

Ku-ring-gai Council

Ku-ring-gai Contributions Plan 2010

Aligned to the Metropolitan
Strategy Development
Period: 2004-2031



Ku-ring-gai Contributions Plan 2010

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Acknowledgements

This Contributions Plan is a review and consolidation of two preceding Contributions Plans:

Ku-ring-gai Council Section 94 Contributions Plan 2004-2009 Residential Development prepared by Dan Brindle of BBC Consulting Planners

and

Ku-ring-gai Town Centres Development Contributions Plan 2008 prepared by Greg New of *Newplan* Urban Planning Solutions

It is inevitable that this review and consolidation has built upon this solid base and supporting information has been carried over into this document. This significant contribution by the authors of these predecessor documents is duly acknowledged.

Notes on the Legislative Context

At the time of drafting completion in November 2009 for subsequent reporting for exhibition the legislation passed by both Houses of Parliament and assented in June 2008 had not yet commenced so far as it applies to development contributions. Further, at the time of reporting this draft Contributions Plan for adoption post-exhibition in November 2010, that legislation also remained uncommenced, but could still be commenced at any time. While it could be argued that there is no compunction to comply with this legislation while it remains uncommenced, nothing in the current legislation precludes a Council from structuring its Contributions Plan with regard to these pending requirements. Any inactive reference in any set of dual references will be amended as part of the post-adoption finalisation for publication process with respect to whichever legislation is in force at the date of coming into force post adoption.

Notes on the Legal Context

At the time of reporting this draft Contributions Plan for adoption, there exists a s94E Direction issued on 16 September 2010 applying to the Ku-ring-gai Local Government Area. This s94E Direction limits development contributions on residential dwellings to a maximum of \$20,000 *except* in the areas identified in the attached schedule to the s94E Direction.

The area identified in the schedule is a 'grandfathered' area in which there is no active s94E Direction applying an artificial cap to contributions. It relates to the redevelopment areas along the Pacific Highway and in St Ives. These areas are subject to intensive redevelopment with concomitant infrastructure demands that cannot be met within such a cap.

Contributions in this Contributions Plan range from well below \$20,000 to above \$20,000 primarily because they are based on a per capita demand multiplied by occupancy rates. Larger dwellings are responsible for a greater proportional demand than smaller dwellings. Reference to the still current *Development Contributions Practice notes – July 2005* issued by the Department of Planning to guide the preparation of Contributions Plans confirms that this is the correct and equitable way of determining and apportioning relative demand generated on a per capita basis. The *Environmental Planning and Assessment Regulation 2000* requires a council to have regard to these Practice Notes.

This Contributions Plan complies with the s94E Direction issued 16 September 2010 as follows:

- ☑ All 'per dwelling' residential contributions outside the town centre redevelopment areas identified in the maps within this document are below \$20,000 including contributions for single dwellings and dual occupancies in most of the Local Government Area – however it should be noted that the process of CPI and HPI inflation will ultimately carry these contributions over this cap which will become a matter to be addressed if the s94E Direction remains in force at that time;
- ☑ Contributions for all dwellings in Wahroonga which is also outside the 'grandfathered areas' are also below \$20,000 – however it should be noted that the process of CPI and HPI inflation will ultimately carry these contributions over this cap which will become a matter to be addressed if the s94E Direction remains in force at that time;

- ☑ Some 'per dwelling' residential contributions for larger dwellings in the 'grandfathered' areas exceed \$20,000 which is permitted as there is no active contributions cap in these areas;

There is one area of technical non-compliance with the s94E Direction which took effect on and from 16 September 2010 which is acknowledged, without prejudice, as follows:

One of the six centres includes areas that were rezoned for redevelopment by *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* that were not identified in *Ku-ring-gai Town Centres Development Contributions Plan 2008* (which was based on an earlier Draft Local Environmental Plan). These areas will ultimately need to be formally incorporated into the 'grandfathered areas' in order to be permitted to contribute their fair share. Until that time Ku-ring-gai Council remains bound by the present s94E Direction and will, for long as it remains in force, comply with that s94E Direction in respect of any proposed development of these properties.

Please refer to **1.41 Ministerial Directions** for further clarity of the inter-relationship of this Contributions Plan with Ministerial Directions issued under s94E.

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Part A: Summary Schedules

Summary Contribution Rates

Contribution Rates

Person	Dwelling Houses		Units, Townhouses, Villas					Other Residential		Retail	Business
Per Capita	2 bedrooms (or less)	3 bedrooms (or more)	Studio/Bedrels	1 bedroom	2 bedrooms	3+ bedrooms	Seniors Living	Newly subdivided	Non-private dwelling	Per square metre of GFA	Per square metre of GFA
1.0	1.9	2.6	1.0	1.2	1.7	2.1	1.3	2.6	1.0		

Northern Areas Outside those Specified on the Town Centres and Local Centre Catchment Maps at figures 1.2-1.8 (all suburbs north of Ryde Road and Mona Vale Road plus St Ives)											
Local parks and Local sporting facilities	\$6,015.80	\$11,430.02	\$15,641.08	\$6,015.80	\$7,218.96	\$10,226.86	\$12,633.18	\$7,820.54	\$15,641.08	\$6,015.80	NA
Local recreational and cultural, Local social facilities	\$1,029.49	\$1,956.03	\$2,676.68	\$1,029.49	\$1,235.39	\$1,750.13	\$2,161.93	\$1,338.34	\$2,676.68	\$1,029.49	NA
Total	\$7,045.29	\$13,386.06	\$18,317.76	\$7,045.29	\$8,454.35	\$11,977.00	\$14,795.11	\$9,158.88	\$18,317.76	\$7,045.29	NA

Southern Areas Outside those specified on the Town Centres and Local Centre Catchment Maps at figures 1.2-1.8 (all suburbs south of Ryde Road and Mona Vale Road excluding St Ives)											
Local parks and Local sporting facilities	\$5,593.20	\$10,627.07	\$14,542.31	\$5,593.20	\$6,711.83	\$9,508.43	\$11,745.71	\$7,271.15	\$14,542.31	\$5,593.20	NA
Local recreational and cultural, Local social facilities	\$1,029.49	\$1,956.03	\$2,676.68	\$1,029.49	\$1,235.39	\$1,750.13	\$2,161.93	\$1,338.34	\$2,676.68	\$1,029.49	NA
Total	\$6,622.69	\$12,583.10	\$17,218.98	\$6,622.69	\$7,947.22	\$11,258.57	\$13,907.64	\$8,609.49	\$17,218.98	\$6,622.69	NA

Turramurra Town Centre (see catchment map at figure 1.6)											
Local parks and Local sporting facilities	\$6,135.92	\$11,658.24	\$15,953.38	\$6,135.92	\$7,363.10	\$10,431.06	\$12,885.42	\$7,976.69	\$15,953.38	\$6,135.92	NA
Local recreational and cultural, Local social facilities	\$1,029.49	\$1,956.03	\$2,676.68	\$1,029.49	\$1,235.39	\$1,750.13	\$2,161.93	\$1,338.34	\$2,676.68	\$1,029.49	NA
Local roads, Local bus facilities & Local drainage facilities (New Roads and Road Modifications)*	\$2,058.09	\$4,373.44	\$4,373.44	\$2,058.09	\$2,058.09	\$2,572.61	\$3,344.40	\$2,315.35	\$4,373.44	\$0.00	\$236.68
Local roads, Local bus facilities & Local drainage facilities (Townscape, Transport & Pedestrian facilities)	\$5,394.15	\$10,248.89	\$14,024.80	\$5,394.15	\$6,472.98	\$9,170.06	\$11,327.72	\$7,012.40	\$14,024.80	\$5,394.15	NA
Total	\$14,617.65	\$28,236.61	\$37,028.30	\$14,617.65	\$17,129.56	\$23,923.86	\$29,719.47	\$18,642.78	\$37,028.30	\$12,559.56	\$102.90

St Ives Town Centre (see catchment map at figure 1.8)											
Local parks and Local sporting facilities	\$7,414.35	\$14,087.27	\$19,277.31	\$7,414.35	\$8,897.22	\$12,604.40	\$15,570.14	\$9,638.66	\$19,277.31	\$7,414.35	NA
Local recreational and cultural, Local social facilities	\$1,029.49	\$1,956.03	\$2,676.68	\$1,029.49	\$1,235.39	\$1,750.13	\$2,161.93	\$1,338.34	\$2,676.68	\$1,029.49	NA
Local roads, Local bus facilities & Local drainage facilities (New Roads and Road Modifications)*	\$579.22	\$1,230.84	\$1,230.84	\$579.22	\$579.22	\$724.02	\$941.23	\$651.62	\$1,230.84	\$0.00	\$66.61
Local roads, Local bus facilities & Local drainage facilities (Townscape, Transport & Pedestrian facilities)	\$4,819.86	\$9,157.73	\$12,531.63	\$4,819.86	\$5,783.83	\$8,193.76	\$10,121.70	\$6,265.82	\$12,531.63	\$4,819.86	NA
Total	\$13,842.92	\$26,431.87	\$35,716.46	\$13,842.92	\$16,495.66	\$23,272.31	\$28,795.00	\$17,894.43	\$35,716.46	\$13,263.70	\$28.96

Pymble Town Centre and Pymble Business Park (see catchment map at figure 1.5)											
Local parks and Local sporting facilities	\$7,177.89	\$13,637.98	\$18,662.50	\$7,177.89	\$8,613.46	\$12,202.41	\$15,073.56	\$9,331.25	\$18,662.50	\$7,177.89	NA
Local recreational and cultural, Local social facilities	\$1,029.49	\$1,956.03	\$2,676.68	\$1,029.49	\$1,235.39	\$1,750.13	\$2,161.93	\$1,338.34	\$2,676.68	\$1,029.49	NA
Local roads, Local bus facilities & Local drainage facilities (New Roads and Road Modifications)*	\$1,854.77	\$3,941.39	\$3,941.39	\$1,854.77	\$1,854.77	\$2,318.46	\$3,014.00	\$2,086.62	\$3,941.39	\$0.00	\$213.30
Local roads, Local bus facilities & Local drainage facilities (Townscape, Transport & Pedestrian facilities)	\$4,031.25	\$7,659.37	\$10,481.25	\$4,031.25	\$4,837.50	\$6,853.12	\$8,465.62	\$5,240.62	\$10,481.25	\$4,031.25	NA
Total	\$14,093.40	\$27,194.78	\$35,761.81	\$14,093.40	\$16,541.12	\$23,124.13	\$28,715.12	\$17,996.83	\$35,761.81	\$12,238.63	\$92.74

* Contributions for New Roads and Road Modifications are based on trip generation not per capita demand. The per capita figure cannot be multiplied by the occupancy rate to derive a total for this category (see section 5.11).
Note: Residential non-private dwellings such as institutions, hostels, boarding houses, nurses' accommodation, seminaries, boarding schools and the like will be assessed in accordance with the number of persons intended to be resident on the basis of one resident per bed as well as on their individual merits as presented in the Statement of Environmental Effects. Applicants for low cost accommodation should specifically refer to sections 1.25 - 1.33.

Part A: Summary Schedules

Summary Contribution Rates

Contribution Rates

Person	Dwelling Houses		Units, Townhouses, Villas					Other Residential		Retail	Business
Per Capita	2 bedrooms (or less)	3 bedrooms (or more)	Studios/Bedits	1 bedroom	2 bedrooms	3+ bedrooms	Seniors Living	New lot subdivision	Non private dwelling	Per square metre of GFA	Per square metre of GFA
1.0	1.9	2.6	1.0	1.2	1.7	2.1	1.3	2.6	1.0		

Gordon Town Centre (see catchment map at figure 1.4)

Local parks and Local sporting facilities	\$5,955.72	\$11,315.88	\$15,484.88	\$5,955.72	\$7,146.87	\$10,124.73	\$12,507.02	\$7,742.44	\$15,484.88	\$5,955.72	NA	NA
Local recreational and cultural, Local social facilities	\$1,029.49	\$1,956.03	\$2,676.68	\$1,029.49	\$1,235.39	\$1,750.13	\$2,161.93	\$1,338.34	\$2,676.68	\$1,029.49	NA	NA
Local roads, Local bus facilities & Local drainage facilities (New Roads and Road Modifications)*	\$2,933.04	\$6,232.70	\$6,232.70	\$2,933.04	\$2,933.04	\$3,666.30	\$4,766.19	\$3,299.67	\$6,232.70	\$0.00	\$337.30	\$146.65
Local roads, Local bus facilities & Local drainage facilities (Townscape, Transport & Pedestrian facilities)	\$3,679.22	\$6,990.52	\$9,565.98	\$3,679.22	\$4,415.07	\$6,254.68	\$7,726.37	\$4,782.99	\$9,565.98	\$3,679.22	NA	NA
Total	\$13,597.48	\$26,495.14	\$33,960.24	\$13,597.48	\$15,730.36	\$21,795.84	\$27,161.51	\$17,163.44	\$33,960.24	\$10,664.44	\$337.30	\$146.65

Lindfield Town Centre (see catchment map at figure 1.3)

Local parks and Local sporting facilities	\$5,769.12	\$10,961.34	\$14,999.72	\$5,769.12	\$6,922.95	\$9,807.51	\$12,115.16	\$7,499.86	\$14,999.72	\$5,769.12	NA	NA
Local recreational and cultural, Local social facilities	\$1,029.49	\$1,956.03	\$2,676.68	\$1,029.49	\$1,235.39	\$1,750.13	\$2,161.93	\$1,338.34	\$2,676.68	\$1,029.49	NA	NA
Local roads, Local bus facilities & Local drainage facilities (New Roads and Road Modifications)*	\$1,418.47	\$3,014.25	\$3,014.25	\$1,418.47	\$1,418.47	\$1,773.09	\$2,305.02	\$1,595.78	\$3,014.25	\$0.00	\$163.12	\$70.92
Local roads, Local bus facilities & Local drainage facilities (Townscape, Transport & Pedestrian facilities)	\$4,041.96	\$7,679.72	\$10,509.10	\$4,041.96	\$4,850.35	\$6,871.33	\$8,488.12	\$5,254.55	\$10,509.10	\$4,041.96	NA	NA
Total	\$12,259.05	\$23,611.35	\$31,199.75	\$12,259.05	\$14,427.16	\$20,202.07	\$25,070.23	\$15,688.53	\$31,199.75	\$10,840.58	\$163.12	\$70.92

Roseville Town Centre (see catchment map at figure 1.2)

Local parks and Local sporting facilities	\$5,908.39	\$11,225.95	\$15,361.82	\$5,908.39	\$7,090.07	\$10,044.27	\$12,407.63	\$7,680.91	\$15,361.82	\$5,908.39	NA	NA
Local recreational and cultural, Local social facilities	\$1,029.49	\$1,956.03	\$2,676.68	\$1,029.49	\$1,235.39	\$1,750.13	\$2,161.93	\$1,338.34	\$2,676.68	\$1,029.49	NA	NA
Local roads, Local bus facilities & Local drainage facilities (New Roads and Road Modifications)*	\$702.65	\$1,493.12	\$1,493.12	\$702.65	\$702.65	\$878.31	\$1,141.80	\$790.48	\$1,493.12	\$0.00	\$80.80	\$35.13
Local roads, Local bus facilities & Local drainage facilities (Townscape, Transport & Pedestrian facilities)	\$6,013.28	\$11,425.23	\$15,634.53	\$6,013.28	\$7,215.94	\$10,222.58	\$12,627.89	\$7,817.26	\$15,634.53	\$6,013.28	NA	NA
Total	\$13,653.81	\$26,100.34	\$35,166.15	\$13,653.81	\$16,244.04	\$22,895.29	\$28,339.25	\$17,626.99	\$35,166.15	\$12,951.16	\$80.80	\$35.13

Wahroonga Local Centre (see catchment map at figure 1.7)

Local parks and Local sporting facilities	\$6,015.80	\$11,430.02	\$15,641.08	\$6,015.80	\$7,218.96	\$10,226.86	\$12,633.18	\$7,820.54	\$15,641.08	\$6,015.80	NA	NA
Local recreational and cultural, Local social facilities	\$1,029.49	\$1,956.03	\$2,676.68	\$1,029.49	\$1,235.39	\$1,750.13	\$2,161.93	\$1,338.34	\$2,676.68	\$1,029.49	NA	NA
Local roads, Local bus facilities & Local drainage facilities	\$476.75	\$905.82	\$1,239.55	\$476.75	\$572.10	\$810.47	\$1,001.17	\$619.77	\$1,239.55	\$476.75	NA	NA
Total	\$7,522.04	\$14,291.88	\$19,557.31	\$7,522.04	\$9,026.45	\$12,787.47	\$15,796.29	\$9,778.65	\$19,557.31	\$7,522.04	\$0.00	\$0.00

* Contributions for New Roads and Road Modifications are based on trip generation not per capita demand. The per capita figure cannot be multiplied by occupancy rates to derive a total for this category (see section 5.11). **Note:** Residential non-private dwellings such as institutions, hostels, boarding houses, nurses' accommodation, seminaries, boarding schools and the like will be assessed in accordance with the number of persons intended to be resident on the basis of one resident per bed as well as on their individual merits as presented in the Statement of Environmental Effects. Applicants for low cost accommodation should specifically refer to sections 1.25 -1.33.

Summary Works Programmes

Total works programme for all categories of contribution for Key Community Infrastructure¹

It is emphasised that these figures represent the total capital cost of the works programme over 25 years from 2004 to 2031.

Apportionment of individual works in the works programme ranges from approximately 85% Ku-ring-gai Council:15% New Development (where the demand is generated by both the existing and the new population) though to 100% New Development (where the proposed works simply maintain (up to) current per capita rates of provision or where these works are triggered by the cumulative impact of the new development and would not be carried out but for that development).

Following exhibition, savings of nearly \$50M have been made by reducing the scale and extent of the works programme in response to submissions and with a view to bringing contribution rates for new dwellings under \$30,000 in line with other urban development areas which also feature land acquisition cost for both roads and open space.

Key Community Infrastructure	
Area & Categories	Estimated Total Capital Costs
Northern Suburbs Works Programme	
Local parks and Local sporting facilities - North	\$68,707,670
Southern Suburbs Works Programme	
Local parks and Local sporting facilities - South	\$53,908,546
Whole of LGA Works Programme	
Local parks and Local sporting facilities - LGA	\$54,957,481
Local recreational and cultural, Local social facilities	\$72,472,085
Gordon Town Centre	
Local roads, Local bus facilities & Local drainage facilities	\$39,760,323
Lindfield Town Centre	
Local roads, Local bus facilities & Local drainage facilities	\$20,336,084
Pymble Town Centre & Pymble Business Park	
Local roads, Local bus facilities & Local drainage facilities	\$18,017,382
Roseville Town Centre	
Local roads, Local bus facilities & Local drainage facilities	\$12,825,147
St Ives Town Centre	
Local roads, Local bus facilities & Local drainage facilities	\$18,466,119
Turramurra Town Centre	
Local roads, Local bus facilities & Local drainage facilities	\$23,349,156
Wahroonga Local Centre	
Local roads, Local bus facilities & Local drainage facilities	\$728,949
Total	\$383,528,942

¹ It should be noted that these works are apportioned to various degrees as specified in the relevant chapters between the population and traffic generation of the anticipated development and the status quo at the commencement of the present development phase in 2004. Some development has already commenced and has been levied under the past Contributions Plans for works carried over into this Contributions Plan (retaining the base date of 2004 to preclude any double-levying). Some development commenced prior to the in force date of *Ku-ring-gai Town Centres Contributions Plan 2008* resulting in a shortfall that must be covered by Ku-ring-gai Council since it is inappropriate to seek to recover any backlog. This is in addition to co-contributions required by the rules of apportionment.

Part B: Contributions Plan Overview, Management – Policies and Procedures

1.1 What is the name of this Contributions Plan?

This Contributions Plan is called: *Ku-ring-gai Contributions Plan 2010*. This document is a Contributions Plan under Division 6² of the *Environmental Planning and Assessment Act, 1979* as amended.

This Contributions Plan is the result of a review and consolidation of two major Contributions Plans: *Ku-ring-gai Town Centres Development Contributions Plan 2008* and *Ku-ring-gai Section 94 Contributions Plans 2004-2009 - Residential Development (Amendment Two)*. It supersedes these and all other Contributions Plans previously applying to all types of development in the Ku-ring-gai Local Government Area.

Important Note: At the time of the finalisation of this Contributions Plan in November 2010 following its exhibition, there exists legislation passed by Parliament on Wednesday 18 June 2008 and assented on Wednesday 25 June 2008 that is not yet commenced so far as it applies to development contributions but could be commenced by proclamation at any time. It is understood that there will be savings provisions for draft Contributions Plans which have been exhibited as this document has been.

The adoption of this Contributions Plan has already been delayed as a result of the legislative uncertainty governing contributions prevailing during 2010. Ku-ring-gai Council is not in a position to further delay this consolidated Contributions Plan until such time as there is absolute legislative certainty in respect of the development contributions system due to the necessity of ensuring the active Contributions Plan accurately reflects and supports the current in force LEPs and DCPs and due to the need to replace the 2004-2009 Section 94 Contributions Plan for Residential Development. In this context the gazettal of *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* took effect from 25 May 2010. It is noted that this Contributions Plan was intended to be reported for adoption in June 2010 concurrent with the *Ku-ring-gai Development Control Plan (Town Centres) 2010*, but for a s94E Direction issued on 4 June 2010. That s94E Direction has subsequently been revoked.

Accordingly, this Contributions Plan has been prepared with reference to both the current and the as yet uncommenced legislation. Following adoption, whichever legislative references are not relevant will be deleted. At the time of drafting there were no revised Practice Notes or formally Guidelines issued by the Department of Planning. Reference was duly made to the still current Practice Notes on the Department of Planning website. A consultation draft of Guidelines for Part 5B Contributions Plans was exhibited after this document was reported for exhibition. Limited changes have been possible post-exhibition as these guidelines remain a draft.

1.2 What is the purpose of this plan?

The purpose of this plan is to enable the council to require a direct contribution in accordance with the requirements of the *Environmental Planning and Assessment Act, 1979* (and the *Regulations* thereunder) towards the provision, extension and/or augmentation of the following types of Key Community Infrastructure³:

² **Note:** Part 5B Provision of Public Infrastructure had not yet commenced at the time this Contributions Plan was approved by Ku-ring-gai Council on 23 November 2010.

³ While this Contributions Plan uses the terminology of a future Part 5B Contributions Plan with the intent of facilitating future conversion, it remains, formally, a Section 94 Contributions Plan.

- ✓ Local parks
- ✓ Local sporting facilities
- ✓ Local recreational and cultural facilities
- ✓ Local social facilities
- ✓ Local roads
- ✓ Local bus facilities
- ✓ Land associated with the above local facilities (exclusive of riparian corridors)
- ✓ Drainage and stormwater management works (where integrated with local parks and local roads)

This Contributions Plan does not provide for additional car parking other than as required for the public facilities identified in the works programme. Ku-ring-gai Council expects that all new development will accommodate the required car parking on-site. Applications for change of use of existing developments will be considered on the individual merit of each application.

Where indicated within the plan (including the works programmes) the recoupment of the costs in providing these types of infrastructure in anticipation of development is also covered by this Contributions Plan.

This Contribution Plan:

- seeks to ensure that the level of community and physical infrastructure provided throughout Ku-ring-gai is adequate to address the cumulative demand from new development;
- enables the council to impose conditions when granting consent to development on land to which this plan applies;
- enables the council to recoup funds which it spends on the provision of community infrastructure in anticipation of likely future development;
- provides a framework under which strategies for the provision of community infrastructure may be implemented and coordinated;
- provides a comprehensive strategy for the assessment, collection, expenditure, accounting and review of contributions over the life of the Contributions Plan;
- strives to ensure that the existing community is not burdened by the provision of new key community infrastructure required as a result of new development nor disadvantaged by increased pressure on current facilities provision; and
- enables the council to be publicly accountable in its management of the contributions system.

This Contributions Plan builds upon extensive work undertaken for the preparation of the *Ku-ring-gai Town Centres Development Contributions Plan 2008*, itself supported by the *Development Contributions Strategy 2007*.⁴

This Contributions Plan supports the integrated planning of the Ku-ring-gai Local Government Area through the Local Environmental Plans, Development Control Plans and other planning and policy documents guiding the future of Ku-ring-gai. Alongside the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010* it supports the provision of infrastructure to support concentrated development and population growth around six key town centres.

⁴ These two documents were prepared on behalf of Ku-ring-gai Council by *Newplan Urban Planning Solutions*.

This Contributions Plan is essentially a baseline Contributions Plan. It levies to provide significantly less than current minimum per capita rates of provision of local open space. It seeks to provide community facilities that will support the future total population appropriately apportioned. It levies to increase the carrying capacity of some existing sportsgrounds and parks and for the development of some additional sportsfields on current open space land but does not seek to purchase additional land for sportsgrounds. It levies contributions towards the works which enable increasing numbers of people to move about within the area – pedestrian routes, traffic and transport improvements, cycleways and improvements to town centres. It levies for the provision of new roads and road improvements to manage the increased need for vehicular and pedestrian circulation in and around the key town centres arising as a direct result of the concentration of development.

In this development phase, covering the period from 2004 to 2031 which mirrors the Metropolitan Strategy, Ku-ring-gai Council is providing for an estimated 12,069 additional dwellings⁵ which will directly accommodate an estimated 21,048 additional residents. The size of the anticipated population increase in the area cannot be absorbed without commensurate provision of facilities or the increased competition for already scarce community resources will have a major impact on both existing and future populations. This is inequitable and unreasonable and will directly impact on the economic viability of future development in the area.

The works programme in this Contributions Plan is apportioned over all new development, large and small, and, where required, the Council pays a pro rata per capita co-contribution on behalf of the existing population.

A more detailed breakdown of the anticipated future development is provided in **Part C: Strategy Plans Sections 2.9 – 2.12**. Apportionment also is further discussed under each category of Key Community Infrastructure.

