

Transition with intensification as appropriate	Proposed zone	Timing of development	Floorspace			Jobs	
			Current	At 2036 (limited by capacity)	2036+ (remaining capacity)	Audited current jobs	Implied current capacity for additional jobs
Tuggerah Business Park	B7	Capacity to 2025	179,412	262,071	0	1,377	629
Tuggerah Straight	B5 along Pacific Highway; IN2 remainder; IN1 on east of Pacific Hwy	Capacity to 2025	142,624	156,927	0	1,304	129
Tuggerah Station Industrial	B5 on west; IN2 along Lake Road	Capacity to 2036	23,130	42,797	0	137	90
Ourimbah Industrial	IN2	Capacity to 2025	3,319	4,841	4,628	60	61
North Wyong Industrial	B6 along Pacific Highway frontage; IN1 for remainder	Capacity to 2036	175,011	275,079	0	1,295	477
Bateau Bay Industrial	IN2	Capacity to 2036	0	887	0	0	5
WEZ Warnervale Business Park	IN1	Capacity to 2025	83,268	139,072	0	743	498
Gwandalan Industrial	B1 in the north and IN2 in the south	Capacity to 2025	4,756	5,851	0	16	4

Promote and secure for longer term industry prospects	Proposed zone	Timing of development	Floorspace		Jobs		
			Current	At 2036 (limited by capacity)	2036+ (remaining capacity)	Audited current jobs	Implied current capacity for additional jobs
Darlington	INI	Very long – required by 2050	0	0	85,930	n.a.	483
WEZ Sparks Road North*	INI	Medium term – required by 2025+	13,430	90,120	262,899	80	2,023
WEZ Airport Lands*	INI	Medium term – required by 2025+	0	78,462	32,884	n.a.	626
WEZ North West (Warner Industrial Park)*	INI	Capacity to 2036	0	0	213,960	n.a.	1,202
Hunter Land	INI	Capacity to 2036	0	0	0	n.a.	0
Wallarah No.2 Coal Site	INI	Very long – required by 2050+	0	0	517,769	n.a.	2,909
Bushells Ridge - Remainder	INI	Long term – required by 2036+	22,108	113,368	41,060	n.a.	743
<b>TOTAL</b>			<b>1,133,307</b>	<b>1,694,081</b>	<b>1,165,104</b>	<b>6,617</b>	<b>10,019</b>

Notes: Floorspace at 2036 includes absorbed excess demand, and is limited by each precinct's capacity.



TABLE 30. FUTURE ROLE FOR POTENTIAL INDUSTRIAL AREAS (NOT YET ZONED)

Selective new release in short to medium term	Proposed zone	Timing	Floorspace			Jobs	
			Current	At 2036 (limited by capacity)	2036+ (remaining capacity)	Audited current jobs	Implied current capacity for additional jobs
Craigie Avenue	B6	Short term	0	11,301	0	n.a.	63
NWSSP 4 - Warnervale South West	B7	Medium term – required by 2025+	0	24,747	64,474	n.a.	501
NWSSP 8 - Warnervale North East	IN2	Medium term – required by 2025+	0	8,205	131,962	n.a.	787
NWSSP 11 - Bushells Ridge North East	IN1	Medium term – required by 2025+	0	42,323	0	n.a.	238
<b>Reconsider in medium to long term</b>							
Darkinjung South	-	Long term – required by 2036+	0	0	22,710	n.a.	676
NWSSP 1 - Hux Hue Road	-	Very long – required by 2050+	0	0	106,145	n.a.	596

NWSSP 6 - Mannivale North West	Land required after 2016 subject to review.	*	Very long - required by 2050+	0	0	197,804	n.a.	1,111
NWSSP 12 - Dapidian South West	Land required after 2015 subject to review.	*	Long term - required by 2036+	0	0	144,016	n.a.	832
NWSSP 13 - Dapidian West	Land required after 2016 subject to review.	*	Very long - required by 2050+	0	0	497,796	n.a.	493
NWSSP 14 - Dapidian East	Land required after 2016 subject to review.	*	Very long - required by 2050+	0	0	91,892	n.a.	516
NWSSP 15 - Dapidian North East	Land required after 2015 subject to review.	*	Medium term - required by 2025+	0	42,719	21,166	n.a.	370
NWSSP 16 - Lake Mannivale	Land required after 2016 subject to review.	*	Long term - required by required by 2036+	0	0	349,348	n.a.	1,704
Buttoberry WDP	Land required after 2016 subject to review.	*	Very long - required by 2050+	0	0	58,369	n.a.	327
<b>TOTAL</b>				<b>0</b>	<b>42,719</b>	<b>1,499,138</b>	<b>n.a.</b>	<b>8,214</b>

Notes: \* If biodiversity condition is not achieved, vegetated portions of the WZ which contain threatened species habitat may not be cleared. This may affect development yields. Carburong South and Darkinjung may require additional environmental offsets to be incorporated in areas proposed to be rezoned to address wildlife corridor planning and offsets to address to threatened species planning requirements. Hunter Land has been discounted from capacity analysis as all land in this precinct is classified as highly consolidated. Long Jetty Enterprise Corridor was not audited for this study; recommendations for this precinct have been based on 2012 Retail Centres Review. Floorspace at 2016 includes assumed excess demand and is listed by each precinct's capacity.



# 6 APPENDIX 1 – PRECINCT ANALYSIS

## 6.1 Introduction

This section of the report outlines the character, key assets and issues and future role of each current and potential industrial precinct.

■	Bateau Bay Industrial Area
■	Berkeley Vale Industrial Area
■	Bushells Ridge
■	Charmhaven Industrial Area
■	Doyalson Industrial Area
■	Fountaindale Industrial Area
■	Gwandalan Industrial Area
■	Long Jetty Industrial Area
■	North Wyong Industrial Area
■	Ourimbah Industrial Area
■	Tuggerah Business Park
■	Tuggerah Station Industrial
■	Tuggerah Straight
■	Tumbi Gardens Industrial
■	Wyong Employment Zone – Warnervale Business Park
■	Craigie Avenue site
■	Hunter Land site
■	Wallarah No.2 Coal site
■	Wyong Employment Zone – Sparks Road North
■	Wyong Employment Zone – Airport Land
■	Wyong Employment Zone – North West
■	Buttonderry Waste Disposal Facility
■	Darkinjung
■	Darkinjung South
■	Land identified in the NWSSP:
■	1 - Hue Hue Road
■	4 - Warnervale South West (Council owned land)
■	6 - Warnervale North West
■	8 - Warnervale North East
■	12 - Doyalson South West
■	13 - Doyalson West
■	14 - Doyalson East
■	15 - Doyalson North East
■	16 - Lake Munmorah

An audit of Wyong’s industrially zoned land was completed using a method developed by SGS Economics and Planning in association with the Department of Planning and Infrastructure. Four levels of information were collected about each lot in **current areas** in the land audit; as displayed in the following table.

TABLE 31. LAND AUDIT DATA

	Data Collected	Source of Data
Level 1	Zoning, size of lot,	Cadastral with LEP overlay
Level 2	Building envelope, above-ground car parking	GIS base for on-ground verification (digitised building outlines using aerial photographs)
Level 3	Building size, Broad Land Use Category and ANZSIC categories of land use	On-ground field survey
Level 4	Employment numbers	Internal survey / contact with business

The field work and internal building survey (Levels 3 and 4) built on the Level 1 and Level 2 data inputted via GIS. The field and internal survey included direct data entry through the use of hand-held Palm Pilots. A more detailed method outlining the land audit process can be found in Appendix 4.

## 6.2 Total for Wyong LGA

Overall there is 564.2 hectares of utilised employment lands in the Wyong LGA. There is a total of 1547 hectares of vacant industrial land in the Wyong LGA. Of this 520 hectares are within existing industrial areas and a further 1026 is within potential industrial lands (the Bushells Ridge area has been considered as potential industrial land in the table below). Those lands that have an overall constraints ranking of four and above have been considered as 'highly constrained' to determine the amount of 'highly constrained' and 'low-level constrained' industrial land in the Wyong LGA. The ranking of four was chosen as it signified more than one significant constraint on a parcel of land indicating that this may affect the short and medium-term delivery timeframe of the land.

Therefore, the total amount of low-level constrained industrial supply in the LGA is 1148 hectares, with 391 hectares in existing industrial precincts and 757 hectares in potential industrial precincts ( ). Again, these constraint estimates are not definitive and only provide an indicator of the capability of a lot for development.

In assessing the overall supply of vacant industrial land in the Wyong LGA 'Bushells Ridge South', as defined by the dNWSSP, has not been included as approximately the same portion land area is has been accounted for by the Darkinjung and Wallarah No.2 colliery proposals. The Wallarah No.2 Coal proposal precinct is proposed for a coal mine and hence may be unavailable for other industrial use in the near future. However, if the coal mine is approved there may be some opportunities for collocation of compatible employment uses, especially those which can leverage off the freight infrastructure and, in the long term, the land may become available for employment uses after mining is complete. If the coal mine is not approved then the site may also become available for employment uses in the medium term.

TABLE 32. WYONG LGA – TOTAL AND LOW-LEVEL CONSTRAINED SUPPLY

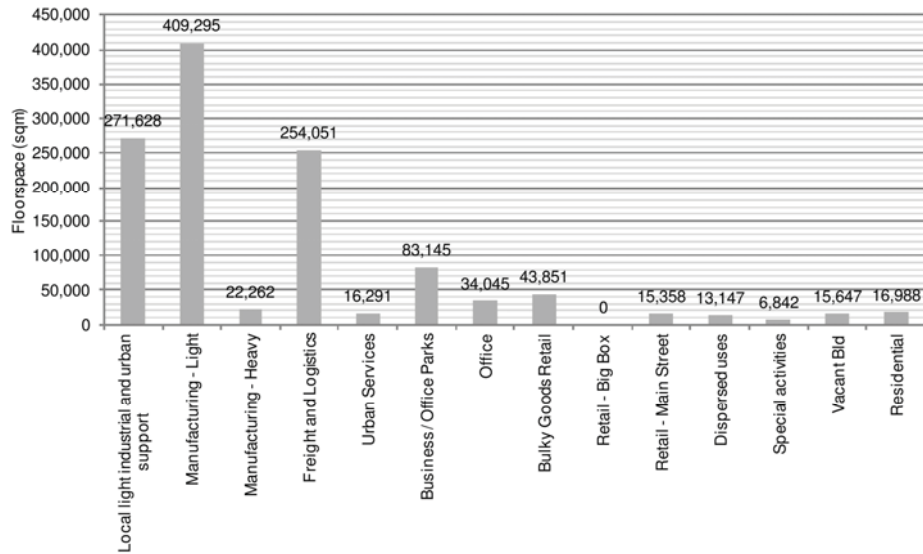
Precinct	Vacant floorspace (sqm)	Vacant land (Ha)	Highly constrained (with a constraint score of -4 or below) (Ha)	Low-level Unconstrained (Ha)
<b>Existing precincts</b>				
Bateau Bay Industrial	0	0.48	0.00	0.48
Berkeley Vale Industrial	9,919	19.00	10.29	8.71
Charmhaven Industrial	18,505	0.79	0.00	0.79
Doyalson Industrial	712	4.42	0.00	4.42
Fountaindale Industrial	2,121	0.51	0.00	0.51
Gwandalan Industrial	1,819	0.99	0.00	0.99
Long Jetty Industrial Area	354	0.00	0.00	0.00
North Wyong Industrial	15,706	32.13	1.44	30.69
Ourimbah Industrial	2,505	4.41	0.00	4.41
Tuggerah Business Park	14,914	11.44	0.00	11.44
Tuggerah Station Industrial	6,512	11.84	0.14	11.70
Tuggerah Straight	15,087	4.43	0.51	3.92
Tumbi Gardens Industrial	1,626	0.07	0.00	0.07
WEZ Airport Lands	0	43.44	3.32	40.13
WEZ North West	0	83.89	6.78	77.11
WEZ Sparks Road North	0	141.97	2.31	139.66
WEZ Warnervale Business Park	473	23.98	15.69	8.29
Bushells Ridge - remainder	0	136.45	88.76	47.69
<b>Subtotal</b>	<b>90,252</b>	<b>520</b>	<b>129</b>	<b>391</b>
<b>Potential precincts</b>				
Craigie Avenue	0	4.07	0.00	4.07
NWSSP Hue Hue Road	0	38.46	0.21	38.25
NWSSP Warnervale South West	0	32.43	0.27	32.15
NWSSP Warnervale North West	0	75.65	4.35	71.29
NWSSP Warnervale North East	0	50.58	0.06	50.52
Wallarah No.2 Coal Site*	0	198.97	12.37	186.60
NWSSP Bushells Ridge North East*	0	15.25	0.00	15.25
NWSSP Doyalson South West	0	53.34	0.00	53.34
NWSSP Doyalson West	0	34.37	2.75	31.62
NWSSP Doyalson East	0	33.39	0.27	33.12
NWSSP Doyalson North East	0	35.62	0.00	35.62
Buttonderry WDF	0	n.a.	n.a.	21.00
Darbinjung*	0	271.94	240.97	30.97
NWSSP Darbinjung South	0	43.45	0.09	43.37
NWSSP Lake Munmorah	0	123.49	14.16	109.33
Hunter Land*	0	15.38	15.38	0.00
<b>Subtotal</b>	<b>0</b>	<b>1,026</b>	<b>291</b>	<b>757</b>
<b>Total</b>	<b>90,252</b>	<b>1,547</b>	<b>420</b>	<b>1,148</b>

Source: SGS Economics and Planning, 2012.

