections_2006_2036_2008release.xls

Age	Newcastle			Hunter region excluding Newcastle		
	Proportion of total population		Proportional Change	Proportion of total population		Proportional Change
	2010	2036	2010-2036	2010	2036	
0-4	6.1%	5.4%	-0.70%	6.2%	5.7%	-0.49%
5-9	6.2%	5.6%	-0.56%	6.4%	5.8%	-0.52%
10-14	6.4%	5.7%	-0.69%	6.6%	5.8%	-0.79%
15-19	6.8%	5.8%	-1.06%	6.6%	5.3%	-1.26%
20-24	6.6%	5.5%	-1.10%	4.8%	3.9%	-0.93%
25-29	6.3%	5.2%	-1.13%	5.2%	4.3%	-0.92%
30-34	6.1%	5.5%	-0.65%	5.5%	4.9%	-0.59%
35-39	6.8%	5.8%	-0.96%	6.4%	5.4%	-0.99%
40-44	6.5%	6.1%	-0.42%	6.4%	5.8%	-0.60%
45-49	6.9%	6.1%	-0.83%	7.1%	5.8%	-1.29%
50-54	6.8%	6.1%	-0.75%	7.0%	6.0%	-1.04%
55-59	6.4%	5.9%	-0.51%	6.7%	6.1%	-0.58%
60-64	6.0%	6.0%	0.04%	6.7%	6.5%	-0.11%
65-69	4.7%	5.9%	1.17%	5.6%	6.6%	1.03%
70-74	3.7%	5.7%	2.00%	4.6%	6.5%	1.91%
75-79	3.0%	5.2%	2.21%	3.5%	5.8%	2.37%
80-84	2.5%	4.1%	1.62%	2.7%	4.5%	1.82%
85-89	1.5%	2.8%	1.30%	1.5%	3.1%	1.57%
90+	0.7%	1.8%	1.05%	0.8%	1.9%	1.18%

Source: NSW Department of Planning Household and Dwelling Projections: 2008

The NSW Department of Planning’s calculations for Newcastle (Table 15) indicate that there is projected to be a decrease in the proportion of families in the Statistical Subdivision (SSD) by 2021 (-1.2%), with a somewhat more significant decrease by 2036 (-2.9%). There is projected to be a corresponding increase in the proportion of lone person households, and this is likely to be reflective of the projected increase in older persons in the SSD (Table 15). While these trends will be felt differently in different parts of Newcastle and Lake Macquarie, the broader LGA trends are likely to have an influence on the demographic makeup of the incoming population of the concept plan area.

Table 15 – Projected change in household composition: Newcastle SSD (% Cumulative Change)

Household type	2011	2016	2021	2026	2031	2036
Single parent family	+0.2%	+0.3%	+0.0%	-0.1%	-0.2%	-0.3%
Other family	+0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%
<i>Total one family household</i>	<i>-0.3%</i>	<i>-0.8%</i>	<i>-1.3%</i>	<i>-1.8%</i>	<i>-2.4%</i>	<i>-3.0%</i>

Household type	2011	2016	2021	2026	2031	2036
Multiple family household	+0.0%	+0.1%	+0.1%	+0.1%	+0.1%	+0.1%
<i>Total family household</i>	<i>-0.3%</i>	<i>-0.7%</i>	<i>-1.2%</i>	<i>-1.7%</i>	<i>-2.4%</i>	<i>-2.9%</i>
Group household	-0.2%	-0.5%	-0.5%	-0.6%	-0.7%	-0.7%
Lone person household	+0.5%	+1.2%	+1.8%	+2.4%	+3.1%	+3.7%

Source: NSW Department of Planning Household and Dwelling Projections: 2008

4.1.2 New developments in the region

An analysis has been undertaken to identify districts within the Hunter Region that have recently experienced urban growth, with the aim of understanding the population profiles of new urban development within the region. A review of the population profiles of these growth areas was subsequently undertaken and Table 16 below details the findings of this analysis:

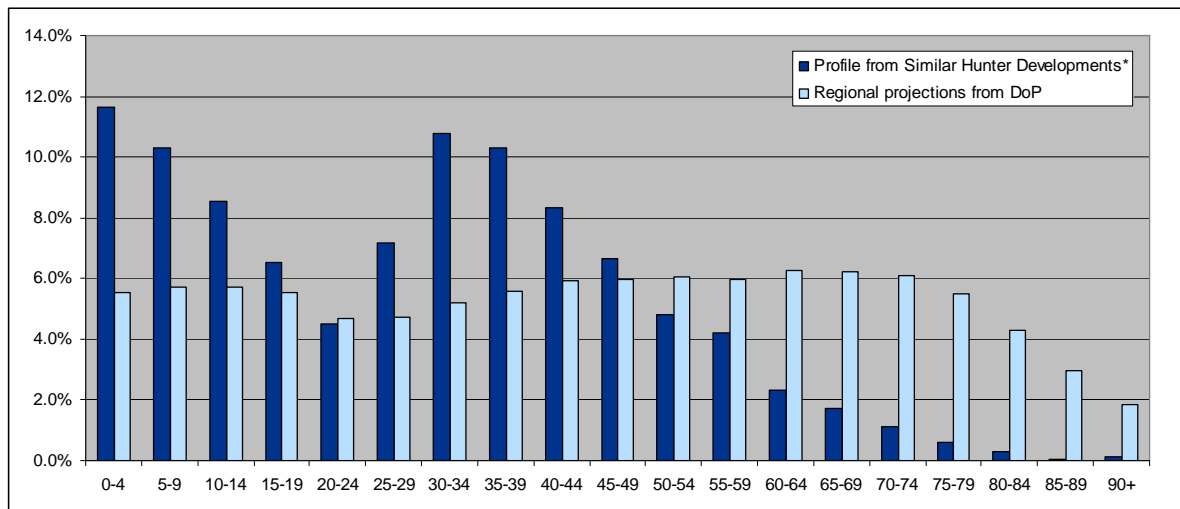
Table 16 – Sample populations from new developments in the region.

Age	Thornton CD 1111015	Thornton CD 1111016	Metford CD 1110911	Cameron Park CD 1120113	TOTAL	Proportion
2006 pop	1315	1481	1301	1896		
0-4	157	171	146	224	698	12%
5-9	136	164	112	205	617	10%
10-14	118	120	107	167	512	9%
15-19	119	81	85	107	392	7%
20-24	42	81	76	71	270	5%
25-29	35	118	147	131	431	7%
30-34	132	164	144	207	647	11%
35-39	135	151	123	209	618	10%
40-44	124	112	107	156	499	8%
45-49	112	85	72	131	400	7%
50-54	62	81	54	90	287	5%
55-59	62	45	49	96	252	4%
60-64	30	39	33	36	138	2%
65-69	20	32	24	27	103	2%
70-74	17	18	12	21	68	1%
75-79	6	9	7	15	37	1%
80-84	8	4	3	3	18	0%
85-89	0	3	0	0	3	0%
90+	0	3	0	0	3	0%

Source: 2006 Census Data of selected CDs with development between 1999 and 2006.

A comparison of this data to the regional forecasts from the Department of Planning, shows a significant difference between the profile of residents in existing new developments, and the needs that will be demanded by the projected population within the region.

Figure 2 – Comparison of DoP projections and the profile of similar Hunter developments



Source: *based on 2006 census from CDs in table 16 and Regional projections from DoP to 2036.

4.1.3 Design response to target market

The expected demographic changes in the region will influence the potential market for the new development. For this reason the concept plan seeks to provide a significantly more diverse range of housing products than those in the existing suburbs of Minmi, Fletcher, Cameron Park and Maryland. This is due to factors of the target market, lot sizes and building types. The concept plan aims to target a much broader range of households, house sizes and levels of affordability, in addition to large family households. Key population and household types likely for the development may be anticipated to include: empty nesters aged 55 to 70, group housing, single person households, and older retirees 65+years as well as younger families and working couples.

Responding to these expected differences in the target market, the concept plan includes a seniors living development with approximately 150 independent living units and a focus on universal housing principles, smaller lot sizes and community infrastructure to support an ageing population.

This will encourage a shift in the demographic profile of Minmi/Link Road toward an older age group and lone person/couple without children household structure, which is more appropriate to the emerging market within the region. As a result, there is likely to be a somewhat different community profile in the proposed development from that of the existing areas of Minmi, Cameron Park, Maryland and Fletcher and of other new development areas in the Hunter region.

4.1.4 Urban form and lot size

In the context of this report, urban form is referred to in terms of lot sizes and the dwellings types which are likely to be appropriate to construct on these lots. A number of key points (discussed below) must be considered in relation to this.

The urban form proposed in the concept plan provides a different character to the existing Minmi area and the surrounding areas of Fletcher, Maryland and Cameron Park. The suburbs of Minmi, Fletcher, Maryland and Cameron Park have a significantly higher number of larger lots and a significantly lower number of smaller lots than is proposed for the development at Minmi/Link Road. There is an inherent assumption that larger lot sizes are able to support larger dwellings and higher occupancies, and this is supported by an analysis of lot sizes in these surrounding suburbs which accommodate a significantly larger number of separate houses. The types of dwellings that will be accommodated on the Minmi/Link Road site are likely to include a significantly higher number of smaller dwellings which would be less appropriate for larger households and will therefore decrease the overall occupancy. Some key differences between the surrounding areas and the proposal include:

- a significantly higher proportion of small townhouse or higher density housing lots sized <350 m²: 1.3% in surrounding areas; 12.8% in proposal.
- a significantly lower proportion of larger traditional free standing house lots. For example, the surrounding areas are composed of 68% lots sized 550m² – 799m² whereas the proposal has around 49%³ lots sized 550 – 900m².

The subdivision layout in the concept plan indicates a different dwelling type which will result in reduced average household occupancy rates than the immediately surrounding suburbs and encourage a different demographic. This also results in the number of dwellings per hectare being greater which generates more sustainable land use efficiencies.

4.1.5 Dwelling type

We recognise that there may be a range of different catchments which could be used as reference regions to derive necessary population statistics. As such we have also considered another more targeted area as a comparable reference area, the Newcastle – Outer West SLA⁴ (see Appendix). This more discrete geography removes large sections of the catchment and excludes town centre areas such as Charlestown, employment areas such as Cardiff, and areas with high proportions of older persons (see map indicating average age Appendix D2). However, this geography does incorporate an urban form which more closely corresponds to what is expected in the proposal i.e. a greater mix of medium density with a predominance of freestanding houses, some on smaller lots.

In comparing the built form of the proposed dwelling type (Table 17, column C) with that of surrounding suburbs (Table 17, column A) and Newcastle – Outer West SLA (Table 17, column B), it is evident that there are significant differences. This results in a target form more aligned with that of the Newcastle - Outer West SLA and associated (potentially) lower occupancy rates, rather than that of immediately surrounding suburbs.

Table 17 – Dwelling types: surrounding suburbs compared with Newcastle – Outer West SLA

	A	B	C
Dwelling Type	Minmi, Fletcher, Maryland and Cameron Park	Newcastle – Outer West SLA¹ (% dwelling type) (occupancy rate)	Proposal³
Separate house	94.7%	85.7% (2.7)	87.2%* (2.7)**
Semi-detached, row or terrace house, townhouse etc	3.2%	9.2% (1.8)	8.5% (1.8)
Flat, unit or apartment	2.1%	4.9% (1.6)	4.3% (1.6)
Other dwellings	0.00%	0.3% (2.0)	-
Overall occupancy rate (total)	3.0	2.6	2.6

Source: ¹ABS Census 2006; ²ABS Census 2006 and Urbis; ³Provided by Conics (urban design).

The concept plan provides for a built form which is more closely aligned to the Newcastle – Outer West SLA and is assumed to have more comparable dwelling types and occupancy rates, than that of the immediately surrounding suburbs.

³ The master plan defines lot types, which are defined by size, as well as other location and site characteristics, and as such have overlapping size ranges which do not enable direct comparison.

⁴ a census geography based on the outer western suburbs of Newcastle LGA which also includes Maryland, Fletcher and Minmi as well as satellite towns of Tarro, Beresfield and suburbs of Wallsend, Shortland and Elmore Vale.

4.2 Projected population

For reasons outlined above, the projected population for Minmi/Link Road has been modelled against a profile similar to that of the Outer West Newcastle SLA. The model has assumed an occupancy rate of 3.0 persons per household in 2013 though it is identified that this may reduce over the term of the development. The independent living units have used an occupancy ratio of 1.8 persons per household which is typical of this type of development. This rate has been applied for all new developments within the region

This has been calculated on a maximum dwelling yield at Minmi/Link Road of 3,150 housing lots and 150 independent living units. The projection summary is in Table 18 below and the full projections can be found in Appendix C.

Table 18 – Projected regional population projections – highest growth scenario

	2012	2015	2020	2025	2030	2032	Total
New developments							
Coal & Allied development ³	0	1260	3510	6255	8730	9720	9720
Northlakes in Cameron Park ⁵	450	1800	2700	2700	2700	2700	2700
Sanctuary in Fletcher	450	1800	2517	2517	2517	2517	2517
Hidden Waters in Fletcher	150	600	813	813	813	813	813
The Outlook in Fletcher	150	900	2400	2790	2790	2790	2790
New development populations sub total	1200	6360	11940	15075	17550	18540	18540
Existing population forecast growth ²							
Minmi (2006 Census + .5% pa increase) ¹	754	765	784	804	825	833	833
Cameron Park (2006 Census + .5% pa increase)	7050	7156	7337	7522	7712	7790	7790
Maryland (2009 projections + .5% pa increase)	8658	8788	9010	9238	9471	9566	9566
Fletcher (2009 projections + .5% pa increase)	2392	2428	2489	2552	2617	2643	2643
Existing populations sub total (aggregate)	18853	19138	19621	20116	20624	20831	20831
Total population forecast for Minmi / Cameron Park / Fletcher & Maryland							
Total population	20053	25498	31561	35191	38174	39371	39371
Population increase from 2011	1200	6644	12707	16338	19321	20518	20518

¹ The existing population of Minmi is from the 2006 ABS Census for "Minmi State Suburb".

² Projected populations are not available from the NSW Department of Planning at suburb level. Therefore, an average of the growth rates (0.5%) for the "Newcastle (C) Statistical Local Area (SLA) – Remainder" and the "Lake Macquarie (C) Statistical Local Area" for each five year period from 2006-2026 have been applied to the Minmi suburb base population.

³ It is anticipated that a total of 3,300 Coal & Allied dwelling units will be built commencing in 2012 with approximately 165 lots being built each year. Based on this rate, all dwelling units will be built by 2032.

⁵ Northlakes modelled from Northlake S94 Contributions Plan http://www.lakemac.com.au/downloads/section94_contplan.pdf

4.2.1 Projected population profile

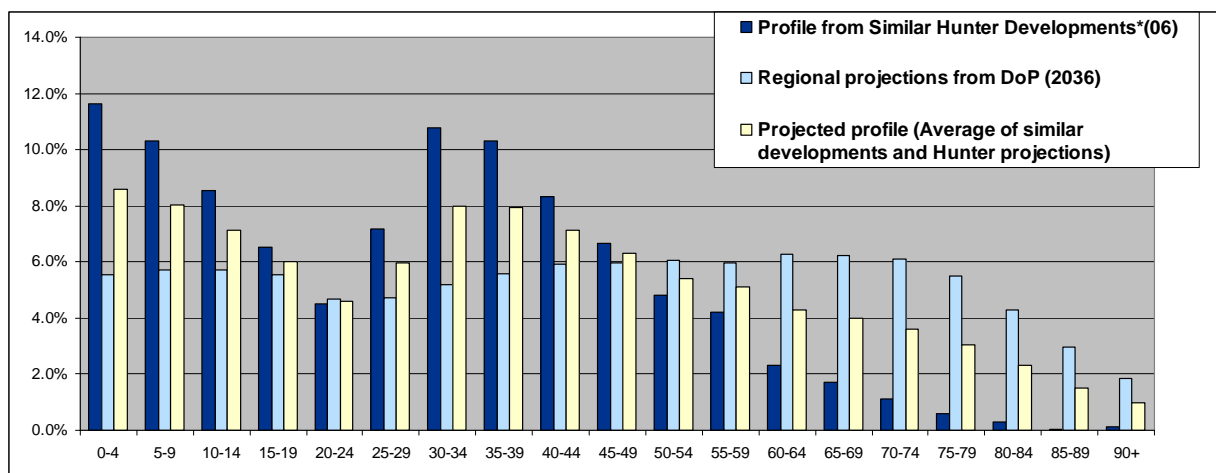
The projected age profile has also used an average from the DOP projections and the typical age profile for new developments in the region. The age profile has also considered the independent living units. The following population profile has been developed for Minmi/Link Road based on similar profiles from new developments in the Hunter Region and the Department of Planning projections.