1.3 Area to which this Contributions Plan applies

This Contributions Plan applies to the Ku-ring-gai Local Government Area as shown on the map overleaf in **Figure 1.1** on Page 13.

The Ku-ring-gai Local Government Area covered by this Contributions Plan is approximately 8,540 hectares (which is 85.4km²) of which approximately 20% is covered by three National Parks: Ku-ring-gai Chase National Park, Garigal National Park and Lane Cove National Park. The urban area (excluding the National Parks) covers approximately 6,850 hectares (being 68.5km²) which is 80% of the LGA.

Some categories of contribution, such as Local parks and sporting facilities and Local social, recreational and cultural facilities, apply to the entire Local Government Area. Open Space catchments further divide the Local Government Area into North and South. Some works to the existing parks in the town centres which will be most impacted by the demand arising from intense new surrounding developments are apportioned to that centre.

⁵ The additional dwelling figures include the mid-range scenario estimates of nett additional development 2004-2031 under the then *Draft Ku-ring-gai Local Environmental Plan (Town Centres) 2008* approved by the Ku-ring-gai Planning Panel on 27 May 2009 and referred to the Minister for Planning for gazettal which ultimately occurred on 25 May 2010 as well as development under the currently in force *Ku-ring-gai Local Environmental Plans 194* and *200*, estimated development potential for key sites such as the University of Technology and Sydney Adventist Hospital, and estimated incremental dual occupancy and seniors living development outside these areas.

Other categories of contribution, such as Local roads (which includes public domain works such as footpath widenings and upgrades) and bus facilities primarily relate only to the Town Centre areas along the Pacific Highway / North Shore Rail Corridor and in St Ives where the highest density redevelopment is concentrated. Some additional drainage works are also included within council's roads reservations. There are separate catchment maps for these works. With respect to these Town Centre specific works, this plan has been divided into catchment areas based on the individual town centres and adjoining Pacific Highway / North Shore Rail Corridor Development.

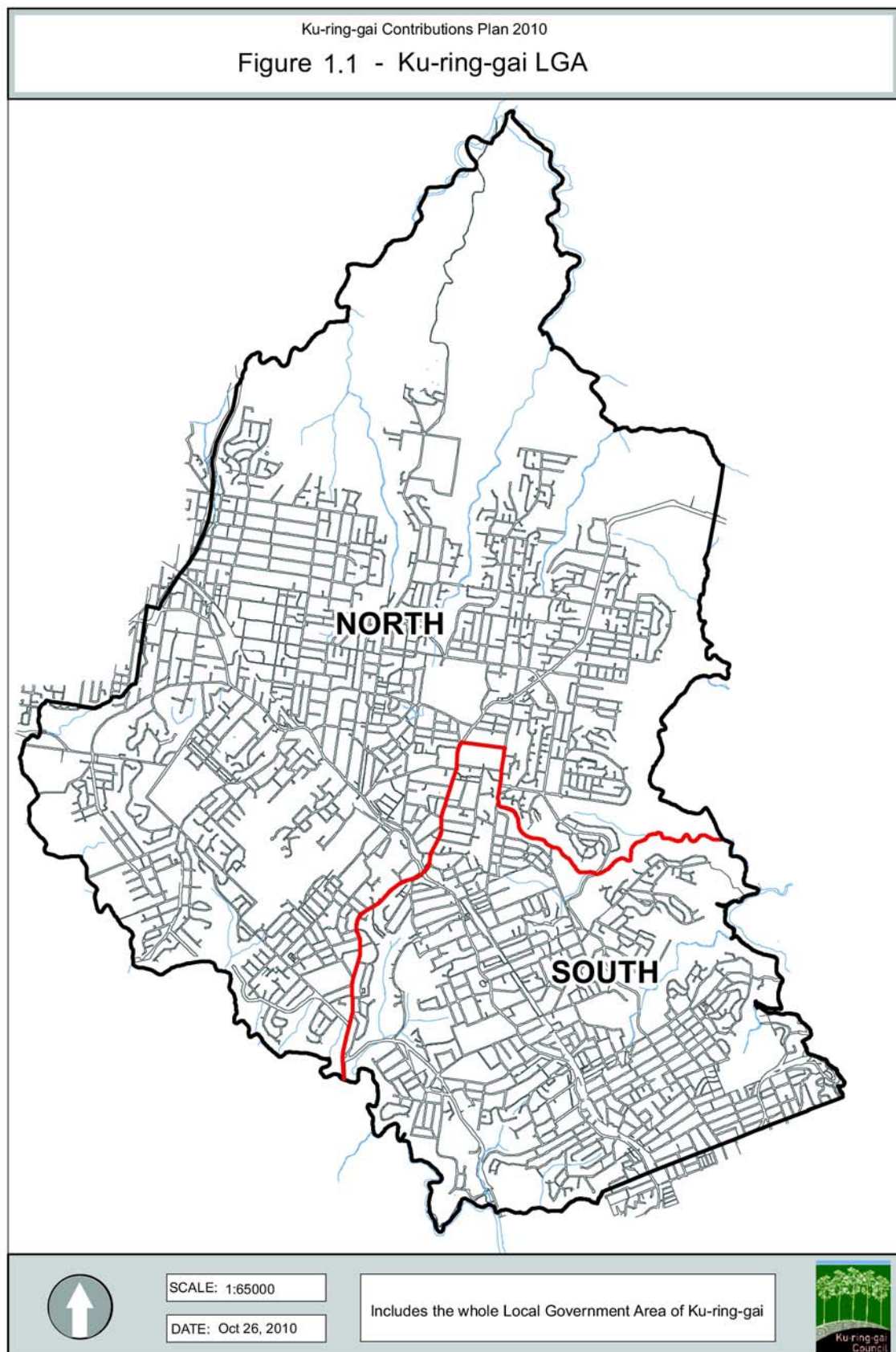
The precise specification of the traffic and transport works that apply solely to the Town Centres Catchments is located in the fifth chapter: **Key Community Infrastructure: Local Roads; Local Bus Facilities; and Local Drainage Works.**

These catchments areas are shown on maps on the following pages numbered for **Figure 1.2 to Figure 1.8.**

The boundaries of these catchment areas have been drawn with reference to the following criteria:

- Reference to the boundaries of the Ku-ring-gai Planning Panel and the areas that have some potential for medium to high density under the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*;
- Incorporating those areas zoned 2(d3) for medium to high density development under *Ku-ring-gai Local Environmental Plan 194* and *Ku-ring-gai Local Environmental Plan 200* which are not otherwise superseded by *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*;
- Excluding those areas which have not been up-zoned for medium to high density development or have been down-zoned to low density residential or environmental protection under the *Ku-ring-gai Local Environment Plan (Town Centres) 2010* (i.e. R2, E2 and E4 zones) from the onus to contribute to particular works to the town centres which relate specifically to the concentration of higher density development in the town centres;⁶
- Respecting the hierarchy of the town centres and neighbourhood centres;
- Respecting perceived boundaries like railway lines and major arterial roads;
- Respecting census collector district boundaries for the purposes of statistical accuracy;
- Creating logical open space catchment areas with reference to the *Open Space Acquisition Strategy 2006* and to existing physical and perceived boundaries for the expenditure of development contributions in order to meet the increased demand and the nexus requirements arising from that demand; and
- Ensuring that medium to high density development that does occur outside the town centres on key sites or under State Environmental Planning Policies is required to make its fair contribution towards the provision of Key Community Infrastructure such as additional local parkland and community facilities.

⁶ This Contributions Plan seeks to treat all new single dwellings and dual occupancy development in low density R2 zones and the equivalent(s) under the *Ku-ring-gai Planning Scheme Ordinance* in the same manner regardless of whether that development occurs inside or outside the designated town centres. The *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* initially sought to prohibit dual occupancies from the town centre areas but this clause has since been amended to allow dual occupancies.

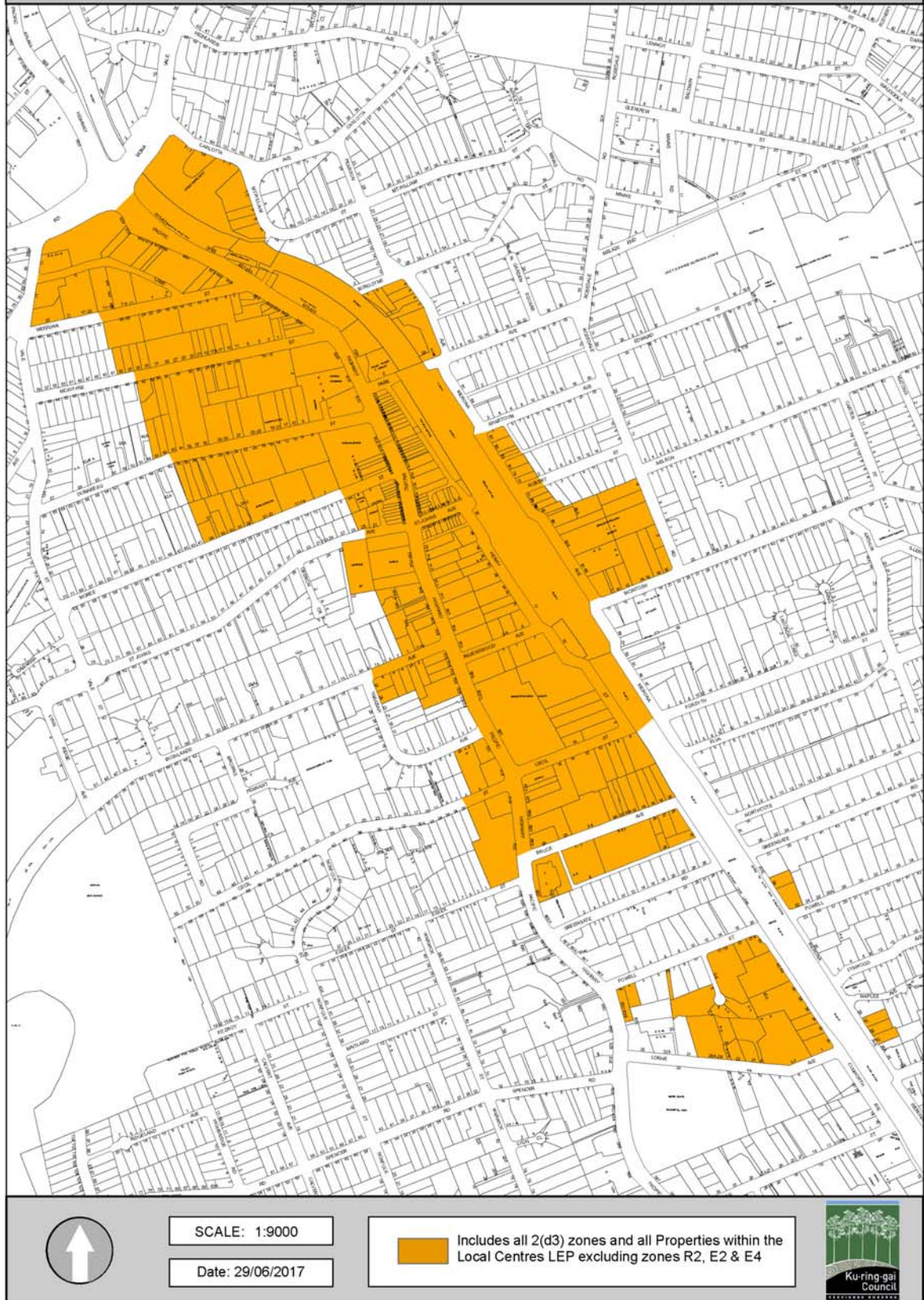


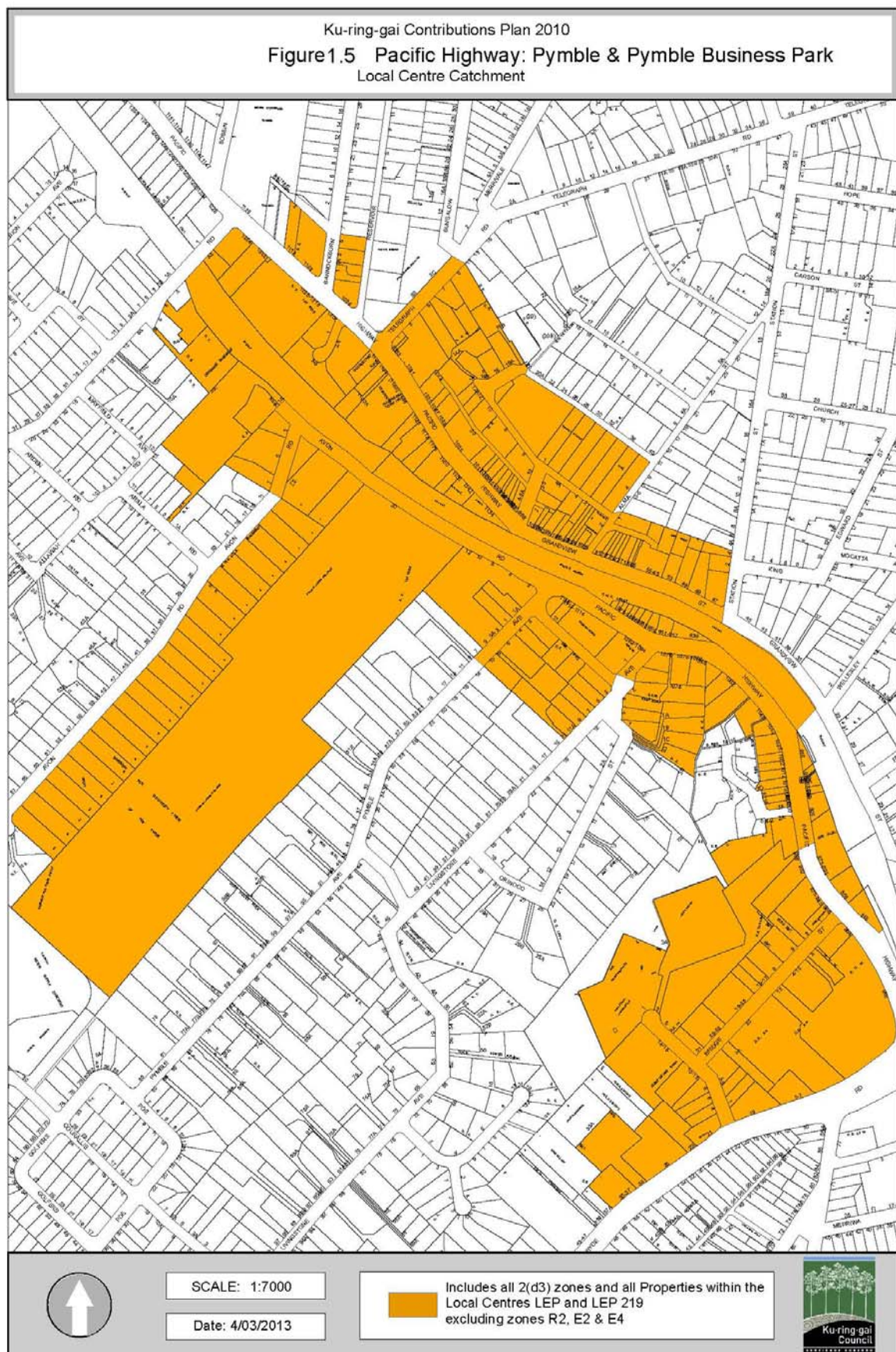
Ku-ring-gai Contributions Plan 2010
Figure 1.2 Pacific Highway: Roseville
 Local Centre Catchment

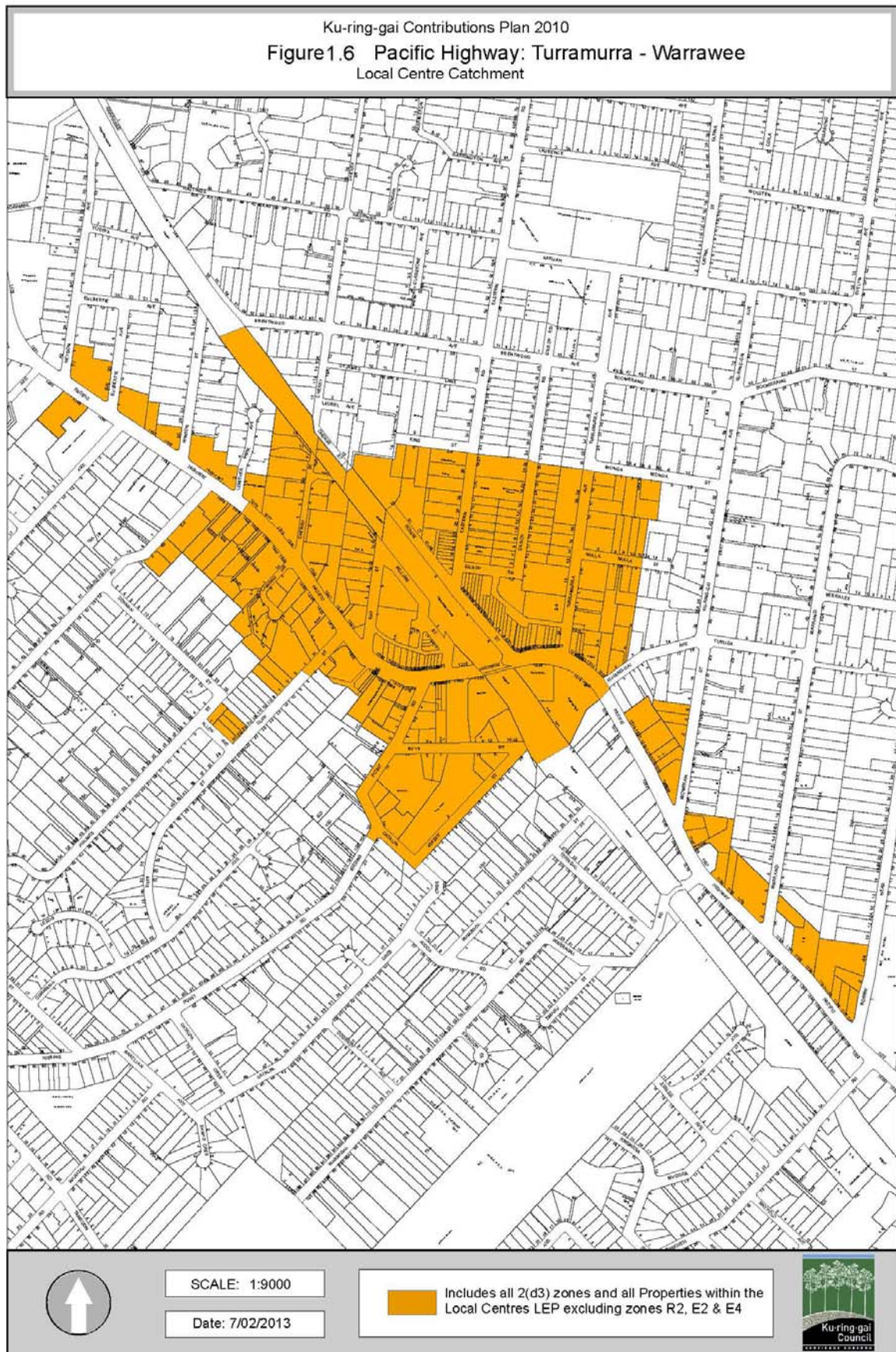




Ku-ring-gai Contributions Plan 2010
Figure 1.4 Pacific Highway: Gordon - Killara
Local Centre Catchment

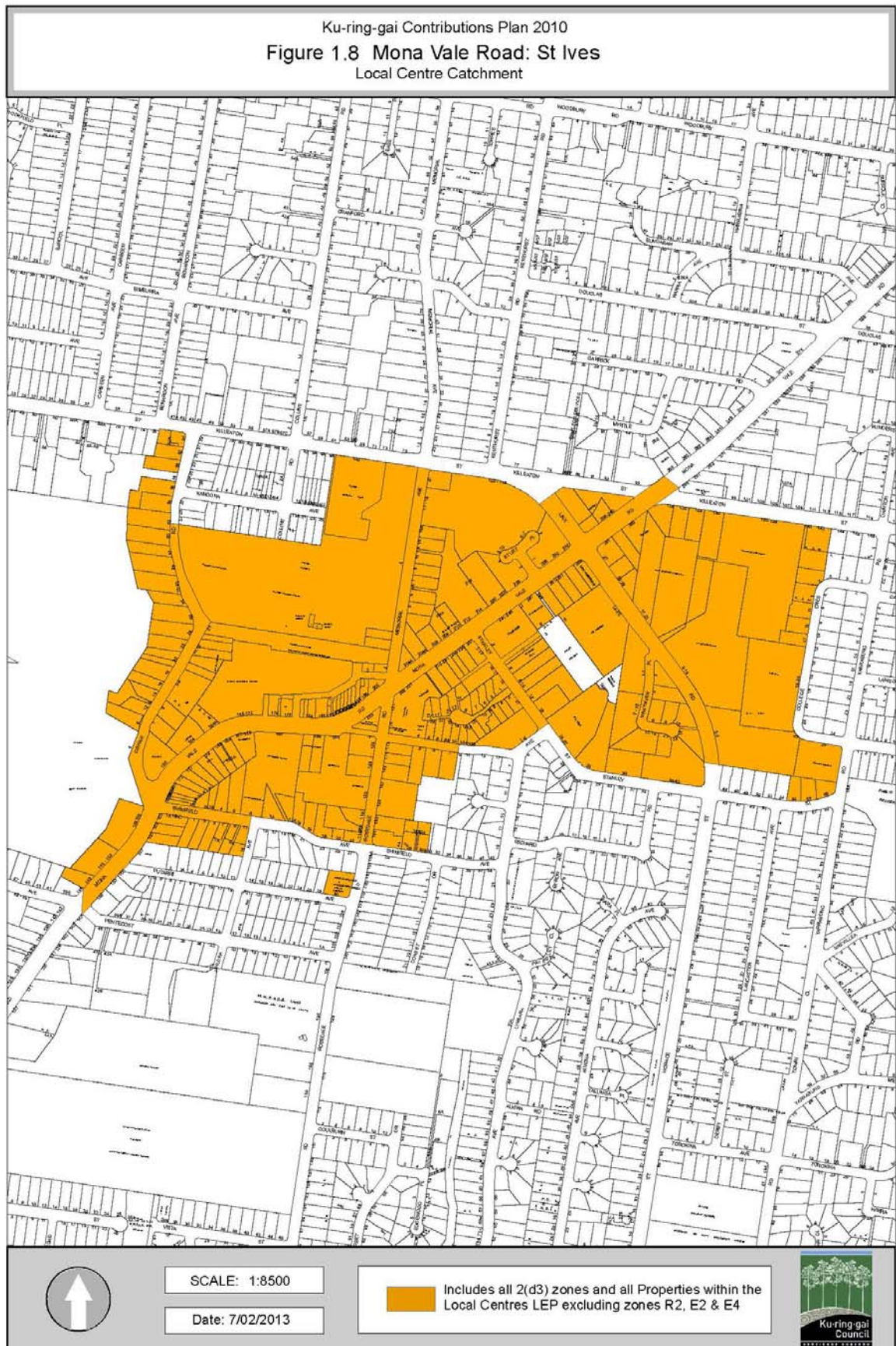






Ku-ring-gai Contributions Plan 2010
Figure 1.7 Pacific Highway: Wahroonga
Catchment





1.4 Development to which this Contributions Plan applies

This Contributions Plan applies to all development that increases the demand for the facilities and amenities for which this Contributions Plan provides.

For the purposes of this Contributions Plan, development may include subdivision, all forms of residential development including single dwelling houses, dual occupancies, villas and townhouses and multi-unit development including seniors living dwellings and non-private dwellings, increased commercial floorspace in the form of floorspace for business purposes, office, retail, industrial or other for-profit use and increased intensity of usage or employment in any such premises, or any combination of these.

The limited capacity for exemption from the obligation to pay contributions is detailed in 1.25 to 1.33.

1.5 Commencement of the Plan & Transitional Arrangements

This Contributions Plan takes effect from the date stated in the published public notice, pursuant to clause 31(4) of the *Environmental Planning and Assessment Regulation, 2000* or, if amended, the comparable clause in its successor.

This Contributions Plan was adopted by Ku-ring-gai Council at its meeting of Tuesday 23 November 2010.

This Contributions Plan officially came into force effective from Sunday 19 December 2010.

The exhibition draft of this Contributions Plan in the form in which it was exhibited was referred to the Department of Planning for information and comment prior to the finalisation of the document post-exhibition.

Contributions calculated in accordance with this Contributions Plan will be applied to all Development Applications which are assessed as having the potential to increase the demand for facilities and works provided for by this Contributions Plan and which are determined by the granting of consent after the effective date cited above with reference to the relevant catchments as indicated in the maps in 1.3 (Figures 1.1-1.8).

All previous Contributions Plans listed in 1.6 below were consequentially superseded from the date this Contributions Plan came into force.

Note: The application of this Contributions Plan after the effective date applies notwithstanding the date of lodgement of the Development Application.

1.6 Relationship to past Contributions Plans

This Contributions Plan results from a comprehensive review following the full release of the 2006 census data and the finalisation of the then draft *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* by the Ku-ring-gai Planning Panel which was adopted at its meeting of 27 May 2009 and formally gazetted by the Minister for Planning as *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* on 25 May 2010.

Recent amendments to the *Environmental Planning and Assessment Act, 1979* and the Regulations thereunder (which were assented in June 2008 but which, at the time of drafting this Contributions Plans, had not yet commenced), are also incorporated where logical and feasible. It should be noted, however, that these relate primarily to terminology and structure as the relevant legislative provisions remain uncommenced as at the time of adoption.