Overall, within the Wyong LGA, Light Manufacturing is the most dominant BLC land use with 34 percent of total floorspace, followed by Local Light industrial (23 percent) and Freight and Logistics (21 percent) ().



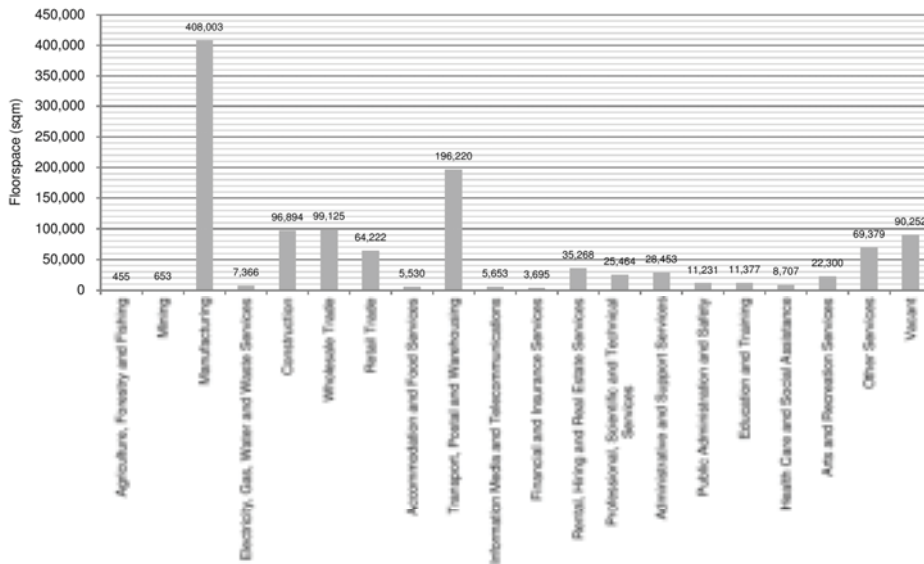
FIGURE 11. FLOORSPACE BY BLC



Source: SGS Economics and Planning, 2012.

In terms of ANZSIC uses, the Manufacturing industry is the most dominant land use with 34 percent of total floorspace, followed by Transport, Postal and Warehousing (16 percent) and Construction and Wholesale Trade (both 8 percent) (). There is approximately 90,252 square metres of vacant floorspace in Wyong (1.3 percent).

FIGURE 12. FLOORSPACE BY ANZSIC

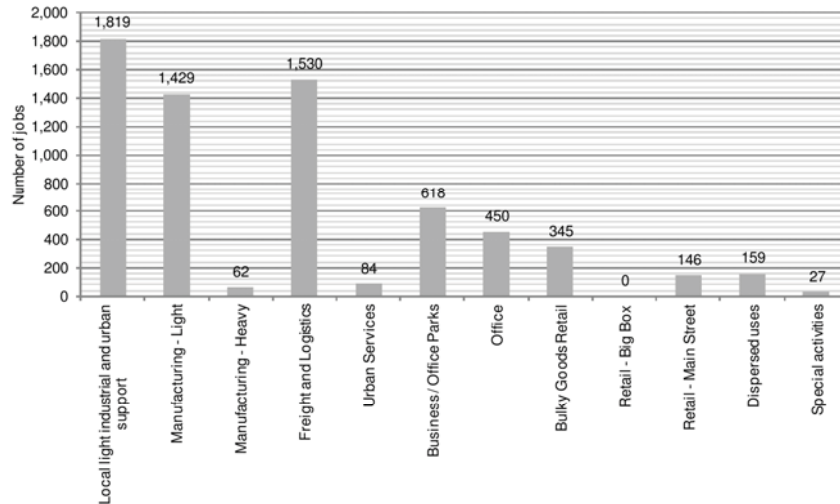


Source: SGS Economics and Planning, 2012.

Local Light industrial is the largest employer, with 27 percent of the total workforce followed by Freight and Logistics at 23 percent and Light Manufacturing at 21 percent (). Jobs were recorded for vacant BLCs because some buildings were noted as vacant where the majority of uses within that building were vacant (i.e. three out of four strata businesses might have been vacant).



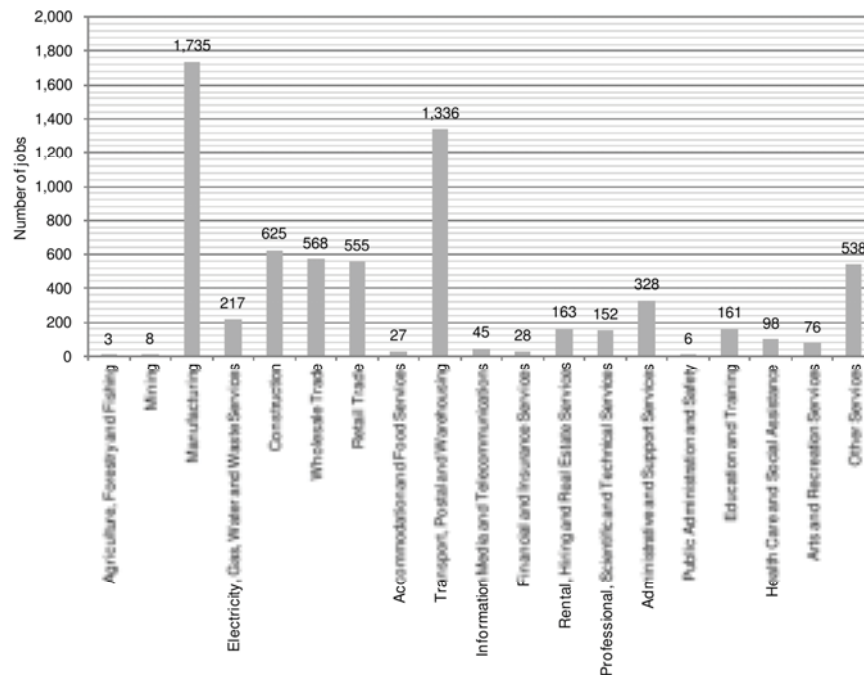
FIGURE 13. EMPLOYMENT BY BLC



Source: SGS Economics and Planning, 2012.

The largest employing industries are, at a one-digit ANZSIC code, Manufacturing (26 percent), Transport, Postal and Warehousing (20 percent), Construction (9 percent) and Wholesale Trade (9 percent) ().

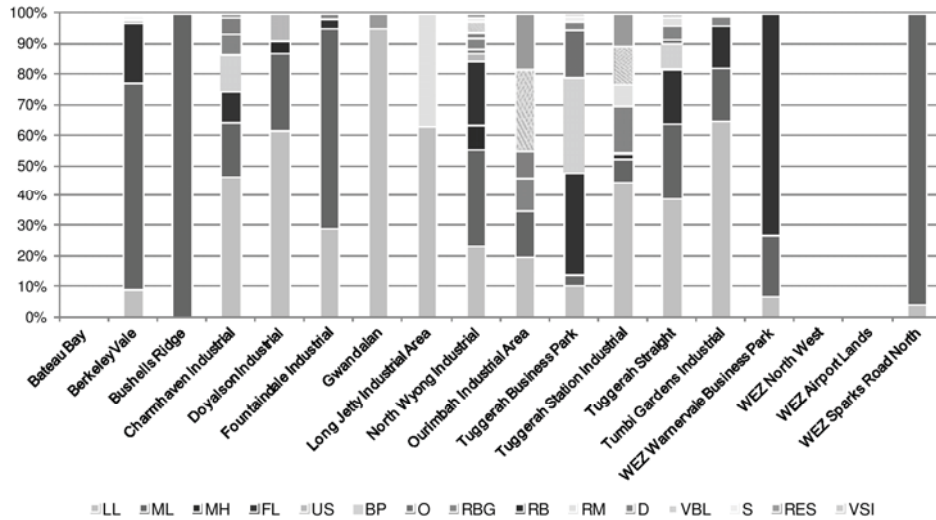
FIGURE 14. EMPLOYMENT BY 1-DIGIT ANZSIC CODE



Source: SGS Economics and Planning, 2012.

The composition of BLCs by precinct can be seen below in . Local Light industry, Light Manufacturing and Freight and Logistics are the most prevalent BLCs across all precincts.

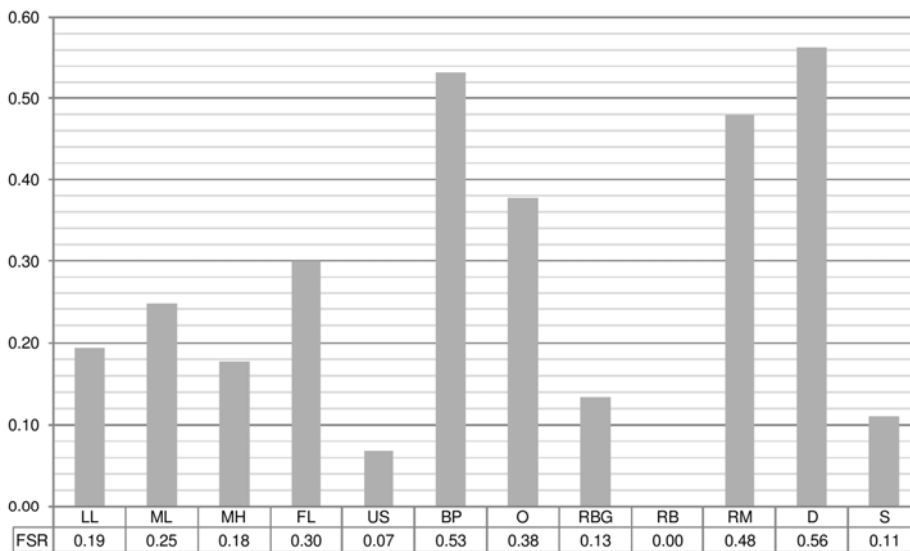
FIGURE 15. BLC BY PRECINCT



Source: SGS Economics and Planning, 2012.

The average actual FSR in Wyong is 0.2:1 (.). Dispersed Uses and Business Parks displayed the highest actual FSRs for industrial uses at 0.56:1 and 0.53:1, respectively. Urban Services recorded the lowest FSR at 0.07:1, equating to site coverage of approximately seven percent. It should be noted that 0.8:1 is the FSR contained in DCP75 that applies to all industrial land precincts.

FIGURE 16. ACTUAL FSR BY BLC



Source: SGS Economics and Planning, 2012.

depicts the actual FSRs by various precincts. Tuggerah Business Park and Fountaindale Industrial have the highest overall FSR of 0.4:1 followed by Tumbl Gardens with an FSR of 0.3:1.

**TABLE 33. ACTUAL FLOOR SPACE RATIOS BY PRECINCT**

Precinct	FSR
Bateau Bay	0.0
Berkeley Vale	0.2
Bushells Ridge	0.1
Charmhaven Industrial	0.2
Doyalson Industrial	0.1
Fountaindale Industrial	0.4
Gwandalan	0.1
Long Jetty Industrial Area	0.2
North Wyong Industrial	0.2
Ourimbah Industrial Area	0.1
Tuggerah Business Park	0.5
Tuggerah Station Industrial	0.2
Tuggerah Straight	0.2
Tumbi Gardens Industrial	0.4
WEZ – Warnervale Business Park	0.4
WEZ – Sparks Road North	0.2
<b>Average</b>	<b>0.2</b>

Source: SGS Economics and Planning, 2012.

displays the total number of jobs by precinct. North Wyong Industrial is the largest employer with 2091 employees followed by Wyong Employment Zone with 1,486 employees and Tuggerah Business Park precinct with 1377 jobs.