Table 19 – Projected age profiles for the 2032 population for the Minmi/Link Road concept plan

Age group	Projected profile (Average of similar developments and Hunter projections)	Aged Care	Single lots	Total projected based on 2006 population data
TOTAL		270	9450	
0-4	8.6%		812	812
5-9	8.0%		757	757
10-14	7.1%		674	674
15-19	6.0%		570	570
20-24	4.6%		435	435
25-29	6.0%		563	563
30-34	8.0%		755	755
35-39	8.0%		752	752
40-44	7.1%		674	674
45-49	6.3%		598	598
50-54	5.4%		512	512
55-59	5.1%		481	481
60-64	4.3%	59	406	465
65-69	4.0%	54	376	431
70-74	3.6%	49	342	392
75-79	3.1%	42	290	332
80-84	2.3%	31	217	249
85-89	1.5%	21	142	163
90+	1.0%	14	94	108
TOTAL:		270	9450	9720

The following figure provides a graphic representation of the projected population profile.

Figure 3 – Projected population profile



5 Social infrastructure audit and provision

This section considers the current supply of community facilities and services in the local area. It summarises the audit of social infrastructure that has been undertaken from an initial desktop search and consultation responses from Council and local service providers. This consultation process was commenced in 2008 with key service providers including; NSW Health, DADHC and the NSW Department of Education and there has been subsequent correspondence with these agencies in finalising the concept plan.

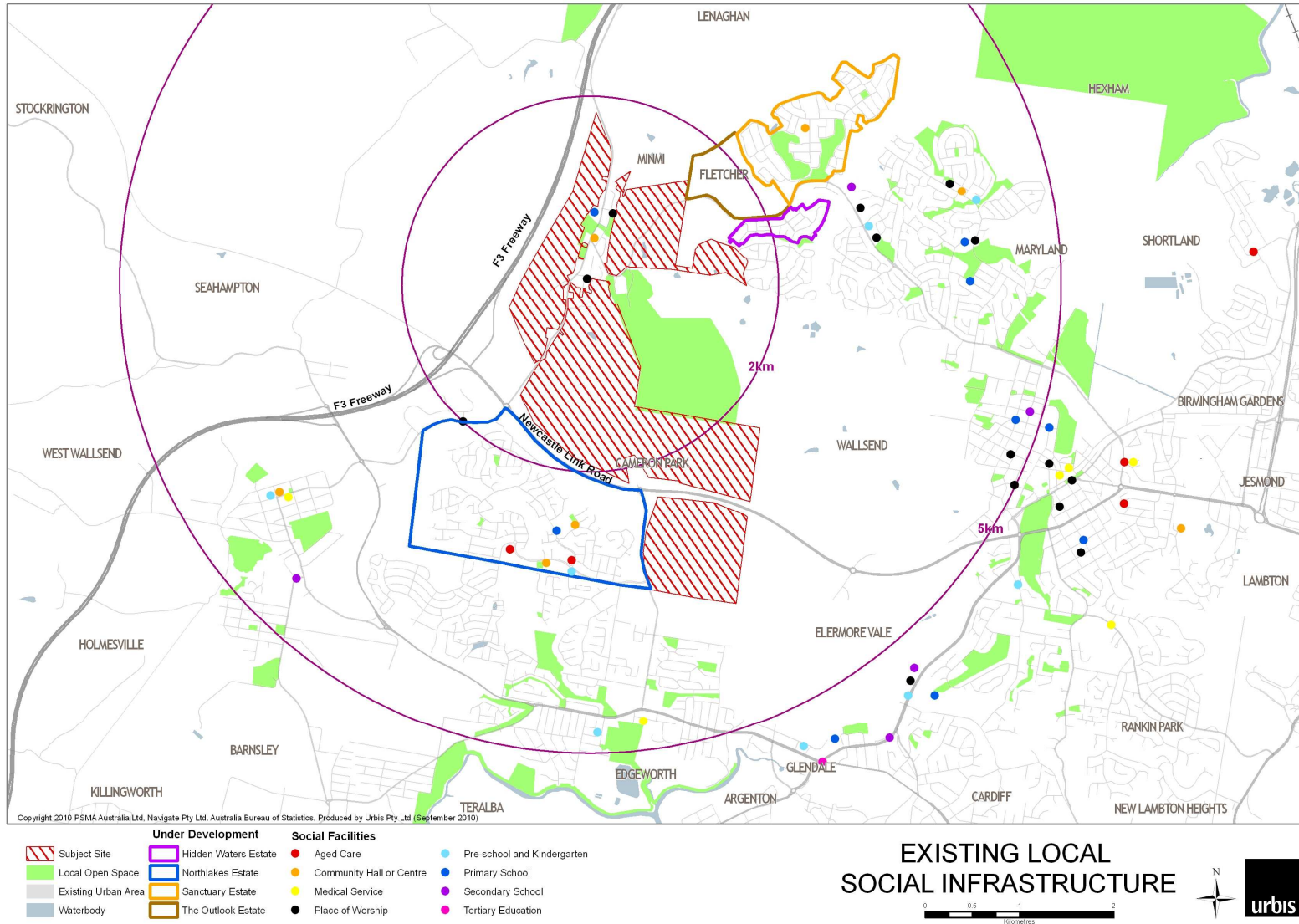
The NSW Department of Planning's *Lower Hunter Regional Strategy* sets out some key principles for neighbourhood planning. While the development at Minmi/Link Rd proposes 3,300 new houses, with a projected population of 9,720 the principles should be borne in mind. These are:

- a range of land uses to provide the right mix of houses, jobs, open space, recreational space and green space
- easy access to major town centres with a full range of shops, recreational facilities and services along with smaller village centres and neighbourhood shops
- increasing the jobs available locally and regionally, reducing the demand for transport services
- streets and suburbs planned so that residents can walk to shops for their daily needs
- a focus on providing a wide range of housing choices to provide for different needs, lifestyles and incomes. Traditional houses on individual blocks will be available along with smaller, lower maintenance homes, units and terraces for older people and young singles or couples
- conservation lands in-and around the proposed development sites, to help protect biodiversity and provide open space for recreation
- public transport networks that link frequent buses into the rail system

5.1 Infrastructure audit

An audit of existing community facilities and services in the locality (study area) has been undertaken as part of this assessment. The following map shows existing and proposed community facilities in the vicinity of Minmi/Link Road. The full list of facilities is provided in Appendix A of this report. It should be noted that the Northlakes Estate, directly south-west and adjacent to the site is currently under development and The Sanctuary, The Outlook and Hidden Waters directly to the north are at various stages of approval and development. There are a number of proposed social infrastructure facilities and services planned for these new developments. These have also been highlighted on the GIS map and considered in the gap analysis.

Figure 4 – Local social infrastructure



Source: Urbis, 2010

5.2 Local and regional social infrastructure

5.2.1 Community halls, centres and facilities

There is an existing community hall in Minmi that serves the local community. There are another three halls/centres are situated in surrounding areas roughly within two kilometres from Minmi/Link Road that provide further services for the community.

It is noted that there is one proposed community facility located in the Sanctuary Estate, Fletcher (within 2 kilometres of the site). These neighbourhood centres provide space for community interaction, dance, art and cultural activities, public forums and education and recreational activities for all ages and backgrounds.

The closest current community facility is the Maryland Multipurpose Centre. This centre provides numerous community based initiatives that include; play group for children, dance classes, weight watchers, dog training and taekwondo. There is also a community outreach program with a primary focus on youth.

It should be noted that there are two proposed community halls/centres to be developed within the North Lakes redevelopment precinct.

Newcastle City Council and Lake Macquarie City Council both noted that there was no need for new swimming facilities, but there may be potential to upgrade the Wallsend Swimming Centre, which was the closest swimming facility with relation to the site.

5.2.2 Places of worship

There are approximately 12 places of worship within the local study area, covering a wide range of denominations including Catholic, Anglican, Baptist and Seventh Day Adventist. As noted in the demographic analysis in Section 2 of this report, the two most common responses to religious affiliation for local and regional suburbs were Anglican and Catholic.

There is one place of worship within close proximity to the site, namely the Community of Christ Church at Cameron Park, however there are four churches within five kilometres of the site at Maryland. These include; The Hunter Baptist Church, The Christian City Church, The Anglican Church of Australia and the New Vine Church. Many of these places provide weekly sermons as well as community based events and celebrations for all residents.

5.2.3 Aged care facilities

Within the study area there are a total of three aged care facilities, these are all located beyond a five kilometre radius of the site. The aged care facilities listed include the Cumberland Grove, Shortland, the Wallsend Aged Care Facility and Sugarloaf Gardens, Wallsend. It should be noted that there are two proposed aged care facilities to be developed in the North Lakes precinct.

The consultation with DADHC noted that demand for community care from older people and people with a disability and their carers tends to exceed supply, and that appropriate accommodation for disabled persons in Newcastle in general is relatively limited. To this end, group homes are likely to be sought in the broader region (including Wallsend, Fletcher and Maryland) in the form of larger residential properties (4 to 5 bedrooms in size). These properties are to be used by DADHC to mainstream the accommodation for persons with a disability in the community and allow opportunities for greater independence while also providing for a supportive living environment.

A number of aged care accommodation places are available in the sub-region. The largest provider in this area is the Royal Freemasons Benevolent Institution of NSW, which operates 130 places at a complex at Northville Drive, Edgeworth, seven kilometres south of Minmi. The Northville Drive complex is split into three campuses - the Hawkins Masonic Village Nursing Home, Acacia House Hostel and the Jacaranda Hostel, which together provide for:

- 29 High Care Residential Places, and
- 101 Low Care Residential Places.

Aged care facilities are also available at Wallsend and include the large Wallsend Aged Care Facility, offering 103 High Care Residential Places, and Woodlands Lodge, providing 72 Residential low care places.

DADHC currently coordinates home visits for all regional allied health services provided to disabled persons, with third-party venues only used in instances where a risk to the service provider has been established (for example, alcohol or drug dependent clients, clients with severe mental illness, and so on). Given that this model of service delivery does not require the provision of space outside the home, there are likely to be no additional community health needs by way of facilities for disabled and aged persons in Minmi.

With relation to health and its promotion, urban design and planning that provides for desirable and accessible paths of access for persons walking and those in wheelchairs may be an important consideration, including the choice of flat pavement materials (for example concrete) and an avoidance of materials which make access difficult for those in wheelchairs or motorised equipment, and those using walking frames (for example gravel).

Community transport was identified as a significant issue for disabled persons in the more regional areas of Newcastle and Lake Macquarie. It is noted that Newcastle Community Transport currently provides for services in the area as part of an alliance with DADHC; however, the consultation also noted that the quality and quantity of public transport services should also be expected to improve in line with any population increase.

It is noted that proposals are being developed for a retirement village in the Village Centre Precinct. Coal & Allied indicated that the housing to be developed at Minmi will be flexibly designed and easily adaptable to meet the changing needs of future generations. In addition to this, Coal & Allied has stated that any proposed retirement village would respond to SEPP senior living design standards. The proposal would therefore deliver compatibility, in land use terms, ensuring that the retirement village is in comfortable walking distance of local shops and amenities.

5.2.4 Medical centres and health services

There are a total of seven medical and health related services and centres within the study area. Most of these services are located outside the five kilometre radius from the site. The closest medical centre is located at West Wallsend, offering doctors and medical practitioners. Other medical centres offer facilities that include x-rays, mental health services and day surgery.

The Lower Hunter Northern Lands Social Infrastructure Study has acknowledged that major regional public hospitals in Newcastle and Maitland, and Child and Family Health Centres are located at Wallsend, Maryland and Beresfield, are readily accessible to residents. There are a total of three district hospitals; Hunter Valley private Hospital in Shortland, Newcastle Private Hospital in New Lambton Heights and John Hunter Public Hospital in New Lambton. There are also five regional hospitals located in Newcastle and Maitland, including the James Fletcher Hospital, Royal Newcastle Hospital and Morisset Public Hospital in Newcastle and the Maitland Public Hospital in Maitland. It is noted that an increase in an ageing population for Minmi/Link Road site and the region as a whole will increase the need for hospital beds in the region.

It was identified that facilities to accommodate visiting community and allied health services would be required in the development, and that these would need to provide a flexible space that could appropriately cater for both a diversity of health uses and a variety of target audiences, including children and families, older persons, persons with a disability and indigenous health clients. Provision of flexible accommodation that can support the needs of visiting community health services will address a number of community health issues and provide the focus for health promotion to be extended to a community setting.

There is a need for a clause in the Multi-Purpose Centre charter to secure access for the ongoing use of the facility by visiting/consulting community and allied health services. It is recommended that such access provisions be reviewed at regular intervals (5 years) to ensure that the balance between service demand and facility provision is appropriately maintained.

NSW Health is keen to promote integrated primary health care models, where doctors, dentists and allied health care professionals are co-located. This model not only improves service delivery for the patient but also enhances resource management. This Departmental model is similar to the concept being canvassed in this development where provision for general practitioner services and allied health associated with multi-purpose community facilities in the short term would be accessed in adjacent suburbs to Minmi. NSW Health has indicated it is looking for 'service enhancement' of facilities in places such as Maitland and Thornton which can be accessed relatively easily by Minmi residents. NSW Health suggests that Maitland Hospital is a suitable alternative hospital destination for Minmi residents. There is also a private hospital in East Maitland.

It should also be noted that emerging health hubs, with multi purpose facilities, are planned for regional locations such as Branxton.

The development will also encourage healthy living through the promotion of physical activity by providing landscaping, water courses, and improved access to pedestrian footpaths and open spaces. The retention of 80% of Coal & Allied land as conservation land has a direct benefit on the biodiversity of the area, and also an indirect health benefit for residents (through improved air, noise abatement and visual quality).

5.2.5 Emergency services

The City of Newcastle and Lake Macquarie Councils and other agencies have identified that there are opportunities to co-locate facilities for police and emergency services. The consultation identified some local concerns about current level of access to police services in Minmi and the increased use of motor bikes in bush locations, indicating the need for a stronger Police presence.

As stated within the Newcastle-Lake Macquarie Western Corridor Planning Strategy, it is proposed that one stand alone ambulance facility is required along Newcastle Link Road in the vicinity of the Cameron Park or Minmi Road roundabouts. This is being addressed as part of the Minmi/Link Road project and is discussed later in this document.

5.2.6 Preschool and childcare centres

There are seven preschools facilities in operation across the study area. The services offered include long day care, out of hours, out of school care and vacation care. Most are located approximately five kilometres from the site and within close proximity to schools and main roads. There are three local childcare centres, namely the Early Childcare Centre at North Lakes, Cameron Park (offering 66 places), Cameron Park OOSH before and after school care (30 places) and ABC Learning, Cameron Park providing long day care.

For the projected population, up to two Long Day Care/Out of School Hours Care facilities will be required. This takes in to consideration the slightly higher proportion of children aged 0 – 4 in the existing Minmi population, than Newcastle LGA, Lake Macquarie LGA or NSW (state), and the higher proportion in the 5-9 years range than Fletcher and Maryland or Newcastle LGA and Lake Macquarie LGA and NSW (state) (see earlier demographic analysis).