Subject to the final note at the end of this section, this Contributions Plan supersedes the following Contributions Plans in their entirety:

Ku-ring-gai Town Centres Development Contributions Plan 2008

*Ku-ring-gai Council Section 94 Contributions Plan 2004-2009 – Residential Development (and both subsequent amendments)*⁷

Ku-ring-gai Section 94 Contributions Plan No.1 (adopted 29 June 1993 and amended 17 November 1993)

Ku-ring-gai Section 94 Development Contributions Plan for No. 9, 9a, 11 & 15 Curagal Road Nth Turramurra (1995)

Ku-ring-gai Section 94 Development Contributions Plans for:

- *Gordon Business Centre Car Parking;*
- *Wahroonga Business Centre Car Parking; and*
- *West Lindfield Business Centre Car Parking.*

Ku-ring-gai Section 94 Contributions Plan 324-346 Mona Vale Road, St Ives "Hillcrest"

Ku-ring-gai Section 94 Contributions Plan: SEPP5 Housing 2002

Collectively, these plans are known as the predecessor plans.

The *Environmental Planning and Assessment Act* states:

" The amendment or repeal, whether in whole or in part, of a contributions plan does not affect the previous operation of the plan or anything duly done under the plan."⁸

Development consents which include conditions requiring the payment of development contributions levied under the predecessor contributions plans repealed by this document will continue to be acted upon and those contributions (together with any applicable inflation) will become due and payable in accordance with the wording of the related consent condition.

⁷ *Ku-ring-gai Council Section 94 Contributions Plan 2004-2009 – Residential Development* came into force on 30 June 2004. *Ku-ring-gai Council Section 94 Contributions Plan 2004-2009 – Residential Development – Amendment 1* came into force on 19 October 2007. *Ku-ring-gai Council Section 94 Contributions Plan 2004-2009 – Residential Development – Amendment 2* came into force on 30 July 2008. The original 2004-2009 Contributions Plan was itself a successor to the 2000-2003 Contributions Plan.

⁸ Both Section 94EB(4) of the *Environmental Planning and Assessment Act, 1979* and the uncommenced Clause 9(4) of Schedule 1: Provisions relating to development contributions, Part 1: Community Infrastructure Contributions, of the future version of the *Environmental Planning and Assessment Act* as outlined in the *Environmental Planning and Assessment Amendment Act* contain this exact provision.

The Council will continue to expend all incoming contributions levied under the predecessor Contributions Plans for the purposes for which they were levied in accordance with the relevant legislation. It should be noted that some major works have been rolled into this Contributions Plan as they will also serve longer term population growth.

Note: The predecessor Contributions Plans are consequentially superseded by this subsequent Contributions Plan; they are not formally repealed as a distinct process. In the event this Contributions Plan fails for any reason, Ku-ring-gai Council intends to revert to the predecessor Contributions Plans until such time as a new Contributions Plan can be brought into force. The reason for this policy statement is to ensure that no resident or business is disadvantaged by any inability of Council to provide anticipated facilities due to a shortfall in contributions and that equity is maintained between all developers by ensuring all new development is required to make contributions towards such core facilities regardless of the point in time at which a consent may be determined. This policy statement is intended to obviate inadvertently conferring a pecuniary advantage on any developer based on the timing of their development to the detriment of supporting infrastructure provision in Ku-ring-gai.

1.7 Relationship to the Strategic Planning Process

This Contributions Plan supports the Local Environmental Plans and Development Control Plans of the Council which enable and guide the development that generates the demand for facilities and amenities funded, or partially funded, by this Contributions Plan. More detail on this inter-relationship is detailed in **Part C: Strategy Plans**.

This Contributions Plan is part of a suite of planning documents which will support the delivery of new development in Ku-ring-gai as its commitment to the Draft North Subregional Strategy which plans for dwelling and population growth from 2004 to 2031.

As required by the Notes to the Direction issued by the Minister for Planning to Ku-ring-gai on 31 May 2009, the Ku-ring-gai Planning Panel has also been consulted during the process of preparing and finalising this Contributions Plan to ensure the document aligns with the objectives of the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*.

1.8 Key Considerations for Development Contributions

Under the uncommenced provisions *Environmental Planning and Assessment Act* and *Regulations*, there are key considerations for any Local Government Authority proposing to levy development contributions. While these considerations are not formally required to be addressed in this manner within a Contributions Plan under the present requirements of the *Environmental Planning and Assessment Act* and *Regulations*, nothing precludes their consideration in anticipation of soon becoming law. Indeed, the principles expressed therein have always been part of the spirit and intent of the Development Contributions system and the uncommenced legislation simply underlines the requirement for more formally documented consideration within the Contributions Plan itself.

Accordingly, the following key considerations have been considered in this Contributions Plan:

- a) Can the public infrastructure that is proposed to be funded by a development contribution be provided within a reasonable time?
- b) What will be the impact of the proposed development contribution on the affordability of the proposed development?
- c) Is the proposed development contribution based on a reasonable apportionment between existing demand and new demand for public infrastructure to be created by the proposed development to which the contribution relates?
- d) Is the proposed development contribution based on a reasonable estimate of the cost of proposed public infrastructure?
- e) Are the estimates of demand for each item of public infrastructure to which the proposed development contribution relates reasonable?

These questions are addressed by this Contributions Plan in the following sections dealing respectively with the key considerations of temporal nexus (a), affordability (b), apportionment (c), cost estimates (d) and causal nexus (e). At the time of drafting this Contributions Plan, revised Practice Notes guiding the process of addressing this aspect of Contributions Plans have not been released by the Department of Planning.

1.9 Key Consideration Statement – Temporal Nexus

The timing of works under this Contributions Plan over the life of the plan has been a key consideration of the plan preparation process. This plan provides for a variety of different works. Some works, like intersection treatments, have a critical trigger point at which they must be implemented. Some, such as community facilities, are single major works which must be timed to meet need within a broader funding strategy. Some such works partially replace (as well as augment) existing facilities which reach the end of their economic life at various times over the life of this Contributions Plan⁹ which allows these facilities to be staged over the life of the Contributions Plan while continuing to provide services to the community. Other works, such as open space acquisition and embellishment, are pro rata per capita contributions which can be effected in a rolling works programme continuously over the life of the Contributions Plan targeted to areas of development activity.

The rate of receipt of income from development contributions is subject to some uncertainty in established areas where the rate of development and the economic cycle is difficult to predict particularly over the longer term. The life of this Contributions Plan to 2031 will cover several economic cycles from period of limited activity to period of intense development activity. Ku-ring-gai Council will continue to

⁹ Many of Ku-ring-gai's existing community facilities (including at least two of the libraries) cannot be physically extended due to the age, design and/or the inappropriate location of the existing facility. Where whole new facilities are required, these are strictly apportioned between the existing demand and the new demand with Council providing a significant proportional co-contribution representing the full apportionment on behalf of the existing community. Other community facilities are levied pro rata per capita to maintain current rates of floorspace provision. These are apportioned differently. Specific facilities are addressed in Part C: Strategy in this Contributions Plan.

monitor the rate of development and contributions income and manage its rolling works programme through its Long Term Financial Plan.¹⁰

Ku-ring-gai Council has integrated this Contribution Plan into its Long Term Financial Plan which maintains a twenty year horizon into the future. The Long Term Financial Plan identifies funding commitments for Council's committed co-contribution for apportioned facilities and indicates the proposed sources of funding for that commitment. This financial management process ensures that sufficient general revenue is saved each year for future commitments.

It is acknowledged that some of the major works in this Contributions Plan require a substantial co-contribution from council on behalf of the existing population and that this co-contribution will, ultimately, only be fully funded by the strategic disposal of some current Council land-holdings – or the commitment of these assets to a future development at full market benefit. Ku-ring-gai Council is in the fortunate position of being a key property holder in the town centres which are targeted for the major concentrations of new development where augmented community facilities and new open space assets will be most keenly required and most logically centrally located.

It is not possible at the time of finalising this Contributions Plan to identify the subject properties because the consideration of these assets for strategic disposal must be preceded by a comprehensive reclassification process. While Council cannot pre-empt the outcome of any such process in this document, it has committed to its formal commencement following the gazettal of *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*. Preliminary investigations as part of the preparation process of *Ku-ring-gai Town Centres Development Contributions Plan 2008* (an immediate predecessor of this plan) suggested that there was considerable scope in these properties for meeting a fair proportion of the co-contribution required through to 2031.

The proposed works programme under this Contributions Plan will be prioritised and staged to match the rate of development and the generation of additional demand. Works have generally been assigned the following timing descriptions:

"S" being "Short term" means within five years of the date of adoption of this Contributions Plan.

"M" being "Medium term" means between five and ten years from the date of adoption of this Contributions Plan.

"I" being "Intermediate term" means between ten and fifteen years from the date of adoption of this Contributions Plan.

"L" being "Longer term" means more than fifteen years from the date of adoption of this Contributions Plan.

"E" being "External" defines a work that is expected to be provided either wholly or partly in kind as part of a development and its timing will therefore be determined by the timing of that development. Council has no direct control over when any given development might proceed and therefore cannot determine the likely timing of this work.

¹⁰ Ku-ring-gai Council has established and manages a twenty year Long Term Financial Plan which is reported to Council on a quarterly basis.

“R” identifies recently completed works which have been wholly or partly forward-funded by Council to support the current redevelopment phase that is underway in the Ku-ring-gai Local Government Area and are under recoupment.

It should be noted that some works defined as ‘External’ have also been allocated a term by which Council would prefer to see the work implemented beyond which Council is prepared to investigate options for negotiating with the property owner to bring forward the work.

Generally works have only been assigned intermediate and longer term estimated start dates where they are secondary to works which may already be providing a similar service, are replacements as well as augmentation for such facilities or where peak demand for the facility or service will not be achieved until later in the development period covered by this Contributions Plan. It should be noted that development rates are regularly monitored and works could be brought forward from these estimates if the rate of development and the cash-flow permitted.

In the case of open space acquisition for new parks individual items have not been designated a specific acquisition time. This is because Ku-ring-gai Council prefers an opportunistic approach rather than compulsory acquisition. Designating a specific target could inhibit council’s ability to consider each situation on its own merits. It must also be noted that, in the case of land expected to be zoned for new open space under the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*, that a property owner could, if they so wished, serve notice on Council to acquire that land at any time irrespective of any later timing Council may anticipate. Temporal and geographic nexus for new open space will be maintained by a mixed rolling works programme of both zoned and opportunistic acquisitions in areas of development activity. Ku-ring-gai Council will continue to monitor the location and scale of development in the Local Government Area and target acquisitions to areas of high activity and demand.

1.10 Key Consideration Statement – Affordability

1.10.1 Overview

There are two facets to affordability: the economic viability of development and the affordability of the finished product to the target market.

The first key aspect is the economic viability of development. The purchase price of the developable land is a key contributor to the overall cost of development. Additionally, all development costs from demolition and site clearance, construction and marketing costs contribute to the total project cost. In this context, development contributions are also a component of the total project cost of development. The other key aspect is the affordability of the finished product. Is the outcome of the development new housing that is affordable in the relevant market? These two facets are considered separately below.

Overall, contribution rates in Ku-ring-gai might appear by comparison to be higher than other established area councils. The prime reason for high contribution rates is the cost of land. Ku-ring-gai Council, to attempt to maintain reasonable per capita rates of local open space and to improve traffic and pedestrian flow by providing additional through roads, must acquire land at a fair market value (or an equivalent benefit such as transferable floorspace where this can be built into the relevant

controls). Land acquisition costs for these two types of essential facilities make up a substantial proportion of the total contribution rates.

Development Contributions for a wide variety of purposes have been levied on development in established areas since the inception of the *Environmental Planning and Assessment Act, 1979*. After thirty years, they are a well-established component of the total cost of development and routinely taken into consideration by prospective developers prior to committing to any development. Developers will always sell their product at the best price the market will pay.

1.10.2 Economic Viability of Development

As part of the development of the planning controls for the six Town Centres where the majority of development will be located, Ku-ring-gai Council commissioned extensive professional economic viability testing of key sites affected by the Town Centres Planning including the Contributions Plans.

Additionally, as part of the process of seeking an exemption from a s94E Direction which would, but for the exemption, have limited contributions under the predecessor Contributions Plans to a maximum of \$20,000 per dwelling, Ku-ring-gai Council also commissioned an independent economic analysis of the impact of contributions on new proposals in the climate of economic downturn that prevailed in early 2009.

Sphere Property Corporation¹¹ concluded that:-

- Contributions are currently a small percentage of the total project cost¹² (in the order of 1.1-4.1% depending on whether the development is mixed use or 100% residential);
- The reduction in contributions would not achieve a significant reduction in the proportion of contributions to the total project cost with an average reduction of 0.5%;
- As such they are not a critical deciding factor in the decision to proceed with development. There are other factors of greater influence;
- There is likely to be a relatively initial small benefit to development in the short-term by allowing a reduction in prices in the order of 0.4-1.9%. However in some cases a price reduction would be unlikely;
- In the longer term, such reductions would be likely to be withheld from the market as developer profit;
- The impact of the loss of works provided by the contributions in terms of amenity also impact on the attractiveness of the product for buyers and a negative impact on the potential for future development;
- There are other mechanisms (such as reducing required on-site parking) which would have a more marked effect on the total project cost of the development; and
- Reducing contributions to \$20,000 for larger apartments could change the trend in unit mix from predominately two bedroom apartments towards larger apartments which are typically most expensive to purchase.

¹¹ *Ku-ring-gai Council, \$20,000 Section 94 Levy Limit – Report of the Impacts on Property Development Economics; Sphere Property Corporation, John Harston, February 2009.*

¹² **Note:** the total project cost in this context is a complete project cost inclusive of such components as land costs, profit et al. It should not be interpreted as equivalent to the construction cost that is used for the purposes of calculating a percentage levy.

In many areas, but particularly in Ku-ring-gai, purchasers are orientated towards the total package provided by the apartment dwelling. This package includes the environment beyond the apartment building itself and includes the accessibility of public transport, the accessibility and amenity of the shopping area and availability of other services, community facilities and public spaces. A post-occupancy survey conducted in late 2008 for the *Community Facilities Strategy*¹³ suggested that many recent purchasers may be down-sizing from a larger dwelling in the area.

The amenity of the public domain, pedestrian and vehicular accessibility and community facilities that are offered beyond the development site are provided by Ku-ring-gai Council utilising development contributions. These works are duly apportioned where required but development contributions still make up a key component of the total project budget in the absence of which the works programme would need to be delayed or curtailed or both. Therefore these facilities and the urban amenity so provided are directly related to continued capacity to levy the appropriate contributions. The present and future viability of new development is inter-related to the provision of this amenity.

As a result of such extensive research Ku-ring-gai Council believes the contributions required under this Contributions Plan to be reasonable and affordable. The on-going viability of the contributions system will be monitored as part of the management of this Contributions Plan.

It is acknowledged that this Contributions Plan is being introduced to replace two current contributions plans at a time of some economic uncertainty following the Global Financial Crisis however, while there has been a reduction in the amount of development instigated in the short term, this cycle will reach its natural conclusion and there are indications that it has already begun to turn. This Contributions Plan must be in place in anticipation of that new development particularly noting that development potential through to 2031 is now released in gazetted LEPs. Every effort has been made to find savings where possible and to reduce the overall contribution rate both post exhibition in response to submissions and in relation to the current 'grandfathered' contributions plans which will be consequentially superseded by this Contributions Plan, while still supporting intensive, concentrated redevelopment.

Factors supporting a future upswing in development include a continuing undersupply of dwellings in Sydney leading to a tight rental market and relatively high rents. These in turns encourage property investment. The trend may be further supported by an on-going perception that bricks and mortar are a better long-term investment than shares. There is also continued scope for investors to purchase an investment property with a view to down-sizing at some point in the future. It is important to note that both present and future down-sizers – 'last-home buyers' – are purchasers to whom the immediate urban environment of the new dwelling is an important factor in the decision to invest.

1.10.3 Housing Affordability

The Upper North Shore housing market is traditionally one of the least affordable in Sydney¹⁴. The price of apartments in the Ku-ring-gai Local Government Area, as for everywhere else in Sydney, is determined by what the market will bear. It is a function

¹³ Detailed statistical outcomes from this survey are further discussed in Part C: Strategy Plans.

¹⁴ The median price of all strata-titled dwellings in Ku-ring-gai exceeds \$500,000 and is relatively high compared to many other areas of Sydney; Housing NSW Housing Analysis and Research: Rent and Sales Reports (various).

of many factors including supply and demand, the health of the investor market and rental vacancies, the availability or otherwise of mechanisms to assist buyers into the market, the availability of developable land, the cost and availability of materials and the economic cycle.

Continuing to support future development by improving the environment of the development including improvements to the amenity and vitality of the town centres, is the mechanism that will provide additional housing as well as housing choice. The act of providing a greater variety of housing choice – specifically smaller dwellings in the form of units – contributes significantly to the provision of more affordable housing.

The development that is attracted to Ku-ring-gai will, in turn, provide a greater supply of housing and a wider variety of housing choice by facilitating down-sizing while supporting ageing within the area. Both housing supply and housing choice are major contributors to improved housing affordability.

It is also noted that, to the extent that contributions may influence unit mix, artificially reducing contributions for larger apartments could have the effect of encouraging the development of a greater number of larger apartments which are, typically, more expensive. This would, in turn, have the opposite effect to that otherwise envisaged on the variety of housing choice and affordability in the Ku-ring-gai Local Government Area.

In regard to the sub-market of strata sales in Ku-ring-gai Local Government Area, strata sales over the past two years were examined by referencing data from the Quarterly Publication: Rent and Sales Report and incorporated in **Figure 1.9** below¹⁵. In summary, during 2009, all strata housing stock across the price scales appeared to be affected by the global economic slow-down and a general short-term over-supply of dwelling stock arising from intense building activity in 2006-2008.

While the median price of all strata residential properties in Ku-ring-gai had fallen in recent months, the latest figures are potentially indicative of some recovery which, if sustained, is likely to absorb the short-term over-supply and encourage developers and investors back into the market. Importantly for housing affordability, only first quartile price is in the vicinity of \$500,000.¹⁶

The latest figures indicate that the average unit price shows signs of recovery, however the average price has, in general, showed the greatest fluctuations over time depending on the product on the market and the number of sales in each quartile. It should be noted that a relatively small number of higher priced sales can significantly affect the average figure. It is, therefore, too early to analyse whether this is indicative of the beginnings of recovery or reflective of external influences.

The present overall trend, showing stability or rises across the quartiles, median and mean, is suggestive of a correcting and stabilising market in strata dwellings – however change in a single quarter should be regarded with some caution. Indications in previous quarters of a shift away from luxury penthouse-type units and larger townhouses towards a market that is more affordable to a broader range of potential purchasers may also be reflective of a maturing and stabilising of the development

¹⁵ Housing NSW Housing Analysis and Research: Rent and Sales Reports No. 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91 & 92.

¹⁶ Housing NSW Housing Analysis and Research: Rent and Sales Reports No. 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91 & 92.

market in Ku-ring-gai to produce a mix of unit sizes and prices with the capacity to appeal to a broader market. Price variations at the luxury unit/townhouse end of the market (3rd quartile) are generally more volatile as there is inevitably a more limited pool of buyers for this type of strata purchase.¹⁷

Figure 1.9: Strata Sales in Ku-ring-gai

Reporting Quarter	1 st Quartile	Median	3 rd Quartile	Mean
March 2010	\$578,000	\$655,000	\$833,000	\$720,000
December 2009	\$527,000	\$614,000	\$796,000	\$673,000
September 2009	\$525,000	\$616,000	\$750,000	\$651,000
June 2009 ¹⁸	\$510,000	\$610,000	\$764,000	\$648,000
March 2009	\$485,000	\$540,000	\$663,000	\$579,000
December 2008	\$470,000	\$585,000	\$801,000	\$666,000
September 2008	\$466,000	\$588,000	\$735,000	\$641,000
June 2008	\$490,000	\$610,000	\$834,000	\$703,000
March 2008	\$483,000	\$610,000	\$750,000	\$637,000
December 2007	\$490,000	\$580,000	\$780,000	\$655,000
September 2007	\$455,000	\$545,000	\$730,000	\$613,000
June 2007	\$445,000	\$620,000	\$758,000	\$619,000
March 2007	\$415,000	\$528,000	\$650,000	\$540,000

As of March 2009, there had been further falls in all unit prices with the exception of the first quartile – or more affordable strata properties – which continued to rise slowly. The June 2009 figures show some recovery flowing through to median and third quartile prices. The September figures show these rises stabilising. While the December figures show rises in the 3rd quartile flowing through to the mean, it has been previously noted that these figures can be distorted by relatively few high-end sales. The December 2009 figures indicate stability in the 1st quartile and median sales prices. The latest figures, relating to March 2010, show strong evidence of recovery in the unit market arguably relating to a take-up of the over-supply developed prior to the Global Financial Crisis.

Figure 1.9 demonstrates in the first quartile figures that there are affordable units under \$600,000 in Ku-ring-gai many of which have been developed under the contribution rates that were the subject of Ku-ring-gai Council's appeal to the Contributions Review Panel. The median price indicates that, in fact, a significant proportion of Ku-ring-gai strata sales are at this lower end of the market. This is balanced by a smaller number of higher priced units, in some cases significantly higher-priced (over \$1 million), such as larger units on the top floor of a development which often command valuable views. This factor increases the overall average (or mean) price above the median.

With respect to this picture of the Ku-ring-gai sub-market, it should be noted that the majority of the larger developments contain a mix of unit sizes and unit prices with units overlooking the railway line or Pacific Highway or facing south selling for less than units facing north or overlooking parkland or tree-lined avenues. Larger units, top floor units and units built on the ridgeline and commanding district views also inevitably command higher prices. Significant numbers of Ku-ring-gai's new

¹⁷ It should be noted that strata unit prices are fluctuating notwithstanding the maintenance of development contributions over that period.

¹⁸ These were the most up-to-date figures at the time of the final drafting stage of this Contributions Plan. The more recent figures were published in the Rent and Sales Report No. 90 on 15 February 2010, No.91 on 18 May 2010 and No 92 on 16 August 2010 and incorporated into this table post-exhibition.

developments are purposefully designed and located to maximise this variety within a single development, balancing and managing risk. Compromising the immediate amenity of the town centre in which the development is situated could prove to be short-sighted by adversely affecting the viability of these developments as a whole by reducing the capacity to market particularly the higher priced units.

Ku-ring-gai Council has, in this Contributions Plan, supported the provision of Affordable Housing without compromising the outcome of well-designed town centres and the provision of essential physical and community infrastructure by:

- Ensuring that contributions for bedsits and studios, one bedroom units and SEPP5 developments are less than \$20,000 per unit;
- Providing a sliding scale of contributions for larger units based on occupancy rates to ensure that, to the extent that development contributions may influence unit design, more one bedroom units, bedsits and SEPP5 developments will be provided than larger units which typically sell for much higher prices;
- Having regard to *State Environmental Planning Policy (Affordable Rental Housing) 2009*;
- Introducing the capacity for some types of affordable housing for vulnerable groups to suspend or discount the development contributions payable;
- Exempting secondary dwellings (as distinct from the larger scale dual occupancies) from the obligation to pay development contributions facilitating the provision of affordable housing for extended family;
- Limiting the top contribution rate to 3+ bedrooms (rather than 4+) for dwelling houses as well as dwelling units. It is noted that larger dwelling houses have a capacity to support inter-generational housing for older parents and/or grown-up children, thereby also supporting affordable housing and supporting a range of age groups within Ku-ring-gai;
- Recognising that the cost of land is a significant component of the contribution rate and reducing per capita rates for additional local open space acquisition to levels substantially below currently prevailing levels of local open space provision and significantly below current overall open space provision levels¹⁹;
- Where possible, seeking to reduce land acquisition costs for new roads identified under the then draft *Ku-ring-gai Development Control Plan (Town Centres) 2009* by facilitating a system documented in the then draft *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* of transferable floor space thus reducing the residual value of land rendered devoid of its development potential. It should be noted that this method was used extensively in the adopted *Ku-ring-gai Town Centres Development Contributions Plan 2008* however the subsequent zoning of these lands SP2 for infrastructure provision by the NSW State Government, effectively inhibits this pro-active option for reducing the cost of the targeted land. This Contributions Plan, therefore, is required to include approximately \$25M worth of *additional* land acquisition costs for new roads²⁰;
- Introducing the concept of urban design benefits to the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* to facilitate some streetscape improvements works that are directly related to one particular development to be integrated and delivered in the course of that development enabling these works to be deleted from the Contributions Plan. It is considered preferable where such

¹⁹ This policy guarantees that per capita rates of open space provision will fall over time. The impact over time of open space provision below the current per capita rates is further detailed in Part C: Strategy Plans.

²⁰ This zoning is the chief reason for an increase in commercial contribution rates. Ku-ring-gai is continuing to work with the Department of Planning to address this consequence of zoning land for infrastructure in an LEP as compared to targeting it in a DCP.

works relate most directly to one particular development, usually a commercial or mixed use development in the heart of the centre, for that development to incorporate those works rather than utilising a Contributions Plan which would require all development large and small to contribute. It should be noted that the original scope of the urban design benefits clause as exhibited was intended to also provide for works in the public domain that clearly provide an additional benefit to one particular large development. This methodology has worked successfully in other centres where the developer recognises a direct benefit to the development from the works. This situation gives rise to an opportunity for benefit to both the developer and the community. Subsequent discussions with the NSW Government however made clear that their view was that such works belonged in a Contributions Plan which requires all development in the centre to collectively contribute. As such, this innovative and pro-active approach for reducing the costs attributable in this Contributions Plan was also unable to proceed as the original vision had intended;

- Undertaking to research and prepare an Affordable Housing Strategy including investigating any future scope for key worker housing; and
- Undertaking to further investigate potential for reductions in the required on-site car parking in developments located proximate to public transport noting that the cost of excavation to provide underground parking is a significant cost.

1.11 Key Consideration Statement – Apportionment

Ku-ring-gai Local Government Area is currently experiencing a significant increase in development predominantly concentrated in key town centres along the railway line, the Pacific Highway and in the satellite centre of St Ives on Mona Vale Road.