**TABLE 34. EMPLOYMENT BY PRECINCT**

Precinct	Employment	% employment
Bateau Bay	-	0%
Berkeley Vale	557	8%
Bushells Ridge	52	1%
Charmhaven Industrial	614	9%
Doyalson Industrial	60	1%
Fountaindale Industrial	157	2%
Gwandalan	16	0%
Long Jetty Industrial Area	25	0%
North Wyong Industrial	1,295	19%
Ourimbah Industrial Area	60	1%
Tuggerah Business Park	1,377	21%
Tuggerah Station Industrial	137	2%
Tuggerah Straight	1304	20%
Tumbi Gardens Industrial	192	3%
Wyong Employment Zone	823	12%
<b>Total</b>	<b>6,669</b>	<b>100%</b>

Source: SGS Economics and Planning, 2012.

The audit recorded 6669 jobs in the industrial areas in Wyong with an average job density of 1 job per 180 square metres of floorspace. The Vales Point and Munmorah Power Stations were not audited for this study, although they were contacted with regards to employment numbers and they indicated that there are 280 full time and part time production workers including 30 apprentices and 81 full time and part time maintenance workers employed across both sites.

shows the job density for each BLC. Offices have the highest amount employment density with 76 square metres of floorspace per job. As expected, Heavy Manufacturing has the least employment density of the industrial uses with 359 square metres of floorspace per job.

The ostensible discrepancy between floorspace per jobs and jobs per hectare is a result of the different pattern of lot usage by each BLC. Those BLCs that have high FSRs will typically record higher jobs per hectare ratios. For example, Freight and Logistics and Business Park have similar floorspace per job ratios at 166:1 and 135:1, respectively. However, their respective jobs per hectare ratio are comparatively more diverse at 18 and 40 jobs per hectare. By implication, this indicates that the BLC of Business Park would have a higher FSR than Freight and Logistics; which is evident from , above.

Some of these job density numbers diverge from industry standards and this is likely due to the existence of outliers which can have an adverse impact on a relatively small data set. In particular the floorspace per job ratio in the BLCs of Business Parks and Office is higher than would be anticipated, while for the BLC of Freight and Logistics it is lower than would be anticipated (this is driven down by the 600 jobs reported by the Woolworths distribution centre at its WEZ facility).

**TABLE 35. EMPLOYMENT DENSITY BY BLC**

BLC	Floorspace / Jobs (sqm)	Jobs / Area (Ha)
LL	149	13
ML	286	9
MH	359	5
FL	166	18
US	194	4
BP	135	40
O	76	50
RBG	127	10
RB	-	-
RM	105	46
D	83	68
S	253	4
Total	178	13

Source: SGS Economics and Planning, 2012.

shows the employment density by precinct. In terms of floorspace per job, Ourimbah has the lowest floorspace per job (most intense), followed by Tuggerah Straight, and Wyong Employment Zone. Berkeley Vale has the lowest employment intensity (high floorspace per job) out of all of the precincts followed by Fountaindale Industrial and Bushells Ridge.

**TABLE 36. EMPLOYMENT DENSITY BY PRECINCT**

Precinct	Floorspace / Jobs (sqm)	Jobs / Area (Ha)
Bateau Bay	0	0
Berkeley Vale	458	5
Bushells Ridge	425	3
Charmhaven Industrial	196	8
Doyalson Industrial	157	6
Fountaindale Industrial	426	9
Gwandalan	297	3
Long Jetty Industrial Area	178	12
North Wyong Industrial	135	13
Ourimbah Industrial Area	55	20
Tuggerah Business Park	131	37
Tuggerah Station Industrial	168	11
Tuggerah Straight	111	17
Tumbi Gardens Industrial	167	22
Wyong Employment Zone	117	6
<b>LGA (audited precincts)</b>	<b>176</b>	<b>13</b>

Source: SGS Economics and Planning, 2012.

### 6.3 Existing precincts

#### **Bateau Bay Industrial**

Bateau Bay is currently undeveloped with respect to industrial floorspace.

### Berkeley Vale Industrial

**Precinct character**

Berkeley Vale is zoned 4a General Industrial under the Wyong Environmental Plan 1991.

The Berkeley Vale Industrial Estate is located to the south of the Tuggerah Business Park, immediately beyond Ourimbah Creek, and north of Enterprise Drive. This area covers approximately 120 hectares, which have been subdivided into allotments ranging in size from 5000 square metres up to 40 hectares. Enterprise Drive is one of the few roads permitted to take B-doubles, which makes it more important for freight and logistics industrial activities.

A substantial proportion of the Berkeley Vale Industrial Estate has already been developed for large-scale manufacturing and warehousing activity. In particular there is a strong food processing presence, represented by Mars Foods and Sanitarium Health Foods (900 employees). Other major tenants include Halley & Mellows Australasia, automotive tool manufacturers Crontec and hi-tech manufacturer TE Connectivity.

**FIGURE 17. BERKELEY VALE ZONING MAP**

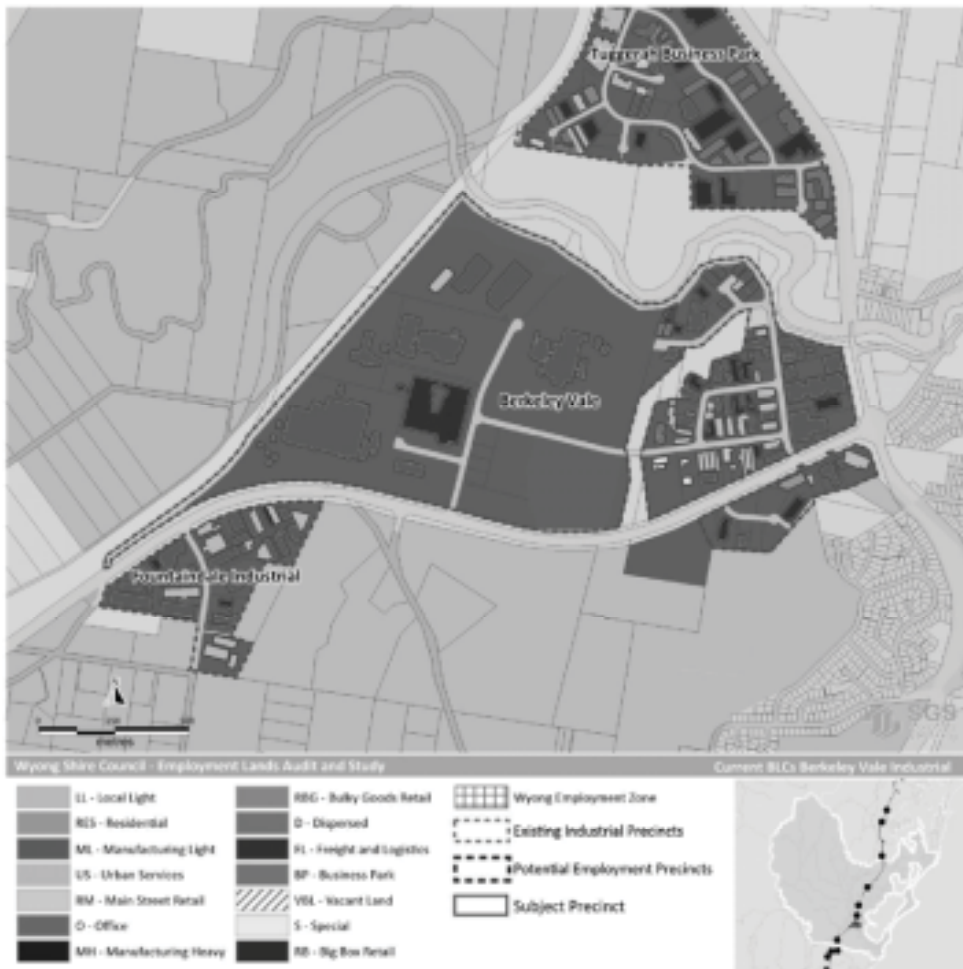


Source: SGS Economics and Planning, 2012.

**Precinct audit**

Berkeley Vale currently has 254,909 square metres of floorspace at an average actual FSR of 0.23:1. It has 19 hectares of vacant land, with 8.71 hectares of low-level constrained vacant land. There are 9919 square metres of vacant floorspace in Berkeley Vale. Light Manufacturing is the most dominant land use with 68 percent of total floorspace, followed by Freight and Logistics (20 percent) and Local Light industrial (9 percent). Light Manufacturing is the largest employer, with 65 percent of the total workforce followed by Freight and Logistics at 11 percent. There are 557 jobs in Berkeley Vale. It has an average job density of 1 job per 458 square metres of floorspace or five jobs per hectare.

**FIGURE 18. BERKELEY VALE AUDIT FINDINGS**





**Opportunities and constraints**

Based on our opportunities analysis Berkeley Vale is ranked 6<sup>th</sup> out of 34 existing and potential employment precincts with a constraints score of -2.3 indicating that it has relatively low-level constrained land compared to other lands in the shire (Figure 15). Based on our locational based BLC criteria, Freight and Logistics, Light Manufacturing and Urban Services industrial are the most suitable industries for Berkeley Vale.

**FIGURE 19. BERKELEY VALE CONSTRAINTS**



**Key assets and issues**

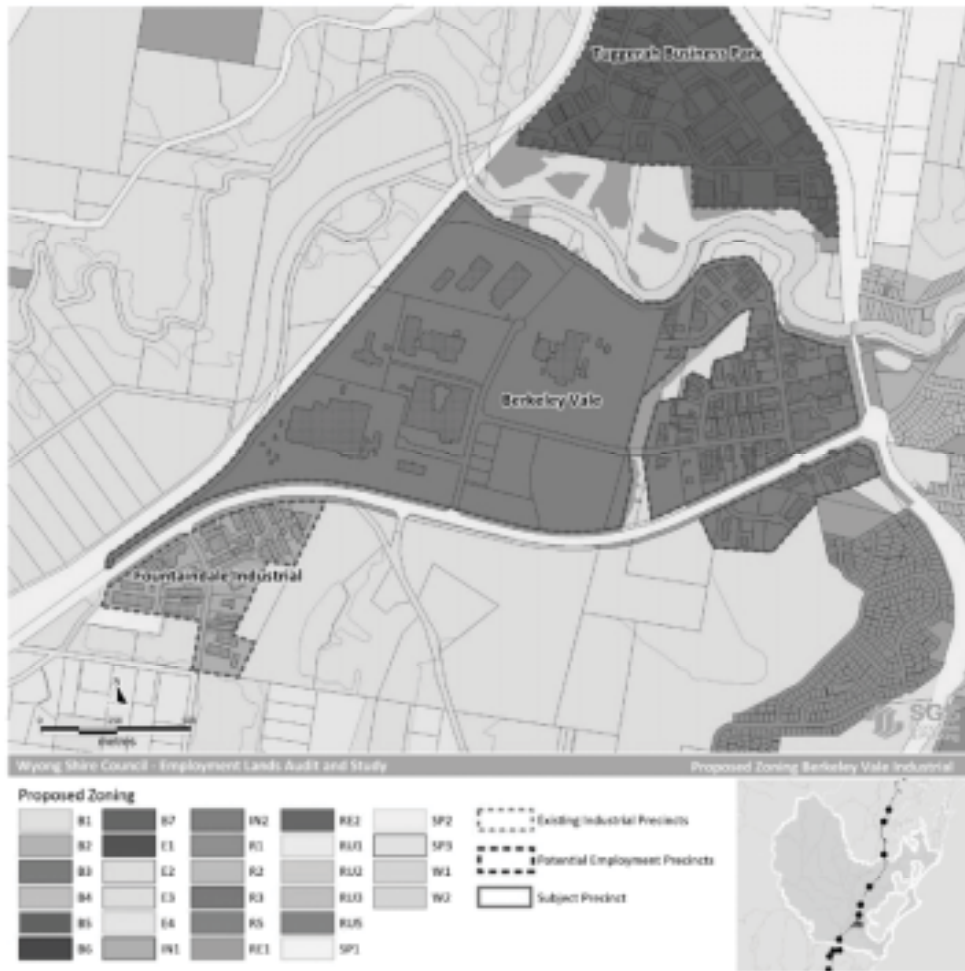
- The western area of the industrial precinct has poor road quality and a high truck parking/loading demand.
- A lack of local food and convenience retail for workers and precinct visitors is believed to limit the appeal of the estate to new tenants.

**Future role**

The current role of Berkeley Vale to be consolidated over time. There are additional opportunities for food manufacturing, hi-tech and value-add manufacturing and strategic industry growth. Given the strategic transport location on the B-Double road network off Enterprise Drive large lots are ideal in this precinct.

The precinct is proposed to be zoned IN1 with a small amount of IN2 south of Enterprise Drive.