This projected need is based upon identification of some capacity in childcare facilities in adjacent suburbs. Co-location of childcare facilities with primary schools may also be desirable in planning terms as this can help to manage resources cost-effectively. Identification of childcare opportunities at Black Hill may also present an opportunity for Minmi residents.

The development at Minmi exceeds the recommended population threshold, set by the former NSW Growth Centres Commission for the provision of a Youth Centre. In line with the City of Newcastle and Lake Macquarie Councils Community Plans, it is therefore recommended that a single multi-purpose

centre be developed (possibly in the new Town Centre), which would include a Youth Centre. This should be sufficient to meet the capacity of the development.

5.2.7 Primary, secondary schools and tertiary education

There are a total of eleven primary and five high schools within the study area. One primary school is located in Minmi, namely Minmi Public School which caters for 117 students and has five permanent teaching staff. Most primary and secondary schools are located approximately five kilometres from the site in Maryland, Wallsend and Glendale. A primary school is also proposed as part of the Northlakes estate precinct.

The schools within the area are both public and private and also cater for particular religious affiliations.

The Department for Education and Training is proposing to upgrade the existing Minmi primary school and develop one additional primary school in Minmi/Link Rd. There are currently no plans to provide a high school in Minmi as the projected population growth falls below the threshold target for high school provision. In this regard, capacity in the outer suburbs of Newcastle is considered sufficient and there are both existing and new schools planned in neighbouring Fletcher.

The consultation findings highlighted that local residents want to maintain the local school at its current capacity. However, it is likely that the Department of Education and Training would seek to utilise existing capacity at Minmi primary school prior to a new school commencement.

There is one tertiary education institute within the study area; the Glendale Campus NSW TAFE. The Glendale Campus offers courses relating to the following areas:

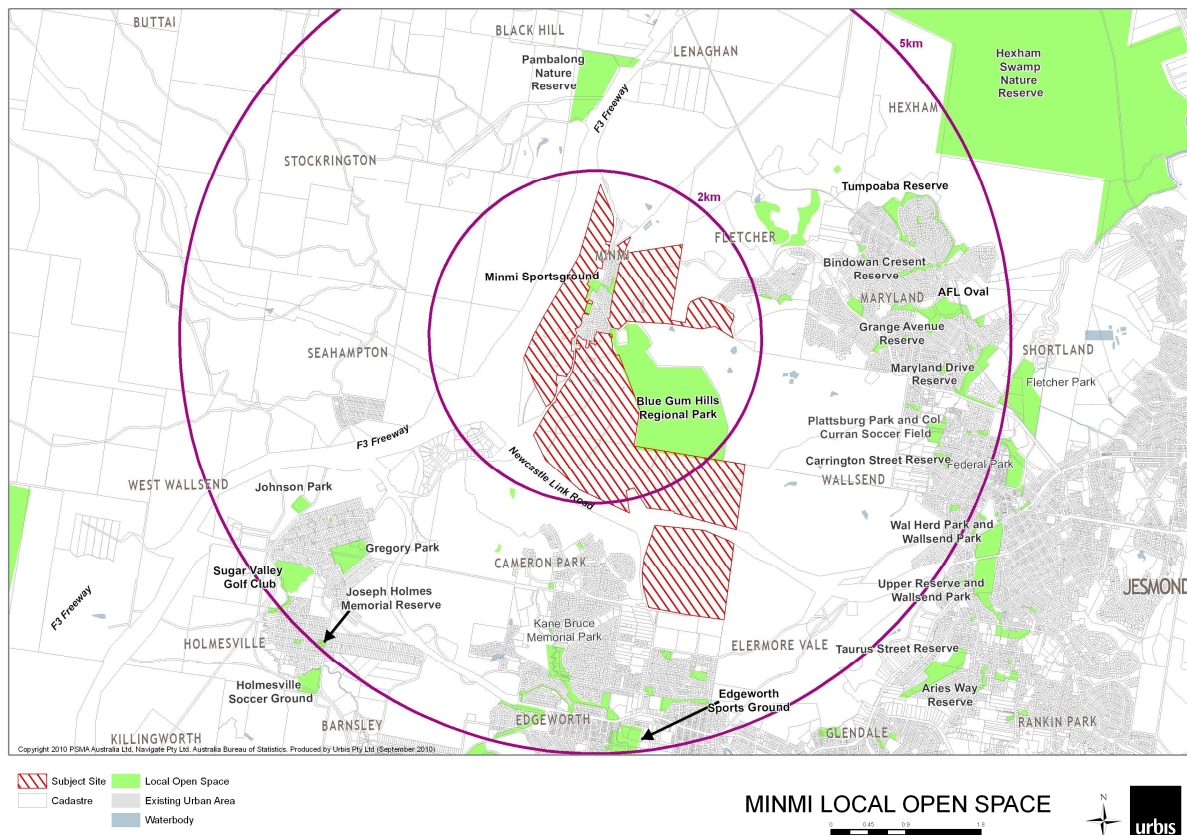
- Access and general education
- Business and computing
- Health and community services
- Metals and mechanical engineering
- Tourism and hospitality

The closest university to the subject area is the University of Newcastle

5.2.8 Open space and recreation

An audit of existing local and regional open space has been undertaken as part of this assessment. Figure 5 below provides a visual representation of the local open space network within close proximity to the subject site. This map is also located at Appendix B.

Figure 5 – Local open space network



Source: Urbis, 2010

Overall, there are a total of 11 local parks within close proximity to the site. This includes two in Minimi, three proposed parks in Northlakes, Cameron Park, three proposed in The Outlook, Fletcher, two proposed in The Sanctuary, Fletcher and one proposed in Hidden Waters, Fletcher. The Blue Gum Hills Regional Park is a large passive recreation area located directly east of the subject site. This regional park will play an important role in providing local passive recreation space for future residents.

Figure 5 shows the locations of open active and passive space within the district. These include sport grounds, nature reserves and recreation facilities. There is a tennis court and an asphalt basketball/netball court currently located in Minimi, plus the Minimi sportsground which includes two soccer fields with a cricket pitch in between, two practice wickets and an associated club house. Two sports fields, two netball courts and two tennis courts are also proposed for The Sanctuary, Fletcher.

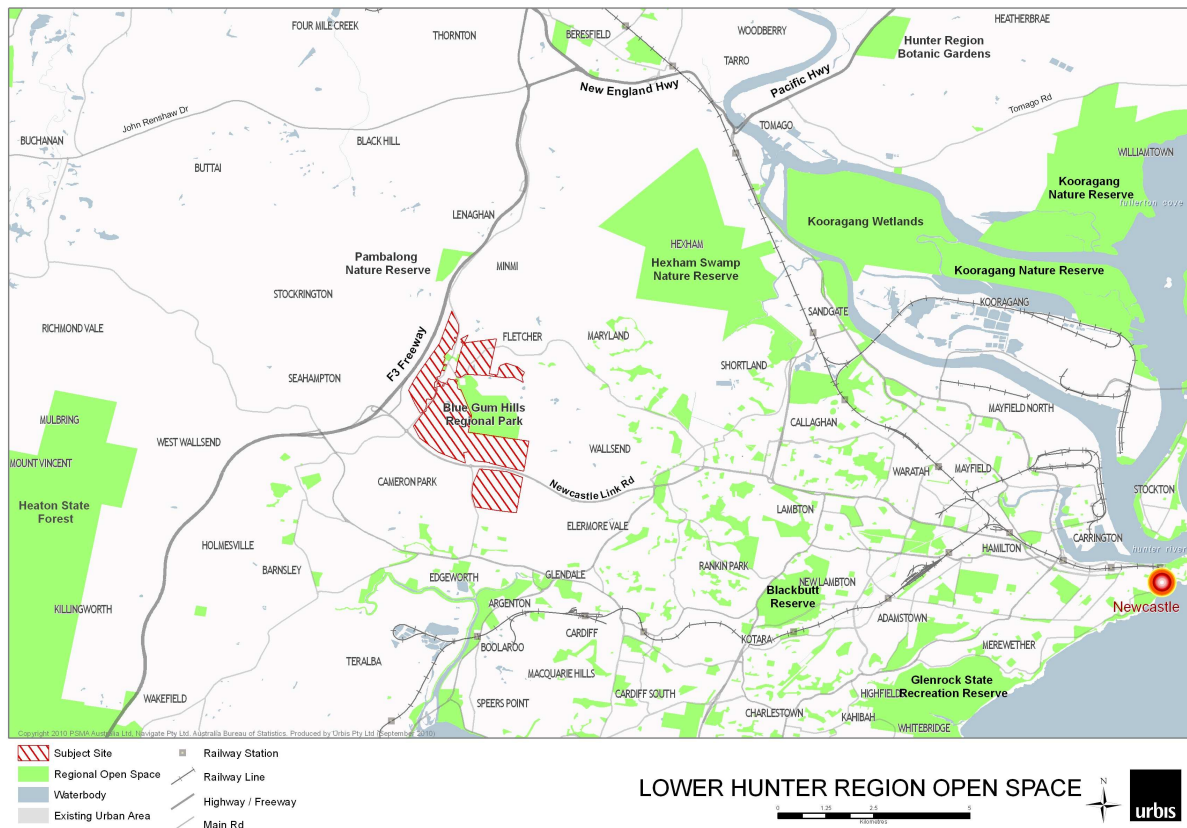
Newcastle City Council and Lake Macquarie City Council expressed the view that pocket parks, particularly smaller parks adjoining residential land uses, should be avoided as a basic rule. It was noted that there are no pocket park style developments of recreational space proposed in the master plan.

There was an agreement between the Councils that the allocation of recreation facilities between Newcastle City Council and Lake Macquarie City Council areas would be unequal, and there would be a natural skew toward providing services in the most accessible and site-appropriate locations to meet the community need.

It is noted that Lake Macquarie City Council representatives indicated that Council is presently exploring the acquisition of lands at Edgeworth for the development of a regional outdoor sports centre. This centre would involve up to eight playing fields which is likely to accommodate sports such as soccer and Australian Rules Football. It is understood that there is currently an indoor sport centre and youth centre facilities in Cameron Park, south of the proposed development.

Figure 6 below provides a broader perspective of the regional open space, including Newcastle and larger conservation areas.

Figure 6 – Regional open space network



Source: Urbis, 2010.

5.2.9 Transport

Accessibility to, and within, Minmi is largely reliant on the use of a car. Delivering a sustainable community requires the enhancement of pedestrian, public transport, cycleways and road networks. The integration of public transport so that private and public bus services can operate seamlessly will provide improved service to residents. Coal & Allied is committed to delivering a sustainable neighbourhood with town centres in easy walking distance of new housing (400-800 metres).

The consultations highlighted that the lack of accessibility to public transport was an issue for children and young people accessing recreational facilities located outside of Minmi. Many residents suggested that future provision of an express bus service to Newcastle is also desirable. A subsidised bus service to neighbouring areas such as Black Hill and Cameron Park may improve the quality of life for new and existing residents until the transport network is established.

Connectivity between existing and new open and recreation spaces via pedestrian paths and cycleways can provide space for enjoyment and relaxation and green corridors where biodiversity can thrive. Linking spaces by pedestrian paths and cycleways also helps to increase physical activity and reduce car dependency. Sensitive landscaping of paths and cycleways can improve the visual quality of the development, provide wildlife corridors and enhance the quality of life, both for individuals using the network and for the community as a whole.

Sustainable and non-motorised transport opportunities should be captured at the earliest possible stage in site development, to facilitate the commissioning of infrastructure that supports community building, active health and wellbeing.

Cycling facilities have been identified by both Councils with relation to the sub-region, including opportunities to provide linkages to existing on- and off-road cycle paths, and the potential to explore development of a community cycling trail in the Blue Gum Hills regional park. There is potential to link on- and off-road cycle paths through Fletcher to Wallsend, allowing for cycling facilities to be joined up with the existing public transport interchange located here, and supplementing current levels of bus service to Minmi.

It is expected that the frequency of bus services will improve over the course of the development as population growth dictates. Future bus routing will also accommodate urban development through greater coverage of the suburb and additional route options, including the potential for Minmi-Newcastle express services during the morning and evening peak.

The planning for the development has ensured an appropriate walking distance to access the bus network. This has been modelled on a 400m and a 600m radius. The bus stops tend to be in the denser areas of the site, and so the number of dwellings in the catchments is likely to represent a slightly higher percentage than the land areas given above.

5.3 Provision for social infrastructure and open space

There are no definitive global best practice provision standards for social infrastructure and open space. Standards should be used in conjunction with local supply, demand analysis participation rates and considerate of the local site context. It is also recognised that the way in which open spaces are categorised and audited varies between government areas and therefore it is not possible to accurately compare one area to another. However it is useful to provide a review of appropriate benchmarks against commonly applied standards to inform the provision. The standards applied in this report are based on the following:

- The former NSW Growth Centres Commission standards
- The Cameron Park Section 94 Contributions Plan
- Other recognised benchmark standards as noted

The limitations of a standard provision for community infrastructure have been documented by a number of scholars. As a result of this community facilities and open space planners have encouraged the adoption of a 'needs-based' approach to open space and recreation planning. This includes a more qualitative approach for the identification and provision of infrastructure. For this reason the assessment undertaken for Minmi has been based on a rough allocation of standards, a detailed assessment of local provision for the purposes of gap analysis and any identified trends or inputs from key stakeholders consulted as part of this assessment. This has informed the recommended infrastructure provision for the Minmi/Link Road development. This assessment is outlined in the following section.

5.4 Draft overview of social infrastructure provision for Minmi & Link Road South

Table 20 sets out the considered approach for the provision of social infrastructure facilities and services for the proposed development at Minmi/Link Road. The provisions have been made on the basis of recognised provision benchmarks;⁵ an audit of existing facilities and associated capacity, and issues and usage trends identified by service providers and stakeholders. This provides a balanced needs analysis that provides effective framing for the recommended provision. The benchmarking

⁵ Where there is a discrepancy in recommended benchmarks, Growth Centres Commission benchmarks have been applied

exercise has been undertaken on the basis of an estimated future population of the precincts of 9,720, based on a dwelling target of 3,300.

It is noted that these tables are intended to provide an evidence base for the quantum of provision. The particular details of built form and scale of recommended facilities will be determined as part of the subdivision DA's and project applications. This will have due regard for policy directions for social infrastructure provision, such as co-location of facilities, which provides efficiencies in terms of infrastructure costs and required land take.