Development of this scale represents a significant departure in housing form from the prevailing development. A comprehensive works programme is required to facilitate and support development of this scale, mitigating its impact and maintaining Ku-ring-gai as a desirable place to live. The works in this Contributions Plan are integral to the on-going success of this development phase by ensuring that there is a continued demand for new dwellings by maintaining the amenity of Ku-ring-gai.

As with any established area experiencing significant redevelopment pressure, there are three key types of apportionment in this Contributions Plan.

Firstly, there are works within this plan which are wholly or partially provided for the population as a whole – both existing and future – which are duly apportioned to ensure that the incoming population only pays its fair share. In these cases, Council bears a significant proportion of the cost as a co-contribution on behalf of the existing population. The proposed new/augmented libraries, community facilities and recreation facilities such as the West Pymble Aquatic Centre are key examples.

Secondly, there are works within this plan which seek to replicate for the new population, the baseline per capita rates of provision which exist for the current population. The acquisition and embellishment of new local open space is the chief example. Generally, works which simply seek to maintain the status quo on a pro rata per capita basis are attributed wholly to the incoming population.

Thirdly, there are works which are required specifically to facilitate and support the intensive redevelopment that is occurring around the town centres. These works would neither be required nor undertaken but for the demand caused directly by this

new development. These works provide direct benefit to this new development, support the quality of the urban environment and, by so doing, facilitate and support the future viability of further development. Such works include works which facilitate accessibility – both pedestrian and vehicular – and some improvements to the public domain required to support the on-going viability of development in Ku-ring-gai. Generally, works which are required solely as a direct result of the intense redevelopment expected in the current development phase, which would not be undertaken but for this development, are fairly and reasonably wholly attributed to the incoming development.

Only where there is a clear demonstrable benefit beyond maintaining the status quo is it reasonable to apportion works. It is unreasonable to require the existing population to effectively subsidise new development through their rates. It is on this principle that the capacity for developments to contribute their fair share to both community infrastructure as well as physical infrastructure was established in 1979 at the inception of the *Environmental Planning and Assessment Act* and refined on an on-going basis over the ensuing thirty years.

The Strategy Chapters provide further detail on apportionment for specific works under this Contributions Plan.

The apportionment factor between the existing and the new residential population is 5:1. This means that the population will increase by approximately 20% over the population that existed at the time this development phase began. It means that the total estimated end population as at 2031, 16.7% will be the new, incoming population from the base date of the 2006 census. It should be noted, however, that virtually all this growth will be concentrated in less than 10% of the Local Government Area, ensuring that the concentration of change in these areas will be intense.

Lastly, there are particular town centre orientated works relating specifically to vehicular circulation and access and the interaction between vehicular and pedestrian traffic that arise as a direct result of the intensive development in these town centres. These are apportioned between residential and commercial development based on traffic generation by land use. The degree of apportionment is also clarified in the Strategy Chapters. Within this apportionment, some intersection works are discounted because the end result of the work will provide a marginal net additional benefit beyond the maintenance of the pre-development level of service.

1.12 Key Consideration Statement – Cost Estimates

Ku-ring-gai Council's approach to cost estimates is to seek professional estimates of the cost of undertaking particular works from time to time at key points in the process and to utilise publicly available indices and references to provide an interim estimate if required. Initial cost estimates prepared for the purposes of this Contributions Plan are refined prior to instigation of the implementation process.

Works to the Town Centres including new streets, civic spaces and public domain works were initially costed by Page Kirkland (Quantity Surveyors) for the *Ku-ring-gai Town Centres Development Contributions Plan 2008*. These cost estimates were updated by Page Kirkland in September 2009 with reference to the draft *Ku-ring-gai Town Centres Public Domain Plan 2009* by Hassell Ltd and Jane Irwin Landscape Architecture. The preparation of the draft *Ku-ring-gai Town Centres Public Domain Plan 2009* was itself supported by an Internal Project Reference Group which drew on

the expertise of all departments in the fields of the delivery and management of all aspects of the public domain.

Cost estimates of works to the West Pymble Aquatic Centre were refined for this Contributions Plan following the preparation of detailed designs for the project by Architects: Suters Prior and Cheney and have been costed by Quantity Surveyors.

Cost estimates for specific community facilities were initially assessed and provided by Page Kirkland (Quantity Surveyors) for *Ku-ring-gai Town Centres Development Contributions Plan 2008* and updated in 2009 for incorporation into this Contributions Plan. Cost estimates for the Gordon Facility were based on preliminary designs provided by and costed by two potential design firms. The costs for community facilities will be further refined after sufficient development has occurred to justify the instigation of a follow-up post-occupancy survey and the commencement of more detailed design.

Estimates for land acquisition are regularly updated and, for this review and consolidation of the two predecessor Contributions Plans, were researched and presented by HillPDA in February 2009.

Cost estimates for works to existing parks and full delivery costs for new parks were prepared by an internal panel of experts utilising recent works experience and with reference to *The Landscape Contractors Association of NSW: Guideline Schedule of Rates for Landscape Works*. Page Kirkland peer reviewed this generic per square rate and supported the quantum as representative of the real cost of embellishment of new parks in Ku-ring-gai, the majority of which will be provided in the vicinity of the urban town centres, many on sloping sites.

Ku-ring-gai Council believes these various approaches, given the variety of Key Community Infrastructure and the varying stages of delivery involved through to at least 2031, to be reasonable. It is impractical to require more detailed cost estimates for generic facilities such as a multi-purpose facility until later post-occupancy surveys determine the precise mix of uses – and users – required to be accommodated in that building. Such a requirement would lead to an inevitable impost on the administration and management component of Contributions Plans without adding significant value at the early stages of planning.

1.13 Key Consideration Statement – Causal Nexus

Integrated planning for growth centred on Ku-ring-gai's Town Centres has been underway for many years. Each aspect of the Key Community Infrastructure sought in this Contributions Plan has been the subject of extensive studies over a period of three years of planning. Reference to **Part D: Dictionary and References** underlines the nature and scope of this extensive research.

Each aspect of Key Community Infrastructure is different in terms of the manner of determining the demand and the reasonable manner of addressing that demand. In this Contributions Plan, under the relevant Strategy Chapter Heading, nexus for each category of Key Community Infrastructure – and, indeed sub-category – is demonstrated in individual detail. Each chapter also contains a Statement of Reasonableness at the conclusion to that chapter.

It is a challenging task to summarise the reasonableness of Ku-ring-gai Council's approach to such a range of Key Community Infrastructure in a single section. The key aspects of Ku-ring-gai approach to the task are, instead, summarised as follows with more detailed nexus arguments appearing within the Strategy Chapters:

- ✓ Analysing the existing per capita rates of provision of particular facilities such as local parks and local community facilities, to cost the replication of such facilities and to discount that provision in order to maintain a reasonable contribution rate while minimising the cumulative impact on the present population.
- ✓ Determining the minimum requirements for works to key intersections in order to maintain current traffic movements and flow despite the anticipated increase in traffic as ascertained by commissioned traffic studies.
- ✓ Identifying key facilities, the demand for which is created equally by the current and the new population that will benefit that total end population in 2031 as a whole and to apportion that cost fairly across the whole population thereby ensuring that new development contributes only its fair share and that Council bears the fair co-contribution on behalf of the existing population.
- ✓ Undertaking the first post-occupancy survey of development that commenced in late 2004 and largely inhabited after the 2006 census to identify emergent demands and demography and to resolve to undertake further post-occupancy surveys as required.
- ✓ Undertaking the drafting of this revision of the two immediate predecessor 'grandfathered' contributions plans as part of a suite of documents supporting intensive redevelopment in and around the town centres.

Ku-ring-gai Council believes its approach to be reasonable.

1.14 Direct Development Contributions and Indirect Levies

The Report into the First Tranche of Councils²¹ assessed by the Contributions Review Panel, of which Ku-ring-gai Council was one, recommended that councils within existing urban areas give consideration to a section 94A (indirect levy) approach due, primarily, to the difficulties of determining the rate, location and type of future development.

The Ku-ring-gai Local Government Area is technically an established area, but, unlike slow-growth areas, is already experiencing intense and concentrated development. This development has been extensively analysed, projected and is supported by comprehensive planning in the form of Local Environmental Plans and Development Control Plans as well as supporting documents.

Ku-ring-gai Council is proceeding with a Direct Development Contributions approach.

This is considered justified due to the unique characteristics prevailing in Ku-ring-gai during this development phase which are further outlined below.

Most anticipated development is concentrated around key town centres which, with the exception of St Ives, were initially developed from the 1880s onwards (when the railway

²¹ NSW Department of Planning Local Contributions review June 2009 | Summary Report – First Tranche; Page 6

line first arrived on the north shore) through to the 1920s. Development is characterised by Victorian and Edwardian terrace style shops, and large Edwardian houses and Californian bungalows surrounded by private gardens on large blocks of land. By comparison to the fringe suburban areas bordering the national parks which were developed in the second development phase from the 1950s through to the 1980s, the areas along the railway lines are relatively poorly supplied with accessible local public open space.

Key areas of targeted open space are particularly critical to the future function, liveability and amenity of the town centres. The Ku-ring-gai Planning Panel, in preparing the then draft *Ku-ring-gai Local Environmental Plan (Town Centres) 2008*, recommended these allotments be zoned RE1 for infrastructure acquisition effectively committing Ku-ring-gai Council to this expenditure.

Further, additional roads are required to accommodate and facilitate traffic flow and pedestrian movement around key town centres. The Roads and Traffic Authority has, in its commentary on the then draft *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* supported this approach to the challenges of traffic and transport management presented by concentrated development. The Ku-ring-gai Planning Panel in preparing the then draft *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* recommended these future roads be zoned SP2 for infrastructure acquisition effectively committing Ku-ring-gai Council to this expenditure.

The acquisition of land, which has significant development potential, and is in close proximity to the town centres, for the purposes of providing local parks and civic spaces, and new local roads, is a very costly exercise. Land values in most centres average around \$1,800-\$2,000 per square metre. A fixed rate indirect levy would simply be unable to provide sufficient income.

By way of example: at 1%, a single substantial \$10,000,000 development²² would provide just \$100,000 in contributions which would buy, but not embellish, just 50m² of land (approximately). Even at 5% such a levy would provide just \$500,000 which would need to be combined with at least two more such levies to be able purchase one single residential allotment in Ku-ring-gai with no provision for its embellishment. Between six and twelve such contributions would be required to provide for the property acquisition only for just one of the identified link roads now zoned SP2 for acquisition for infrastructure (which typically affect between two and four properties each) without providing for the construction of the road.

Indirect development levies simply cannot provide sufficient capital where land acquisition is required.

Unlike greenfield areas, Ku-ring-gai Council cannot economically or cohesively require significant land dedication from piecemeal in-fill development. In brownfield development areas such as this area, cumulative monetary contributions from all development that generates the demand must be pooled to purchase consolidated space. This is precisely the development scenario for which monetary development contributions were designed – accumulating sufficient funds to provide a consolidated facility or work from cumulative development that is individually too small to provide a separate facility but collectively creates a significant additional demand.

²² \$10,000,000 is the threshold for referral to a Joint Regional Planning Panel.

An alternative approach may be suggested wherein development centred on the six designated town centres may be subject to a direct levy and development outside the town centres to an indirect levy. This might be appropriate in the case where only very small scale infill development were likely to occur outside the six designated town centres. It is not appropriate in the situation which affects Ku-ring-gai where there are a number of highly significant known and potential sites which have the capacity to provide large numbers of new dwellings and additional people. These developments should rightly contribute towards the provision of the additional community facilities and new parks that will be needed as a result of this development. In the interests of fair and equitable apportionment amongst all development, all reasonably estimable potential development should be taken into account in a total picture.

Ku-ring-gai Council intends to investigate the potential for an indirect levy for minor development works following the effective in force date of this Contributions Plan in 2010/11. This will be the subject of further reporting to Council.

1.15 Administration of the Contributions System

The preceding sections dealt with policy matters related to the Development Contributions System in Ku-ring-gai. The following sections deal with the application of this Contributions Plan to development in Ku-ring-gai.

1.16 How are Contributions derived?

This plan calculates a contribution rate weighted according to the relative demand placed by residents on the need for additional and augmented facilities and amenities to derive a contribution rate per resident. Additionally, this plan also levies for the demand generated by additional commercial floorspace.

For residential development, contribution rates per resident are then multiplied by the prevailing occupancy rates for dwelling houses (from one to three+ bedrooms) and for studio/bedsit units, one bedroom units, two bedroom units and three+ bedroom units to derive a standard rate for each of these types of dwellings and accommodation based on the relative demand generated. There are also rates for seniors living dwellings, new allotments and non-private dwellings.

Contribution rates so derived are published in this document and regularly inflated as described in **1.38 Indexation of Contributions**.

At the time of development assessment, contributions are calculated for the proposed development. The credit for any existing development on the site is also calculated in accordance with this Contributions Plan. The credit arising from the development site is subtracted from the total contribution calculated and only the nett additional demand is levied on the development consent.²³

1.17 Determining the Nett Increase in Demand

These provisions specify the approach for determining the nett increase in demand for the purposes of levying only the nett additional demand arising from the development.

²³ A reference to development consent includes a reference to a Complying Development for the purposes of this Contributions Plan.

For the purposes of this Contributions Plan, a credit for the demand arising from existing development will be determined only in the following circumstances:

In the case of existing dwellings:

- ✓ a credit will be given for each dwelling, however in order to secure that credit, evidence of the number of bedrooms in each dwelling on the development site must be provided as part of the Development Application or application for a Complying Development Certificate.

In the cases of commercial premises:

- ✓ a credit will be given for the currently existing active (leased) floor area as applicable on a site the subject of a Development Application; or

In the case of vacant premises:

- ✓ in the case of recently vacated residential premises, a credit will be given for the population that has vacated the site for the purposes of redevelopment and/or as a result of changing economic trends *since* the most recent census on which the Contributions Plan is based. For the purposes of this plan, that means the 2006 Census; or
- ✓ in the case of recently vacated commercial premises, for the floor area that has recently been vacated for the purposes of redevelopment and/or as a result of changing economic trends *since* the most recent census on which the Contributions Plan is based. For the purposes of this plan, that means the 2006 Census.

Note: In each case the applicant must provide sufficient documentary evidence of the scope and usage of commercial floorspace that is the subject of such a claim for credit to enable that credit to be accurately calculated.

In the case of allotments recently rendered vacant by the demolition of previously existing residential or commercial floorspace:

- ✓ a credit will be given only where it can be demonstrated that the floorspace was demolished with the intention of releasing the site for imminent redevelopment. The applicant must provide documentary evidence of both intent and the quantum of past floorspace and/or bedrooms by dwelling to secure any credit sought.

Except as provided for above, no credit will be granted for a vacant residential allotment unless documentary evidence of past payment of a development contribution can be substantiated. Evidence of any past payment must be provided as part of the Development Application or application for a Complying Development Certificate.

In the case of an existing dwelling which straddles two or more existing allotments, any credit arising from that dwelling will be divided between each proposed allotment or each new dwelling in equal parts regardless of the exact location of the dwelling on the boundary. Evidence of the number of bedrooms in the existing dwelling must be provided as part of the Development Application or application for a Complying Development Certificate.

If a site the subject of a development application, notwithstanding the presence or otherwise of vacant buildings on the site, was vacated at the time of the most recent census on which the Contributions Plan is based and, therefore no population or the demand from that site was counted as part of the assessment of existing demand cited in this Contributions Plan, then no part of that former demand can be construed as 'present' or 'deemed to exist' for the purposes of securing a credit under this plan.

In all cases, the onus is on the applicant to supply accurate and complete data and documentary evidence, to enable a credit to be calculated in accordance with this Contributions Plan.

This section should be read in conjunction with **1.25 Exemptions from the Contributions Plan**, and **1.26 merit Exemptions from the Contribution Plan and sections 1.27-1.33** which detail other circumstances in which a case may be made with respect to an exemption from the liability to pay contributions either partially or in their entirety.

1.18 Complying Development

In relation to any application made to an accredited certifier for a complying development certificate, where that development meets the criteria set down in this Contributions Plan, by increasing the population and/or the demand for facilities and services arising from the development the subject of the application, then the accredited certifier must impose a condition requiring monetary contributions calculated in accordance with this Contributions Plan.

The attention of all accredited certifiers is directed to the specified contribution rates in the part of this Contributions Plan entitled: **Part A: Summary Schedules: Summary Contribution Rates** which specify the monetary contributions applicable to each type of development. It should be noted that contribution rates are subject to inflation. In the event further clarity is required, please contact Ku-ring-gai Council directly.

Accredited Certifiers must also have regard to Directions issued by the Minister for Planning for time to time.²⁴ In this regard it should be noted that Ku-ring-gai Council obtained a full exemption from the s94E Direction that would have otherwise capped residential development contributions in this Local Government Area with the effect that that Direction ceased to apply to Ku-ring-gai Council. That exemption was subsequently revoked and a cap imposed across the LGA. The exemption was later reinstated by a further s94E Direction for the areas subject to intensive redevelopment that is now well underway. Third parties are advised to refer to the Department of Planning website to ascertain the current status of all s94E Directions.

While it is noted that, if an accredited certifier fails to comply with the requirements of this Contributions Plan, the consent authority may impose the necessary condition on the complying development certificate and it has the effect as if it had been imposed by the accredited certifier, the potential for lost contributions is evident. As such, it is Ku-ring-gai Council's view that it is the professional responsibility of the individual certifier to accurately calculate and apply the contribution conditions of consent. It should be particularly noted that Ku-ring-gai Council is quite prepared to pursue any third party in the event of the non-receipt of any contribution to which it is entitled under this plan regardless of the nature of the omission that caused the non-payment.

²⁴ Planning Circular 09-020 issued 21 July 2009 entitled: Complying development – accredited certifiers to follow Minister's directions on development contributions.

Accredited certifiers are advised to ensure that they have adequate professional indemnity insurance.

1.19 Construction Certificates

A certifying authority must not issue a construction certificate for building work or subdivision work under a development consent unless it has verified that each condition requiring the payment of monetary contributions has been satisfied.

In particular, the certifier must ensure that the applicant provides a receipt(s) confirming that contributions have been fully paid and copies of such receipts must be included with copies of the certified plans provided to the Council in accordance with the *Environmental Planning and Assessment Regulation, 2000*. Failure to follow this procedure may render such a certificate invalid exposing the certifier to legal action.

Where an applicant may have reached an agreement with Ku-ring-gai Council to provide a work in kind, material public benefit, dedication of land and/or deferred payment arrangement, this would, in the normal course of events, be subject to a formal Planning Agreement accompanying the development application and incorporated within the consent.

Once again, it is Ku-ring-gai Council's view that it is the professional responsibility of the private certifier to ensure that council receives all the contributions to which it is entitled under this plan as levied on the development consent. It should be particularly noted that Ku-ring-gai Council is quite prepared to pursue any third party in the event of the non-receipt of any contribution to which it is entitled under this plan regardless of the nature of the omission that caused the non-payment. Private certifiers are advised to ensure that they have adequate professional indemnity insurance.

1.20 When are the Contributions payable?

Ku-ring-gai Council acknowledges that Planning Circular PS 07-018 dated 6 November 2007²⁵ foreshadowed some future possibility of deferring contributions to payment at a later stage of the process than release of the Construction Certificate²⁶ with further clarification on process to be provided at some future date. No further detail on this matter has been provided to Local Government at the time of drafting – or adopting – this Contributions Plan.

Ku-ring-gai Council particularly notes the following concerns:

- Ku-ring-gai's current development phase commenced in 2004 with the result that Ku-ring-gai has commenced a rolling works programme designed to provide works in a timely manner to meet demand including the on-going purchase of open space. Ku-ring-gai faces a significant financial risk in the zoning of properties for open space acquisition and road infrastructure acquisition following gazettal of the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* which exceeds its current reserves. Additionally, Ku-ring-gai will shortly commence construction on a major recreational facility in the form of the West Pymble Aquatic Centre. Anticipated contribution receipts at Construction Certificate stage have been built

²⁵ This circular was superseded by Circular PS 08-017 dated 23 December 2008 which refers only to deferring State Infrastructure levies.

²⁶ Options canvassed included both Occupation Certificate and point of sale.

into Council's Long Term Financial Plan. Any delay in receipt of these payments will affect current commitments and any resultant financial costs will need to be built into the cost of these projects and, ultimately, into the contributions plan.

- Not all developers immediately sell all the units in a development. There are developers, particularly among the larger developers, who retain around 50% of some new developments as an investment. If payment is proposed to be deferred to point of sale, how will the payment date of these contributions be determined? How will council meet temporal nexus on works funded by contributions for which there is a delayed payment period possibly extending for some years, or even indefinitely?
- Some development companies, particularly smaller development companies, exist only for the construction phase of a development and are dissolved as soon as development is sold. In the event of an outstanding debt owed by such a company, how will the payment of contributions for key community infrastructure be guaranteed?
- While relatively rare, it is not unheard of for development companies to become insolvent during the course of construction and prior to occupation certificate. Ku-ring-gai Council holds the view that it is inappropriate for the community to become an unsecured creditor of an insolvent company through the non-payment of contributions that Ku-ring-gai Council would have been required to hold in trust on behalf of the community to provide key community infrastructure.
- Contributions are an established²⁷ and integral part of the total cost of producing new housing. Unless that cost is represented as an integral part of the total market cost of the new property, rather than as an additional fee at settlement, financiers will be unlikely to lend an additional amount of money to cover the contributions. This increases the deposit gap for the purchaser and completely fails to address the objective of keeping buyers in the market to the detriment of the development industry.

Accordingly, in the absence of a functional system that guarantees payment within a reasonable time, including provision for a payment guarantee in the event of insolvency of the developer, Ku-ring-gai Council continues to defer to the authority of the finding expressed by Commissioner Simpson²⁸ in 1989 arising from the Commission of Inquiry into contributions payable to councils under section 94 of the *Environmental Planning and Assessment Act, 1979*. Commissioner Simpson, having undertaken a thorough investigation into development contributions and following the analysis of extensive submissions, both written and oral, from local government, from developers, from the professional associations of both and other interested parties, supported payment at the release of the then Building Approval (now Construction Certificate). This represents the best balance between the competing desires of a developer to pay as late as possible in the development process and the obligations of local government to meet temporal nexus through a rolling works programme.

²⁷ Section 94 Contributions have been part of the *Environmental Planning and Assessment Act, 1979* since its inception thirty years ago.

²⁸ Simpson, William: *Operations and Practices Associated with Contributions under Section 94 of the Environmental Planning and Assessment Act 1979*, Report to the Minister for Local Government and the Minister for Planning, 1989.

It is noted that this issue has been revisited several times over the past twenty years including as part of the preparation of the 1997 *Section 94 Contributions Manual* and 2005 *Development Contributions Practice Notes* which have each guided the implementation and management of the contributions system over time. On each occasion, following thorough investigation, the system of payment at release of the Construction Certificate has remained standard practice in Local Government.

Accordingly, unless superseded by a formal Ministerial Direction or subsequent retrospective legislative amendment, Ku-ring-gai Council requires that contributions are paid, in full, as follows:-

- **In cases where the proposed development involves construction work only:**
Before the release of the Construction Certificate. In the case of staged Construction Certificates following a Development Consent that was not staged, payment is required before the release of the first approved Construction Certificate that relates to the Development Consent on which the contributions were levied except as amended by the note below:

Note: If staged²⁹ development is foreshadowed, then payment of contributions at release of individual Construction Certificates will only be permitted where there are staged Development Applications or where the initial Development Application separately identified each stage and the applicant made a written request as part of their initial application that separate development contributions conditions be calculated for each stage at the time of development consent. In these circumstances, credit for any existing development shall be apportioned across the stages as the council sees fit in the circumstances of the case. Identifying distinct stages in this manner is not intended to have any effect on the subsequent order in which the stages may be later developed.³⁰

- **In cases where the proposed development involves subdivision only:**
Before the release of any Construction Certificate related to the subdivision works or the release of the linen plans and/or Certificate of Subdivision, whichever occurs first. In the case of staged development refer to the Note above;
- **In cases where the proposed development involves both building works and subdivision:**
Before the release of the first Construction Certificate or the release of the linen plans and/or Certificate of Subdivision, whichever occurs first. In the case of staged development refer to the Note above;
- **In cases of Development Applications or Complying Development Certificates where no construction approval is required:**
Before the release of the Development Approval, Complying Development Certificate or the Occupation Certificate or the commencement of the use, whichever occurs first.

²⁹ The term 'stage' in this context means a building or group of buildings. It does not mean part of a building such as car parking levels or podiums.

³⁰ In cases where a construction certificate may be required prior to any demolition and that demolition is proposed to be undertaken, or it is anticipated that it may be undertaken, as a separate activity to the commencement of construction and therefore requires a separate construction certificate – this, too, must be foreshadowed as part of the initial development consent. If this is not taken into account as part of the development consent and so formally documented it will not be possible to obtain a construction certificate to enable demolition without triggering the requirement to pay the development contributions under this clause.

1.21 Payment of Contributions

The *Environmental Planning and Assessment Act, 1979* provides that contributions may be in the form of a monetary contribution or the dedication of land. The Act and Regulations also make provision for the carrying out of works in kind or the provision of a material public benefit in partial or full satisfaction of any contribution required. Each method, or any combination of these methods, is considered by this Contributions Plan to be a form of payment. Any agreement by the consent authority to accept the satisfaction by non-monetary means of a contribution condition does not alter the total calculated contribution arising from the additional demand generated by the development that is due and payable and no amendment to the contribution condition to reduce the calculated amount will be made. The method of satisfying a contribution does not change the obligation to make the contribution in the quantum specified.

1.21.1 Monetary Contributions

The monetary contribution is the most common means of satisfying a condition of consent requiring a development contribution. Payment must be in the form of cash, debit card (EFTPOS), direct debit (subject to clearance next day from Ku-ring-gai Council's bank) or by bank cheque. Ku-ring-gai Council does not accept credit cards, personal cheques or company cheques for the payment of Development Contributions.