**FIGURE 20. BERKELEY VALE PROPOSED ZONING**



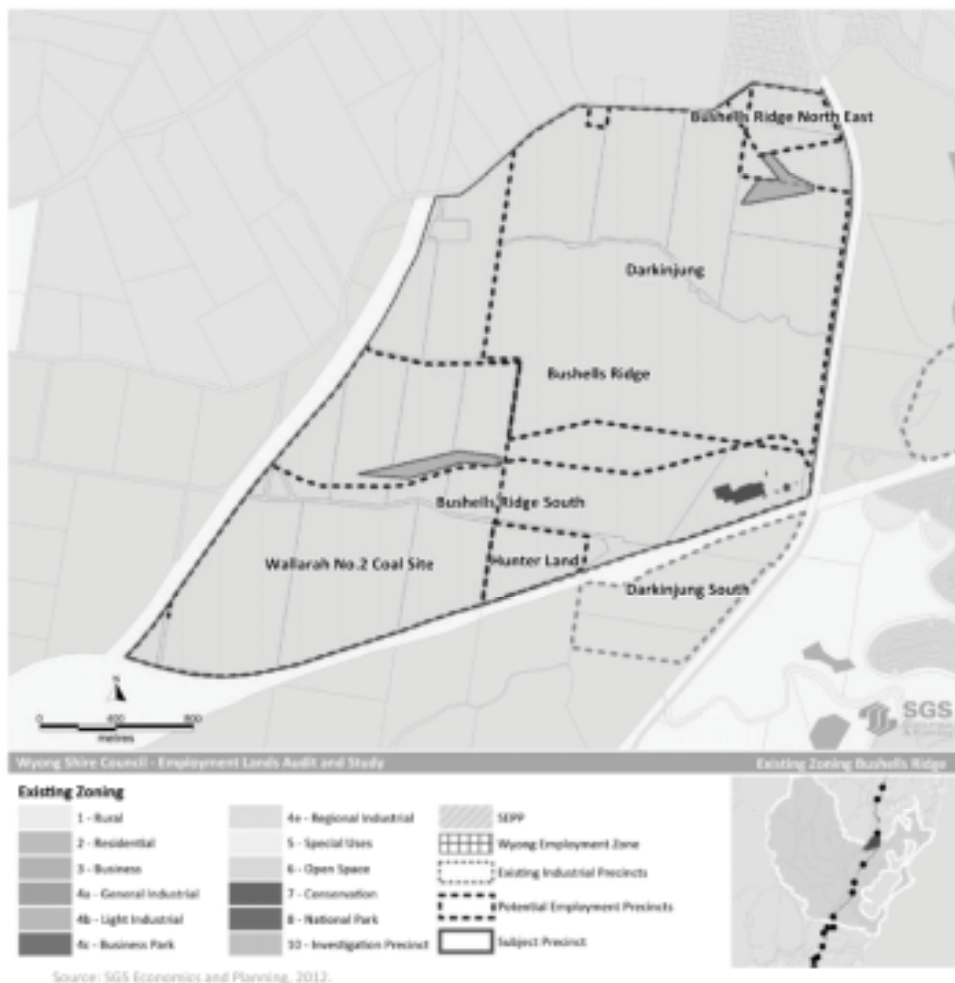
**Bushells Ridge<sup>55</sup>**

*Precinct character*

Bushells Ridge is zoned 4e Regional Industrial and Employment Development Zone under the Wyong Environmental Plan 1991 ().

Bushells Ridge exists mostly as vacant land, with the Boral Montoro quarry and tile factory being the only business currently operating in the precinct. The business is located in Bushells Ridge for proximity to the state significant clay resource contained in the precinct.

**FIGURE 21. BUSHHELLS RIDGE ZONING MAP**

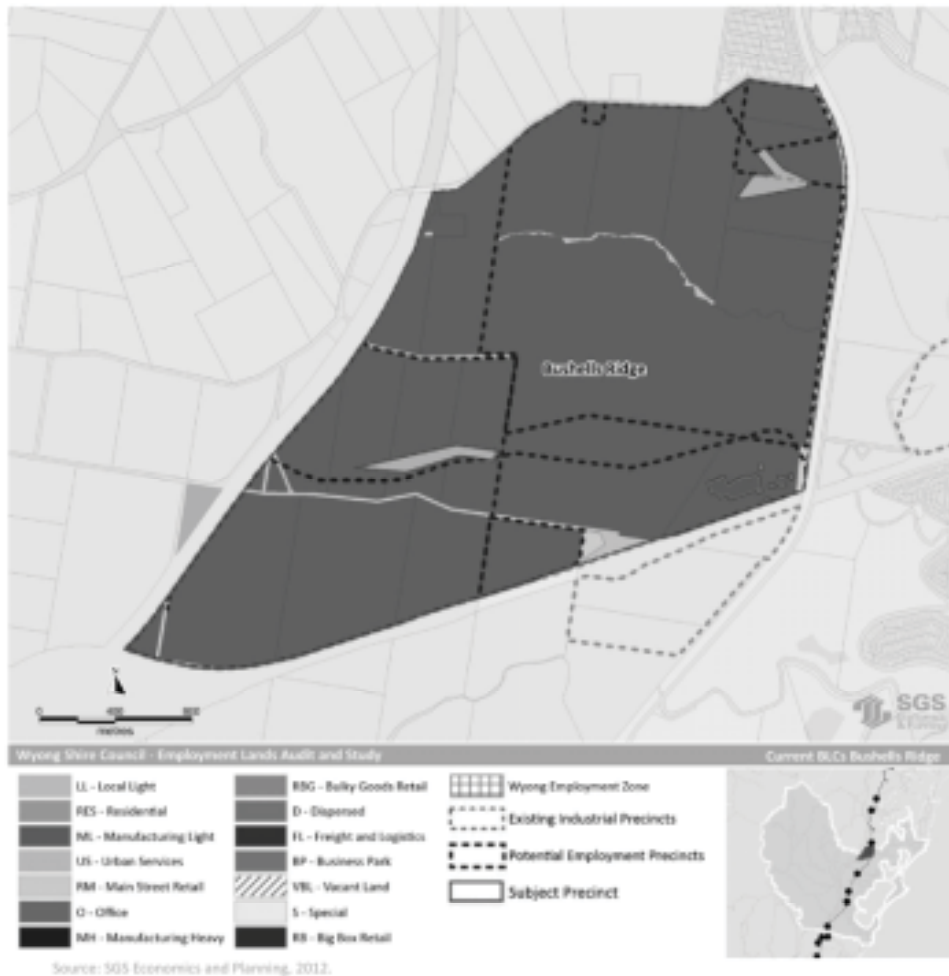


<sup>55</sup> The existing Bushells Ridge precinct discussed here has been divided into smaller areas and included in the discussion of potential precincts at Section 0. These potential precincts are identified by the blue dashed lines.

**Precinct audit**

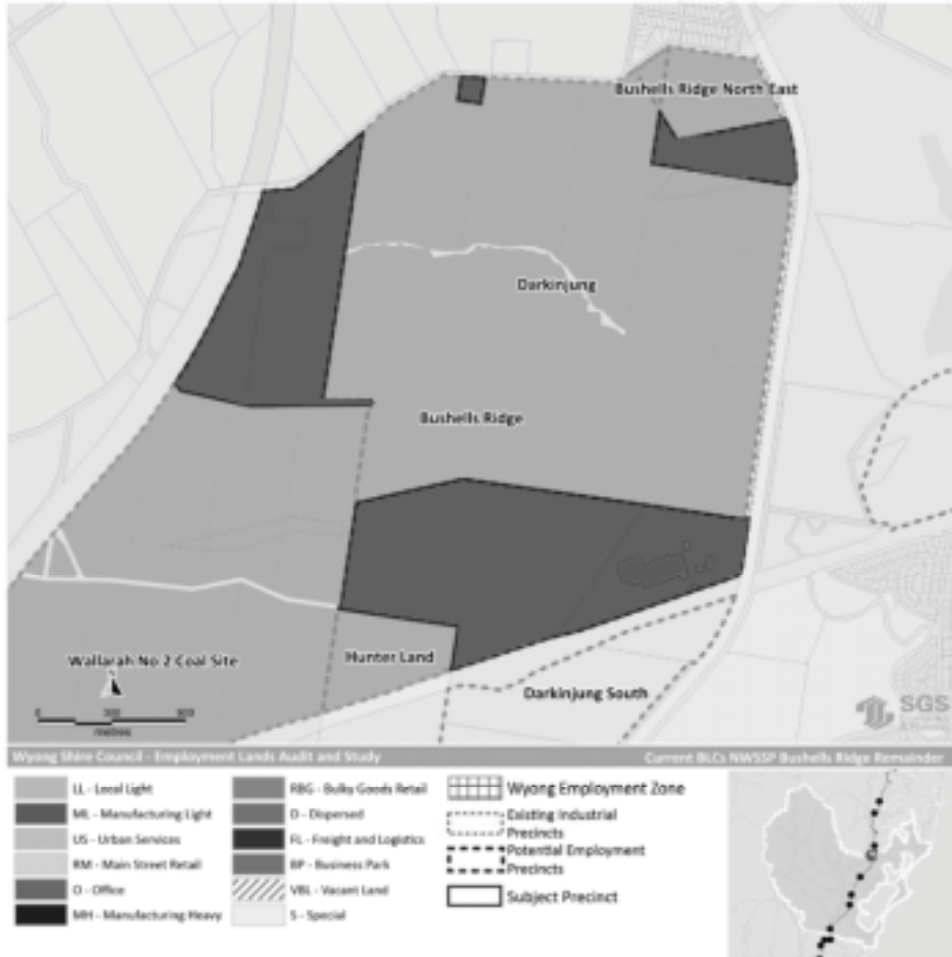
Bushells Ridge is mostly vacant with the Boral Montoro quarry and tile factory being the only business; hence Light Manufacturing comprises 100 percent of total floorspace. There are 52 jobs currently in Bushells Ridge, all in Manufacturing (one-digit ANZSIC code) with an average job density of 1 job per 850 square metres of floorspace. The precinct has an overall FSR of 0.1:1.

**FIGURE 22. BUSHHELLS RIDGE AUDIT FINDINGS**



Bushells Ridge remainder is shaded dark grey below figure.

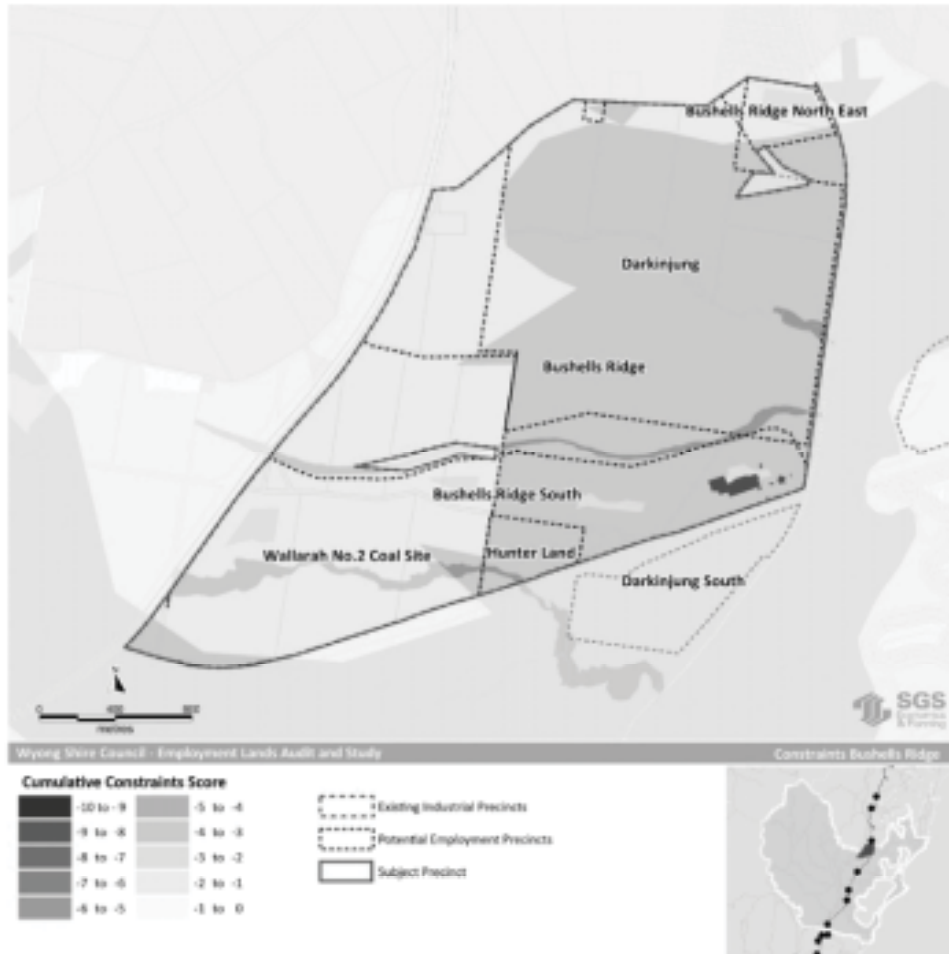
**FIGURE 23. BUSHHELLS RIDGE REMAINDER**



*Opportunities and constraints*

Parts of Bushells Ridge are identified in the North Wyong Shire Structure Plan as Strategic Sites. This means they are strategically located in relation to existing and proposed infrastructure but may have ecological and/or resource constraints. More detailed local investigation is therefore required to determine their conservation and development potential.