Table 20 – Summary assessment of social infrastructure requirements: current and recommended provision (excl. open space and recreation facilities)

Facility / service	Standard benchmark	Local provision	Usage and trends	Proposed provision
General community infrastructure				
Community centre	<p>NSW GCC standards: Local - 1:6,000 people District - 1: 20,000 people Youth Centre - 1:20,000 people</p> <p>Typical land take: 1,500 m² -2,400m²</p>	<p>3 Local Community Centres/Halls 1 in Minmi 2 proposed in the Northlakes Estate 1 proposed at Sanctuary</p> <p>3 District Community Centres/Halls 1 in Wallsend 1 in West Wallsend 1 in Maryland</p>	As the uses of community centres broaden and with an ageing population profile there may be increasing use of community centres.	<p>Proposed provision: Two multi purpose community centres proposed. One in each village centre.</p> <p>Considerations: Look to utilise mixed use centres to serve community health, youth and aged facilities where appropriate.</p>
Library	<p>NSW GCC standard: District - 1: 40,000 people</p> <p>Typical land take: 2,400m²</p>	<p>2 district Libraries 1 in Wallsend 1 in Edgeworth</p>	None identified.	<p>Proposed provision: None proposed. There is not sufficient demand within the new community to justify a local library provision.</p> <p>Considerations: There may be an opportunity to provide library lending facilities as part of a self-service library shopfront located in the community centres.</p>
Community transport	<p>Standard: 1 per 10-20,000 people</p>	Newcastle Community Transport currently provides for services in the area	An increase in need due to the ageing profile of the Minmi population and aged care facilities proposed.	<p>Proposed provision: None proposed in concept plan.</p> <p>Considerations: Provision available within the region; expansion of service provision will need to be considered by transport providers and aged care providers.</p>

SOCIAL INFRASTRUCTURE AUDIT AND PROVISION

Facility / service	Standard benchmark	Local provision	Usage and trends	Proposed provision
Health and medical				
Doctor/ General Practice	<p>Netherlands Capacity Standard: 0.4 GPs per 1,000 people (general population)</p>	<p>7 district general practitioners: 3 in Wallsend 1 in Edgeworth 1 in West Wallsend 1 in Elermore Vale 1 in Cardiff</p>	<p>An increase in need due to the aging profile of the Minmi population and aged care facilities proposed. An increase in need due to increased population locally.</p>	<p>Proposed provision: The population associated with Minmi/Link Road may generate demand for around 4 GP's. The zoning and land area in the Village Centre allow for set up of GP facilities. Considerations: Provision for GPs and allied health consulting rooms are considered in the land use controls for the village centres. These will be privately provided facilities.</p>
Community health centre	<p>Commonly used standard: Local - 1per 5,000 people Neighbourhood - 1 per 10,000 people District - 1 per 30,000 people Regional - 1 per 80,000-100,000 people GCC standard: 1per 20,000 people</p>	<p>1 district community health centre: Wallsend Community Health Centre - Hunter New England Area Health Service</p>	<p>An increase in need due to the aging profile of the Minmi population and aged care facilities proposed.</p>	<p>Proposed provision: Provision of one recommended within the mixed use community centre as part of proposed village centre. Considerations: Coal & Allied have offered NSW Health a 5000sm site in the Village Centre via an offer to enter into a Voluntary Planning Agreement (VPA) with the NSWG</p>
Early childhood health centre	<p>Standard: 1 per 4000-6,000 people</p>	<p>1 district early childhood health centre: Edgeworth Child and Family Health Centre</p>		<p>Proposed provision: Provision of two recommended within the mixed use community centre as part of proposed village centre. Considerations: Potential for adaptable spaces, such as a school facilities may also be utilised for this purpose</p>

SOCIAL INFRASTRUCTURE AUDIT AND PROVISION

Facility / service	Standard benchmark	Local provision	Usage and trends	Proposed provision
Children's and youth services				
Preschool	Standard: 1 per 4,000-6,000 people	1 local preschool proposed in Northlakes Estate 7 District preschools 2 in Maryland 2 in Wallsend 1 in Glendale 1 in Edgeworth 1 in West Wallsend	Ageing demographic may reduce demand.	Proposed provision: Provision recommended as part of town and village/ neighbourhood centres and/ or co-located with primary schools. Land use zoning allows for the provision of appropriate commercially operated preschool facilities.
Child care	GCC standard: 1 per 5 children (0-4 years)	3 Local child care centres Early Learning Centre in Cameron Park (66 places) Cameron Park OOSH – Before School and after school (30 children aged from 6 - 12 years) ABC Learning Cameron Park – Long Day Care		Proposed provision: The concept plan provides land use controls in the village centres to facilitate two commercially operated child care centres. It would be proposed that commercially operated centres be developed to meet demand
Primary school	GCC standard: approx. 1 per 1,500 new dwellings Typical land take: 3ha (3.5ha if co-located or special needs facilities)	2 local primary schools 1 in Minmi 1 proposed in Northlakes Estate 9 primary schools 4 in Wallsend 2 in Glendale 2 in Maryland 1 in Black Hill	The DET has indicated the need for a new 4-ha primary/special needs school site and an extension to Minmi Public School.	Proposed provision: One primary/special needs school site proposed and an extension of the existing Minmi public school.
Secondary school	GCC Standard: 1 per 4,500 new dwellings DET standard: approx 1 per 6,000 new dwellings Typical land take: 6ha (or 10ha if combined K-12 + special needs school facilities)	5 district secondary schools 2 in Wallsend 1 in West Wallsend 1 in Maryland 1 in Glendale	DET identified that the high schools in the immediate vicinity have sufficient land area for expansion if required	Proposed provision: There are a number of schools within the district that have capacity to serve the new population at Minmi. Considerations: Provision of public high schools to serve an estimated 60% of the population; the remaining 40% to be served

SOCIAL INFRASTRUCTURE AUDIT AND PROVISION

Facility / service	Standard benchmark	Local provision	Usage and trends	Proposed provision
				by private providers. Consideration of required land take for remaining high schools to be discussed with private providers (including consideration of integrated K-12 facilities)) within the study area.
Aged care/ disability services (including housing)				
Self-care accommodation/ independent living units (ILUs)	Standard: 55 beds per 1,000 people aged 65 years and over; or 1 14 bed complex per 10-15,000 people	1 Anglican Care aged care facility in Northlakes, Cameron Park - 28 self care included 1 recently opened Domain Aged Care facility in Northlakes, Cameron Park - 60 low care included	Increasing aged population may increase demand for facilities.	Proposed provision: One 150 independent living units proposed within the concept plan.
Aged care facility including nursing home	Standard: By 2011, 50 high care nursing home places, 40 low care hostel places and 10 community aged care packages for every 1,000 people over 70 years of age	1 Anglican Care aged care facility in Northlakes, Cameron Park - 126 residential care included 1 recently opened Domain Aged Care facility in Northlakes, Cameron Park - 60 high care included 3 district aged care facilities 2 in Wallsend 1 in Shortland	Increasing aged population may increase demand for facilities.	Provision: Specific provision requirements to be determined in consultation with service providers and developers in the region as the area develops.
Senior citizens centre	Standard: 1 per 8,000 – 20,000 people	None identified	Increasing aged population may increase demand for facilities.	Provision: one within the mixed use community centre as part of proposed village centre.
Day care centre	Standard: 1per 10,000 – 15,000 people	None identified	None identified	Provision: one within the mixed use community centre as part of proposed village centre or within the proposed retirement facility.

Facility / service	Standard benchmark	Local provision	Usage and trends	Proposed provision
Other facilities and services				
Emergency services including State Emergency Services	No defined standard	<p>1 local Fire station 1 in Minmi</p> <p>2 district fire stations 1 in Wallsend 1 in West Wallsend</p> <p>1 district Police Station in Wallsend</p> <p>Closest ambulance stations located at Beresfield and Boolaroo</p>	<p>Identified opportunities for co-locate facilities for police and emergency services.</p> <p>Some local concerns were raised about local access to police services.</p> <p>Potential need identified for a fire station on the Northern side of the Newcastle Link Road</p>	<p>Provision: One ambulance station provided in Village Centre. Set aside 3,000 m² land</p> <p>One police station in Village. Set aside 6,000 m².</p>
Places of worship	<p>Standard: 15% across all Christian denominations based on the higher than average local population of Christians and the ageing demographic.</p> <p>The National Church Life Survey showed that in 1980 up to 25% of the Australian population attended church at least monthly, but this was heading down to 20% by 2000. (Kaldor, Peter et. al. Build My Church: Trends and Possibilities for Australian Churches. Sydney: Openbook, 1999, p.22)</p>	<p>3 local places of worship located in:</p> <ul style="list-style-type: none"> 2 x Minmi 1 x Cameron Park <p>11 district places of worship located in:</p> <ul style="list-style-type: none"> 7 x Wallsend 4 x Maryland 	<p>The most common religious affiliation stated in the 2006 Census for the locale and region was Anglican. The second most common response was Catholic. There was very little representation of non Christian faiths.</p> <p>As a population ages there is a higher proportion of church attendance. on ageing population may increase the demand</p>	<p>Provision: The potential demand for places of worship is recognised within the Minmi/Link Road development and zoning is in place to permit the set up of facilities as appropriate.</p>

SOCIAL INFRASTRUCTURE AUDIT AND PROVISION

Facility / service	Standard benchmark	Local provision	Usage and trends	Proposed provision
Open space and recreation facilities requirements				
Local park	<p>Department of Planning Standard (1989): 1 per 4,000 people</p> <p>Northlakes standard: 1 per 1,200 people</p> <p>Calculated mean applied: 1 per 2,000 people</p> <p>Typical land take: Approximately 1,000m² to 1ha</p>	<p>4 local parks 2 in Minmi 3 in Northlakes, Cameron Park</p> <p>Local parks generally serve a local catchment. Broader provision is not considered to have an impact on supply</p> <p>Generally local parks serve as passive and unstructured play for the local community.</p>	<p>Preference is for co-location with larger open space but still within a 400m walking distance.</p> <p>A range of park sizes desired.</p> <p>Consultation noted the need for local parks for families and children.</p>	<p>Provision: Nine formally allocated local parks within the precinct. Other informal provision is provided in riparian zones and other easements.</p> <p>Typical land take: 3.10ha total formal provision in the form of local neighbourhood parks.</p> <p>Considerations: 400m radius and co-location with local centres. An additional passive recreation space will be provided in the informal provision of linear parks in riparian zones and drainage easements</p>
District park	<p>Calculated mean applied: 1 per 100,000 (GCC standard)</p> <p>Typical land take: 2ha - 5ha</p>	Blue Gum Hills Regional Park (regional passive recreation)	None identified	<p>Provision: One district size park is proposed for the development.</p> <p>Considerations: Adequate pedestrian and cycle access to the Blue Gum Hills Regional Park are considered</p>
Sports fields - local	<p>Department of Planning Standard (1989): 1 per 3,000 people</p> <p>Department of Sport and Recreation: 1 per 2,000 people</p> <p>GCC standard: 1 per 10,000</p> <p>Council standard: Often provided as 1 per suburb.</p> <p>Northlakes Standard: 1 per 1,200 people</p> <p>Calculated mean applied: 1 per 3,000 people</p> <p>Typical land take:</p>	<p>1 local sport field at Minmi sportsground</p> <p>1 local sport field proposed at Sanctuary</p>	<p>The provision of sports fields needs to consider the mix of possible field uses. This includes soccer, hockey, and rugby union and rugby league. These fields can also be used for cricket if arranged appropriately.</p> <p>The ageing population and target market may reduce local demand on sports fields.</p>	<p>Provision: Two sports fields proposed with two soccer and two rugby fields.</p> <p>Any shortfall in provision will be provided as works in kind and/or cash contribution to additional facilities off site by agreement with either NCC / LMCC</p> <p>Considerations: Consider locating with the local parks. Consider co-location with schools</p>

SOCIAL INFRASTRUCTURE AUDIT AND PROVISION

Facility / service	Standard benchmark	Local provision	Usage and trends	Proposed provision
	3ha + (1 cricket oval and 2 sport fields - Field - Larger base module: 120m x 80m - Smaller base module: 100m x 70m			
Sports fields – district	Provision Std: 1 per 30,000 (GCC) Typical land take: Approximately 5ha - 8ha	4 district sport fields 1 in Maryland 1 in Holmesville 1 in Edgeworth 1 in Black Hill	Sports fields to have a passive recreation component	Provision: No district sports facilities proposed.
Cricket ovals	NSW Land Commission Standard: 1 per 2200 people Department of Planning Standard (1989): 1 per 2,000 people Calculated mean: 1 per 2,980 people Typical land take: 2ha	1 district cricket/AFL field in Maryland		Provision: Two provided as part of local sports fields with opportunities for co-location Considerations: Provided as co-location with soccer fields and facilities with 2 soccer fields and 1 cricket oval preferred. Located in one of the local and the district sports field
Hockey fields	NSW Land Commission Standard: 1 per 3,000 people Typical land take: 2ha	No local hockey facilities identified	No significant demand identified	Provision: No facilities proposed
Netball / basketball courts – local	NSW Land Commission Standard: 1 per 1,000 people Department of Planning Standard (1989): 1 per 2119 people; GCC Standard 1 per 10,000 Calculated mean: 1 per 2220 people	1 local basketball/netball court in Minmi Two Netball courts proposed at Sanctuary	None identified	Provision: 4 local courts proposed. Considerations: Synthetic coating will enable co-location with mini soccer fields (private providers) Co locate with district sports fields.

SOCIAL INFRASTRUCTURE AUDIT AND PROVISION

Facility / service	Standard benchmark	Local provision	Usage and trends	Proposed provision
Tennis centre – local	<p>Department of Planning Standard (1989): 1 per 1000 people</p> <p>Department of Sport & Recreation Standard: 1 per 3,410 people</p> <p>GCC Standard: 1 per 10,000 people</p> <p>Northlakes: 1 per 2,000 people</p> <p>Calculated mean: 1 per 2173 people</p>	1 local tennis court in Minmi Two tennis courts proposed at Sanctuary	None identified	Provision: 4 tennis courts proposed.
Lawn bowls	<p>Provision Standard: 1 per 30,000 people</p> <p>Typical land take: 1ha</p>	No local provision	None identified.	<p>Provision: Not required at this stage.</p> <p>Consideration: Consider provision possibly as part of aged care facilities</p>
Aquatic centre – district	<p>GCC Standard: 1 per 100,000</p> <p>Typical land take: 1ha</p>	No local provision		<p>Provision: Not proposed in the concept plan.</p> <p>Considerations: Hydrotherapy/lap pool facilities could potentially be considered – provision by private sector or as part of the aged care facilities.</p>
Youth activities centre	<p>Provision Std: NorthlakesBMX: 1 per 12,000 Skate: 1 per 12,000</p>	No local youth activity centres		<p>Provision: None proposed. Youth activities considered in association with mixed-use centre in co-location with youth centre.</p> <p>Considerations: Identify potential opportunities near community centres and local and district sports fields. Co-location preferred. Preferred as extensions to community centres or other facilities, for example sports clubs</p>

Facility / service	Standard benchmark	Local provision	Usage and trends	Proposed provision
Children's playground	Neighbourhood baseline service for any new release area. Standard: 1 per 1000 people Typical land take: 0.1 ha - 0.4ha	2 local children's playgrounds in Minmi		Provision: Provided in association with each local and district open space or sports fields, Consider on the edge of riparian zones. Considerations: Need for hierarchy for provision – 'central' – all abilities playgrounds (x2) associated with passive open space. Include local playground, play space, central play area (co-located with passive open space areas)

It is important when considering open space planning for Minmi to be aware of what is required at this strategic planning stage. At concept planning stage the focus for open space planning is to confirm the quantum of open space being planned and the location of key large scale recreation space. The focus at this stage is not on the details of paths, picnic facilities etc. These will be further detailed at project approval stage, subdivision plans and development approvals.

It is also important to note that the proposed development is located in close proximity to the regional park and is also set within the context of an existing large supply of bushland. Natural areas dedicated for conservation also exist in close proximity which have been dedicated to the public through the process of development.

It is noted that the population forecast for the Minmi/Link Road area of 39,371 (9,720 for the Coal & Allied proposed development) has been premised on average household sizes of three persons per dwelling, and that even under these circumstances, population growth in the area remains below the City of Newcastle and Lake Macquarie Councils' recreational infrastructure requirements which were benchmarked against previous modelling for a higher predicted population.

Further, it should be noted that existing facilities located in Wallsend, West Wallsend, and the Blue Gum Hills Regional Park have capacity to support the new populations' regional open space requirements in the Minmi area. These facilities are listed in Appendix B. Minmi residents recognise the value of the surrounding bushland and the need to balance future development of the area with the conservation of existing open space. The conservation lands will act as a buffer zone and a wildlife corridor for flora and fauna.

5.5 Local infrastructure - Section 94 contributions and works in kind

Coal & Allied will enter into separate agreements with LMCC and NCC to;

- Pay section 94 contributions as per the appropriate plan at the time of development of each stage of the project. Payment may be works in kind, cash or a combination of both,
- Agree mechanisms for land dedications including parks, riparian corridors, sportsfields, community facilities etc,
- Include any ongoing management arrangements determined necessary by coal & allied and the councils

The requirements tabled for each respective Section 94 Plan (Newcastle City Council and Lake Macquarie City Council) have the potential to change over time as new Plans are prepared by Councils to align with new population projections and community demands for as needed community infrastructure.