1.21.2 Planning Agreements - Overview

Ku-ring-gai Council will request the applicant commences negotiation of a Planning Agreement under the *Environmental Planning and Assessment Act* where there is any proposal to dedicate land, carry out works in kind and/or provide a material public benefit. The joint voluntary agreement of the specifics of the proposal is required to ensure the legality of non-monetary payments of development contributions. The *Environmental Planning and Assessment Act* and *Regulations* thereunder require a draft Planning Agreement to be exhibited concurrent with a Development Application or a Local Environmental Plan / Development Control Plan. In order to satisfy these criteria, a prospective applicant must notify the Council of their preference to negotiate any non-monetary payment of development contributions prior to the lodgement of any Development Application.

Ku-ring-gai Council has an adopted *Planning Agreement Policy 2008*. It is intended that this document will be revised following the commencement of the legislation assented in June 2008 which had not, at the time of finalising the drafting this Contributions Plan, been commenced.

1.21.3 Planning Agreements with Land Provision for Infrastructure Purposes

A Planning Agreement may make provision for the transfer to the Council of land free-of-cost, or subject to such payment options as may be negotiated in the circumstances of the case, in full or partial satisfaction of a contribution required as part of a Development Consent. The land may be for any purpose identified within the works programmes of this Contributions Plan.

The estimated value of the land will be negotiated as part of the Planning Agreement, taking into account the unique characteristics of the property and the circumstances of the transfer including but not limited to:

- whether the land has been targeted by any adopted policy of the Council including, but not limited to any Local Environmental Plan, Development Control Plan, this Contributions Plan, and/or the Open Space Acquisition Strategy;
- in the case of land not targeted in this plan, Council will also assess the potential impact on the achievement of the identified works programme;
- the size, shape, location, accessibility and topography of the land proposed to be dedicated;
- whether the land adjoins an existing area of open space and can be readily consolidated into that area and/or the land will create or improve accessibility within the area;
- any factors which may affect the usability of the land such as soil condition, flood liability, possible site contamination, public accessibility and safety, proximity to existing uses, the current use of the land, the cost of embellishment or construction of the proposed facility, the impact on the current Contributions Plan works programmes, measures required to fence and maintain the land in the event that works cannot be carried out for some time, and the like;
- the degree to which the identified land can satisfy the purpose for which the contributions has been sought;
- the extent to which any development potential pertaining to the area to be dedicated has been lost or retained by the developer, in whole or in part; and
- the on-going costs to the Council of care, control and management both prior to and after any improvement works are carried out on the land.

Note: The dedication of land provided as an integral part of a development such as aspects of the landscaping plan, a forecourt or plaza, street frontages, pedestrian linkages and the like will not, as a general rule, be acceptable as a means of satisfying wholly or partly the obligation to pay a contribution required under this plan unless specifically identified herein.

To qualify as full or partial satisfaction of a required development contribution, all land must be formally dedicated. It is not the policy of Ku-ring-gai Council to accept publicly accessible space secured by a covenant or any means other than dedication.

1.21.4 Planning Agreements: Works in Kind and Material Public Benefits

An applicant may, in principle, and subject to Council's specific requirements, carry out any of the works which are identified the works programmes as works in kind.

For the purposes of this Contributions Plan, the term 'material public benefit' refers to works which are not specifically listed in the works programme but which are proposed by applicants as an alternative to paying a monetary contribution towards these costed, exhibited and adopted works. There are financial implications for Council in accepting such works and this is likely only to occur in truly exceptional circumstances.

An applicant may also propose works on public land (or future public land) for which no monetary compensation or offset will be supported by Council but which may be proposed and may be supported because they benefit the future operation or amenity of the development. Such applicant-driven works may also include additional

embellishment, beyond baseline standard, to works which are valued in this Contributions Plan.

All proposed works in the public domain must be formally agreed to by the consent authority and documented in a formal Planning Agreement under the *Environmental Planning and Assessment Act, 1979*. Planning Agreements have specific requirements including formal exhibition and reporting procedures to ensure transparency. Ku-ring-gai Council formally adopted its *Planning Agreement Policy 2008* on 15 July 2008. Applicants for works in the public domain, or on private land that will become part of the public domain such as parks or roads that will be dedicated to Council, need to familiarise themselves with this document.

In negotiating to carry out works in kind, the proponent must make particular reference to the cost estimates for that item located in the works programmes related to the Strategy chapters of this plan.

With respect to material public benefits, it is emphasised that the contribution rates in this plan are a direct division of the estimated total cost of that works programme by the contributing population. The works programmes within this Contributions Plan cater for the needs of a significant population increase in an environment of high land values. As such, the adopted works programme is comprehensive, extensive and fully costed. Many works have already been excluded in the interests of maintaining reasonable contribution rates. Additionally, Ku-ring-gai Council is already making a significant co-contribution to the total works programme on behalf of the existing population. Therefore, any applicant proposing an alternative work should be aware that Ku-ring-gai Council takes the view that any diversion of contributions from these adopted works to non-identified works threatens the achievement of the adopted works programme. Any such work would have to be of a truly exceptional relevance, quality and scale to be considered eligible for acceptance as a material public benefit.

Applicants should also be aware that Council will not hold itself bound to accept any works in kind or material public benefits which were not the subject of a formal Planning Agreement. Any applicant proposing land dedication or works in kind, including works identified in any Environmental Planning Instrument or Development Control Plan, should contact Council for a pre-Development Application meeting prior to lodgement of a Development Application in order to commence the timely negotiation of a formal Planning Agreement.

1.21.5 Planning Agreements: Development not covered by this Contributions Plan

This Contributions Plan applies to the type, scope and location of development that is anticipated in Ku-ring-gai through to 2031. The present planning environment, however, permits changes to permissible development to be effected relatively quickly through the use of State Environmental Planning Policies (SEPPs). In the event of a major development that will have demonstrable impacts not foreseen or catered for within this Contributions Plan, Ku-ring-gai Council advises the owners and applicants that scope for mitigating such impacts through a Voluntary Planning Agreement should be raised at an early stage of preparation of a Development Application.

1.22 Goods and Services Tax (GST)

At the time this Contributions Plan was prepared, the position of the Australian Taxation Office was that payment of development contributions made under the *Environmental Planning and Assessment Act, 1979* is exempt from the GST.

The budget for each work listed in the works programmes for this Contributions Plan has also been estimated nett of GST. It is expected that either the developer or the Council (provided with full documentation supplied by the developer) will claim the relevant GST exemption from the Australian Taxation Office.

1.23 Deferred or Periodic payments

The Council may permit the payment of contributions to be deferred or paid by instalments only in the following circumstances:-

- where the applicant has reached agreement with the Council to provide works-in-kind, land dedication and/or material public benefits documented in the form of a formal Planning Agreement which makes detailed and specific provision for the dedication of land and/or the carrying out works in kind and/or the provision of a material public benefit in partial or full satisfaction of a condition imposed by the development consent and, as an integral part of the delivery of that package of works process sets out an alternative timing for the payment of monetary contributions, with security if required; or
- in other circumstances, such as financial hardship, which must be substantiated in writing by the applicant with appropriate documentation, and which are determined to be both severe and sufficiently unique as to distinguish this applicant from any other applicant, which must be determined by Council on the specific merits of the case where the Council must also determine that the deferred or periodic payment of the contributions will not prejudice the timing or the manner of the provision of public facilities included in the works programmes within this Contributions Plan.

It should be noted with respect to the second category above that it is essential for any local government authority to treat all applicants and developers equally by the same criteria and, given that there is the potential for a pecuniary advantage for one applicant or developer in the context of a deferral of payment which, if extended to all, would prejudice the timing of the works programme, such an application without unique and severe extenuating circumstances is unlikely to succeed.

Subject to the criteria above, and unless otherwise expressed within a formal Planning Agreement, deferred monetary payments are acceptable only where a special deposit is made or where an unconditional, non-expiring Bank Guarantee has been submitted in accordance with Council's procedures. Insurance Bonds, including unconditional insurance bonds, are not accepted. Contributions being paid in the form of land dedication and/or the carrying out of works may be secured by the above methods or by transfer of the title of the land, by formal Planning Agreement or a combination of these methods as negotiated. Applicants should obtain current procedures for the lodgement, management and release of securities from Ku-ring-gai Council.

1.23.1 General matters relating to Bank Guarantees

Council may, if it decides to accept the deferred or periodic payment of a contribution, require the applicant to provide a bank guarantee by an Australian bank for the contribution or the outstanding balance of the contribution on condition that:

- i. The guarantee requires to bank to pay the guarantee amount unconditionally to the consent authority where is so demands in writing, not earlier that six months (or a term determined by council) from the provision of the guarantee or completion of the development or stage of the development to which the contributions or part relates; and
- ii. The guarantee prohibits the bank from having recourse to the applicant or other person entitled to act upon the consent before paying the guaranteed amount and/or having recourse to any appeal, dispute or controversy, issue or other matter relating to the consent or the carrying out of the development in accordance with the consent, before paying the guaranteed amount; and
- iii. The bank's obligation under the guarantee are discharged:
 - When payment is made to the consent authority according to the terms of the bank guarantee and the consent;
 - If the related consent lapses; or
 - If the consent authority otherwise notifies the bank in writing that the bank guarantee is no longer required.
- iv. The applicant pays interest to Council on the contribution or the outstanding amount at the overdraft rate on and from the date when the contribution would have been otherwise payable in accordance with **1.20 When are the Contributions payable?**³¹

Where the Council does not require the applicant to provide a bank guarantee, it may require a public positive covenant under section 88E of the *Conveyancing Act, 1919* to be registered on the title to the land to which the relevant development application relates.

All bank or other charges incurred in the establishment, operation or discharge of the bank guarantee shall be borne by the applicant. Subject to (i) above, the Council may call up the guarantee at any time without reference to the applicant, however the guarantee will generally only be called up where a cash payment has not been received, land dedication has not taken place and/or works have not been completed to Council's satisfaction by the end of the agreed period. In cases where a major work is to be carried out by extensive works in kind, the Council may agree to the lodgement of several bank guarantees for staged release providing the Council always holds sufficient guarantees or bonds to complete any outstanding work at any given time. The Council will discharge the bank guarantee when payment is made in full by cash payment, land dedication and/or by completion and transfer of works in kind and/or by completion and formalisation of a management agreement in respect of the works in kind or if the consent lapses or is formally surrendered.

³¹ This requirement may be omitted in the case of works in kind where no final monetary contribution will be due and payable following the hand-over of the asset.

1.24 Works exceeding the required Contribution

Where an applicant proposes to dedicate land to the Council and/or carries out works in kind, the agreed value of the land or works will be calculated with reference with this plan and to the unique circumstances of the particular case and incorporated within a formal Planning Agreement. Upon registration, the Planning Agreement supersedes any reference or costing in this contributions plan.

The estimated costs calculated in the works programmes in the Strategy Plan Chapters and Works Programme attachments represent the maximum project budget for which contributions are sought. This does not presently limit the scope of matters open for negotiation as part of a proposed Planning Agreement. In this context Ku-ring-gai Council notes the intent of the Minister to limit the scope of Planning Agreements to Key Community Infrastructure except with Ministerial approval.

A Planning Agreement may make provision for managing a situation where the works proposed exceed the required contribution for a whole development, or for a stage of development in the specific circumstances of the development. A Planning Agreement may make provision for contributions by Council towards the cost of additional work from its own revenue or assets including development contributions.

Note: No credit will be given for land or works, whether or not included as part of this Contributions Plan, unless such works have been formally agreed to by Council, by means of a formal voluntary Planning Agreement pursuant to the *Environmental Planning and Assessment Act, 1979* and the *Regulations* thereunder.

1.25 Exemptions from the Contributions Plan

The following types of development will be exempted from the obligation to pay a contribution under this Contributions Plan:

- Development which involves alterations and additions to an existing single family dwelling or the knock-down-rebuild of an existing free-standing single dwelling house where no additional dwellings will be created³²;
- Development for the purposes of a secondary dwelling where the second dwelling is integral and subordinate to the primary dwelling and cannot be subdivided.³³
Note: There are strict criteria for secondary dwellings to distinguish them from dual occupancies;
- Development for the purposes of a single dwelling house³⁴ on a vacant lot where it can be established that a development contribution relating to that lot was paid at time of subdivision³⁵;

³² The term 'existing single dwelling' in this context does not include dwellings that have been recently constructed as part of a new development, subdivided into individual 'single' titles, including Torrens Title, and are now the subject of separate applications for alterations and additions. In such cases the full nett additional development contributions will be formally levied as part of any development consent.

³³ In the event a secondary dwelling becomes a dual occupancy by virtue of a subsequent application for extensions and/or subdivision full development contributions for the entire nett additional dwelling will be applied as part of any such approval. Secondary dwellings are not to be regarded as a potential mechanism for avoiding required contributions from new separate dwellings that are properly classed as dual occupancies.

³⁴ Development for the purposes of a dual occupancy on such a lot will be levied for the two new dwellings with a credit for one residential lot ensuring that only the nett additional demand is levied.

³⁵ The onus of proof is on the applicant and/or owner of the subject property and is to be submitted concurrent with the Development Application.

- Development for the sole purpose of the adaptive reuse of an Item of Environmental Heritage;
- Development for the purposes of infrastructure identified under this Contributions Plan including development for the purposes of community and recreation facilities.

The primary reasons for these exemptions include:

- Maintaining the flexibility for local residents to extend their homes to accommodate their existing family without undue financial hardship;
- Supporting the potential for the provision of small-scale local affordable housing for elderly relatives and older children in the form of secondary dwellings;
- Facilitating adaptive re-use of heritage properties; and
- Facilitating the development of infrastructure which is essential to support the population without additional cost to that population.

1.26 Merit Exemptions from the Contributions Plan

It is not always possible to identify in advance all developments which may be able to make a meritorious case for an exemption from the obligation to pay some or all of the applicable contributions. On the principle of ensuring public accountability, transparency and equity between all developers, this section specifies the limited opportunity for making a merit-based case for exemption.

Council may formally consider, on the individual merits, a case for exempting the following types of development from the levying of contributions:

- Developments which provide a distinct community benefit on a not-for-profit basis including but not necessarily limited to: fire stations, police stations or police shopfronts, ambulance stations, rescue services, State Emergency Service (SES) and Rural Fire Services (RFS) operational bases and the like³⁶;
- Development by or for non-profit or cooperative organisations which provide a distinct community benefit including but not limited to: the provision of childcare services (especially for under-2s and/or special needs children) including kindergartens and pre-schools; outreach services, community services or the like, on a cooperative or not-for-profit basis;
- Development which involves an application solely for the internal conversion of one existing single terrace style shop-top type dwelling (typically located in the town centres along the Pacific Highway) or a freestanding single dwelling which has recently been used for commercial purposes back to residential use. This potential exemption will not apply where that conversion occurs as part of a larger redevelopment which must be considered as a whole; and/or
- Development where it can be demonstrated to the satisfaction of Council that in any particular category of contribution that the development, by the particular nature of its use, in the unique circumstances of the case, does not generate a demand for, or derive benefit from, some or any of the types of facilities and amenities to be provided. **Note:** Given that the grant of any such exemption, full or partial, may be considered to create a precedent or confer a pecuniary advantage on one developer over others, such an exemption is not likely to be granted unless there are absolute meritorious circumstances that would distinguish the case of the subject development from any other. All such arguments will be put before

³⁶ This provision is not intended to include corporate headquarters of any type.

Council for formal determination and the full text of any such submission will be publicly available on Council's website for public scrutiny.

Full details of any case for exemption must be included as part of the Development Application to enable the Council to make a merit-based assessment of the unique circumstances of the specific case in question concurrent with the consideration of the Development Application as a whole.

1.27 Contributions and Part 3A Development (Ministerial Sites)

It is the policy of Ku-ring-gai Council to request the Minister, any Joint Regional Planning Panel, the Ku-ring-gai Planning Panel, or any other body acting on behalf of the Minister, to apply Council's current Contribution Plan to any determination they may make.

It is considered reasonable and equitable that all development that imposes an additional demand, contributes towards facilities provided to address that demand.

1.28 Contributions and Development by the Crown

Excepting compliance with any direction issued from time to time, Ku-ring-gai Council holds the view that development by the Crown is subject to development contributions in the same manner as development by a private developer. This does not preclude Crown development from arguing a case for merit exemption in the same manner as a private developer.

Ku-ring-gai Council will, if required, seek the formal concurrence of the relevant Minister to any consent condition seeking development contributions.³⁷

1.29 Contributions and the Economic Stimulus Plan

The NSW State Government has contemplated the application of development contributions to works to be carried out under funding from the Nation Building Economic Stimulus Plan under the document entitled: *Australian Government Nation Building Economic Stimulus Plan - NSW Taskforce Update – Planning Edition – Issue No 3, 27 July 2009*.

1.29.1 Education Projects

In respect of Education Projects, the policy position of the NSW Government is as follows:

“Education projects

*The Policy for both government and non-government **education projects** approved under the Nation Building and Jobs Plan Act is that:*

- *neither government nor non-government projects will be required to pay development contributions for the component that is funded by the Nation Building Stimulus Plan;*

³⁷ “A consent authority (other than the Minister) may not ... impose a condition of consent (on Crown development) except with the approval of the Minister or the applicant.” Circular PS 09-017 issued 2 July 2009.

- *the Infrastructure Coordinator General may apply conditions requiring contributions to school projects that contain components that are not funded by the Nation Building Economic Stimulus Plan.*

*An example would be a new building costing say \$10m which includes a \$2m library funded by the Nation Building Economic Stimulus Plan with the balance of funds provided by the school. In such cases it is proposed that any approval would include a condition requiring that for the \$8m non-Nation Building funded component, the school is to pay contributions in accordance with the Council's Contribution Plan.*⁸⁸

The Minister for Planning has formalised this policy position by the issue of a s94E Direction on 9 September 2009 to the effect that any component of a development that is a BER project is not subject to development contributions in the manner of other comparable developments.

1.29.2 Social Housing Projects

In respect of Social Housing Projects, the policy position of the NSW Government for Affordable Housing approved under the *Nation Building and Jobs Plan (State Infrastructure Delivery) Act 2009 (Nation Building and Jobs Plan Act)* is as follows:

"Social Housing projects

The Policy for social housing projects is as follows:

- *no local development contributions apply to projects with 20 or fewer dwellings in one application;*
- *the first 20 dwellings in any application will not be subject to any local developer (sic) contributions;*
- *for the 21st dwelling and above in the Sydney metropolitan area, the local development contribution will be \$10,000 per dwelling OR in accordance with the council's Section 94 Plan, whichever is the lesser;*
- *no local development contributions are payable for seniors housing developed in accordance with the State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004³⁹;*
- *no State Infrastructure levies will apply;*
- *any component of a social housing project which is not for social housing use, such as commercial or retail areas, or dwellings for private rent or sale, will be required to pay contributions in accordance with the council's section 94 Contributions Plan.*

The rationale for this is that developments with 20 or fewer dwellings determined under the Infrastructure SEPP provisions will not pay any local developer (sic) contributions, therefore the same criteria should apply to the same number of units approved under the Nation Building and Jobs Plan Act. The policy is consistent with the Section 94E Direction made by the Minister for Planning in relation to seniors housing. For developments with in excess of 20 dwellings a reasonable rate per dwelling has been set based on information provided by Housing NSW on the range of contributions paid to councils."

³⁸ Australian Government Nation Building Economic Stimulus Plan - NSW Taskforce Update - Planning Edition - Issue No 3, 27 July 2009.

³⁹ At the time of drafting this Contributions Plan, *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* only exempts social housing providers from the obligation to pay development contributions.

It is noted, however, that, at the time of drafting this Contributions Plan, the Minister for Planning has not formalised this policy position by the issue of a s94E Direction for the development of affordable housing under the Economic Stimulus Plan (as distinct from the stance in relation to Education Projects). Accordingly, while this is stated a policy position, it is not, at this stage, binding on local government, though this may change in the future.

At present, it appears that only developments undertaken by Housing NSW would qualify for funding under the Economic Stimulus package but this is not absolutely clear and it could, in any case, be subject to future change. In the case of development by Housing NSW, such development would also be development by the Crown and covered by **1.28 Contributions and Development by the Crown** above and the application of this Contributions Plan would be subject to negotiation.

In the event that social housing development supported by the stimulus plan is extended beyond Housing NSW, for so long as the issue of development contributions remains a non-binding matter, Ku-ring-gai Council will consider such developments on their merits in accordance with the legislation in force at the time - including paying due regard to the importance of encouraging and supporting affordable housing. It is emphasised that Ku-ring-gai Council supports the principle of the provision of affordable housing and intends to prepare an *Affordable Housing Strategy* in support of the Principal Local Environment Plan but also has key infrastructure issues.

1.30 Contributions and Aged and Disabled Persons Housing

Except as provided for by any over-riding legislation, contributions for developers of Aged and Disabled Persons Housing that do not meet the definition of a Social Housing Provider are due and payable in the same manner as contributions for any new dwelling. Nexus is determined for each category of facility within the Strategy Chapters. Specific occupancy rates have been determined for Seniors Living type housing to reflect the actual demand likely to arise from units with restricted occupancy.

1.31 Contributions and other Affordable Housing

As previously stated, Ku-ring-gai Council supports the principle of the provision of affordable housing for the community in the short term and in the long term and will proceed to further investigate affordable housing issues as part of the instigation of the Principal Local Environment Plan process.

At present there are no formal directions limiting the application of development contributions to affordable housing except in respect of the provision of housing by social housing providers of the type referred to in **1.30 Contributions and Aged and Disabled Persons Housing** above.

Accordingly, unless superseded by a Direction, new SEPP or other legislative mechanism, this Contributions Plan enables Ku-ring-gai Council to consider the application of development contributions to such applications on their merits. Council may consider exempting developments which provide affordable housing for the general community subject to the satisfaction of key criteria, including the provision of affordable housing in perpetuity, or may provide for development contributions to be calculated but suspended for so long as the housing remains affordable housing under the applicable definitions and management criteria.

The reason for this policy position is that there has been a high demand for private housing for aged persons in Ku-ring-gai (which are not automatically rendered affordable by virtue of that restriction alone) and that there are a number of religious entities with significant land holdings in the Local Government Area. As such there is genuine potential for significant shortfalls in contributions that would severely compromise Ku-ring-gai Council's capacity for the provision of the essential infrastructure required by the anticipated development and incorporated within this Contributions Plan. While Ku-ring-gai Council is supportive in principle of the provision of Affordable Housing, such provision should not become a means of denying the community funding for essential infrastructure.

The various types of affordable housing affected by this policy position are detailed below. Where no prohibition on contributions exists, Ku-ring-gai Council will calculate development contributions and will seek to apply them.

As emphasised above, Ku-ring-gai Council supports the principle of affordable housing and notes that the on-going suspension of development contributions would be likely to encourage any such housing to remain affordable housing in perpetuity while still permitting flexibility for the original developer and subsequent investor to withdraw such housing from the affordable pool.

Formal applications for the suspension of contributions under this section must comprehensively argue the case for suspension including the specific circumstances that would distinguish the subject proposal's merit case from others. Applications for merit suspension will be referred to Council for formal determination and accompanying submissions will be made public as part of that process.

In the event of a successful merit argument, a condition, fully suspended while that criterion is met, will be applied to the consent. Applicants should liaise with Ku-ring-gai Council for Development Applications of this nature.

1.31.1 Affordable Rental Housing

The *State Environmental Planning Policy (Affordable Rental Housing) 2009* lists the following types of housing provision as potentially meeting the criteria for new affordable housing rental development:

- any residential development by the Land and Housing Corporation (Housing NSW),
- secondary dwellings,⁴⁰
- boarding houses,
- supportive accommodation,
- group homes.

Affordable rental housing may be provided by:

- private developers,
- joint ventures between public authorities, social housing providers and private developers,
- social housing providers as defined in *SEPP (Affordable Rental Housing) 2009* (see 1.31.2 below).

⁴⁰ Dwellings that meet the strict criteria identifying 'secondary dwellings' are already exempted under 1.25 of this Contributions Plan.

1.31.2 Social Housing Providers

State Environmental Planning Policy (Affordable Rental Housing) 2009 defines Social Housing Providers⁴¹ as follows:

social housing provider means any of the following:

- (a) the Department of Human Services,
- (b) the Land and Housing Corporation,
- (c) a registered community housing provider,
- (d) the Aboriginal Housing Office,
- (e) a registered Aboriginal housing organisation within the meaning of the *Aboriginal Housing Act 1998*,
- (f) a local government authority that provides affordable housing,
- (g) a not-for-profit organisation that is a direct provider of rental housing to tenants.

Note: For the purposes of this Contributions Plan it is recognised that social housing providers may also provide for-profit housing or a mix of social and for-profit housing as part of any given development. Only housing that meets the criteria of social housing will be considered as affordable housing for the purposes of this Contributions Plan.

1.32 Private Boarding Houses, Group Homes and Affordable Housing

Unless superseded by legislation or direction, in the case of private developments such as hostels, group homes and boarding houses, this type of development may be able to justify a case for an exemption so long as it meets State Government criteria for a tax exemption for low-cost accommodation.

Formal applications for the suspension of contributions under this section must comprehensively argue the case for suspension including the specific circumstances that would distinguish the subject proposal's merit case from others. Applications for merit suspension will be referred to Council for formal determination and accompanying submissions will be made public as part of that process.

In the event of a successful merit argument, a condition, fully suspended while that criterion is met, will be applied to the consent. Applicants should liaise with Ku-ring-gai Council for Development Applications of this nature.

1.33 Contributions and Temporary Uses

Where a use is of an interim or temporary nature and subject to a short timeframe time-limited consent which will expire requiring the cessation of the use and/or demolition of the structure, then contributions will be calculated but will be suspended – meaning no payment is due at activation of the consent. In the event a subsequent Development Application is lodged to continue the use, contributions will be due and payable notwithstanding the short term existence of the use with full application of the applicable inflation. An example of such a use would be a temporary free-standing display unit or a temporary sales office.

⁴¹ The wording of the definition of social housing providers in *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* is similar in import but with some dated references.