**FIGURE 24. BUSHELLS RIDGE CONSTRAINTS**



*Key assets and issues*

- Boral have a current exploration license that exists over Darkinjung LALC land and this could affect both the future pattern and staging of development.
- Site servicing is currently minimal and would not support industrial expansion without further development of infrastructure.
- The Development Servicing Plan proposes to service the area with sewer from the Charmhaven Sewage Treatment Plant. There could be opportunities to bring the delivery of the servicing plan forward with developer funding or joint servicing strategies between development areas.
- There are significant environmental constraints, including biodiversity, mine subsidence and bushfire risks, which require further investigation to better define development potential.



- The North Wyong Shire Structure Plan also identifies that the extent of the clay resource and environmental issues need to be resolved before the amount of industrial land available can be determined. It is likely that some of the land within this precinct will be required for wildlife corridors and environmental offsets.
- The existing Tooheys Road intersection and interchange is a key piece of infrastructure and an asset for the area.

#### *Future role*

The Darkinjung LALC is the single largest land owner in the Northern part of Wyong Shire and they currently have a major Part 3A proposal for an industrial subdivision in the Bushells Ridge area. Investigations are currently being undertaken to address the Director-General's Requirements for an industrial subdivision proposal under Part 3A. The affected area covers approximately 190 hectares of land to the north of the motorway link. A smaller 72 lot, approximately 40 hectare subdivision to the south of the Motorway link is also in the early planning stages.

A parcel of land between Tooheys Road and the Motorway link owned by Hunter Land has been approved for industrial subdivision, although this is yet to be activated. There are 18 lots in total ranging from 4000 square metres to 9000 square metres. The site is 15 hectares in total of which 11 are Net Developable Hectares.

The Wallarah No. 2 colliery proposal is located to the west of the Darkinjung lands in Bushells Ridge. This site is unlikely to be developed for industrial purposes in the short to medium term, but opportunity should be preserved.

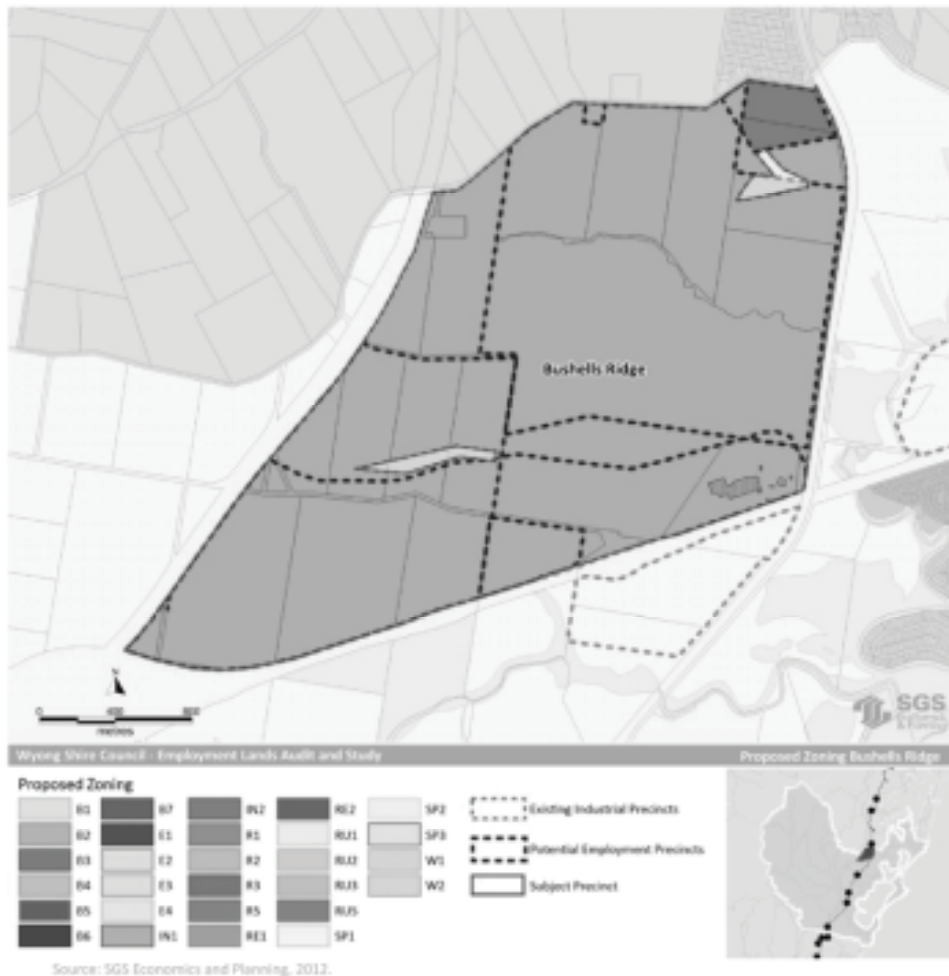
The North Wyong Shire Structure Plan and the Wye Structure Plan identify land to the north of the Bushells Ridge North East precinct as a potential location for increased residential development. This may impact the employment opportunities in the area and increase demand for light industrial services in the northern parts of the precinct and therefore potentially impacting the precincts future role.



It is proposed to zone the majority of the precinct as IN1 with a small amount of IN2 in the north east, although parts of the precinct that are highly environmentally constrained will have to be zoned for E2.

The site should be part of a detailed structure planning process for the Bushells Ridge and Wyong Employment Zone precincts that ensures long term strategic opportunities for industry are protected. Structure planning would aim to manage the tension between short and long term demands, and provide for a controlled but flexible mix of different lot sizes, ensuring a significant share of the area is protected for lots of say 4 hectares or larger (for freight and logistics users).

FIGURE 25. BUSHHELLS RIDGE PROPOSED ZONING



**Charmhaven industrial**

**Precinct character**

Charmhaven is zoned 4b Light Industrial under the Wyong Environmental Plan 1991 ().

The Charmhaven industrial area is located approximately 12 kilometres to the north of Wyong centre, on the western side of the Pacific Highway. The functional character of the Charmhaven industrial area is dominated by a mix of small factory, warehouse and showroom/bulky goods retail activities.

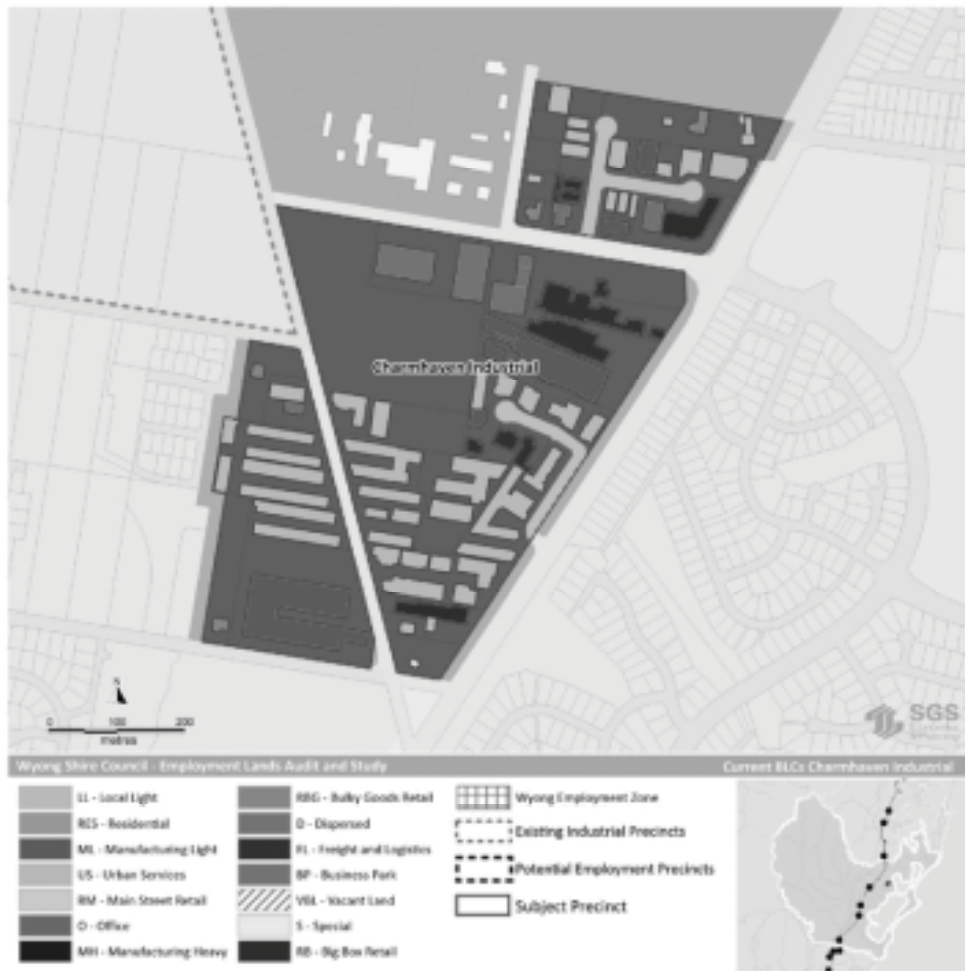
**FIGURE 26. CHARMHAVEN ZONING MAP**



**Precinct audit**

There are 119,174 square metres of floorspace at an FSR of 0.2:1. Local Light industrial is the most dominant land use with 42 percent of total floorspace, followed by Light Manufacturing (17 percent) and Business Park (11 percent). Charmhaven has approximately 0.79 hectares of vacant land (all of which is low-level constrained) and 18,505 square metres of vacant floorspace. There are 614 jobs in Charmhaven with Local Light industrial being the largest employer, comprising 53 percent of the total workforce followed by Freight and Logistics at 27 percent. At a one-digit ANZSIC level, the largest employers are Manufacturing (42 percent), Retail Trade (12 percent), Construction (11 percent) and Other Services (11 percent). It has an average job density of around 1 job per 196 square metres of floorspace or eight jobs per hectare.

**FIGURE 27. CHARMHAVEN AUDIT FINDINGS**



**Opportunities and constraints**

Based on our opportunities analysis Charmhaven is ranked 12<sup>th</sup> out of 34 existing and potential employment precincts with a constraints score of -7.0 indicating that it is low-level constrained compared to other lands in the shire ( ). Based on our locational based BLC criteria, Local Light industrial and Freight and Logistics are the most suitable industries for Charmhaven.

Subject to the resolution of biodiversity issues, there may also be additional employment potential in the area to the immediate north of Charmhaven, within the area identified by the Structure Plan as being a Strategic Site.