Lot yields for both NCC and LMCC areas are the subject of potential LGA common boundary alignment changes. Timing of the change is currently unknown. Section 94 Plans will apply as appropriate to the current LGA boundary. Coal & Allied will enter into separate agreements with LMCC and NCC to pay Section 94 Contributions as per the appropriate Plan at the time of development of each stage of the project

City of Newcastle

The City of Newcastle has set development contributions for the Blue Gum Hills region which are as follows:

Transport facilities:⁶ \$1,795 per separate allotment or per large dwelling unit of 3 or more in multi housing development
 \$897 per small dwelling unit of two bedrooms or less in multi housing development.

Table 21 –Sub catchments of Minmi and Maryland⁷:

	Per 3+ bedroom dwelling/lot
Community facilities	\$1,948.83
Open space and recreation	\$9,596.98
Foreshore promenade	\$133.08
S94 management	\$380.04
BGH place management	\$266.16
Total	\$12,325.09

⁶ http://www.newcastle.nsw.gov.au/_data/assets/pdf_file/0018/20484/Development_Contributions_Plan_No_4.pdf, p. 3

⁷ http://www.newcastle.nsw.gov.au/_data/assets/pdf_file/0006/104964/Section_94_rates_Plan_12005_040810.pdf

Lake Macquarie City Council

Table 22 – Lake Macquarie Section 94 Contributions Plan – Northlakes (2004)

Rates apply from the time the development plan is determined not when it is lodged:

Facility	Person	1 / 2 Bed Dwelling (Medium Density)	3+ Bed Dwelling (Medium Density)	Lot	Dedication Per Person (m2)	Dedication Per Lot (m2)
Open Space and Recreation	\$4,293	\$8,586	\$11,162	\$12,879	51.02	153.06
Community Facilities	\$793	\$1,586	\$2,062	\$2,379	0.70	2.10
Management	N/A	\$100	\$130	\$150	N/A	N/A

Source: http://www.lakemac.com.au/downloads/section94_contplan.pdf, p. 8

The Lake Macquarie City Council charge includes contributions of \$12,879 per lot toward open space and recreation infrastructure, \$2,379 per lot toward community facilities, and \$150 per lot toward management costs.

Works in kind

Coal & Allied will negotiate with both Councils in regard to the level of works in kind for open space, recreation and community facilities as the Concept Plan includes extensive open space areas, parks sports facilities and community activity accommodation within the village centres. It is anticipated that Coal & Allied will enter into a Voluntary Planning Agreement with each Council that will provide the framework for contributions and works in kind. This will be based on the following anticipated provision as identified in the master plan:

- Proposed Sports & Recreation 15.08ha
- Neighbourhood Parks 3.10ha
- Passive open space 34.70ha
- Feature Parks 9.35ha
- **Total Area:** **62.23ha**

Based on a total forecast population of 9,720 and an open space standard requirement of 2.84ha per 1,000 population the standard provision requirement would be 27.60ha. The proposed provision exceeds this standard and this should be considered in the in the set up of the Local Planning Agreements.

Newcastle City Council (Blue Gum Hills) development area

By way of recreation facilities, the Newcastle Development Contributions Plan No. 1 2005 for the Blue Gum Hills Contributions Catchment provides a standard for the development of district court and field based activities:

Table 23 – Blue Gum Hills recreational facilities standard

Facility	Standard
District court and field based activities	0.7 Ha 1,000 residents

The provisions of the Newcastle City Council Development Contributions Plan (2005) only makes provision for new residents (rather than the total number of residents) in Minmi. The Blue Gum Hills Regional Park area will provide the regional open space and district facilities for the wider region as well as for the proposed Coal & Allied development.

Newcastle and Lake Macquarie Councils agreed that issues of scale would be important determinants of the future population of the Minmi development area, in that average household sizes and tenure patterns would reflect those of the sub-region rather than the averages measured across the LGA by the ABS. It is also relevant to note that there is a current application with the Department of Local Government for a boundary adjustment between Lake Macquarie and Newcastle City Councils, however the timing of a decision on the application is unknown.

5.6 State Infrastructure - Voluntary Planning Agreement

Coal & Allied has offered to enter into a Voluntary Planning Agreement (VPA) with the State Government for the payment of monetary contributions, land dedications or works in kind for the provision of regional infrastructure as determined by the NSW state government.

NOTE: The NSW Department of Planning has developed a draft plan to streamline the contributions process for regional infrastructure in the Lower Hunter region. The plan is proposed for those non-urban lands that are rezoned to residential and industrial purposes and will fund a wide range of road, education, emergency services, health and regional open space infrastructure. At the time of writing, the documents were in Draft and on exhibition for public comment”.

Coal & Allied has offered to pay the State Infrastructure Contribution rate current at the time of future development applications, offset by land dedications and any appropriate “works-in-kind”. This will be the subject of future negotiations with the NSW Dept of Planning pending the outcome of the regional infrastructure contribution determination.

6 Social impact assessment

This section provides an analysis of the potential social benefits and impacts of the proposed Minmi/Link Road development based on research into existing local issues, the community profiling exercise, social infrastructure audit and gap analysis and consultation activities. Based on these outcomes we have identified a number of potential social benefits and impacts associated with the development and where possible we have included suggestions for improvement and/or recommendations to mitigate any adverse impacts or enhance identified benefits. Table 24 below provides an analysis against Newcastle City Council's Social Impact Assessment Policy Matrix. The general objective of the Social Impact Policy is to ensure that, where relevant, social considerations are an integral part of the development assessment system.

Table 24 – Overview of analysis against the Social Impact Policy Matrix (Newcastle Social Impact Assessment Policy)

Social Impact	Comments	Mitigation measures or actions to be considered in future planning, development or operational phases
Population change	<ul style="list-style-type: none"> The current concept plan provides for 3,300 new dwellings over the next 22 years. Under current occupancy rates this forecasts an additional population of 9,720 persons by 2032. 	<ul style="list-style-type: none"> The current plans have ensured that adequate provision of facilities and services are implemented and targeted at the incoming population type. The concept plan has considered the needs for consultation and social infrastructure servicing appropriate for the level of detail being considered. The detailed master plans, project approvals, subdivision DA's and dwelling DA's will also consider the infrastructure needs and demands associated with the appropriate stage of development.
Accessibility	<p>Positive</p> <ul style="list-style-type: none"> The proposed development design will promote affordable and adaptable housing options. The provision of suitable pedestrian and cycle paths will be implemented to provide connectivity and accessibility between existing neighbourhoods and the proposed development. This will limit the possibilities of isolation and detachment. Local public transport options will be implemented to connect with existing transport nodes and hubs. 	<ul style="list-style-type: none"> The concept plan has considered the provision of public transport in its design. Effective accessibility has been considered between aged care services and facilities and community facilities and village centre. Detailed design and project approvals should ensure the consideration of safe pedestrian and cycle routes to schools. Future proposals to work closely with the local bus providers to confirm and implement a local bus route with the proposed development site that connects to existing transport nodes. Consider the access needs for disabled or less mobile people.
	<p>Negative</p> <ul style="list-style-type: none"> The increase in population will in turn increase the amount of traffic on local and regional roads and therefore increase traffic flow, noise and light spillage. 	<ul style="list-style-type: none"> The current concept plan seeks to enable the future provision of public transport through design consideration and density. The concept plan also seeks to include the continuation of pathways, cycle ways and road ways between existing towns and the proposed development. At detailed design phase consider designing the road network to minimise road traffic speed.
Community facilities and services (recreation, cultural and social)	<p>Positive</p> <ul style="list-style-type: none"> The increase in population will generate demand for the provision of new community facilities, including community centres, open space and sporting facilities. 	<ul style="list-style-type: none"> The concept plan provides open space and sporting facilities that will provide local and regional residents with opportunities to wider access community facilities. Future development should encourage and promote shared use by local and regional residents where appropriate.

Social Impact	Comments	Mitigation measures or actions to be considered in future planning, development or operational phases
	<p>Negative</p> <ul style="list-style-type: none"> Newer community facilities and infrastructure may put pressure on existing facilities. 	<ul style="list-style-type: none"> The current concept plan ensures appropriate facilities are provided in a timely manner to service the new population and limit pressures on existing facilities.
Public safety	<p>Positive</p> <ul style="list-style-type: none"> The increase in population will provide an increase in surveillance (passive and active) throughout local and neighbouring suburbs. New emergency services facilities are proposed as part of the concept plan. This includes facilities for Ambulance and Police services. 	<ul style="list-style-type: none"> The increase in population will justify the proposed increase in emergency services within the local area (police and ambulance stations). The pedestrian, cycle and vehicle connectivity within the proposed development and between adjoining neighbourhoods will provide opportunities for passive and active surveillance.
	<p>Negative</p> <ul style="list-style-type: none"> The increased population in the area may have a negative impact on crime rates. The increase in traffic on local road networks may increase traffic incidents. Due to an increase in population to the area there may be a public safety risk with relation to previous mining activities in the area. Portions of the new development may be exposed to bushfire risks. 	<ul style="list-style-type: none"> At detailed design phase consideration should be given to ensure the principles of Crime Prevention through Environmental Design (CPTED) are implemented to limit the potential for criminal activity and the perception of unsafe areas. Detailed design should consider traffic speed, and pedestrian safety measures to limit the impact of increased traffic. The concept plan has identified areas of the region subject to mine subsidence and pot holes. These will be managed appropriately through signage and fencing where required. The concept plan has included significant asset protection zones (APZ's) to protect the community against potential bushfire hazards. Detailed dwelling designs should also consider bushfire protection.
Cultural and community well being (community structure and identity)	<p>Positive</p> <ul style="list-style-type: none"> Proposed two multi purpose community centres (one in each village centre). Passive open space and local heritage items may provide local opportunities for future cultural and community spaces and places providing residents with connection, pride and ownership of their local neighbourhood. 	<ul style="list-style-type: none"> Ensure that integration and inclusion of current and future local and regional residents in community based activities that may relate to public art and events. Ensure that the current local community identity, ownership and pride are upheld and continue with the incoming population.

SOCIAL IMPACT ASSESSMENT

Social Impact	Comments	Mitigation measures or actions to be considered in future planning, development or operational phases
	<p>Negative</p> <ul style="list-style-type: none"> Due to an incoming population there may be an impact on identity for the current residents. 	<ul style="list-style-type: none"> Encourage community capacity building initiatives and ensure that public access between the proposed and existing communities and identify opportunities for community integration and engagement between current and incoming persons.
Health	<p>Positive</p> <ul style="list-style-type: none"> A proposed 150 independent living unit developments is proposed in the concept plan to service a forecast ageing population in the region. The concept plan provides for a range of local health needs through the provision of two mixed-use community centres. These centres will include provision for community health and early childhood needs. The concept plan also recognises the need for GP's through providing capacity in the villages and allows for them in the village centres and zoning. 	<ul style="list-style-type: none"> Future developments to identify opportunities to promote the attractiveness of the development to potential GP's, particularly those with specialised backgrounds.
	<p>Negative</p> <ul style="list-style-type: none"> The increase in population may place pressure on local health services. 	<ul style="list-style-type: none"> Work with local health providers and transport providers to ensure adequate transport services are connected to regional health services and hospitals, particularly for people with disability and the predicted ageing population. A land allocation to NSW Health of 5,000m² is proposed
Education	<p>Positive</p> <ul style="list-style-type: none"> The proposed upgrade of Minmi Primary School (as recommended by the Department of Education) will provide additional local primary school positions. An additional primary school within the redeveloped site will increase the number of education places at all levels. The DoE is proposing that this additional school will also include capacity for students with special needs. 	<ul style="list-style-type: none"> The promotion of additional school places. The promotion of local education employment opportunities for current and incoming residents.
	<p>Negative</p> <ul style="list-style-type: none"> Due to an increase in population there will be an increased demand on local high schools. 	<ul style="list-style-type: none"> DoE have identified that there is sufficient capacity to cater for the new population through either existing capacity or new development in existing schools. Staged growth and appropriate bus services to be considered to cater for students travelling to local and regional schools.

Social Impact	Comments	Mitigation measures or actions to be considered in future planning, development or operational phases
Employment	<p>Positive</p> <ul style="list-style-type: none"> • There will be new employment opportunities for local and regional residents during the construction phase. • There will be employment opportunities for local and regional residents after the construction phase in a number of employment areas including aged care, community health, retail, education, trade and services. • At the completion of the proposed development there will be provision for local employment for local and regional residents (education, health, retail, community). 	<ul style="list-style-type: none"> • Future development approvals to consider seeking local labour in construction activities. • Developers of the village centres could seek out local industry involvement through promoting the development merits to local business and identifying employment opportunities within the village areas.
	<p>Negative</p> <ul style="list-style-type: none"> • Due to the increase in population and provision of new services and facilities there may be potential pressure on local businesses and their employees due to larger businesses moving in. 	<ul style="list-style-type: none"> • Ensure that local businesses are consulted and considered appropriately.
Housing	<p>Positive</p> <ul style="list-style-type: none"> • Adaptable and affordable housing to be implemented. This will cater for first home buyers, young families and an ageing population. 	<ul style="list-style-type: none"> • Promote a diverse mix of housing types and costs which will allow opportunities for a diverse range of household compositions to live in the area.
	<p>Negative</p> <ul style="list-style-type: none"> • The proposed development will have an environmental footprint that will need to be considered. 	<ul style="list-style-type: none"> • The ESD report prepared as part of the concept plan seeks to minimise the negative impacts of the housing on the local and global environment.
Local economic impact	<p>Positive</p> <ul style="list-style-type: none"> • The increase in local population will in turn provide an increase in local business opportunities. • The increase in population may boost local small business retail. • An increase in the local population may increase the local and regional economy, including retail competition. 	<ul style="list-style-type: none"> • Complement and integrate existing local economic activity with proposed.
	<p>Negative</p> <ul style="list-style-type: none"> • The increase in new housing may put pressure on current local and regional residents with regard to affordable housing prices. 	<ul style="list-style-type: none"> • Future detailed development plans should ensure that there are affordable and adaptable housing options that are appropriate to the future market.

SOCIAL IMPACT ASSESSMENT

Social Impact	Comments	Mitigation measures or actions to be considered in future planning, development or operational phases
	<ul style="list-style-type: none"> Poorly staged retail may affect local small business retail. 	<ul style="list-style-type: none"> Ensure that appropriate consultation is undertaken with local businesses to ensure local business viability is not hindered. The study of the retail potential provided as part of this report provides for considered future staging to minimise the impact of new retail development on existing retail.
Social diversity and needs of particular groups	<p>Positive</p> <ul style="list-style-type: none"> There will be an increase in housing and diversity of residents in the local area and this may provide possibilities for further social diversity. It is predicted that the proposed development will hold an ageing population that may require particular health services to be established within local GPs. Private GPs will be established within the local area. Proposed provision of one community health service. It is proposed that a special needs school will be built within the local area. This will in turn ensure that the needs of people with disability will be considered. 	<ul style="list-style-type: none"> Ensure appropriate facilities for minority groups are easily accessible, including the elderly and people with disability. Appropriate public transport options will also need to be established to major regional hospitals and other community services and programs. Ensure that facilities, services and housing caters for the current and future diversity of local and regional suburbs
Social equity	<p>Positive</p> <ul style="list-style-type: none"> The concept plan seeks to market to a diverse range of individual, household and family incomes across local and regional suburbs as well as other LGAs. <p>Negative</p> <ul style="list-style-type: none"> An increase in housing provision and services within the local and regional area may put increased pressure on local existing housing prices. 	<ul style="list-style-type: none"> The market need is for a range of affordable housing options. It makes good business sense to provide housing for a range of market sectors. The dwelling mix and village services will be appropriate to service an ageing population profile. Prices and market strategies to be set to provide social equity for all residents.
Public transport	<p>Positive</p> <ul style="list-style-type: none"> The concept plan design has considered the potential for service by a future bus network. An increase in population will provide opportunities to further expand existing bus routes. 	<ul style="list-style-type: none"> There is an opportunity to provide greater public transport options for residents in Minmi and the surrounding suburbs. There will be an emerging transport hub at Glendale including a train and bus station. This will provide opportunities for persons to access regional facilities. Access to the Glendale transport hub will be important for residents of the proposed development especially to access

Social Impact	Comments	Mitigation measures or actions to be considered in future planning, development or operational phases
	<p>Negative</p> <ul style="list-style-type: none"> An increase in the local population will place pressure on current public and private transport. Car ownership in local suburbs is high so there will also be a need to ensure proposed road networks are connected to already existing roads in surrounding suburbs. 	<p>tertiary education options and medical facilities.</p> <ul style="list-style-type: none"> Seek early implementation and promotion of public transport in close consultation with regional bus providers.