1.34 Accounting for Development Contributions

Separate accounting records are maintained for all development contributions at the Ku-ring-gai Council. A contributions register is maintained by council in accordance with the *Environmental Planning and Assessment Act* and the *Regulations* thereunder. The register is maintained in an electronic format and therefore may be inspected on request on provision of reasonable notice.

1.35 Policy on Grants and Development Contributions

Ku-ring-gai Council recognises that contributions are only a proportion of the infrastructure costs of the Capital Works Programme. Council also recognises that development contributions cannot be levied to 'catch up' on any backlog in the rate of provision - at most, Council may seek contributions to maintain the status quo, even if that is technically inadequate. The necessity of ensuring that contributions are reasonable may mean that Council is not able to maintain current per capita rates of facility provision particularly in the case of land intensive works such as new parks.

Ku-ring-gai Council also recognises that capital works funded by development contributions and by the grants system generally must be mutually exclusive. It is the Council's intention to seek grants only in respect of works, or components of works, which are not formally part of this Contributions Plan. These may include those works which, for various reasons, cannot or should not be wholly or partially levied for: such as the relocation or rearrangement of existing facilities to better use an existing space or facilities which, if included in their totality, would result in an excessive and unreasonable contribution rate.

By way of example, Ku-ring-gai Council has recently received a Federal grant to fund a sustainable water supply at North Turramurra Oval. While other works to North Turramurra Oval are valued by this Contributions Plan, this particular aspect of the project is not included in the total budget under this Contributions Plan.

Works beyond the scope of baseline works included within this Contributions Plan are considered to be additional works for the purposes of this assessment even if they occur in the same physical space e.g. higher quality or more extensive landscaping and provision of higher quality or additional park furniture in parks and sportsgrounds or more extensive or higher quality town centre embellishments and street furniture.

Ku-ring-gai Council may also seek grants for projects valued in this Contributions Plan if considered necessary to make up for any short-fall in contributions that were anticipated and would have been received but for government policy limiting or precluding contributions from a particular development or class of developments. This input is intended to be sought only if necessary to ensure the project is not delayed to the detriment of the area as a whole as a direct result of such policy.

1.36 Policy for the Recoupment of Past Works

Ku-ring-gai Council entered the present development phase effectively from 2004 when the first medium density approvals were granted under *Ku-ring-gai Local Environmental Plan 194*. Population growth remained stable until after the 2006 census when the new residents of those approved developments began to appear in the Estimated Resident Population statistics published by the Australian Bureau of

Statistics. Ku-ring-gai was already planning for growth in 2004 which expanded with the focus on the six key town centres from 2005 onwards.

This Contributions Plan reflects the Metropolitan Strategy and covers development growth from the period of 2004 to 2031 with consequential population growth from 2006 onwards. Long term works which support the full anticipated extent of population growth commencing from the predecessor 2004-2009 Contributions Plan, such as the West Pymble Aquatic Centre, are rolled into this Contributions Plan. No works completed before 2004 are recouped in this Contributions Plan because such works could not meet the key criteria of having been provided in anticipation of the impending growth in population.

Works that will meet demand arising from the total end population at 2031 and which are, therefore, proportionally funded over that period of time by that total population, will be provided on a rolling works programme through to 2031. These works will roll over to recoupment works on completion. They cannot be deleted from the Contributions Plan until the technical payback of internal borrowings from within the Contributions Plan as a whole, in order to bring that work forward from 2031, is achieved. To do so prematurely would compromise the proportional funding of the remaining works programme. Contributions Plans essentially mirror a Nett Present Value system in terms of the time period foreshadowed but rely on costs in today's dollars plus the processes of inflation over time plus investment returns in order to keep pace with increasing costs over time.

1.37 Modifications to Development Consents

A subsequent section 96 modification to an issued Development Consent does not alter the original date of consent. Any formal application to amend a Development Consent in such a way as will consequentially alter the contributions due and payable will be taken to authorise a change to the development contributions consent condition(s).

It is understood that any s94E Direction applying to consents issued after a certain date will not apply to subsequent s96 modifications of consents issued prior to that date unless that is specified in the terms of the Direction.

All such amendments are considered under the Contributions Plan that applied at the date of the original development consent. Accordingly the procedure is different depending on whether the original contribution has, or has not, been paid.

1.37.1 Where the Original Contribution has not been paid

If the development contributions levied on the original consent have not yet been paid, the contributions are recalculated in their entirety including any credit for any existing development that applied at the date of the original consent. The revised consent condition will replace the original condition.

1.37.2 Where the Original Contribution has been paid

If the development contributions levied on the original consent have been paid, the procedure is different because it is not reasonable to apply inflation to that part of the contribution which has been paid. Given that payment generally occurs at the release of the Construction Certificate, it is also likely that the development will be under construction.

In these circumstances, the development for which contributions have been paid is considered to be the existing development. This approved development will be credited as the existing development for the purposes of the recalculation. The proposed amended application in its entirety is, therefore, the proposed development for the purpose of calculating the contributions.

In this way, only the nett additional contribution, if any, is charged at the current CPI/HPI. In this circumstance an additional condition will be inserted alongside the original condition which remains in the consent because the additional contribution does not supersede or obviate the obligation to pay the original contribution.

Note: No refunds will be provided in the event there are no nett additional contributions required as all contributions received are committed to Council's rolling works programme in such a manner as will address temporal nexus and Council is entitled to certainty in cash-flow.

1.38 Indexation of Contributions

Contributions towards the capital works programme in this Development Contributions Plan will be indexed quarterly by the Consumer Price Index (All Groups Sydney), being a readily accessible public index. Contributions towards land acquisition will be indexed quarterly by the Housing Price Index (Sydney), being, likewise, a readily accessible index. Contributions will continue to inflate until they are paid.

Both the Consumer Price Index and the Housing Price Index are published quarterly on the website of the Australian Bureau of Statistics at www.abs.gov.au.

For the purposes of indexation, there is no differentiation in this plan between past works under recoupment and future works – both will be indexed quarterly. The amendments to the development contributions legislation which commenced on 8th July 2005 effectively required that contributions for past works must also be inflated in accordance with the *Environmental Planning and Assessment Regulation, 2000* as specified in the relevant Contributions Plan. This process is fair and reasonable because it facilitates the timely provision of works under a rolling works programme by facilitating internal borrowing.

Contributions for all works will be adjusted both at the time of consent of an individual Development Application and time of payment in accordance with the quarterly Consumer Price Index (All Groups Sydney) and the Housing Price Index– Established House Prices (Sydney). The justification for this adjustment lies both in the need to keep pace with increasing costs of implementation and to ensure equity between earlier and later developers in real terms (time value of money).

It should be noted that there are essential lead times for Development Applications which are reported to the Consent Authority for determination. If the quarterly CPI or HPI changes between the reporting deadline and the council meeting, the updated amount will not necessarily appear in the consent. All contributions will continue to inflate until paid.

For changes to the Consumer Price Index – (All Groups Sydney), the contribution rates within the plan will be reviewed on a quarterly basis in accordance with the following formula:

The formula below is used to calculate the changed contributions payable:

$$\$C_{CW} + \frac{\$C_{CW} \times ([\text{Current Index} - \text{Base Index}])}{[\text{Base Index}]}$$

Where:

$\$C_{CW}$	is the contribution towards capital works at the time of adoption of the plan expressed in dollars;
Current Index	is the Consumer Price Index as published by the Australian Bureau of Statistics available at the time of review of the contribution rate;
Base Index	is the Consumer Price Index as published by the Australian Bureau of Statistics at the time the works programme of this Contributions Plan was costed.

For changes to the Housing Price Index – Established House Prices (Sydney), the contribution rates within the plan will be reviewed on a quarterly basis in accordance with the following formula:

$$\$C_{LV} + \frac{\$C_{LV} \times ([\text{Current LV Index} - \text{Base LV Index}])}{[\text{Base Index}]}$$

Where:

$\$C_{LV}$	is the contributions towards land within the plan at the time of adoption of the plan expressed in dollars;
Current Index	is the land value index as published by the Australian Bureau of Statistics available at the time of review of the contribution rate;
Base Index	is the land value index as published by the Australian Bureau of Statistics at the time the works programme of this Contributions Plan was costed.

Note: For construction cost estimate purposes, the base date of this Contributions Plan is the September Quarter 2009. For land value cost estimates, the base date of this Contributions Plan is the December Quarter 2008. These are the respective quarters within which the Quantity Surveyor cost estimates were undertaken by Page Kirkland and the land valuations estimates were undertaken by HillPDA.⁴²

Commencing during 2010, following the in force date of this consolidated Contributions Plan, Ku-ring-gai Council intends to fully integrate its contributions management with the mainframe system. As each updated CPI and HPI figures is entered into this system, it will automatically inflate unpaid contributions until such time as they are receipted. It will be necessary to verify with Council the correct payment due at the date payment is proposed.

⁴² At the time the land valuations were commissioned in November 2008, the practical import of the Minister for Planning's January 2009 s94E Direction limiting contributions to \$20,000 per residential dwelling, subsequent appeal processes, and subsequent s94E Directions dated 31 May 2009, 4 June 2010, 14 September 2010 and 16 September 2010 could not have been foreseen or these valuations would have been commissioned much later in the review process.

1.39 Pooling of Contributions

To facilitate the orderly and timely provision of public amenities and facilities, this plan authorises monetary development contributions paid for different purposes to be pooled and applied progressively towards the works identified in this Development Contributions Plan. The estimated timing and priority for expenditure on each work is set out in the works programmes however development is regularly monitored as part of the management of the Development Contributions system and these priorities may be altered in the interest of better meeting the key requirements of geographic and temporal nexus.

As part of the financial assessment process before commencing any new major work, Council will consider whether such internal borrowings will unreasonably prejudice other the works in the works programme.

The works programme under this Contributions Plan has, from draft stage, commenced the process of full integration into Ku-ring-gai Council's Long Term Financial Plan looking forward over the next twenty years. This process facilitates the assessment of all consequential financial effects of pooling contributions to bring forward any given work allowing those effects to be recognised and managed.

1.40 Discounting

Ku-ring-gai Council has had regard to the *Development Contributions Practice Notes – July 2005* issued by the Department of Planning and current at the time of finalisation of this Contributions Plan. The section in respect of discounting reads as follows:

"Discounting Contributions

Discounting means reducing the calculated contribution rate in order to achieve a specific planning, social, economic or environmental purpose.

Discounting should not be confused with:

- *apportionment* which ensures that new development only pays for the proportion of the demand that it generates;
- *exemptions* which provide relief of some types of development from a specific contribution (or part);
- *credits* which refer to the allowance a council may make for existing development, for works-in-kind or for a material public benefit.

...

It is extremely important for a council to consider the implications which discounting, and the consequent reduction in contributions, may have for the existing and/or the new community.

Implications could include the delay in the provision of an identified facility or the provision of a facility of a lesser standard or capacity.

Another implication is the creation of a precedent. Where discounting has been actively employed, perhaps to encourage development, it is often difficult to shift the policy or defend a new policy in the face of past actions.

Discounting should be used judiciously as if effectively means that existing ratepayers are subsidising future development. Council and the community must be made fully aware of the financial implications of discounting practices.”

On Friday 4 June 2010, effective Monday 7 June 2010, the Minister for Planning issued a s94E Direction requiring that contributions for residential development be arbitrarily discounted to comply with a maximum of \$20,000 for each lot authorised by the consent. This s94E Direction remained in force until 14 September 2010 when Ku-ring-gai was granted an exemption for the areas that are subject to more intensive redevelopment capacity as defined by the then current *Ku-ring-gai Town Centres Development Contributions Plan 2008* and the recently gazetted *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*.

In the preceding year, 2009, Ku-ring-gai Council had defended its then current contributions plans and had achieved an exemption from an earlier s94E Direction which would otherwise have limited contributions in a similar manner effective from 30 April 2009. This exemption was granted without this cap ever coming into force for development in Ku-ring-gai. Compliance with any Minister’s Direction limiting contributions should not, therefore, be interpreted as a precedent set by Ku-ring-gai Council notwithstanding its lawful compliance for so long as any such a Direction is in force.

1.41 Ministerial Directions under s94E

At the time of adoption of this Contributions Plan, a s94E Direction limiting contributions for residential development in part only of the Ku-ring-gai Local Government Area is in force. That s94E Direction took effect on and from 16 September 2010.

The subject s94E Direction identifies by geographic description areas of Ku-ring-gai in which there is no ‘cap’ applying to contributions calculated in accordance with current adopted and in force Contributions Plans. Areas outside that geographic area continue to be subject to a cap as per the terms of the Direction.

Following the adoption of this Contributions Plan, it is anticipated that this Direction will be amended to alter the resultant outdated references to *Ku-ring-gai Town Centres Contributions Plan 2008* in the geographic description of the ‘grandfathered’ areas in Schedule 2 to refer to this Contributions Plan.

Ku-ring-gai Council will continue to comply with current s94E Directions in respect of the application of this Contributions Plan.

In respect of the specific s94E Direction in force at the time of adoption of this Contributions Plan, the following statement is to be noted:

At the time this Contributions Plan was finalised, a Ministerial Direction issued pursuant to section 94E of the Environmental Planning and Assessment Act 1979 and in effect on and from 16 September 2010 was current and provided that a Council must not impose a condition of development consent under section 94(1) or 94(3) of the Act requiring the payment of a monetary contribution exceeding \$20,000 for each dwelling or lot authorised by the consent.

The Ministerial Direction identified land in Schedule 2, described as at 16 September 2010, to which the direction did not apply. Part only of the Ku-ring-gai Local Government Area was geographically identified in that Schedule at paragraph (8).

Thus, in respect of land other than land identified in Schedule 2 of the direction, in the event that the total contribution calculated in accordance with this Contributions Plan exceeds \$20,000 for each dwelling or lot authorised by the consent, the total contribution will be reduced to a maximum of \$20,000 for each dwelling or lot authorised by the consent in compliance with the s94E Direction for so long as that Ministerial Direction remains in effect.

1.42 Monitoring and Review

Ku-ring-gai Council acknowledges the necessity for monitoring a range of variables with respect to the on-going strategic management of the contributions system including: building and population growth, assessed demand, income and expenditure, future cash-flow and operational management systems.

Ku-ring-gai Council recognises and supports the importance of keeping a Contributions Plan under review.

It is generally intended that this plan will be comprehensively reviewed every five years triggered by the full release of census data from the five-yearly census. It is anticipated that data from the 2011 census will be released during 2012 allowing a review to commence in that year.

Ideally, there will also be at least one review between each census. Reviews may also be triggered by the need to manage specific aspects of the plan such as significant changes in the cost of land or materials; in the event key parameters such as the scale of future development change; or in response to legislative change.

Note: While Ku-ring-gai Council commits to keeping this Contributions Plan under review, nothing in this Contributions Plan can be taken as a commitment to adopt any review of this document by any specific date. Nothing in this Contributions Plan may be read as implying that the Plan will cease to operate unless reviewed within any particular period.

1.43 Dictionary and References

The definitions supporting the operation of this Contributions Plan and the References relating to the preparation and consolidation of this Contributions Plan are contained in **Part D: Dictionary and References** following **Part C: Strategy Plans**.

Part C: Strategy Plans

Key Community Infrastructure: Infrastructure Planning Overview

2.0 Ku-ring-gai in Profile

The Ku-ring-gai Local Government Area (LGA) covered by this Contributions Plan is approximately 8,540 hectares (which is 85.4km²) of which approximately 20% is covered by three National Parks: Ku-ring-gai Chase National Park, Garigal National Park and Lane Cove National Park. The urban area (excluding the National Parks) covers approximately 6,850 hectares (being 68.5km²) which is 80% of the LGA.

Ku-ring-gai LGA has experienced several periods of rapid growth in its history, interspersed with periods of stable or declining population. The first period of rapid residential growth occurred after the opening of the North Shore railway line in 1890. This period began the establishment of the town centres along the railway line that we know today.

The interwar period of the 1920s and 1930s witnessed another active period of subdivision and residential expansion encouraged by improved access anticipated due to the opening of the Sydney Harbour Bridge in 1932. The post-war years, beginning in the 1950s through to the 1970s, were a period of intense development during which the population doubled from 50,000 to 100,000. Much of the community infrastructure provided around this time is now reaching the end of its economic life and is unable to cater for further growth. A significant amount of Ku-ring-gai's local open space was also developed during this suburban expansion and is physically remote from the town centres along the ridgeline and in St Ives where the current development phase is taking place.

Since the 1980s the population has been relatively stable in terms of overall numbers but ageing. The next phase of development, featuring urban consolidation in areas of high accessibility along the railway line and major roads, has recently commenced. This process is following the lead of other Local Government Areas closer to the Sydney Central Business District which have been experiencing urban consolidation for up to fifteen years.

The population of Ku-ring-gai is expected to have increased to around 126,151 by the time this current growth phase is complete in the early 2030s.

2.1 The Role of Ku-ring-gai as part of Greater Sydney

The State Government's 2005 Metropolitan Strategy *The City of Cities - A Plan for Sydney's Future* identifies the following broad trends and drivers of change to which planning for Sydney, as a whole, must respond. These are:

- population growth and demographic change, including migration trends, birth rates, an ageing population and less people living in each household;
- employment growth and change, including more service and office based jobs and a shift to integrated office, production and warehousing operations which means more land is required for some economic activities;
- the increasing globalisation of the economy, which means Sydney and Australia have to compete internationally to attract investment and sell goods and services overseas to remain prosperous;
- the push for more sustainable development, in the face of global environmental and climatic changes, which creates drier and more unpredictable weather events, and increased rates of consumption of natural resources such as water and fuels for energy;

- the rising costs of transport-fuel prices, congestion, greenhouse gas emissions, air quality and community health are placing increasing burdens on families and business. Demand for travel is increasing faster than population growth and the largest increase is in the use of private vehicles; and
- the basic structure and built fabric of the city which is substantially in place and will not change fundamentally over the life of the Strategy.

Notwithstanding the recent slowdown in economic activity, these drivers of change are expected to remain valid for the life of the Metropolitan Strategy. Economic and development activity is cyclical and several periods of both intense and slower activity will be experienced during the life of this Contributions Plan.

2.2 Ku-ring-gai and the Metropolitan Strategy

The Metropolitan Strategy supports continued economic growth while balancing social and environmental impacts. It recognises the significant challenges that will face Sydney over the next 25 years or so. The key challenge is that Sydney's population is expected to grow by 1.1 million people between 2004 and 2031, from a current population of 4.2 million to 5.3 million. To cater for this growth, the Government has predicted Sydney will require the 640,000 new homes and 500,000 more jobs. This will generate demand for approximately 7,500 hectares of extra industrial land, 6.8 million square metres of additional commercial floor space and 3.7 million square metres of additional retail space.

Recently there have been suggestions that even these growth figures in the Metropolitan Strategy are conservative and that Sydney could be looking at increased population pressures of up to 1.7 million to 2036. This underlines the necessity for regular review of all Strategic Planning documents.

The draft North Subregional Strategy, which covers Ku-ring-gai and Hornsby, was released by the Department of Planning on 31 October 2007. This subregional strategy translates the objectives of the NSW Government's Metropolitan Strategy to the local level. Local planning is required to be consistent with the subregional strategy.

Ku-ring-gai's share of the current targets for Sydney is a minimum of 10,000 achievable dwellings by 2031 and employment capacity for 4,500 new jobs. In the context of our ageing population, the variety of housing choice created by adding villas, townhouses and units to the stock of large houses will enable older residents to down-size their residence within their established community. The release of larger established dwellings will, in turn, encourage younger adults and families to return to the area or to stay. The provision of housing choice is also critical to improving housing affordability.

2.3 Focus on Town Centre and Pacific Highway Development

The current redevelopment trends are for medium to high density housing and mixed residential commercial buildings located around public transport nodes such as railway stations and major bus routes.

In Ku-ring-gai, Town Centres Planning has been underway since 2005/2006 and extensive work has been undertaken and consolidated by Council working with specialist consultants. This body of work includes a range of studies such as traffic, parking and transport modelling, comprehensive urban design analysis, community

facilities analysis, heritage study, interface planning, housing, retail and commercial lands analysis, demographic review, open space planning, natural resource planning, detailed work on key sites, and an independent economic feasibility analysis/testing of proposed development scenarios.

The intent of *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* is to recognise and address the following key strategic planning issues facing Ku-ring-gai through to the 2030s:

- population growth and demographic change as a stable ageing population profile begins the shift to cyclical renewal as younger families move back to the area and retirees downsize their large dwellings;
- the need to take advantage of proximity to public transport maintaining good levels of train use and addressing access to bus transport;
- rectifying a relatively limited choice of housing with dwelling stock currently concentrated in single dwellings on large blocks;
- addressing a significant escape of retail spending to adjoining areas such as Hornsby, Macquarie Centre and Chatswood resulting in increased vehicle kilometres travelled;
- the need to revitalise local town centres to support population growth and demographic change, support local employment and improve local amenity and accessibility;
- supporting the character of Ku-ring-gai by strengthening local heritage provisions and maintaining access to parks and community facilities; and
- support for biodiversity and ecological processes.

2.4 Development outside the Town Centres

The key objective of providing housing choice underlines the fact that while a focus on highly accessible town centres makes good practical as well as good planning sense, not all development opportunities can be constrained to the Town Centres. There will always be demand for small-scale redevelopment such as dual occupancies and seniors living development in the form of villas and townhouses which may be better accommodated close to smaller neighbourhood centres. This smaller scale development is typically a maximum of two storeys in height with private gardens and can be more easily integrated into low rise housing areas.

The opportunity for this type of development remains in the *Ku-ring-gai Planning Scheme Ordinance* and the *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*⁴³ and this on-going potential is expected to be incorporated in the Principal Local Environmental Plan going forward. Accordingly, the cumulative demand anticipated to arise from this incremental additional demand is also accommodated within this Contributions Plan.

In addition, there are some key sites outside the town centres and the Pacific Highway Corridor where significant development will be enabled. These sites include the Sydney Adventist Hospital (San) and the University of Technology (UTS). While other possible redevelopment sites cannot be formally anticipated, this Contributions Plan is drafted to enable development external to the Town Centres to also contribute their fair share towards additional community infrastructure, in particular new open space and community facilities. Since the demand for many works is analysed per capita and

⁴³ Note the name of this policy was changed from *SEPP (Seniors Living) 2004* to *SEPP (Housing for Seniors or People with a Disability) 2004* effective 12 October 2007.

given that works will be staged, if additional development occurs, any additional demand levied for can also be catered for by expanding the capacity of the existing works programme utilising those contributions in the form of larger community centres or additional areas of open space. All such development will, therefore, be expected to contribute its fair share in the same manner as any other nett additional development in the Ku-ring-gai Local Government Area.

2.5 Infrastructure Contributions Supporting Development

Ku-ring-gai Council's Development Contributions Plan is a key supporting document for achieving infrastructure to support the challenges inherent in population growth and consolidation as identified by the Metropolitan Strategy and the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*.

Major new development in Ku-ring-gai is concentrated along the Pacific Highway / North Shore Rail Corridor and focussed on the core Town Centres – including the satellite town centre of St Ives on Mona Vale Road. Intensification of this scale brings with it unique demands on the pedestrian and vehicular environment and on facilities for the future community. The vitality of the centres is supported by their physical amenity and that physical amenity must be upgraded to cater for this intensive development. The success of these upgrades will contribute to the economic viability of development of the area as well as its amenity. Both factors directly influence the on-going viability of later residential and commercial developments. In short, all developers have a vested interest in the success of the town centre redevelopments.

SURROUNDING INFRASTRUCTURE: *People rarely make property choices based merely on the four walls of the actual house. In fact, the schools, roads, parks, cafes and shops around those four walls are usually more important than the house itself, hence the value of location. You see, property values are rarely about the bricks, timber and materials of the home but more about the land value of the location. That's why apartments in the inner city can be worth more than a house on a quarter acre block further away from the city - the apartment attracts a location premium that the house cannot.*⁴⁴

Contribution rates are a mathematical function of the cost of the work divided by the contributing population. Where land acquisition is involved this cost is inevitably impacted by the land values in the area. On the upper North Shore, these land values are high. These are the same land values which are created in part by the values that developers are, themselves, prepare to pay to acquire developable land. In most cases, Council has no option but to acquire additional land at that market rate and this cost is inevitably included within the Contributions Plan.

As far as possible, Council has incorporated strategies to reduce the cost of contributions including encouraging works in kind and facilitating land dedication through the provision of transferable floorspace (meaning that the development potential of that land is utilised within the development site). The zoning of much of the land required for parks and roads as RE1 and SP2, however, pre-empts a local government acquisition process at full market value which precludes the utilisation of any floorspace potential within an adjoining development and inhibits the carrying out of the work as works-in-kind. This ensures that the land must be acquired at market rates when the owner wishes to sell, which is not necessarily contemporary with the

⁴⁴ *Will a booming population mean another property boom?* Alex Brooks, Journalist / Property Writer, Sydney Morning Herald / Domain 24 September 2009.

development of adjoining sites. This process has restricted the use of an effective method of reducing the cost of infrastructure and directly increased the cost of the works programme that must be incorporated into this Contributions Plan. It also increases the financial risk exposure to Ku-ring-gai Council necessitating the retention of an account balance at levels that will enable council to respond to requests for acquisition. Many other works have also been deleted from this Contributions Plan in order to maintain a reasonable contribution rate.

2.6 Scope of Key Community Infrastructure Demarcations

Ku-ring-gai Council is constrained by the need to review *Ku-ring-gai Town Centres Contributions Plan 2008* to accommodate the amendments arising from the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010*. Gazettal of the LEP occurred on 25 May 2010. There is also some urgency in replacing the 2004-2009 Contributions Plan going forward.

The Notes to the Minister's s94E Direction of 31 May 2009, which confirmed the exemption of Ku-ring-gai Council from the \$20,000 threshold, while not forming part of the Direction, none-the-less requested Ku-ring-gai Council to complete its review and consolidation by the end of 2009. Accordingly, there has been implicit onus on Ku-ring-gai Council to demonstrate that it has, in good faith, reported a formal draft document before the end of the 2009 calendar year. This Contributions Plan in its draft form commenced exhibition in December 2009, extended into February 2010..