**FIGURE 28. CHARMHAVEN CONSTRAINTS**



**Key assets and issues**

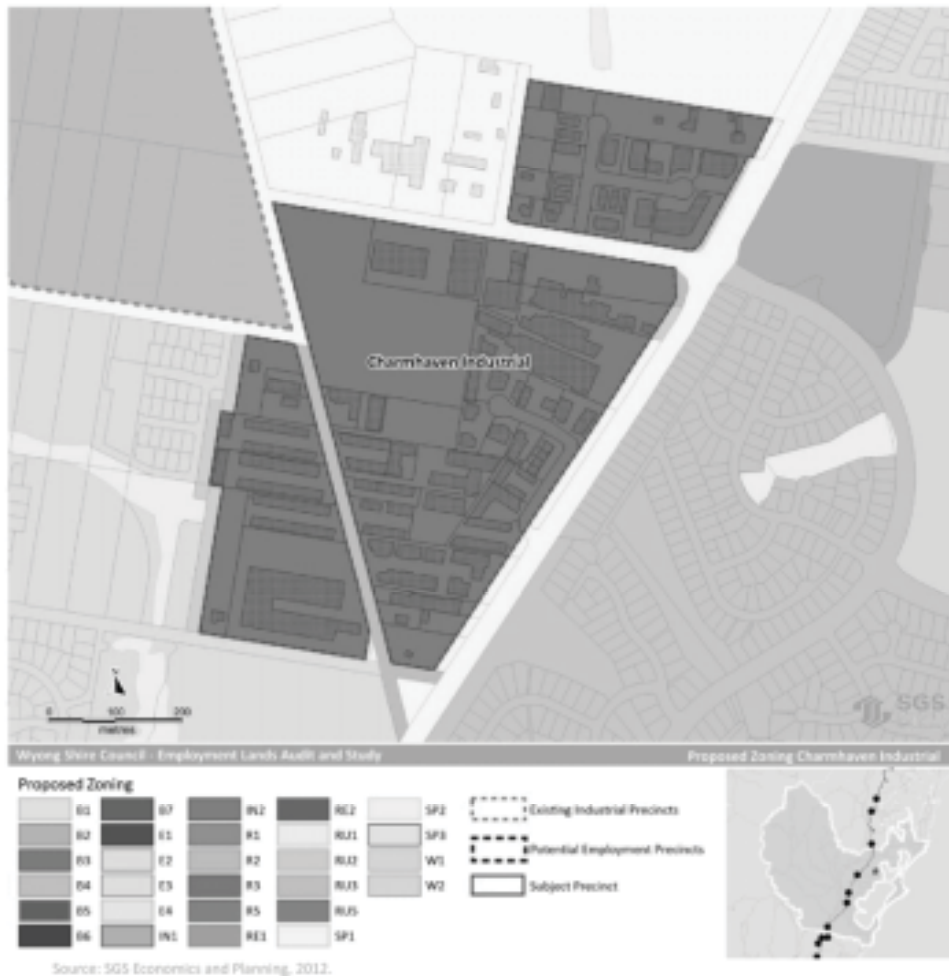
- There were no issues raised by businesses in the course of consultation around potential improvements to the Charmhaven estate. Close proximity to the retail facilities at Lake Haven Shopping Centre was seen as the most important asset in attracting and retaining staff, providing access to food and general retail.

**Future role**

In contrast with other larger estates on the Central Coast, which accommodate operations of large national and multi-national enterprises, much of the activity at Charmhaven is orientated towards servicing the needs of the local community. This local service focus needs to be preserved, given the potential for Charmhaven to play an important role in supporting future construction activity associated with future urban development of the Shire. The role of this precinct could be supported by industrial expansion at Warnervale North East.

The IN2 zone is proposed for this precinct.

**FIGURE 29. CHARMHAVEN PROPOSED ZONING**

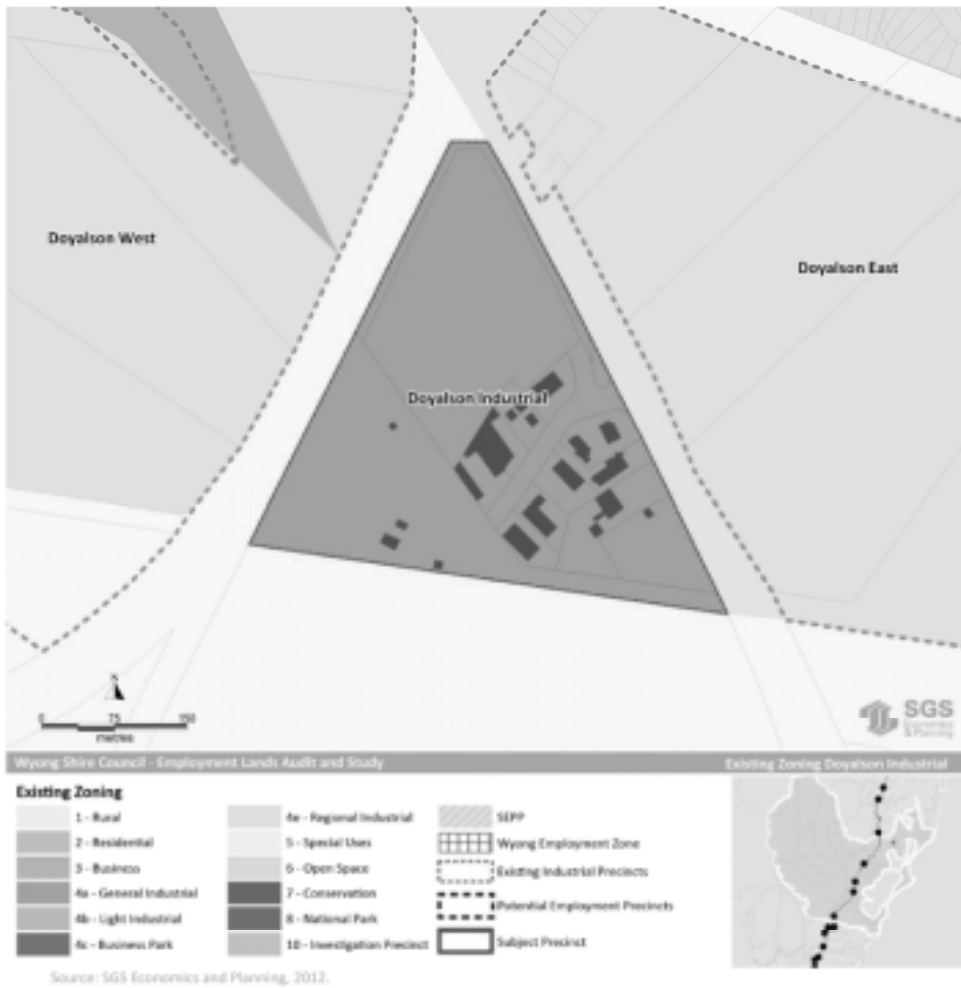


**Doyalson industrial**

*Precinct character*

Doyalson is zoned 4a General Industrial under the Wyong Environmental Plan 1991 ().

**FIGURE 30. DOYALSON ZONING MAP**





**Precinct audit**

Doyalson currently has 9403 square metres of floorspace at an FSR of 0.1:1. Existing uses include Local Light industrial, which accounts for approximately two-thirds (62 percent) of total floorspace, followed by Light Manufacturing (26 percent). The precinct contains approximately 712 square metres of vacant floorspace and 4.42 hectares of vacant land (all of which is low-level constrained).

At a one-digit ANZSIC level, the largest employers are Manufacturing (55 percent), Other Services (33 percent) and Retail Trade (12 percent). There are 60 jobs in Doyalson with Local Light industrial and Urban Services equally the largest employers with 47 percent of the total workforce. The average job density is 1 job per 157 square metres of floorspace or 6 jobs per hectare.

**FIGURE 31. DOYALSON AUDIT FINDINGS**



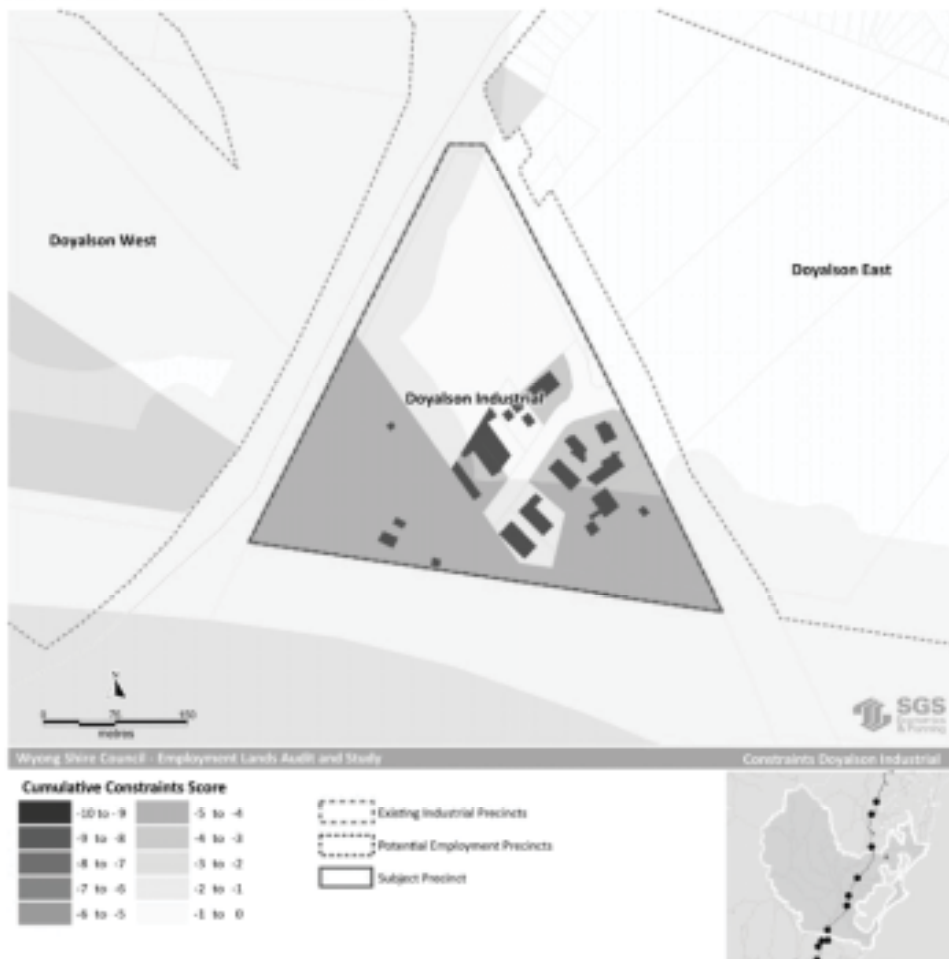


**Opportunities and constraints**

Based on the opportunities analysis Doyalson is ranked 14<sup>th</sup> out of 34 existing and potential employment precincts with a constraint score of -7.0 (I). Based on the locational based BLC criteria, Local Light industrial and Freight and Logistics are the most suitable industries for Doyalson.

The Doyalson site is highly constrained by the existence of a biodiversity corridor transecting the breadth of the site in an east-to-west pattern. Risks associated with bushfires also present an additional constraint to future use. There may be potential for minor expansion to the south, subject to resolution of issues associated with the proposed east-west biodiversity corridor identified in the Structure Plan.

**FIGURE 32. DOYALSON CONSTRAINTS**



**Key assets and issues**

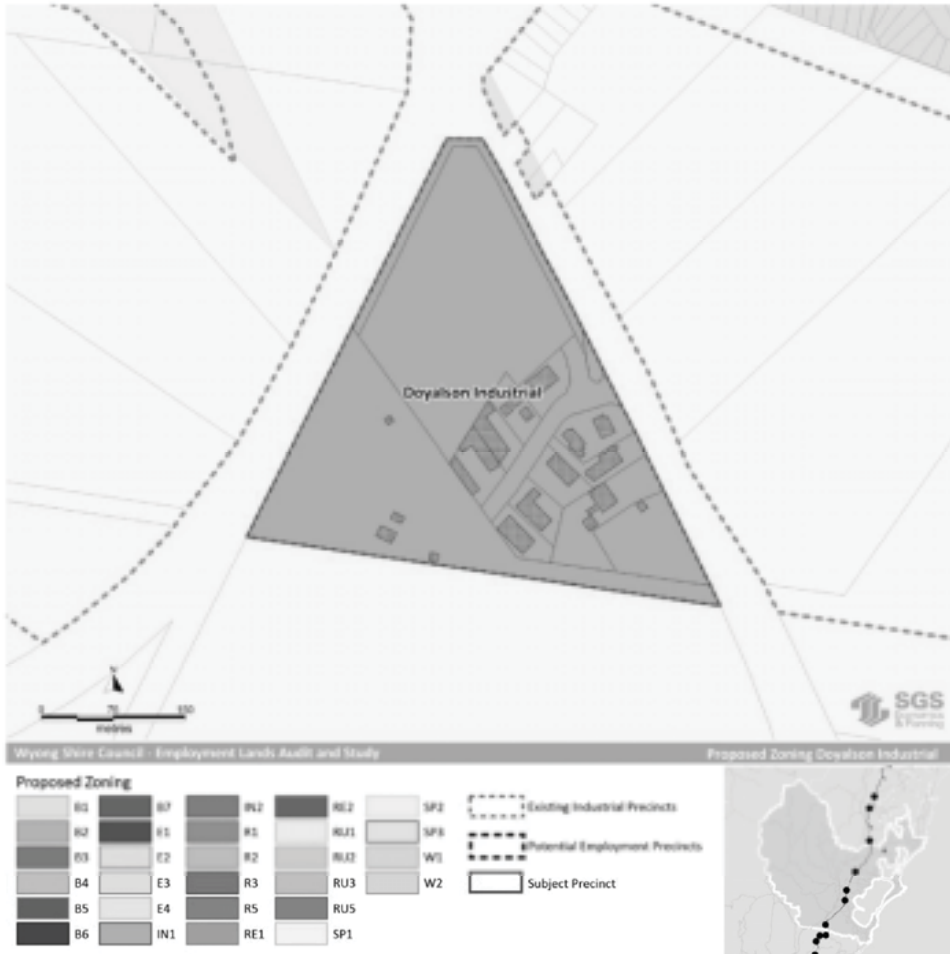
- Management of environmental impacts associated with development in areas near the biodiversity corridor; permissibility of development within the corridor also needs to be established. This is expected to reduce the volume of land available for future industrial development.