The assessment of the social impacts in the table above identified positive and negative factors associated with the future development of the Minmi/Link Road site. The concept plan takes the first step in providing the planning to maximise the benefits and minimising or mitigating the negative impacts.

The next phases of design and approval will need to consider in detail what can be done at that stage to further consider the social impacts of the development. The process of managing the social impacts of the future development of Minmi/Link road will need to be considered over the next 23 years and beyond by numerous stakeholders with varying influence. The current concept plan has considered a number of impacts and provided considered mitigation measures where appropriate.

7 Minmi Main Trade Area Analysis

This section of the report assesses the potential for retail facilities within the Lower Hunter Northern Lands region.

The suburb of Minmi has been identified as a suitable location for a supermarket based centre, given that it is well located to serve the needs of the future growing population of Minmi/Link Rd. The analysis takes into account existing retail development at North Lakes.

7.1 Main Trade Area

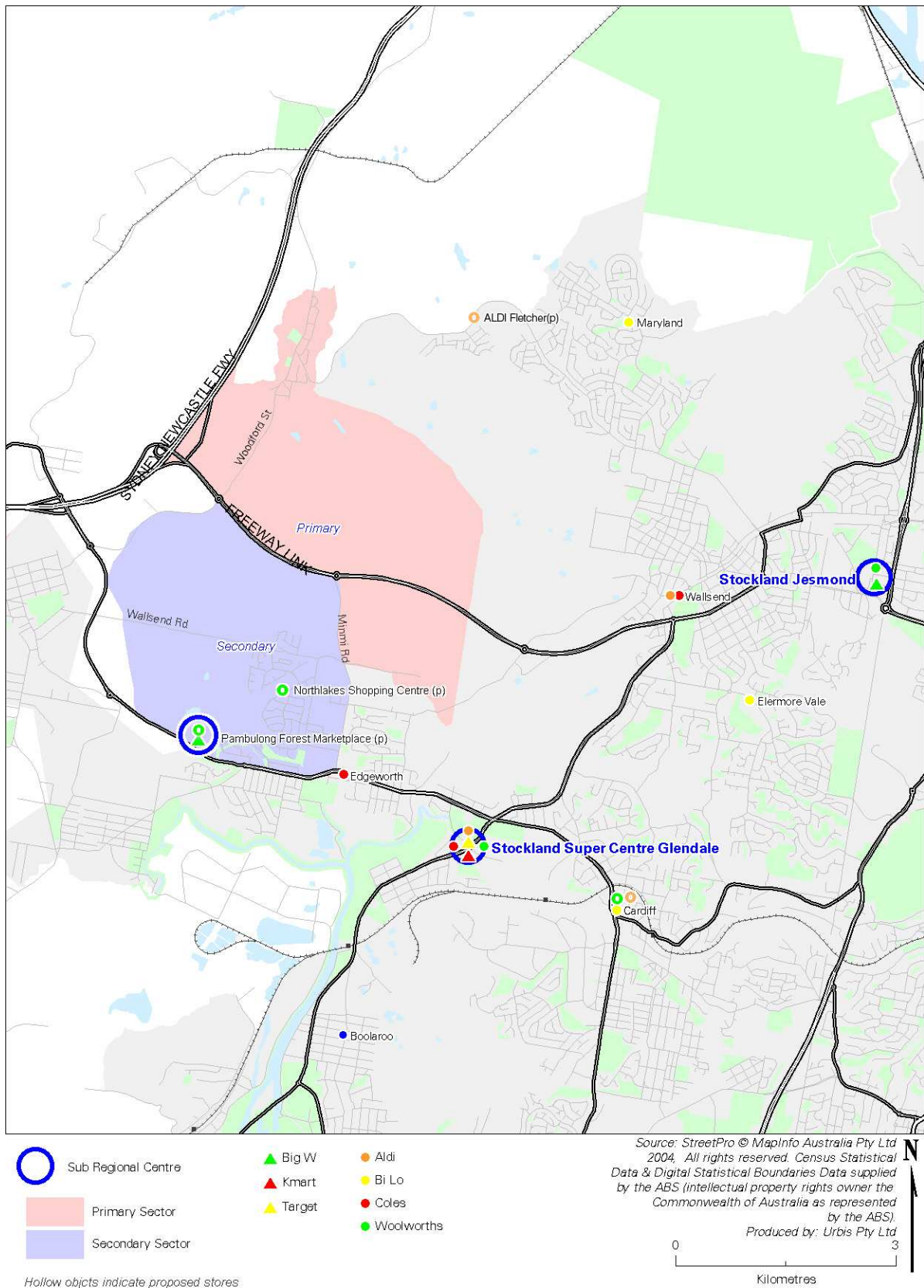
The main trade area which is likely to serve the future residents of the Minmi/Link Rd area is shown on Figure 1. The main trade area comprises a primary and a secondary sector as follows:

- The **primary sector** comprises the suburb of Minmi and northern parts of Cameron Park. This sector is bounded to the west by the Sydney-Newcastle Freeway, to the south by Link Road and to the east by the surrounding conservation area.
- The **secondary sector**, located to the south of the primary sector incorporates the suburb of Cameron Park, bounded to the west by the Sydney-Newcastle Freeway and to the east by retail facilities at Edgeworth.

Given that the primary sector is relatively isolated by the natural barrier of the surrounding undeveloped area to the east and the freeway to the west, it is likely that any supermarket facilities located in this area will largely serve residents within this limited locality.

We note that a secondary north east trade area would have been warranted, however we are of the opinion that this trade area is not supportable as a result of the proposed ALDI recently approved at Fletcher in addition to the Bi Lo anchored centre at Merryland.

Figure 7 – Minmi Main Trade Area and Competition



7.1.1 Main Trade Area Population

Table 25 – outlines the existing and future population of the Minmi main trade area.

Minmi Trade Area Population, 1991-2021									
Trade Area Sector	Actual Residential Population ¹					Forecast Population			
	1991	1996	2001	2006	2009	2011	2016	2021	2026
• Primary	370	640	700	730	750	770	1,530	4,010	6,750
• Secondary	1,330	2,110	3,890	4,380	6,250	7,500	9,800	10,760	11,200
Main Trade Area	1,700	2,750	4,590	5,110	7,000	8,270	11,330	14,770	17,950
Average Annual Change (No.)									
	1991-96	1996-01	2001-06	2006-09	2006-11	2011-16	2016-21	2021-26	
• Primary		54	12	6	7	8	152	496	548
• Secondary		156	356	98	623	624	460	192	88
Main Trade Area		210	368	104	630	632	612	688	636
Average Annual Change (%)									
	1991-96	1996-01	2001-06	2006-09	2006-11	2011-16	2016-21	2021-26	
• Primary		11.6%	1.8%	0.8%	0.9%	1.1%	14.7%	21.3%	11.0%
• Secondary		9.7%	13.0%	2.4%	12.6%	11.4%	5.5%	1.9%	0.8%
Main Trade Area		10.1%	10.8%	2.2%	11.1%	10.1%	6.5%	5.4%	4.0%

1. as at June

Source : ABS Cdata 1991, 1996, 2001 and 2006; ABS, Regional Population Growth, Australia, Electronic Delivery (3218.0.55.001);
ie. Title, Author, Date, ABS publication number etc; Urbis

As shown, the population of the main trade area is expected to increase rapidly over the next 18 years, at a rate of 630-690 persons annually. This analysis assumes that 3,150 lots are developed at Minmi/Link Rd between 2012 and 2031. The secondary sector population growth will be driven by the North Lakes development in Cameron Park. According to the Section 94 Plan produced by Lake Macquarie City Council, the North Lakes development is expected to accommodate 4,250 lots by 2015.

On the basis of the above, the main trade area population is expected to reach 11,330 by 2016, increasing to 17,950 in 2026. Typically, for a full line supermarket (of 3,200 sq.m – 3,500 sq.m) to be supportable, it requires a main trade area population of 8,000 – 9,000 persons. Given that a supermarket in Minmi/Link Rd is unlikely to achieve strong market shares from the secondary sector, the population of the primary sector will be key in assessing the amount and timing of supermarket floorspace in Minmi/Link Rd.

7.1.2 Main Trade Area Expenditure

The table below outlines the forecast retail expenditure within the main trade area over the forecast period to 2016. As shown, the food and grocery (F&G) market, which is most relevant for supermarkets, is \$33.7 in 2010 million (accounting for around 39% of total retail spending), increasing rapidly to \$52.7 million by 2016, and \$89.2 million by 2026, reflecting an average annual growth rate of 6.3%, over the period 2010-26.

Minmi Main Trade Area Retail Food and Non-Food Spending, 2010-2019 (\$2010, Excluding GST)

Year	F&G \$M	Total Food \$M	DSTM \$M	Total Non-Food \$M	Total Retail \$M
2010	33.7	46.6	37.6	40.3	86.9
2011	36.9	51.1	42.1	45.2	96.3
2012	40.1	55.6	46.8	50.1	105.7
2013	43.1	59.9	51.3	54.9	114.8
2014	46.2	64.4	56.0	59.9	124.3
2015	49.5	68.9	60.7	64.8	133.7
2016	52.7	73.5	65.5	69.9	143.5
2017	56.1	78.3	70.6	75.4	153.7
2018	59.8	83.4	76.0	81.1	164.5
2019	63.4	88.6	81.6	87.0	175.6
2020	67.1	93.8	87.5	93.2	187.0
2021	70.9	99.1	93.5	99.6	198.7
2022	74.6	104.3	99.5	106.0	210.3
2023	78.1	109.4	105.6	112.4	221.7
2024	81.8	114.5	111.9	119.0	233.5
2025	85.5	119.7	118.4	125.9	245.6
2026	89.2	125.1	125.1	133.0	258.0
Average Annual Growth¹					
2010-13	8.5%	8.8%	11.0%	10.8%	9.7%
2013-19	6.6%	6.7%	8.1%	8.0%	7.3%
2010-19	7.3%	7.4%	9.0%	8.9%	8.1%
2010-26	6.3%	6.4%	7.8%	7.7%	7.0%

1. Assumes average annual per capita growth of 1.7% in 2010-2013 and 1.2% thereafter, with different growth rates for each product group

2. Current year is financial year ; Forecast years are financial years

Source: MDS, MarketInfo 2009; ABS, Australian National Accounts: National Income, Expenditure and Product Accounts (5206.0); Urbis

7.2 Retail Potential

This section assesses the retail potential for supermarket facilities in Minmi/Link Rd. Currently there are no supermarket facilities provided within the main trade area. However, as shown on Figure 1 previously, there are a number of competing full line supermarket facilities beyond the trade area; at Stockland Glendale and Edgeworth to the south, and Wallsend to the east. Also, a sub-regional centre is proposed at Cameron Park, in the secondary sector, which is expected to open in 2013 and will include a full line Woolworths supermarket and Big-W.

As outlined previously, a full line supermarket typically requires a main trade area population of 8,000-9,000 persons in order to be supportable. The Minmi primary trade area population is expected to reach this level by around 2013 and even then, the market shares achieved by the secondary sector are expected to be low (given that they will have their own retail facilities at Cameron Park) and a fair amount of F&G spending would still escape to the south and east.

As detailed in above, the F&G market for the main trade area is currently \$33.7 million in 2010, and is expected to increase to \$52.7 million by 2016 and to \$89.2 million by 2026, once Minmi/Link Rd and Cameron Park are fully developed. Not all F&G spending is available to supermarkets, with some directed to specialty shops, convenience stores, markets and non-food shops that sell food items. There is a currently a relatively low provision of food retail stores within the main trade area.

Given the lack of quality specialty stores, we expect approximately 72.5% of total F&G spending within the main trade area to be available to a supermarket in Minmi.

Of this spending directed to supermarkets within the main trade area (\$38.2 million by 2016), we would initially expect around 76.5% (or \$29.2 million – in constant 2010 dollars and excluding GST) of spending to be retained by a small supermarket (of around 400 sq.m) and the Woolworths supermarket at Cameron Park in 2016. By 2026, a full line supermarket is likely to be supportable at Minmi, given that the primary sector population is forecast to reach around 7,000 persons by that time, with average trading levels maintained at sustainable levels across trade area supermarkets. The primary sector is likely to retain a slightly high proportion of supermarket spending given that it is bounded by major roads to the west and south, and it is over 4 km to the closest supermarket beyond the main trade area. On this basis, the primary sector area will achieve a slightly higher retention rate (of around 90%) than the secondary sector (85%) which can more easily access supermarket facilities beyond the main trade area at Edgeworth and Glendale.

Taking into consideration sales from beyond the main trade area (assumed at 15%) and the proportion of spending in supermarkets on general merchandise (i.e. non F&G items such as books, clothes, crockery etc, assumed at 6%), the forecast turnover available to a supermarket within the main trade area in 2016 is \$44.5 million, increasing to \$85.3 million in 2026 (in constant 2010 and excluding GST). This analysis assumes that a small IGA style supermarket (of around 400 sq.m with a few other convenience type retailers) located at Minmi in 2016 and a 3,200 sq.m supermarket is developed as part of a 'Town Centre' at Minmi in 2026. It is also assumed that a 4,200 sq.m supermarket opens at Cameron Park in 2013, but that no other supermarkets open within the main trade area over the forecast period (refer Table below).

Over time, given the anticipated population growth within the area, in particular, the primary sector, there is the potential to offer a more complete range to serve the needs of surrounding residents and reduce escaped expenditure beyond the main trade area. It is likely that this could occur by 2026, when the primary sector population reaches around 7,000 and growing to in excess of 9,000 by 2031.

On the basis of the above analysis, the small IGA style supermarket is likely to achieve sales of around \$3.5 million in 2016, reflecting a trading level of around \$8,750 per sq.m. The forecast sales level, however, will be dependent on the location of the retail (i.e. whether it is located with frontage along the main road). At this time, a few other convenience type retailers such as a hairdressers, pharmacy newsagents, takeaway etc.) could also be supported to serve the needs of local residents.

By 2026, when a full line supermarket is added at Minmi (in addition to the convenience retail added in 2016 which would operate at a different level in the retail hierarchy), the combined supermarket sales at Minmi are forecast at around \$28.4 million (in constant 2010 dollars and excluding GST), with the small IGA style supermarket achieving sales of around \$3.0 million (\$7,500 per sq.m) and the full line supermarket with sales of \$25.4 million (\$7,900 per sq.m). Forecast sales will, however, be dependent on the location of the two centres in relation to the main road as well other non-retail cross uses e.g. school, library etc. We also note that the population will continue to grow further enhancing the trading levels into the future.

In terms of supportable specialty retailers, single supermarket based centres in non-metropolitan locations typically support around 1,500 sq.m of retail specialty shops and 500 sq.m of mini major floorspace. Therefore in terms of supportable retail floorspace at Minmi, we would recommend that around 1,000 sq.m of convenience type retail floorspace (including a small IGA supermarket of 400 sq.m) is supportable by 2016. By 2025, around 6,000 sq.m of additional retail floorspace could be developed at Mimi. In addition to the retail floorspace, other non retail uses such as a post office, doctors, dentist, real estate agent, travel agent etc. could co-locate at the centre, to maximise cross usages and create a town centre within Minmi. Typically such uses locate on an upper level above the retail component. We would recommend that a further 500-1,000 sq.m of non retail floorspace could be supported. In total, therefore, around 8,000 sq.m of floorspace could be developed at Minmi, assuming that 3,300 residential lots are developed in the finalisation of the project. Table 1.4 below outlines our recommended provision of supportable floorspace at Minmi in 2015 and 2026.