As such, Ku-ring-gai Council was never in a position to delay the finalisation of this review until there was certainty on when Part 5B of the *Environmental Planning and Assessment Act* (assented in June 2008) will be commenced. At the time of finalising this document post-exhibition, a commenced date has not yet been announced.

Accordingly, while the requirements for Key Community Infrastructure do not exist under the present Division 6 of the *Environmental Planning and Assessment Act*, it is a fact that they will, ultimately, come into force. Even if commencement is delayed beyond the in force date of this Contributions Plan, it would be inappropriate to prepare a Contributions Plan with the intention of allowing it to become outdated almost immediately. Notwithstanding, preparing a draft Contributions Plan to with reference to new, untried legislation in the absence of revised Practice Notes from the Department of Planning presented a challenging situation.

The relevant section of the new Part 5B as passed by both Houses of Parliament reads as follows:

116I Councils limited to contributions for key community infrastructure

A council's contributions plan cannot allow the council to require a community infrastructure contribution unless the community infrastructure is:

- (a) **key community infrastructure** (being community infrastructure prescribed by the regulations as key community infrastructure), or
- (b) **additional community infrastructure** (being community infrastructure other than key community infrastructure) that the Minister has approved for the council under this section.

In the drafting of this Contributions Plan, Ku-ring-gai Council has relied on the list of Key Community Infrastructure listed in the version of Clause 31A of the Regulations appended to the *Environmental Planning and Assessment Amendment Bill 2008* as passed by both Houses of Parliament and assented by the Governor of NSW.

This Clause 31A reads as follows:

31A Key community infrastructure and additional community infrastructure

- (1) The following community infrastructure is prescribed as key community infrastructure for the purposes of sections 116I and 116V of the Act:
 - (a) local roads,
 - (b) local bus facilities,
 - (c) local parks,
 - (d) local sporting, recreational and cultural facilities and local social facilities (being community and child care centres and volunteer rescue and volunteer emergency services facilities),
 - (e) local car parking facilities,
 - (f) drainage and stormwater management works,
 - (g) land for any community infrastructure (except land for riparian corridors),
 - (h) district infrastructure of the kind referred to in paragraphs (a)-(e) but only if there is a direct connection with the development to which a contribution relates.
- (2) Public infrastructure comprising land for riparian corridors cannot be approved under section 116I or 116V of the Act as additional community infrastructure or additional public infrastructure.
- (3) In this clause:
facilities means buildings and works.

As previously noted, Ku-ring-gai Council could not practically delay the exhibition of this Contributions Plan until revised Guidelines or Practice Notes were issued by the Department of Planning which might clarify how the term 'local road' or 'local park' as an item of key community infrastructure is to be applied to the urban context as distinct from the greenfield release areas or how embellishment of the public domain is to be treated in the urban context. While a consultation draft of the Local Development Contributions Guidelines was issued for consultation purposes only after this Contributions was adopted for exhibition, this information was not available to Ku-ring-gai at the time of drafting this Contributions Plan and only limited changes can be made to a draft document post-exhibition.

Accordingly, Ku-ring-gai has taken the following approaches to the distribution of its works programme under the Key Community Infrastructure headings which it believes, in good faith, to be reasonable.

2.6.1 Key Community Infrastructure – Public Places

Ku-ring-gai Council notes that the NSW State Government has provided clear support for urban civic spaces and town centre improvements as key community infrastructure for which additional demand is created by new development in established areas. The North Subregion - Draft Subregional Strategy states:

“ Population growth and demographic change will continue to create new demands for parks, public places and cultural facilities in the subregion. In addition to parks and sports grounds, public places also comprise other aspects of the public domain such as urban civic space such as town squares, widened footpaths and boulevards. Ku-ring-gai Council is working towards developing new civic spaces through the progression of an LEP for six of their centres. ”⁴⁵

There are different aspects of the ‘public domain’ ranging from improvements to the pedestrian environment on footpaths and through new pedestrian links through to civic spaces and town squares. These different aspects of the public domain could be considered to fulfil the role of a local park or a local road in the urban context. The demarcations in terms of usage and role are not clear-cut. In fact, the significant reductions in proposed local open space at less than half of current per capita rates, underlines the importance of the role of the public domain as a passive recreational resource in the urban context.

2.6.2 Key Community Infrastructure – Civic Spaces and Urban Parks

Civic spaces and town centre urban parks are considered differently to other aspects of the public domain. Frequently the establishment of new civic spaces is also dependent on the acquisition of private land to create or increase the space. The nature of use is also different. Rather than having a key function as thoroughfares with seating and places to linger being a secondary function, these spaces have a distinct passive recreation function as well as serving as a pedestrian linkage. It is the form of embellishment, and the focus on passive recreation that distinguishes these spaces from the streetscape components of footpath embellishment. Accordingly civic spaces and urban parks are included as part of the Local Parks item of Key Community Infrastructure.

2.6.3 Key Community Infrastructure – The Pedestrian Environment

In attempting to define the correct demarcation for improvements to the pedestrian environment incorporating primarily footpath improvements, the definition of ‘road’ under the *Local Government Act 1993* is instructive:

“road” includes:

- (a) highway, street, lane, pathway, footpath, cycleway, thoroughfare, bridge, culvert, causeway, road-ferry, ford, crossing, by-pass and trackway, whether temporary or permanent, and
- (b) any part of a road and any part of any thing referred to in paragraph (a), and
- (c) any thing forming part of a road or any thing forming part of any thing referred to in paragraph (a).

It is specifically noted that footpaths are a key part of the road, and are located within the road reservation. Ku-ring-gai Council consequently considers the term ‘Local Roads’ as it applies to key community infrastructure to include the entire road reservation in the public domain between property boundaries (being the private domain) inclusive of footpaths and nature strips and any structure located on them. As such, embellishments to the streetscape have been incorporated as part of the Local Road item of Key Community Infrastructure.

⁴⁵ NSW State Government: North Subregion: Draft Subregional Strategy Page 92

2.6.4 Key Community Infrastructure – Cycleways

The *Local Government Act 1993* definition of a road in the subsection above is also instructive as it pertains to cycleways. In the context of this Contributions Plan therefore both on-road and off-road cycleways are considered to be properly included in within the Local road category of Key Community Infrastructure.

2.6.5 Key Community Infrastructure – Local vs District vs Additional Infrastructure

There is some uncertainty as to when a local facility becomes a district facility in the context of a brownfields area where development may be widely distributed or clustered but accessibility is high throughout the Local Government Area as a whole as well as the correct interpretation of the term 'direct connection' which is used but not clarified in the Legislation that was passed by both Houses of Parliament. Again, this information was not available to Ku-ring-gai Council at the time of drafting this Contributions Plan.

This situation is unclear in the context of the West Pymble Aquatic Centre. This augmented facility is the only swimming pool complex in Ku-ring-gai however, given every surrounding Local Government Area has its own pool and, in some cases, up to four pools of comparable size serving their Local Government Area, Ku-ring-gai's only pool is its local pool which is centrally located near the heart of the Local Government Area. Ku-ring-gai believes this facility to be a local facility provided for the benefit of its population and this is further argued in the relevant chapter.

While plans for the Aquatic Centre are, in fact, sufficiently advanced for Ku-ring-gai Council to be in a position to provide a Business Plan to support its inclusion as District or Additional community infrastructure, other longer-term facilities are not.

It is noted that defining large centrally-located facilities as Additional Community Infrastructure by default of their size, singularity and/or location and, thereby, requiring the sort of business plans that can only be developed when a project is well-advanced, would, if pursued, effectively discourage planning for multi-purpose centralised facilities and, instead, encourage small-scale scattered facilities which are not necessarily the best mechanism for future service delivery.

Lastly, in the absence of any formal definition, it is also unclear whether the aquatic centre to be constructed at West Pymble open air swimming pool should be defined as a Sporting Facility or a Recreational Facility. For the purposes of this Contributions Plan, and noting that the preliminary design for the aquatic centre includes indoor pools, a hydrotherapy pool and a gymnasium, this item has been incorporated in this Contributions Plan as a Recreational Facility on the basis that it is primarily a structure rather than an open air sporting facility.

In conclusion, Ku-ring-gai Council believes, in good faith, that only the West Pymble Aquatic Centre currently potentially falls within the definition of Additional Community Infrastructure although it has been argued that this is a local facility for the population of Ku-ring-gai. If required at some point in the future, a Business Plan will be provided to the Minister for this possible Item of Additional Community Infrastructure.

2.6.6 Management, Studies and Administration

The management of the development contributions system is a complex and expensive business increasingly demanding specialist expertise.⁴⁶ There are significant, regularly changing, legislative requirements and legal precedents in governing every aspect of the system from plan preparation, management, monitoring, implementation, advice and reporting.

There are two facets to the direct costs of managing development contributions. One is people – their time and expertise expressed as salaries and on-costs including continuing professional development. The other is the supporting studies, demography and statistical products, studies and analyses that directly support the professional management of the contributions systems and the on-going review – and refinement – of the Contributions Plan.

Ku-ring-gai Council has recently begun the process of change significantly and dramatically from a Local Government Area with stable population to one of rapid development and demographic renewal. This places considerable demand on the Council for the timely delivery of the appropriate supporting infrastructure. This design and management of the contributions system is inseparable from the whole process. The salary and on-costs of a coordinator⁴⁷ and for studies, data and advice that directly support the plan, its management and implementation are, therefore, properly included in this Contributions Plan. Allowances towards these costs are incorporated within each of the Key Community Infrastructure chapters.⁴⁸

The nature of work undertaken in the preparation and management of a Contributions Plan includes (but is not limited to):

- Analysis of Local Residential Development Trends
- Analysis of Local Business Development Trends
- Analysis of the Economic Cycle
- Demographic Analysis (census, journey-to-work, travel zones)
- Monitoring changing through Post-Occupancy Surveys
- Monitoring of Actual and Projected Development Statistics (residential and commercial)
- Monitoring Inflation and Contribution Rates
- Monitoring changing Land Valuations
- Negotiating of Planning Agreements
- Updating Web-based Information
- Project Management of Works-in-Kind

⁴⁶ Reference to the outcomes of the Contributions Review Panel (1st and 2nd tranche) indicate that the performance of the documents and practices of those councils who employ a specialist staff member justify that expense where the volume of contributions is sufficient to warrant that specialist attention.

⁴⁷ Ku-ring-gai Council currently employs a part-time specialist coordinator.

⁴⁸ In view of the uncertainty over the future capacity to include management costs as a distinct item of Key Community Infrastructure, these costs were distributed across the individual categories of Key Community Infrastructure. While these are, as a result of that process, represented as a percentage of the cost of this works programme, this is not an arbitrary percentage. The all-inclusive cost of managing the development contributions system over the life of the plan was first determined and the percentage was determined as a mathematical function of that cost to achieve the amount that would meet that budget estimate. Subsequently, the capacity to include these costs as a distinct item has been supported in draft consultation guidelines however, to amend this Contributions Plan to structurally reconfigure the contribution rates post-exhibition is considered a trigger for re-exhibition. It is also noted that these Guidelines remain draft at the time of completing this document.

- Project Management of Consultants providing supporting studies, economic advice, updating land valuations, and the like
- Financial Planning including Future Cash-Flow Analysis
- Financial Cash-Flow Management over the life of the Plan
- Budgeting the Council co-contribution for Apportioned Works
- Facilitating the prioritisation and implementation of the Works Programmes
- Quality monitoring – receiving feedback from users both internal and external
- Customer Service – Checks and Audits
- Assessment and advice on Legal Precedent

Additionally, management of the contributions system over the life of the plan requires the commissioning of studies and the purchase of additional data such as:

- Census Data;
- Other Statistical Information from the ABS and from other experts in the fields of demography and economics;
- Land Valuations;
- Development cycles and development activity;
- Economic feasibility testing and advice;
- Updating supporting studies and strategies including retention of specialised consultants; and
- Commissioning and analysing post-occupancy surveys and other surveys.

It should be noted that many of these activities involve all departments of the Council and many staff who are not funded directly or indirectly by development contributions.

The estimated total annual cost of managing the development contributions system inclusive of all tasks, consultancies and data above is estimated to be in the vicinity of \$235,000 in 2009 dollars.

2.7 Integration of Town Centre Planning and Planning for Ku-ring-gai

This Contributions Plan is a key component of the funding strategy for infrastructure supporting development in Ku-ring-gai through to 2031. The majority of this development is expected to be concentrated in and around the six key town centres. Development that occurs outside the town centres is also likely to give rise to needs which, in many cases, may be more logically located in these key town centres to facilitate maximum accessibility. Of critical importance then, are the future structure plans for the six town centres as illustrated in *Ku-ring-gai Development Control Plan (Town Centres) 2010*.

The planning of each of the town centres was built on a planning vision which was prepared with input from the community and developed into a Structure Plan for each Town Centre.

2.7.1 Future Character of Gordon

Gordon will become a high density mixed use area that stretches about 800 metres along the Pacific Highway between St Johns Avenue and Ryde Road. Gordon will become the primary retail and commercial centre for Ku-ring-gai. It is anticipated that commercial floor space will grow from an existing base of about 81,000m² to about 129,000m². Supporting the retail growth will be a range of other employment related uses as well as shop-top housing. Two retail areas are planned for:

- A “Retail Core” on the western side of the Pacific Highway, with at least two large supermarkets and additional specialty stores focused around a newly created public urban space.
- A boutique retail and leisure precinct in the central area of Gordon providing improved main street shops along the Pacific Highway with new specialty shops, offices, and residential apartments on upper floors. Wade Lane will become activated with retail shops on one side of the street looking out across a new urban park which will be created on Council’s land.

Gordon will also develop and expand to become the civic and administrative heart of the Local Government Area offering a wide range of civic and cultural facilities including a library, Council chambers and administration building; and a public park. Further investigation may indicate Gordon is the most appropriate location for a future cultural venue and auditorium either exclusively or as part of a multi-purpose facility.⁴⁹

Shop top housing will be encouraged in each of the precincts to support commercial activity and improve safety of the area particularly in the evening. New apartment buildings are configured to achieve high amenity standards for new residents by minimising noise impacts and optimising solar access.

2.7.2 Future Character of Lindfield

Lindfield centre will be a high density mixed use centre extending about 400-500 metres along the Pacific Highway between Beaconsfield Avenue and Balfour Street. Strong incentive has been given for redevelopment of key areas to allow provision of contemporary supermarkets and addressing the undersupply of retail in the centre.

No extension of the retail zone is proposed however the density provisions in *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* will allow an increase in commercial floor space of about 11,686m² from a base of 32,469m² in Lindfield. This increase will largely cater for increases in the size of supermarkets and associated speciality retail as well as allowing the shops on the highway to face the rear to create quieter retail areas.

Lindfield will be defined by the two main retail hubs on the east and west sides of the centre. Each side will be strengthened and revitalised by allowing additional retail uses, office space, and new shop top housing. Lindfield Avenue’s role as the “main street” will be enhanced to offer distinctive local shopping experience. Woodford Lane will become lined with shops overlooking a new “Village Green”.

A large town square will be created located centrally on the Council car park at Kochia Lane with leisure-based retail uses adjoining such as cafés and restaurants to provide a major community focus. New shop-top apartment buildings along the Highway are configured to achieve high amenity standards for new residents by minimising noise impacts from the highway and ensuring solar access.

⁴⁹ This Contributions Plan provides (as far as possible within the context of a reasonable contribution rate) for the maintenance of current per capita rates of multi-purpose community space. The future use of that space will be determined following post-occupancy surveys and public consultation prior to the instigation of the implementation process.

2.7.3 Future Character of Pymble

Pymble will become a high density mixed use area that stretches about 150-200 metres along the Pacific Highway between Livingstone Avenue and Post Office Street. New residents living in shop-top housing will further support the centre's viability.

Pymble will remain a small street based centre offering both an expanded and improved main street retail area along Grandview Street with new specialty shops, offices and residential apartments; as well as a leisure based retail area along Park Crescent with restaurants and cafes with views over Robert Pymble Park. The latter function has potential to attract people from a broader area which will support the viability of the centre.

The density provisions in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* allow an increase in commercial floor space of about 2,398m² from a base of 10,012m² in Pymble; such an increase is primarily to accommodate expansion of the retail zone onto Park Crescent as well as allowing for a small supermarket to be established (if viable). The proposed building heights in Pymble will provide strong encouragement for redevelopment to support a centre in decline.

A new Council owned multi-purpose community centre on the corner of Alma Street and Park Crescent is also proposed overlooking Robert Pymble Park.

2.7.4 Future Character of Roseville

Roseville will become a small high density mixed use area in two parts:

- The Pacific Highway precinct north of MacLaurin Parade which will continue to develop offering an increasing range of lifestyle and evening entertainment related retail outlets such as restaurants and cafes;
- Hill Street between Roseville Avenue and Bancroft Avenue which will retain a local retail service function. In addition, the Federation and early Inter-War commercial buildings on Hill Street will be retained and enhanced.

New shop top housing in each of the precincts will support commercial activity and improve safety of the area particularly in the evening. New apartment buildings will be configured to achieve high amenity standards for new residents by minimising noise impacts and optimising solar access.

A new "Village Green" on Lord Street behind the Hill Street shops will provide a central community space for a range of activities.

2.7.5 Future Character of St Ives

St Ives will become a high density mixed use area that will extend about 400-500 metres along Mona Vale Road between Stanley Street and Cowan Road. Density provisions in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* allow an increase in commercial floor space of about 23,873m² to cater for existing and future demand. Most of this anticipated growth would be retail floorspace incorporated within the St Ives Shopping Village if it were to undergo redevelopment.

The St Ives Shopping Village will be of a district centre scale offering increased retail choice and opportunities for shop-top housing, as well as office space for professional and medical services. The Shopping Village will not grow to compete with the other

major shopping centres such as Chatswood or Hornsby. It will be a contemporary style centre with open pedestrian “streets” which would be lined with shops and provide views through to the Village Green.

An improved interface between the St Ives Village Shopping Centre and the Village Green will be created by replacing car parking with public space for community activities, events, celebrations, outdoor cafes and late night activities such as restaurants.

A new Council owned community facilities building will be provided that is intended to include a library, and may include a neighbourhood centre, new youth centre, and a child care centre.⁵⁰

2.7.6 Future Character of Turramurra

Turramurra will become a moderate-sized centre that will stretch about 400-500 metres along the Pacific Highway between Turramurra Avenue and Duff Street. Density provisions in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* allow an increase in retail floor space of about 130% in Turramurra to cater for current and future demand.

The centre will be anchored by two major retail hubs one at Ray Street the other on Kissing Point Road; and a third boutique retail area will be centred around Rohini Street. Rohini Street’s role as the “main street” will be protected and enhanced.

Overall the centre will provide a mix of uses including a variety of retail outlets, larger supermarkets, professional services as well as restaurants and cafes to serve the needs of existing and future residents. New housing opportunities, including shop top housing, will be created throughout the centre and this use will further support revitalisation of the centre.

New and upgraded community facilities, that are intended to include a new youth centre and library, will be provided in a central location adjacent to a proposed new town square.⁵¹

2.8 Recent Ku-ring-gai Development

Until quite recently, Ku-ring-gai had not experienced any significant growth since the 1970s. With the exception of 2002-2003 when medium density SEPP5 development was made permissible in Ku-ring-gai and 533 new dwellings received building approval, until 2004 Ku-ring-gai generally produced between 200 and 350 dwellings per year which is characteristic of a slow-growth middle ring Local Government Area.

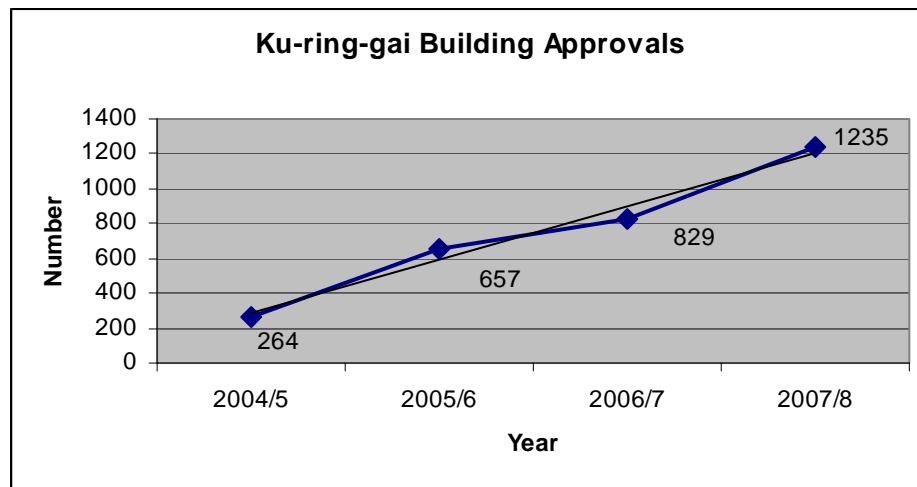
This situation began to turn around significantly following the effective date in 2004 of LEP 194 which allowed non-SEPP5 medium density development to be constructed within the Pacific Highway/Railway corridor and in St Ives. The graph below illustrates

⁵⁰ This Contributions Plan provides (as far as possible within the context of a reasonable contribution rate) for the maintenance of current per capita rates of multi-purpose community space. The future use of that space will be determined following post-occupancy surveys and public consultation prior to the instigation of the implementation process.

⁵¹ This Contributions Plan provides (as far as possible within the context of a reasonable contribution rate) for the maintenance of current per capita rates of multi-purpose community space. The future use of that space will be determined following post-occupancy surveys and public consultation prior to the instigation of the implementation process.

the significant growth in building activity since 2005-2006 as the first 2004-2005 development consents received building approval and commenced construction.

Figure 2.1: Building Approvals for Dwellings in Ku-ring-gai 2004 - 2008⁵²



While it is expected that the current economic climate will not permit comparable figures to be achieved in the short-term, this Contributions Plan mirrors the Metropolitan Strategy in planning for population growth through to 2031. Development activity is cyclical and this is a long-range plan. It is characteristic of the process of redevelopment in an established area that there are periods of high growth and periods of slow growth.

There remains a significant undersupply of dwellings to meet demand in Sydney which will only be exacerbated in the short-term. The National Housing Supply Council's *2008 State of Supply Report* released in March 2009 indicated a shortage of 85,000 dwellings in NSW in June 2008 and commented that this shortfall was likely to be in the order of 203,000 dwellings by 2013.

The NSW rental market is already extremely tight with vacancy levels at 1.6% in June 2007⁵³. Continued undersupply in new dwellings will only exacerbate this situation. Ultimately investors will be encouraged to return to the residential market.

While the present stage of the economic cycle may affect the pace of some infrastructure provision (especially works-in-kind), with timely apportioned council spending and cash-flow management, this Contributions Plan is designed to ride out the inevitable fluctuations in the cyclical residential and non-residential markets. Indeed this is the time for government of all levels to be investing in the infrastructure that will support future development.

2.9 Residential Development Potential and Trends

The rate of realisation of the latent development potential envisaged by Environmental Planning Instruments will vary significantly over the life of the Contributions Plan due to stages in the economic cycle.

⁵² Source: Building Activity, Australia; Australian Bureau of Statistics. Figures for 2008/2009 are not yet available at the time of drafting this Contributions Plan.

⁵³ Australian Bureau of Statistics: NSW in Focus: Housing; June 2008 reissue

2.9.1 New Dwelling Forecasts

This Contributions Plan generally aligns with the *Draft Metropolitan Strategy* which provides a requirement for Ku-ring-gai Council to accommodate a minimum of 10,000 additional achievable dwellings between 2004 and 2031. The table below represents the mid-range scenario of likely development in the Local Government Area from all potential sources.

Figure 2.2: Estimated Nett Additional⁵⁴ Dwellings in Ku-ring-gai 2004 - 2031

Area	Town Centres LEP	LEP 194 / 200	Other	Total
St Ives	1,800	-	-	1,800
Turramurra	1,422	-	-	1,422
Pymble	740	-	-	740
Gordon	1,959	-	-	1,959
Lindfield	1,285	-	345 (UTS)	1,630
Roseville	859	-	-	859
Killara	-	1,127	-	1,127
Wahroonga	-	897	700 (SAN) ⁵⁵	1,597
Roseville to Lindfield	-	51	-	51
Pymble to Turramurra	-	304	-	304
LGA wide	-	-	580 (infill)	580
Total	8,065	2,379	1,625	12,069

2.9.2 Population Growth Forecasts

The dwelling estimates above have been translated into estimated nett additional population growth. These figures take into account the loss of population from properties which are demolished to create a redevelopment site.

Figure 2.3: Estimated Nett Additional Population Growth in Ku-ring-gai 2004 - 2031

Area	Nett Additional ⁵⁶ Population
St Ives	3,104
Turramurra	2,419
Pymble to Turramurra	521
Pymble	1,263
Killara	1,907
Gordon	3,272
Lindfield	2,200
Lindfield - UTS	621
Lindfield to Roseville	81
Roseville	1,441
Wahroonga	1,529
Wahroonga - SAN	1,260
LGA wide (incremental in-fill development)	1,430
Total	21,048

⁵⁴ Nett additional dwellings means new dwellings constructed less existing dwellings demolished.

⁵⁵ It should be noted that the SAN figure is, like the title to the table states, estimated nett additional dwellings. The total estimated numbers provided for by the concept plans and widely exhibited include a significant number of existing dwellings and non-private dwellings such as student accommodation and nursing home beds.

⁵⁶ Nett additional population means that the population lost as a result of the demolition of larger dwellings for redevelopment has been taken into account in these figures.