**Future role**

Regional and local service role to continue. There is ample future expansion potential for this precinct to the west, east and north-east into the areas identified in the NWSSP as 'Doyalson West', 'Doyalson East' and 'Doyalson North East'.

It is proposed to zone the precinct as IN1.

**FIGURE 33. DOYALSON INDUSTRIAL PROPOSED ZONING**



Source: SGS Economics and Planning, 2012.

### Fountaindale Industrial

**Precinct character**

Fountaindale industrial precinct is zoned 4a General Industrial under the Wyong Environmental Plan 1991 (). It is located favourably in relation to road networks and is relatively isolated from residential development. The western area of the precinct contains mostly light manufacturing and industrial uses, while the eastern areas contain business-park type usages.

**FIGURE 34. FOUNTAINDALE ZONING MAP**

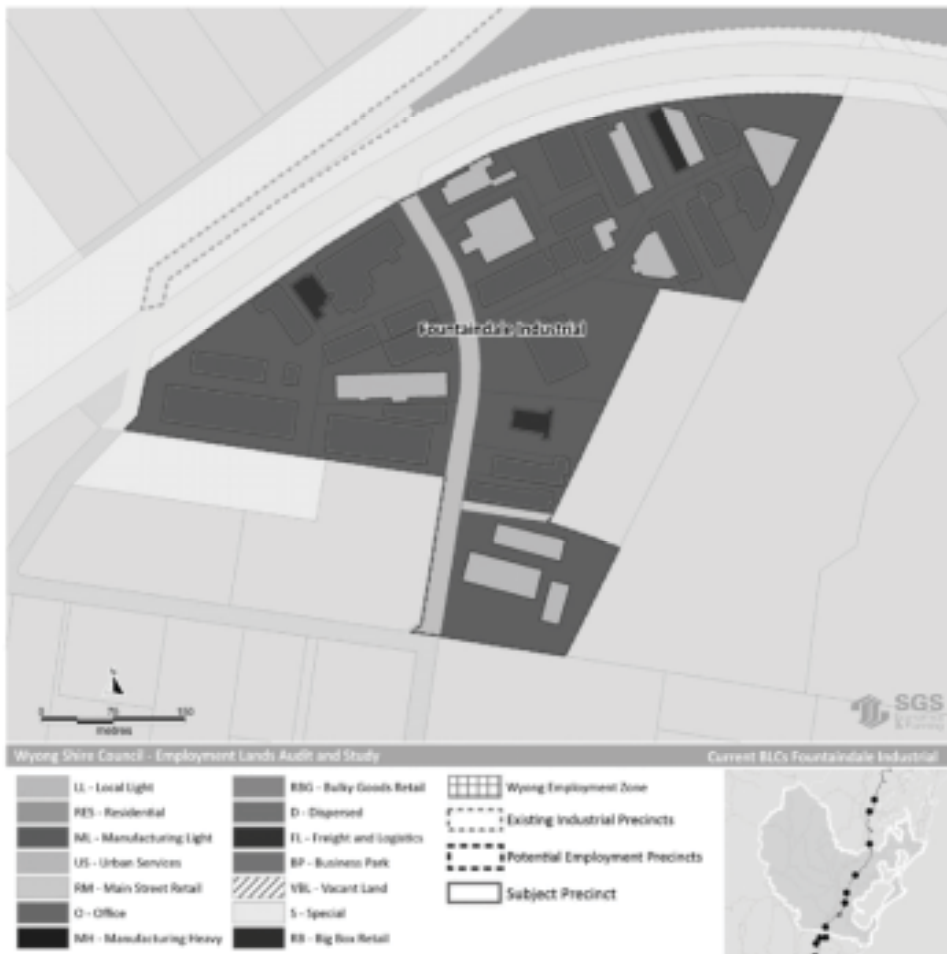


**Precinct audit**

Fountaindale currently has 66,856 square metres of floorspace at an FSR of 0.4:1. Light Manufacturing is the most dominant land use, accounting for two-thirds of total floorspace (66 percent), followed by Local Light industrial (29 percent). Fountaindale has approximately 0.51 hectares of vacant land and 2121 square metres of vacant floorspace. A comparative land assessment undertaken by SGS Economics and Planning identified Somersby and Lisarow as comparable to Fountaindale.

There are 157 jobs in Fountaindale with Local Light Industrial being the largest employer, comprising 61 percent of the total workforce followed by Light Manufacturing at 33 percent. At a one-digit ANZSIC level, the largest employers are Manufacturing (63 percent) and Construction (24 percent). It has an average job density of 1 job per 426 square metres of floorspace or 9 jobs per hectare.

**FIGURE 35. FOUNTAINDALE AUDIT FINDINGS**



Source: SGS Economics and Planning, 2012.

**Opportunities and constraints**

Based on our opportunities analysis Fountaindale is ranked 5<sup>th</sup> out of 34 existing and potential employment precincts with a constraint score of -2.2 indicating that it is low-level constrained compared to other lands in the shire (). Based on our locational based BLC criteria, Freight and Logistics and Light Manufacturing are the most suitable industries for Fountaindale.

Our figures show that the precinct will reach capacity in the short term. Therefore we have allocated excess demand elsewhere in the LGA. However, there could be potential to explore expanding the precinct to the south as it appears to be low-level constrained. This would require further investigation.

**FIGURE 36. FOUNTAINDALE CONSTRAINTS**



**Key assets and issues**

- Traffic impacts relating to the residential area/school on the southern edge of the precinct may require attention if there is any in site expansion. Currently, access to the school is possible only through industrial areas.
- Enterprise Drive is one of the few roads that is permitted to take B-doubles, which makes it more important for freight and logistics industrial activities.

*Future role*

Local service role for established residential communities to continue

The IN1 zone is proposed for this precinct.

**FIGURE 37. FOUNTAINDALE PROPOSED ZONING**



**Gwandalan Industrial**

*Precinct character*

Gwandalan is zoned 4b Light Industrial under the Wyong Environmental Plan 1991 (). The Gwandalan industrial precinct is located in the far north of Wyong Shire in an urban fringe setting away from arterial roads. The precinct is affected by a number of environmental constraints, owing largely to its location on a peninsula within an area currently retaining dense vegetation.

**FIGURE 38. GWANDALAN ZONING MAP**



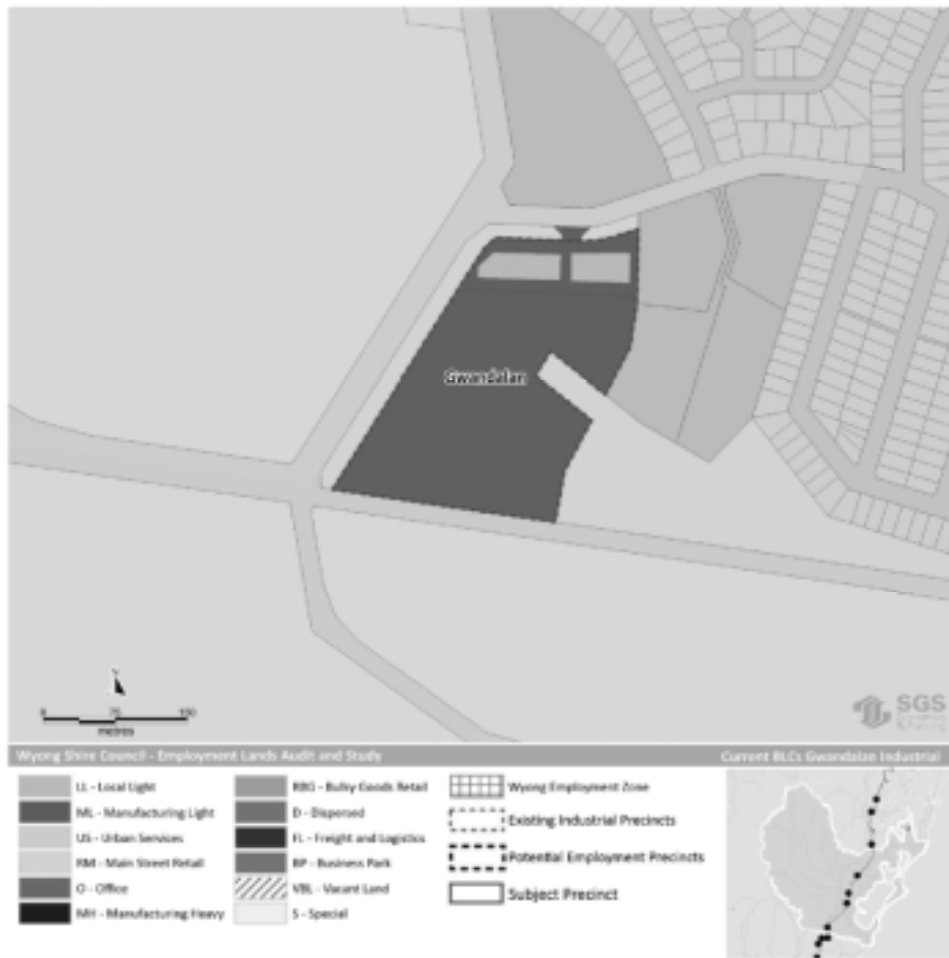


**Precinct audit**

Gwandalan currently has 4756 square metres of floorspace at an FSR of 0.1:1. Local Light industrial is the predominant land use category in Gwandalan. There are 0.99 hectares of vacant land and 1819 square metres of vacant floorspace in Gwandalan. The precinct is relatively isolated and serves a local catchment, and hence has no strong competitor within Wyong or neighbouring LGAs.

There are 16 jobs in Gwandalan, all of which are within Local Light industrial. At a one-digit ANZSIC level the largest employers are Retail Trade (50 percent) and Other Services (50 percent). Gwandalan has an average job density of around 1 job per 297 square metres of floorspace or 3 jobs per hectare.

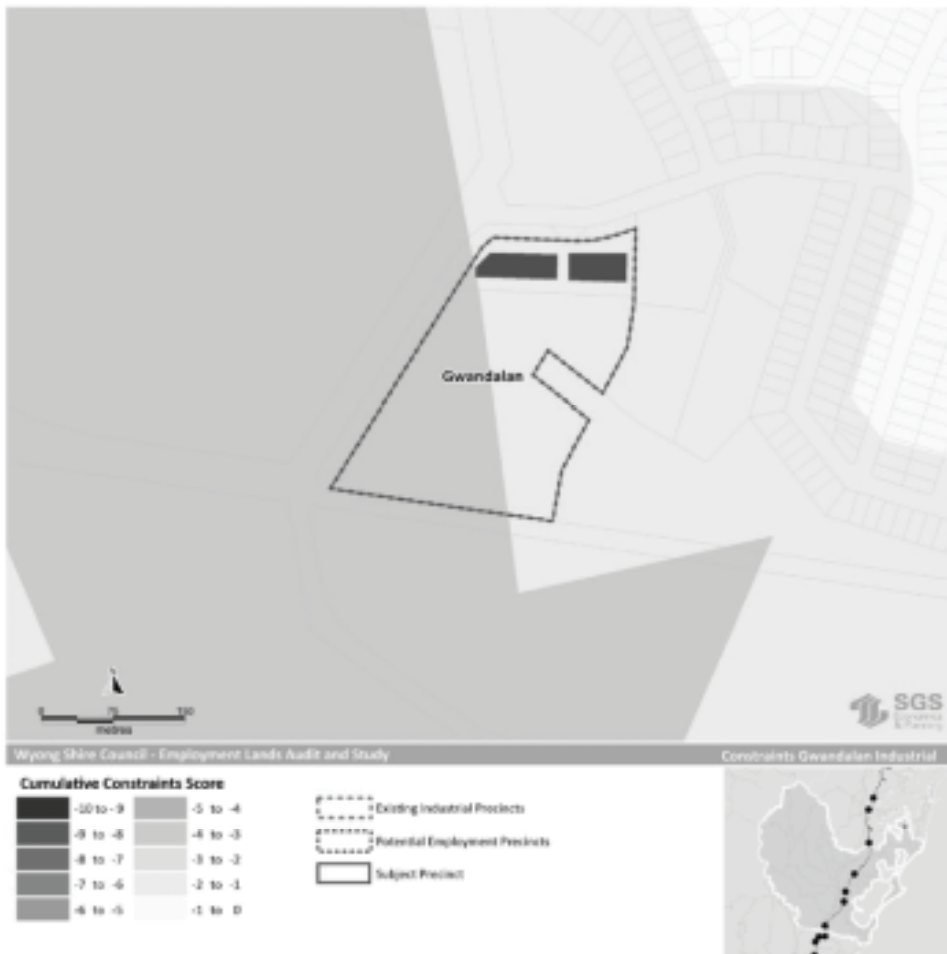
**FIGURE 39. GWANDALAN AUDIT FINDINGS**



**Opportunities and constraints**

Based on the opportunities analysis Gwandalan is ranked 4<sup>th</sup> out of 34 existing and potential employment precincts with a constraint score of -1.6 indicating that it is low-level constrained compared to other lands in the shire (). Based on the locational based BLC criteria, Local Light industrial and Light Manufacturing and are the most suitable industries for Gwandalan. However, the Structure Plan for Gwandalan identifies this precinct as being suitable for a future centre that will service the expanded residential population. Therefore any future industrial expansion in this precinct would likely locate to the rear of the current activities; which are mainly service retail and providing a hub for the local residential population.