The above analysis is based on a mid range scenario, where 3,300 dwellings are ultimately developed at Minmi.

Minmi - Main Trade Area Supermarket Potential Assessment, 2016 - 2026

Factor	Unit	Amount (Constant \$2010 and Ex GST)	
		2016	2026
MTA Population			
• Primary Sector	Persons	1,530	6,750
• Secondary Sector	Persons	<u>9,795</u>	<u>11,200</u>
Total MTA Population	Persons	11,325	17,950
Total Available Spending to TA Smkts	\$M.	44.5	85.3
Existing & Proposed Supermarket Space ¹	Sq.m	4,600	7,800
Resulting Average Trading Levels ²	\$/Sq.m	9,663	10,930
Average Supermarket Turnover	\$/sq.m	9,273	9,748
Supportable Supermarket Floorspace	Sq.m	4,793	8,746
Surplus/Deficiency (+/-)	Sq.m	-193	-946
Minmi MTA Smkt Potential	Sq.m	400	3,600
Share of Total TA F&G to TA Smkts			
• Primary Trade Area	%	15%	85%
• Secondary Trade Area	%	10%	15%
• Main Trade Area	%	10%	40%
Share of Total TA F&G to TA Smkts	\$M	3.0	22.7
Plus Business from Beyond TA	%	8.0%	15.0%
Total F&G Turnover	\$M	3.3	26.7
Plus GM Turnover	%	6.0%	6.0%
Total Store Potential	\$M	3.5	28.4
Average Trading Level	\$/sq.m	8,763	7,894
Inflated (@ 2.5% per annum)	\$M	4.1	42.2
Average Trading Level	\$/sq.m	10,163	11,719

1. Existing supermarket floorspace consists of

2. Assumes 0.5% real increase in average trading levels per year

Source : Urbis

Minmi Proposed Retail Composition

Tenant	2016		2026	
	Convenience Centre		Convenience Centre	Neighbourhood Centre
Supermarket	400		400	3,200
Mini Major	0		0	500
Specialty Stores	<u>500</u>		<u>500</u>	<u>1,500</u>
Total Retail Centre	900		900	5,200
Non Retail	0		0	750
Total Centre	900		900	5,950

Source: Urbis

8 Conclusion

This social impact assessment and social infrastructure study has been prepared for the proposed Minmi / Link Road concept plan. This study has assessed the impact of the development on the existing surrounding communities and provides recommendations in relation to the provision of social infrastructure including open space, recreation, community facilities and retail provision in the development area and to assess the social impact of the development on the surrounding communities.

This report addresses current and required social infrastructure for the proposed residential development at Minmi/Link Rd, including infrastructure that may be regionally located. The recommendations from this report have informed the concept plan design process and also address the social impact requirements outlined in the Director-General's Environmental Assessment Requirements (DGEAR's). The report has been informed by public consultation exercises, document and policy reviews, demographic assessments, population forecasting, key stakeholder inputs and GIS models.

Appendix A Local and regional infrastructure

A.1 List of relevant local and regional infrastructure

Table 26 below provides a detailed list of the social infrastructure within both the local and regional context. The table includes the name, location and contact numbers of those services and facilities mentioned above.

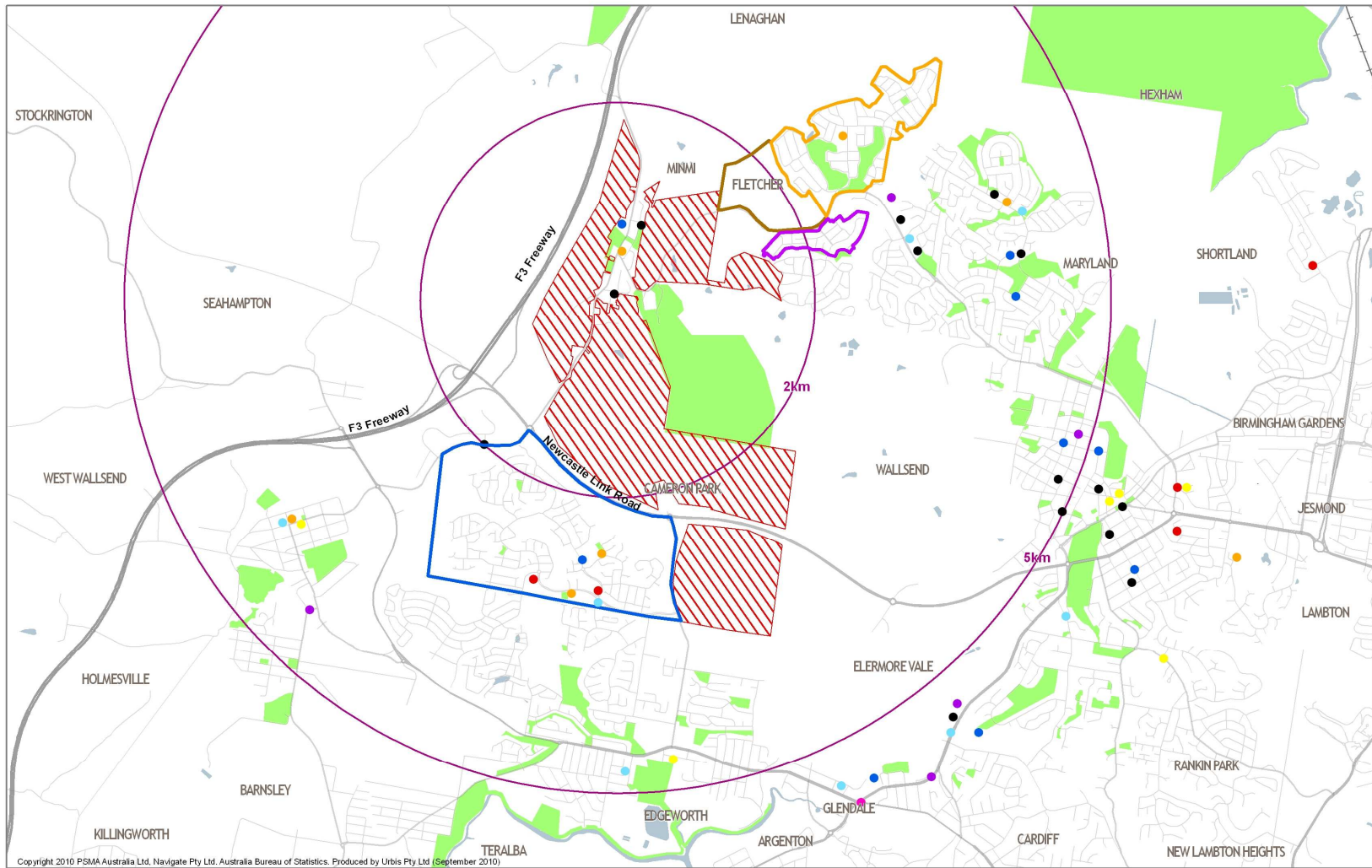
Table 26 – Local and regional social infrastructure

Type	Name	Address	Suburb	Phone
Community Hall or Centre	Maryland Multipurpose Centre	207 Maryland Dr	Maryland	4955 8111
	Jesmond Neighbourhood Centre	11 Iranda Gr	Wallsend	4950 0100
	Sugar Valley Neighbourhood Centre	65 Carrington St	West Wallsend	4953 1667
	Minmi Progress Hall	Woodford St	Minmi	4953 2886
	Sanctuary Living Community Facility (proposed)	Kurraka Drive, The Sanctuary	Fletcher	
Hospital	Newcastle Private Hospital	14 Lookout Rd	New Lambton Heights	4941 8400
	NIB Private hospital	2 Lookout Rd	New Lambton Heights	4957 0099
	John Hunter Childrens Hospital	Lookout Rd	New Lambton	4921 4900
Medical Service	Edgeworth Oasis Family Practice	11 Arnott St	Edgeworth	4953 0966
	Andrew Nash Clinic	136 Nelson St	Wallsend	4951 6511
	Buchanan Mental Health Services	Cnr Longworth Ave and Maitland St	Wallsend	4924 6320
	Wallsend Seven Day Surgery	124 Nelson St	Wallsend	4955 8341
	West Wallsend Medical Centre	60 Carrington St	West Wallsend	4955 1336
	Elernmore Vale general Practice	Elernmore Shopping Centre	Elernmore Vale	49517677
	Cardiff General Practice	42 Harrison St	Cardiff	4903 9000
Pre-school and Kindergarten	Maryland Drive pre-School	179 Maryland Dr	Maryland	4950 2916
	Kindy Patch Maryland	350 Maryland Dr	Maryland	4955 8633
	Karrawong Kindy	75 Carrington St	West Wallsend	4953 1865
	Edgeworth Community Pre-School	11 Albert St	Edgeworth	4950 8166
	Elernmore Vale Pre-school	55 Jubilee Rd	Wallsend	4951 6084
	Macquarie College Pre-School	222 Lake Rd	Wallsend	4954 9449

Type	Name	Address	Suburb	Phone
	Cathy Lynne Pre-School	1A Oakland St	Glendale	4954 5174
	Bishop Tyrrell Lincoln Anglican School	256 Minmi Rd	Wallsend	4953 2198
Primary School	Plattsburg Primary School	Ranclaud St	Wallsend	4955 9196
	Minmi Public School	56 Woodford St	Minmi	4953 2768
	Glendore Public School	Cnr Maryland Dr and Boundary Rd	Maryland	4955 6644
	Black Hill Public School	144 Black Hill Rd	Black Hill	4930 3137
	Holy Cross Primary School	326 Lake Rd	Glendale	4954 8471
	Newcastle Waldorf School	36 Reservoir Rd	Glendale	4954 8533
	St Patrick's Primary School	Cnr Wentworth St and Hannah St	Wallsend	4955 8570
	Wallsend Public School	Cnr Martindale and Metcalfe St	Wallsend	4955 9415
	Plattsburg Public School	Cnr Ranclaud St and Clarke St	Wallsend	4955 9196
	Maryland Public School	Cnr John Bell Dr and Grange Ave	Maryland	4955 9430
	Hunter Christian School	Kerr St	Mayfield	4967 2111
	Bishop Tyrrell Lincoln Anglican School	256 Minmi Rd	Wallsend	4953 2198
Secondary School	Macquarie College	182 Lake Rd	Wallsend	4954 6222
	Bishop Tyrrell Lincoln Anglican School	256 Minmi Rd	Maryland	4953 2198
	Glendale High School	2 Oaklands Rd	Glendale	4954 9166
	West Wallsend High School	2 Appletree Rd	West Wallsend	4953 2111
	Callaghan College	Cnr Charlotte St and Macquarie St	Wallsend	4951 1811
Tertiary Education	TAFE NSW Glendale Campus	Cnr Fredrick St and Main Rd	Glendale	4979 1600
Aged Care	Cumberland Grove Village	48 Marton St	Shortland	4955 0155
	Wallsend Aged Care Facility	Cnr Longworth Ave and Lowrey Lane	Wallsend	4924 6320
	Sugarloaf Gardens	7 Bent St	Wallsend	4944 1500
Place of Worship	Hunter Baptist Church	340 Maryland Dr	Maryland	4955 5877
	Uniting Church	19 Metcalfe St	Wallsend	4955 9529
	Christian City Church	207 Maryland Dr	Maryland	4951 8835
	Community of Christ	6-40 Kirkwood Cl	Cameron Park	4958 3112
	Anglican Church of Australia	Cnr Maryland Dr and Boundary Rd	Maryland	4955 0370

Type	Name	Address	Suburb	Phone
	New Vine Church	340 Maryland Dr	Maryland	4955 5877
	Salvation Army Church Northlakes Corps	182 Lake Rd	Wallsend	4957 5181
	Wallsend Baptist Church	58 Cowper St	Wallsend	4951 7089
	New Beginnings Christian's Centre	75 Metcalfe St	Wallsend	4955 8989
	Catholic Diocese of Maitland-Newcastle	11 Macquarie St	Wallsend	4955 9575
	Multicultural Christian Fellowship	81 Nelson St	Wallsend	4951 6038
	Seventh Day Adventist Church	Cnr Cowper St and Kokera St	Wallsend	4951 8088
	Coptic Orthodox Church	19 Church St	Minmi	
	Revival Fellowship	35 McInnes St	Minmi	

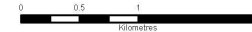
A.2 Map of local social infrastructure



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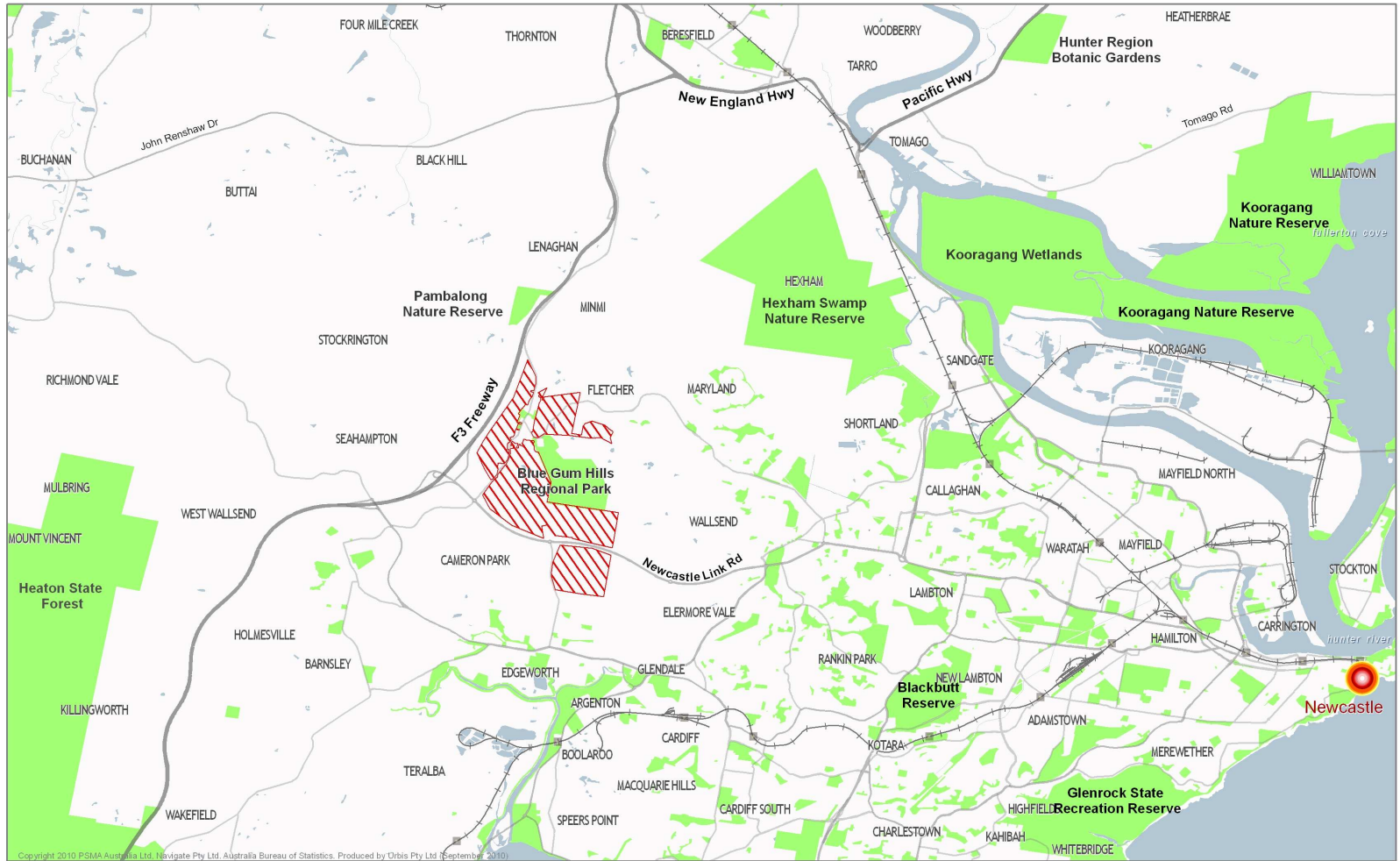
- | | | | |
|---------------------|--------------------|--------------------------|-----------------------------|
| Subject Site | Under Development | Social Facilities | Pre-school and Kindergarten |
| Local Open Space | Northlakes Estate | Community Hall or Centre | Primary School |
| Existing Urban Area | Sanctuary Estate | Medical Service | Secondary School |
| Waterbody | The Outlook Estate | Place of Worship | Tertiary Education |

EXISTING LOCAL SOCIAL INFRASTRUCTURE



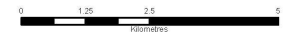
Appendix B Open Space

B.1 Map of regional open space

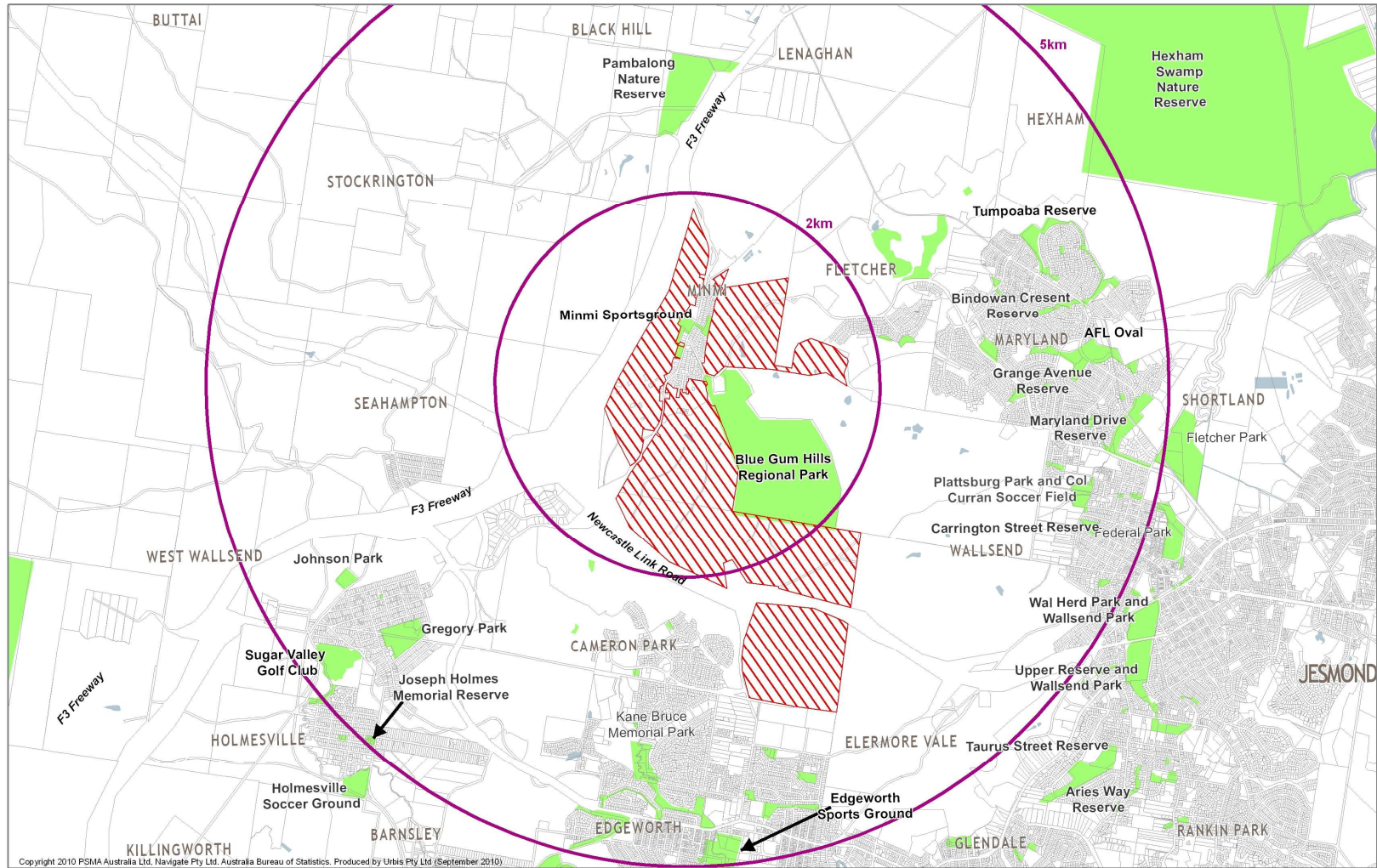


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- Subject Site
- Regional Open Space
- Waterbody
- Existing Urban Area
- Railway Station
- Railway Line
- Highway / Freeway
- Main Rd



B.2 Map of local open space



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- Subject Site
- Local Open Space
- Cadastre
- Existing Urban Area
- Waterbody

B.3 List of open space

The following is the list of open space in Newcastle:

Wallsend

- Upper Reserve Wallsend
- Hope Street Reserve
- Federal Park
- James Park
- Birchgrove Drive Reserve
- Cressington Street Reserve
- Rushton Park
- Rotunda Park
- Wallsend Park
- Carrington Street Reserve

Fletcher

- Oak Close Reserve

Minmi

- Minmi Park
- Minmi Reserve

Adamstown

- Adamstown/ Myers Park
- Banksia Close Reserve
- Fletcher Street Reserve
- O'Connell Park

Adamstown Heights

- Hudson Park
- Claremont Avenue Park

Bar Beach

- Bar Beach Public Bathing Area
- Empire Park

Beresfield

- Lindsay Memorial Park
- Vera Wilson Park

Birmingham Gardens

- Harold Myers Park

Broadmeadow

- District Park
- Coorumbung Road Reserve

Carrington

- Pat Jordan Oval
- Coe Park
- Connolly Park
- Carrington Foreshore
- Grahame Park

Cooks Hill

- Centennial Park

Elmore Vale

- Cambridge Drive Reserve
- Elmore Vale Park
- Willow Close Reserve
- Max Street Reserve

Hamilton

- Gregson Park

Hamilton North

- Richardson Park Reserve

- Smith Park

Hamilton South

- Darling Street Oval

- Learmonth Park

Hexham

- Hexham Park

Islington

- Islington Park

Jesmond

- Heaton Park

- Jesmond Park

Kotara

- Lugar Street Reserve

- Kotara Park

- Nesbitt Park

Lambton

- Lambton Park and Lambton Pool

- Kilpanie Road Reserve

- Johnson Park

Lambton North

- Hillview Playground

- Pilkington Street Reserve

Maryland

- Maryland Drive Reserve

- Bill Elliott Oval

- Tumpoaba Reserve

- Grange Avenue Reserve

- Kariwarra Street Reserve

- Beauford Avenue Reserve

- Bernborough Avenue Park

Maryville

- Hogue Park

Mayfield

- Mayfield Park

- Litchfield Park

- Avon Street Reserve

- Cowie and Usk Street Reserve

- Dangar Park

- Webb Park

Mayfield West

- Stevenson Park

- Bull and Tourle Street Reserve

Merewether

- Campbell Park

- Dixon Park

- Henderson Park

- Gibbs Brothers Park

- Jefferson Park

- Scenic Drive Park

- Myamblah Crescent Reserve

- Mitchell Park/ Townsend Oval

- West Park Reserve

- Woodward Street Reserve

New Lambton

- Lewis Oval

- Arthur Edden Oval

- New Lambton Park

- Novocastrian Park
- Regent Park
- Richley Reserve
- Gwydir Park
- Blackbutt Reserve
- Alder Park
- New Lambton Heights
 - Hollywood Parade Park
- New Lambton Heights & Lambton
 - Jesmond Bushland
- Newcastle
 - Fletcher Park
 - Christie Place City Hall Reserve
 - Civic Park
 - Cathedral Park
 - Convict Stockade Site
 - Shepherds Hill Cottage Reserve
 - South Newcastle Beach
 - The Obelisk
 - Pacific Park
- Newcastle East
 - Parnell Park
 - Newcastle Ocean Baths
 - Nobbys Beach Reserve
 - The Foreshore
 - Tramway Reserve
 - Enterprise Park
- Newcastle West
 - Birdwood Park
 - National Park
- Rankin Park
 - Murabarnbah
- Shortland
 - Northcott Park
 - Tuxford Park
 - Cook Park
 - Lyall Reserve
- Stockton
 - Hunter Street Reserve
 - Griffith Park
 - Corroba Park
 - Breen Park
 - Ballast Ground
 - Pitt Street Reserve
 - Rawson Park
- Tarro
 - Tarro Recreation Area
 - McCaulay Park
- The Hill
 - Mosbri Crescent Park
 - Nesca Park
 - King Edward Park
- The Junction
 - Rowland Park
- Tighes Hill
 - Gross Street Reserve
- Warabrook
 - Warabrook Wetlands Reserve
- Casuarina Circuit Reserve
- Cedrella Crescent Reserve
- Waratah
 - Coolamin Road Reserve
 - Braye Park
 - Cameron Park
 - Waratah Park
- Waratah West
 - Thomas Percy Oval
 - Morpeth Road Reserve
- Wickham
 - Wickham Park
- Lake Macquarie - Sports and Recreation**
 - Glenrock State Recreation Area
 - Glenrock State Recreation Area. All enquiries National Parks & Wildlife. Located off Burwood Road Whitebridge. Car Park. Locked at night, restrictions on dogs.
 - Green Point Recreation Reserve
 - Green Point Recreation Reserve is located at Cardiff Point on lake foreshore between Belmont and Valentine. No dogs permitted in reserve, leashed or unleashed. Gas BBQ available at Belmont end and composting toilets. Spectacular lookout worth the climb. Pedestrian pathway/cycleway links Belmont to Valentine, last stage still under construction. Unique vegetation and wetlands with rainforest raised walkway.
 - Cooranbong Recreation & Equestrian Centre
 - Facilities: 1 x Equestrian field and 1 x campdraft arena. Amenities, Club rooms, storage and canteen. Postal Address: The Secretary, C/- 25 Kings Road, Cooranbong 2265.
 - Rathmines Recreation Area
 - Rathmines Park. Areas available for hire to groups of 200 people or more. Electric BBQ, boat launching, jetty, toilets and full picnic facilities including playgrounds and games areas.
 - The Forum Sports & Aquatic Centre
 - Children's programs "NUkidz"
 - Croudace Bay Sports Complex - Netball
 - FACILITIES: Netball - 6 x Grade 2 hard courts with lights. Amenities and storage facilities. Postal Address: The Secretary, PO Box 3079, Valentine 2280.
 - Croudace Bay Sports Complex - Tennis
 - FACILITIES: Tennis - 4 x Grade 1 synthetic courts with lights. Clubhouse and amenities. Postal Address: The Secretary, PO Box 3140, Valentine 2280.
 - Croudace Bay Sports Complex - Soccer
 - FACILITIES: Soccer - 2 x Grade 3 fields with lights. Cricket - 1 x Grade 3 concrete

- wicket. 1 x Roo Ball field. Amenities, canteen, modular female change room. Postal Address: The Secretary, PO Box 3015, Valentine 2280.
- Hunter Sports Centre
 - Regional athletics and gymnastics centre. Vacation care also available. School Holiday Programs from 9am - 4pm. Gymnastics Programs for people with a disability - Adults and Children. Seniors Fitness Programs.
 - Powerlifting
 - Recreational activities specifically for people with a disability conducted at Glendale Sports Centre
 - Newcastle Basketball Association
 - Cnr Curley & Young St, Broadmeadow, 2292. Major organiser and promoter of basketball in the Newcastle Region and operates a six-court complex at Broadmeadow. Main court has a seating capacity of 1,700. Other indoor sports include volleyball, floorball, netball and futsal (indoor soccer). Sports Lodge accommodation available.
 - Edgeworth Memorial Neighbourhood Centre
 - Street address: Cnr Minmi & Main Roads, Edgeworth 2285. Licence capacity 200. Suitable for community activities and functions. Social and recreational activities. South East/West Lake Macquarie Playgroup Zone Placement Officer 4946 1509 Edgeworth Tiny Tikes Friday am & Edgeworth/Glendale Community Playgroup Wednesday am. Northlake Youth Project (Phone 4958 8648) Tuesday 4.30pm to 7.00pm and Glendale High School (drop in)
 - Youth/Linx Lake Macquarie
 - Postal address - PO Box 4002, Woodrising, 2284. After School recreation program for 11 - 16 age groups & case work support advocacy service. Woodrising Youth Centre Thursday 3.30pm to 6.30pm also at Bolton Point Community Hall Monday 3.30 to 6.30pm & Argenton Community Hall Wednesday 3.30 to 6.30pm.
 - Westlakes Youth Action Committee
 - Social and recreational activities, support & information in a variety of areas for 12-25 years at Toronto West Keith Barry Oval, Awaba Road, Monday & Wednesday 2.00pm to 7.00pm
 - Charlestown Multi Purpose Centre
 - Licence capacity Main Hall 110, Small hall 60. Suitable for community activities and functions. Provides a range of social, recreational, health, and educational activities and services for the community.
 - Valentine Hydrotherapy Pools Inc
 - Postal address PO Box 3004, Valentine, 2280. Therapy and exercise provided in heated pool all year round. Recreational activities for people with a disability.
 - New Lake Peer Support Inc
 - Social, recreational and education activities for young people with moderate to severe disabilities and respite for their carers. 30 Caldwell St Merewether
 - Disabled Surfers Association of Australia
 - People with a disability can enjoy surfing for sport and recreation
 - Headstart Community Access Programme
 - Provides independent living skills training, community access opportunities, recreational and social opportunities for people with an acquired brain injury.
 - Wheelchair Rugby - Hunter Region
 - Played at Newcastle Basketball Stadium. Recreational activities specifically for people with a disability.
 - Special Olympics
 - All sports. Alternate email address: lpburwell@netexcel.net.au Ph: 1300 225762
 - Warners Bay Walking for Pleasure
 - Associated with the Department of Sport and Recreation's Walking for Pleasure Guidelines. Various walks on Mondays
 - Argenton BMX Track
 - Postal address: PO Box 3078, Glendale, 2285. Track Active Days throughout the year in conjunction with the Dept of Sport & Recreation.
 - Hunter Rowing Club
 - PO Box 600, Charlestown 2290. Located in the first green shed along the foreshore. Rowing and sculling at a social, recreational and competitive level. New members welcomed Saturdays & Sundays from 8.00am.
 - Quigley Cooperative
 - The Quigley Grapevine is affiliated with the Cooperative. Email: quigleygrapevine@cnn.net.au. The Cooperative supports NILS Access Agency, Family Fun days, Bolton Point Old Blokes Club, MADTime Kids, Quigley Road Skate Park, Sports for our Neighbourhood, Environment Team, E Community.

Appendix C Population projections

Sydney
Level 21, 321 Kent Street
Sydney, NSW 2000
Tel: +612 8233 9900
Fax: +612 8233 9966

Brisbane
Level 12, 120 Edward Street
Brisbane, QLD 4000
Tel: +617 3007 3800
Fax: +617 3007 3811

Dubai
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Saaha Offices, Old Town Island
Downtown Burj Dubai, UAE
Tel: +971 4 4200212
Fax: +971 4 4200209

Melbourne
Level 12, 120 Collins Street
Melbourne, VIC 3000
Tel: +613 8663 4888
Fax: +613 8663 4999

Perth
Ground Floor, 53 Ord Street
West Perth, WA 6005
Tel: +618 9346 0500
Fax: +618 9321 7790

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