**FIGURE 40. GWANDALAN CONSTRAINTS**



Source: SGS Economics and Planning, 2012.

**Key assets and issues**

- Environmental constraints, including mine subsidence and bushfire risks.
- Distance from arterial roads and rail links, serving only a limited labour pool/catchment.

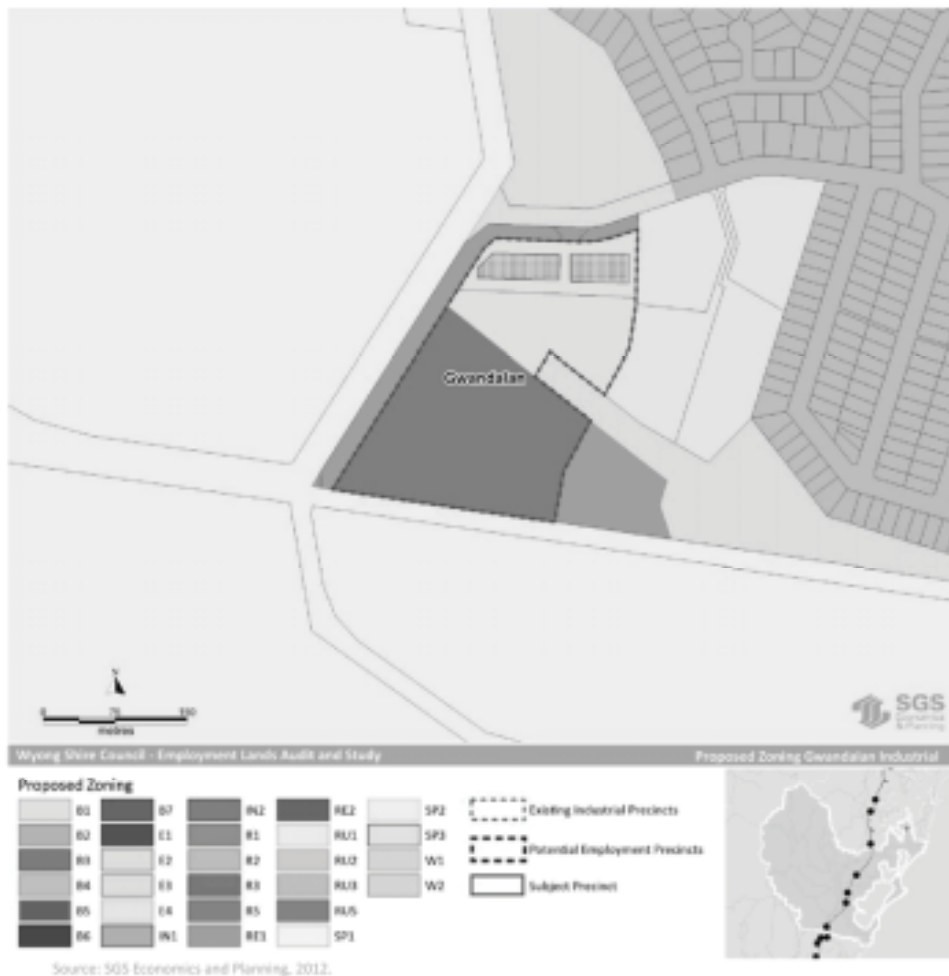
**Future role**

The Structure Plan identifies this site as being suitable for a future centre that will service the expanded residential population.

Retail Centres Review supports a new neighbourhood centre (1500 sqm) as part of the new residential release in the Gwandalan area.

A combination of B1 (to the street frontage) and IN2 (to the rear) zones are proposed for the precinct. The exact boundary for this split needs to be established following consideration of the parking and curtilage requirements of the proposed uses.

**FIGURE 41. GWANDALAN INDICATIVE PROPOSED ZONING**



**Long Jetty Industrial Area**

**Precinct character**

Long Jetty Industrial is zoned 4b Light Industrial under the Wyong Environmental Plan 1991 (). The Long Jetty Industrial precinct is located in an urban setting, immediately adjacent to the Central Coast Highway, accommodating Light Industrial, Freight and Logistics and Light Manufacturing uses.

**FIGURE 42. LONG JETTY ZONING MAP**



**Precinct audit**

Long Jetty currently has 4459 square metres of floorspace at an FSR of 0.2:1. Local Light is the most dominant land use category in the precinct, with 63 percent of total floorspace, with the remainder Mainstreet Retail (37 percent). It has 354 square metres of vacant floorspace and no vacant land.

There are 25 jobs in Long Jetty industrial, with Mainstreet Retail being the largest employer comprising 56 percent of the total workforce followed by Local Light industrial at 44 percent. At a one-digit ANZSIC level, the largest employers are Construction (44 percent), Retail Trade (44 percent) and Arts and Recreation Services (12 percent). Long Jetty Industrial has an average job density of 1 job per 178 square metres of floorspace or 21 jobs per hectare.

**FIGURE 43. LONG JETTY AUDIT FINDINGS**

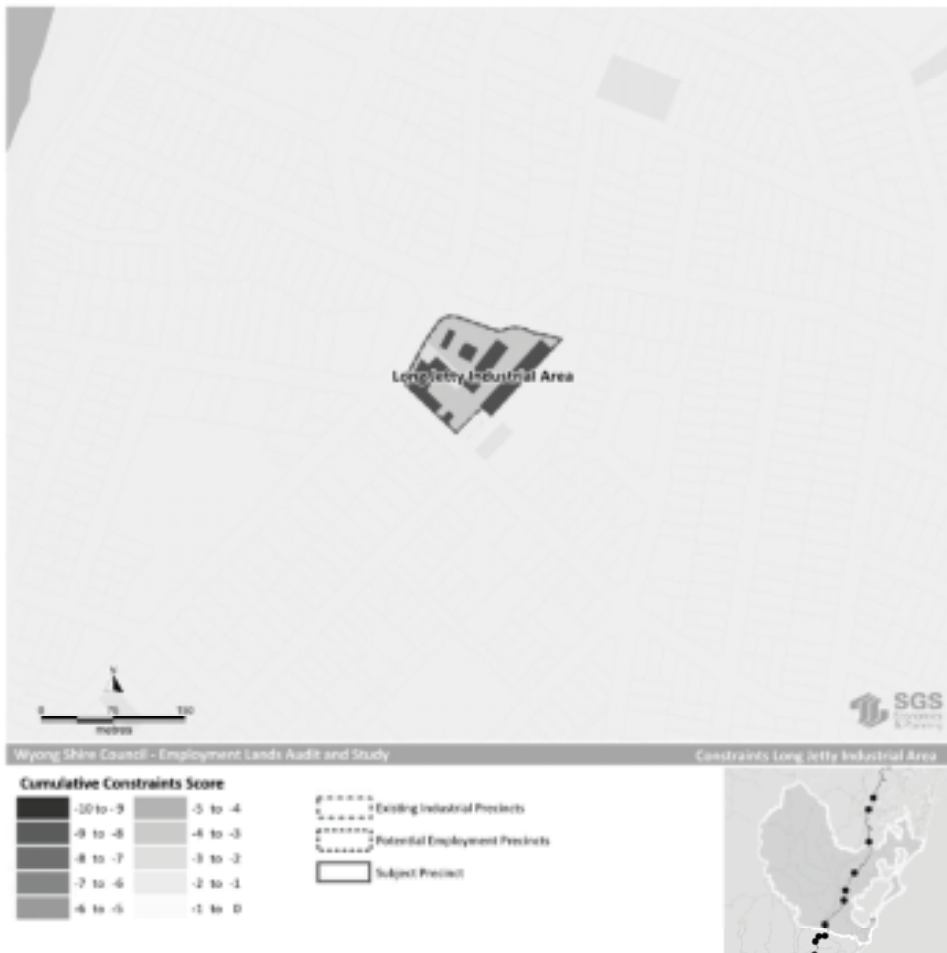


Source: SGS Economics and Planning, 2012.

**Opportunities and constraints**

Based on our opportunities analysis Long Jetty Industrial is ranked 3<sup>rd</sup> out of 34 existing and potential employment precincts with a constraint ranking of -1.0 (J). Based on our locational based BLC criteria, Local Light industrial and Freight and Logistics are the most suitable industries for Long Jetty Industrial.

**FIGURE 44. LONG JETTY CONSTRAINTS**



Source: SGS Economics and Planning, 2012.

**Key assets and issues**

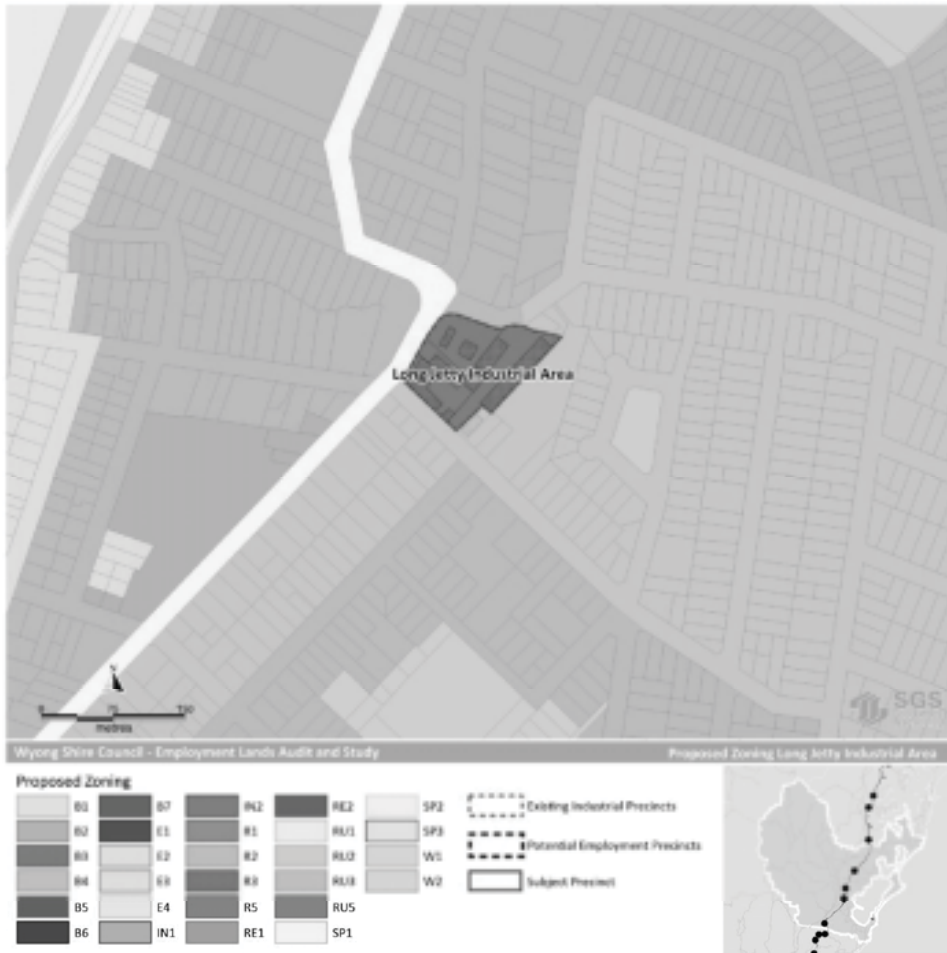
None recorded.

**Future role**

There is limited growth potential for the precinct as it is already built-up. The local service role for established residential communities is proposed to continue.

The IN2 zone is proposed for the precinct.

**FIGURE 45. LONG JETTY PROPOSED ZONING**



Source: SGS Economics and Planning, 2012.