Area	Nett Additional ⁵⁶ Population
Total North	10,954
Total South	10,094

As Australia moves out of the present economic slow-down with the concomitant potential for domestic housing interest rates to rise, with the end of the new homebuyers grant but the first indications of investors returning to the market, and with the on-going existence of some backlog of vacant recently completed new housing stock in Ku-ring-gai against an overall shortfall of housing in Sydney generally, the likely roll-out of development and population growth over five-year periods to 2031 remains most uncertain. Accordingly, no five-yearly estimates of growth are included in this Contributions Plan. Ku-ring-gai Council will continue to monitor the rate of development as part of the process of managing the development contributions system and roll out the works programme accordingly in light of the priorities and estimated timing indicated therein.

Figure 2.4: Population Growth in Ku-ring-gai 2004 - 2031

Year ending 30 June	Estimated Resident Population for Ku-ring-gai ⁵⁷	Growth
2004	106,620	
2005	105,579	- 1,041
2006	105,103	- 476
2007	106,135	+ 1,032
2008	108,135	+ 2,000
2031	126,151	+ 18,016

The table above illustrates the population growth arising from development commencing in 2004, arriving after the 2006 census continuing to demonstrate a sharp climb resulting from intense activity that cannot be sustained following the end of the economic boom period. More moderate rates of development of available stock is anticipated over the short to medium term, slowing towards the end of the development period as the better located sites have been taken up.

Total growth from the commencement of the population growth from 2004 development (population arriving after construction completion so 2006) = 21,048

Total growth from the effective date of the *Ku-ring-gai Town Centres Development Contributions Plan 2008* = 18,016

2.9.3 Forecasting Non-Private Dwelling Development

Ku-ring-gai Local Government Area has a significant older population and, until medium density development was permitted under LEP 194, most development in Ku-ring-gai was SEPP5 Seniors Living⁵⁸ development. Ku-ring-gai Council continues to receive development applications for new or reconfigured accommodation for older persons from active older people through to nursing home accommodation.

⁵⁷ Estimated Resident Population Figures are issued by the Australian bureau of Statistics approximately one year in arrears and are subject to revision until after the following five-yearly census. This means that 2007 and 2008 figures are preliminary only and will not be finalised until after the release of data from the 2011 census.

⁵⁸ This is the historic title of the policy that is currently known as *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*

Additionally, Ku-ring-gai Council also has a number of residents living in staff accommodation such as nurses' quarters and in boarding schools. Many of these types of non-private dwellings provide accommodation for active people who are able to participate fully in community life and use the facilities which council provides for all its residents. More details on this type of dwelling are provided in the demography section at **2.15.5 Non-Private Dwellings**.

It is not possible to scientifically project whether the numbers of non-private dwellings will grow or remain stable over the life of this Contributions Plan as this is subject to the development decisions of individual companies however recent applications for development, as well as some preliminary concept plans, have foreshadowed reconfigurations of on-site accommodation mixes between private dwellings, serviced accommodation and non-private dwellings. Unless all types of residential development are included within this Contributions Plan it will not be possible to accurately assess nett additional population demand arising from such a site and, as such, it may not be possible to provide due credit for existing development.

Accordingly this Contributions Plan provides for a contribution rate for non-private dwellings which also, conversely, provides for a credit if such accommodation is redeveloped. This does not preclude any proponent making a merit case for developments that provide low-cost accommodation for vulnerable people for a formal exemption from the requirement for making a contribution under this Contributions Plan. All such submissions will be considered on their individual merits.

2.10 Residential Occupancy Rates

The demand for facilities, amenities and services has been calculated on a per capita basis. In practice, contributions are charged on the basis of dwelling types. The amount attributable to each type of dwelling unit is the rate per person multiplied by the average occupancy rate for that type of dwelling. It is important to note that occupancy rates can alter over time and will be subject to review at each review of the Contributions Plan.

Dwelling Houses⁵⁹

2 bedrooms (or less) separate dwelling house: 1.9 persons/dwelling
3 bedroom separate dwelling house: 2.6 persons/dwelling
4 bedrooms (or more) separate dwelling house: 3.3 persons/dwelling

Units, villas and townhouses⁶⁰

Studio/bedsit dwellings: 1.0 persons/dwelling
1 bedroom dwelling: 1.2 persons/dwelling
2 bedroom dwellings: 1.7 persons/dwelling
3+ bedroom dwellings: 2.1 persons/dwelling
Seniors Living: 1.3 persons/dwelling

New Lot Subdivision

Equal to a 4+ bedroom dwelling house: 3.3 persons/dwelling

⁵⁹ Occupancy rates for dwelling houses are derived from the 2006 Census as reported by SGS Economics and Planning in *Ku-ring-gai Development and Demographic Forecasts May 2008*.

⁶⁰ Occupancy Rates for medium to high density development have been extrapolated from *Ku-ring-gai Development and Demographic Forecasts* by SGS Economics and Planning May 2008 as at 2011 with the exception of Seniors Living which is derived from post-occupancy surveys.

Non-Private Dwellings

Residential non-private dwellings such as institutions, hostels, boarding houses, nurses' accommodation, seminaries, boarding schools and the like will be assessed in accordance with the number of persons intended to be resident on the basis of one resident per bed as well as on their individual merits as presented in the Statement of Environmental Effects. Applicants for low cost accommodation should specifically refer to sections 1.25 -1.33 concerning the application of this Contributions Plan.

2.11 Commercial Floorspace and Employment Projected Growth

The *Ku-ring-gai & Hornsby Subregional Employment Study*⁶¹ analysed the forecast demand for business development and employment in the area. The key findings for Ku-ring-gai from that report are summarised as follows:

Strong forecast growth in property and business services: This sector displays very strong growth in Ku-ring-gai for the period 2006-2031. In line with forecast employment growth, demand for floorspace from 'Property and Business Services' is high at 49,428m² over the 2006-2031 period. The next highest in terms of floorspace demand comes from 'Retail and Trade' sector with forecast demand for an additional 15,031m² in the 2006-2031 period⁶²; and

High demand for office space in Ku-ring-gai. Demand for office space is by far the greatest of the usage categories in Ku-ring-gai at 40,185m² over the 2006-2031 period. This is followed by main street retail at 17,728m².

Figure 2.5: Commercial Floorspace in Ku-ring-gai (2006)⁶³

Town Centres & Villages	Floorspace 2006 (m ²)	Neighbourhood Centres and Villages	Floorspace 2006 (m ²)
Gordon	81,750	East Killara	1,137
Lindfield	32,469	East Lindfield	1,309
Pymble	10,012	Eastern Road Turramurra	1,290
Pymble Business Park	96,865	Fox Valley	2,863
Roseville	16,311	Hampden Ave Nth Wahroonga	868
St Ives	32,840	Killara	378
Turramurra	24,952	North Turramurra	4,989
Total	295,199	Princess Street Turramurra	1,328
Total Centre based Commercial Floorspace⁶⁴	336,550m²	Roseville Chase	2,383
		South Turramurra	1,210
		St Ives Chase	927
		St Ives North	2,092
		Wahroonga	11,510
		West Gordon	961
		West Lindfield	4,484
		West Pymble	3,622
		Total	41,351m²

⁶¹ *Ku-ring-gai & Hornsby Subregional Employment Study Final Report May 2008* by SGS Economics and Planning.

⁶² This is in addition to the demand identified for the Hornsby Local Government Area for these two sectors being 56,185m² and 58,946m² respectively.

⁶³ These figures have been derived with reference to *Ku-ring-gai & Hornsby Subregional Employment Study Final Report May 2008* by SGS Economics and Planning, refined by subsequent detailed planning in respect of the six designated Town Centres and Pymble Business Park.

⁶⁴ This total excludes non-centre based employment nodes such as the Sydney Adventist Hospital, the University of Technology and the CSIRO at Lindfield and the like.

2.11.1 Town Centres Planning for Commercial Floorspace and Employment Growth

Planning for employment lands across the town centres through to 2031 considered both the *Ku-ring-gai & Hornsby Subregional Employment Study*⁶⁵ and the *Ku-ring-gai Retail Centres Study 2005*⁶⁶ and reflects the following principles:

- Gordon provides for a significant increase in the retail and commercial floorspace to reinforce Gordon's function as the district centre and to provide for increased population. Gordon has the potential to accommodate approximately 120,000m² of commercial floorspace. A significant growth in office and retail is expected.
- St Ives is planned to be the second centre in Ku-ring-gai. Significant retail and commercial expansion is planned for which will also consolidate the role of St Ives as an employment destination and service centre. St Ives will accommodate up to approximately 57,000m² of commercial floorspace of which a large proportion is expected to be retail floorspace within St Ives Shopping Village.
- Turramurra in the north and Lindfield in the south of the Local Government Area are also secondary centres where some commercial expansion is planned to meet the needs of the growing population surrounding these centres. Land zonings in these two centres are expected to accommodate between 33,000m² and 44,000m² of commercial floorspace respectively.
- The smaller centres of Roseville and Pymble are planned to accommodate approximately 18,000m² and 12,000m² of commercial floorspace respectively.
- Substantial growth is expected in the Pymble Business Park which is targeted for larger employment generating commercial, business and office buildings. This area has potential to accommodate approximately 135,000m² of commercial space. Pymble Business Park adjoins the Pymble Town Centre.

Figure 2.6: Commercial⁶⁷ Floorspace Potential in Ku-ring-gai

Commercial Centre	Existing commercial floorspace 2006 (m ²) ⁶⁸	Total full minimum development scenario (m ²)	Nett additional commercial floorspace (m ²)
St Ives	32,840	56,714	23,873
Turramurra	24,952	33,174	8,221
Pymble	10,012	12,410	2,398
Pymble Business Park	96,865	135,308	38,443
Gordon	81,750	119,975	38,225
Lindfield	32,469	44,155	11,686
Roseville	16,311	18,012	1,701
Total	295,199	419,748	124,547

⁶⁵ *Ku-ring-gai & Hornsby Subregional Employment Study Final Report May 2008* by SGS Economics and Planning.

⁶⁶ *Ku-ring-gai Retail Centres Study 2005* by HillPDA.

⁶⁷ The term 'business' floorspace is a collective term and includes retail, commercial and business park type uses.

⁶⁸ These figures have been derived with reference to *Ku-ring-gai & Hornsby Subregional Employment Study Final Report May 2008* by SGS Economics and Planning, refined by subsequent detailed planning in respect of the six designated Town Centres and Pymble Business Park.

2.12 A Note about Population Projections and Population Forecasts

It is acknowledged without prejudice that there are a number of demographic projections extant which show alternative population growth/decline scenarios for the Ku-ring-gai Local Government Area. These include the RAPP programme available from the Local Government and Shires Association, data available from the Transport Data Centre and, to an extent, until recently, the ABS's own projections.

The difficulty with many broad-based estimates, meaning estimates that are undertaken for large areas of NSW broken down by Local Government Area, is that they tend to apply the methodology of formulating projections by examining what has happened in the past and extrapolating or 'projecting' it forward. This is an effective tactic for areas where the characteristics of growth or decline are established and are not in transition. However, because such projections of past trends rarely take account of current local-specific development trends and if they do, tend to err on the conservative side, they are not an accurate representation of areas that are in transition or turn-around.

As such projection-based methods are much less effective at producing valid forecasts for areas like Ku-ring-gai, which are transitioning from stable slow-growth areas to redevelopment areas. It should be noted that even studies that purport to take account of in-migration will, in the case of Ku-ring-gai, have limited past data with which to extrapolate as virtually all new development approved from late 2004 onwards in Ku-ring-gai reached occupation stage after the 2006 census.

By way of example, the RAPP study commissioned by the LGSA states that the age-specific nett migration levels for each region (2001-2006) were assumed to remain constant over the 2006-2021 period.⁶⁹ Ku-ring-gai's resident population declined slightly between 2001 and 2006 so the RAPP method projects a continuing decline. In fact, Ku-ring-gai's population has increased since the 2006 census as the first new unit developments welcomed their new residents. Over 4,000 new dwellings were approved in the period 2004-2008.

The latest Estimated Resident Population tables from the Australian Bureau of Statistics issued in mid 2009 confirm the change in Ku-ring-gai's Estimated Resident Population from a base of 105,103 as of 2006 (revised figures) to 108,135 in June 2008. At 1.9% growth rate over the past year, this is a similar rate of growth as some of the fastest growing local government areas in Sydney such as Blacktown and Liverpool (1.9%) and The Hills (2%). Ku-ring-gai's population increase of 2,000 persons was equal ninth fastest growing in terms of absolute numbers.⁷⁰

Figure 2.7: Ku-ring-gai Estimated Resident Population 2004-2008

2004	2005	2006	2007	2008
106,620	105,579	105,103	106,135	108,135

In summary, the Ku-ring-gai Local Government Area is no longer a slow-growth area although this will not be formally demonstrated in census data until after the release of data from the 2011 census.

⁶⁹ Methodology for the Projection of Population and Labour Supply in RAPP (RAPP Technical Paper) Developed for the NSW Local Government and Shires Association; Section 4. It should also be noted that this paper contains a disclaimer stating that these projections are not to be considered forecasts.

⁷⁰ Australian Bureau of Statistics publication 3218.0 Regional Population Growth, Australia, 2007-08

2.13 Life of the Contributions Plan

This Contributions Plan mirrors the North Subregional Development Strategy which plans for development from 2004 to 2031. This time period also reflects the change in Ku-ring-gai from a stable area with few applications for development to an active brownfields urban consolidation area. The first LEP permitting medium density development beyond seniors living, LEP 194, was gazetted in 2004 and the first development consents were issued towards the end of that year.

The development horizon envisaged by this Contributions Plan also aligns with Ku-ring-gai Council's Long Term Financial Planning which maintains a twenty year horizon currently from 2010 to 2030, and rolled forward each year.

Due to the inevitable lag between development consent, subsequent building approval, demolition and construction through to habitation, it took until the census year of 2006 however, for the marginal decline in the Estimated Resident Population to stabilise and begin to turn around as the first residents of the new development began to settle. This situation is comprehensively demonstrated by comparing **Figure 2.1: Building Approvals in Ku-ring-gai 2004 – 2008** and **Figure 2.7: Ku-ring-gai Estimated Resident Population 2004-2008**.

At the time of drafting this Contributions Plan, there are a number of latent development approvals which were levied under the previous contributions system which may or may not proceed in the current market and may or may not be superseded by a subsequent approval to reconfigure the proposed development to the emergent markets. Given the relatively recent nature of both the development phase in Ku-ring-gai and the present economic slow-down there is insufficient trend data to indicate what percentage of these developments are likely to proceed. It is characteristic of a development phase that has commenced, that it is impossible to pin-point a definitive status at any given point in time due to the number of developments that are under construction and developments that are approved but which may not proceed. Ku-ring-gai is not a new release area notwithstanding the commencement of the present development phase is relatively recent.

An additional complexity for Ku-ring-gai is that some major items of community infrastructure such as the West Pymble Aquatic Centre, commenced being levied for under a contributions plan in 2004 and must retain that base date in order to ensure that no duplication takes place.

This Contributions Plan manages the above complexities by retaining a development base date of 2004 and a population base date of the 2006 census, by tracking development in accordance with the Metropolitan Strategy (which will also assist the accuracy of future reporting on the achievement of those benchmarks) and by incorporating past but continuing works programmes and the past development that contributed to those works within that life on a pro rata basis. This process facilitates long-term planning for major items of infrastructure over the life of the plan recognising all contributing development from the commencement of the current development phase as well as the existing population. Contributions received under past Contributions plans towards these key infrastructure items support the implicit shortfall arising from developments that have already received approval and paid contributions under past Contributions Plans and will not, therefore, be levied under this Contributions Plan.

Although this is not a Nett Present Value system from a financial point of view as it does not involve estimated inflation and deflation, the approach utilises a key characteristic of an NPV system by analysing the whole development phase – and the demands arising from start to finish. In this way, all contributing demand arising from the current development phase is recognised and contributions are fairly apportioned.

Accordingly, Ku-ring-gai is entering the sixth year of this development phase as represented by the table below. Population growth as a result of that gradually instigated development initially lagged before beginning to turn around following the 2006 census.⁷¹

Figure 2.8 Progression of Ku-ring-gai's current development phase

ERP	Year	
105,579	2005	
105,103	2006	
106,135	2007	
108,135	2008	
Not released	2009	
	2010	↩
	2011	
	2012	
	2013	
	2014	
	2015	
	2016	
	2017	
	2018	
	2019	
	2020	
	2021	
	2022	
	2023	
	2024	
	2025	
	2026	
	2027	
	2028	
	2029	
	2030	
126,151	2031	

2.14 The Demography of Ku-ring-gai

This section outlines the key demographic issues which guide the nature and design of facilities that are to be provided, facilities required in the town centres and the manner in which open space is to be embellished. This demographic data is provided in this section because it is important to demonstration of the causal nexus for all types of key community infrastructure and would be repetitive if featured in each chapter.

The demographic data is based on census data from the Australian Bureau of Statistics and suburb based community profiles produced by .id consulting⁷³.

2.14.1 A Note about Place of Enumeration and Place of Usual Residence

There are two main types of resident population counts utilised by the Census. The first is Place of Enumeration which represents the people who were counted within the Ku-ring-gai Statistical Local Area on census night. This is the basic unit of the census and a large range of demographic information is available for this count. It is on this base, which counts about 100,000 people in Ku-ring-gai, on which most of the demographic analysis in this chapter is based.

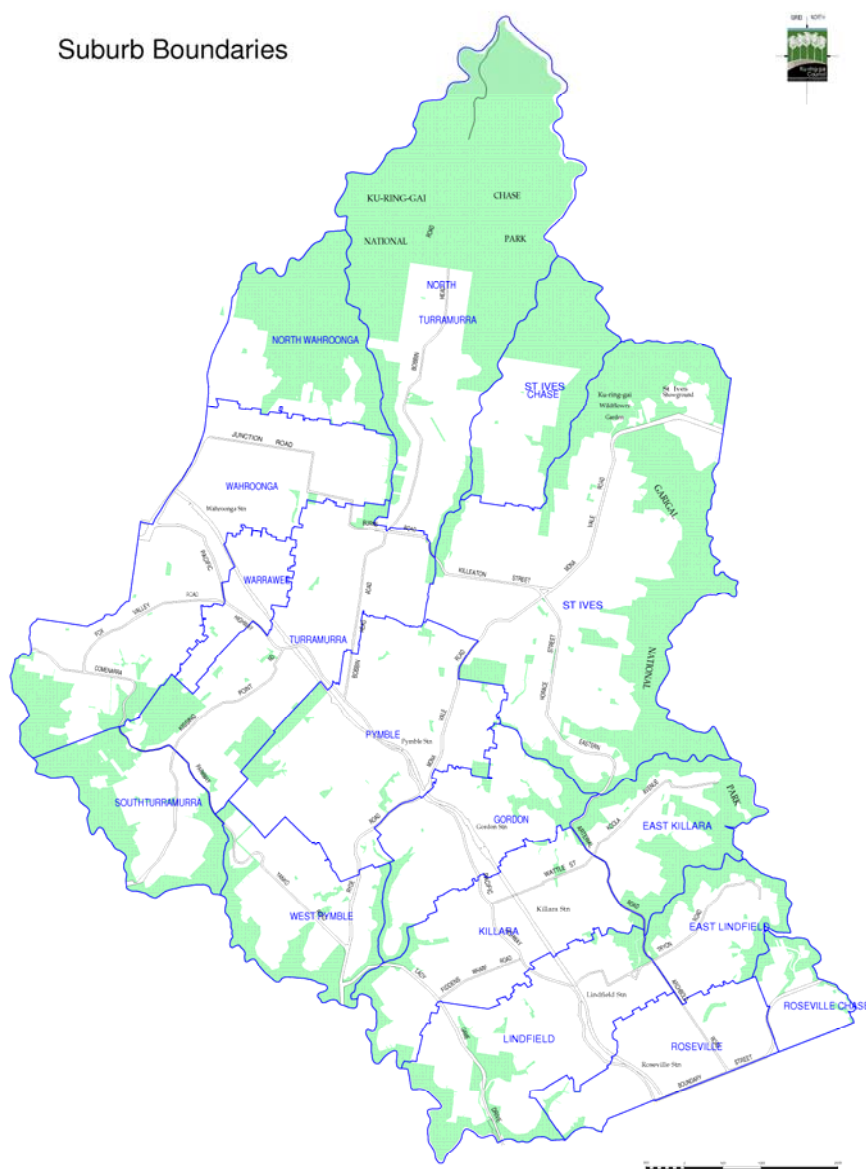
⁷¹ The Estimated Resident Population (ERP) is published by the Australian Bureau of Statistics and issued in arrears. The latest figures are for 30 June 2008 and were released in June 2009. The ERP figures are subject to regular back-casting by the ABS and may be retrospectively changed at some future date. These are the figures that were current at the time this Contributions Plan was drafted.

⁷² Five yearly estimates have not been provided in this Contributions Plan until there is greater certainty on the take-up of existing vacant stock, the rate of recovery from the Global Financial Crisis inclusive of the availability of financing for new developments, and the response to the gazettal of the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* on 25 May 2010. Any projection of the rate of development at this point of time, as distinct from the total amount of development, would be highly speculative.

⁷³.id (informed decisions) is a company of demographers, housing analysts and census data experts who have developed information products specifically for the Australian Local Government market. They also provide extensive consulting services to other Government and commercial organisations: <http://home.id.com.au/>

The second type of population count is Place of Usual Residence from which the Estimated Resident Population is derived. This collects people who were away from home on census night and puts them back in the area where they actually live. This is the source of the figure of 106,000 residents for Ku-ring-gai in 2006 quoted in the North Subregional Strategy. This figure has, in fact, since been revised downwards by the Australian Bureau of Statistics to 105,000 persons in 2006 after the issue of that document. Unfortunately, only a limited range of demographic data is accessible based on Place of Usual Residence. Accordingly it is less useful for detailed comparative demographic analysis but remains valid for estimates of total population. Where statistics from place of enumeration are required to relate to statistics from place of usual residence, percentages rather than absolute figures are used.

Figure 2.9: Suburbs of Ku-ring-gai Local Government Area



2.14.2 Age Structure of Ku-ring-gai Residents

From the table overleaf it can be seen that, up until the 2006 census, Ku-ring-gai's population had been reasonably demographically stable for the past fifteen years with only marginal changes in individual age groups.

There has been a marginal increase in the overall number and proportion of infants as well as in young school age children whereas the number of young people has declined slightly. Young adults, in particular, have declined as a percentage of the total population. Adults in the family stages are stable with significant numbers of older adults as a proportion of the population. Age-groups can be grouped into demographic life-stages to assist in understanding the need for and use of different types of Council-provided facilities.

Figure 2.10: Ku-ring-gai Age Structures⁷⁴

Age Cohorts	2006	2006	2001	1996	1991	1991
	%	#	#	#	#	%
0 to 4	5.27%	5,238	5,387	4,935	4,951	4.99%
5 to 11	10.42%	10,354	10,413	9,474	9,709	9.79%
12 to 17	10.27%	10,210	10,051	10,440	11,164	11.25%
18 to 24	8.70%	8,648	9,567	10,068	11,093	11.18%
25 to 34	6.85%	6,809	8,003	8,526	8,598	8.67%
35 to 49	21.99%	21,857	22,084	22,053	22,804	22.99%
50 to 59	14.16%	14,071	14,040	12,746	11,534	11.63%
60 to 69	9.50%	9,443	8,418	8,636	9,543	9.62%
70 to 84	10.00%	9,932	9,826	9,159	8,255	8.32%
85 and over	2.84%	2,823	2,365	1,941	1,552	1.56%
Total	100.00%	99,385	100,154	97,978	99,203	100.00%

The table below illustrates the age structure of the key suburbs that make up the Ku-ring-gai Local Government Area. In terms of overall numbers, there are significant concentrations of most age-groups distributed throughout Ku-ring-gai which is indicative of an established area.

Figure 2.11: Life Stages in Ku-ring-gai 2006 Census⁷⁵

Suburbs	Infants 0-4	Children 5-17	Adults 18-64	Mature adults 65-84	Senior adults 85+	Total	%
Gordon	200	1,020	3,061	692	254	5,227	5.26%
Killara / East Killara	502	2,089	5,979	1,351	229	10,150	10.22%
Lindfield / East Lindfield	646	2,403	6,455	1,457	461	11,422	11.50%
Pymble / West Pymble	822	3,218	8,200	1,779	291	14,310	14.40%
Roseville / Roseville Chase	530	1,668	4,724	969	197	8,088	8.14%
St Ives / St Ives Chase	834	3,433	9,569	2,662	314	16,812	16.92%
Turramurra / Nth & Sth	967	3,236	9,783	3,069	759	17,814	17.93%

⁷⁴ Data Source: Community Profiles for Ku-ring-gai LGA produced by idconsulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

⁷⁵ Data Source: Community Profiles for Ku-ring-gai LGA produced by idconsulting utilising data from the five yearly national census from the Australian Bureau of Statistics. Numeric discrepancies between this table and the preceding table are primarily due to the respective source data because suburb data is built from small areas counts (collector districts) which include figures that have been rounded to avoid identifying individuals. LGA figures are built from raw data and do not include rounded figures.

Suburbs	Infants 0-4	Children 5-17	Adults 18-64	Mature adults 65-84	Senior adults 85+	Total	%
Turrumurra							
Wahroonga / Nth Wahroonga	634	2,754	7,575	1,859	311	13,133	13.22%
Warrawee	92	623	1,366	280	35	2,396	2.41%
Total	5,227	20,444	56,712	14,118	2,851	99,352	100.0%
Ku-ring-gai Percentages	5.3%	20.7%	57.1%	14.2%	2.8%	100.0%	
Sydney Statistical Division Percentages	6.6%	16.9%	64.3%	10.6%	1.6%	100.0%	

Importantly, the table above demonstrates that school aged children make up a significant 20% of the population of Ku-ring-gai with their parents representing a significant proportion of the adult age-group. This compares to the Sydney Statistical Division which shows 16.9% of the Sydney population falls into the school-age population. There are relatively fewer very young children in terms of overall numbers. The 5.3% of the population in Ku-ring-gai compares to 6.6% of the population in the Sydney Statistical Division. The predominant family type in Ku-ring-gai is families with older school-aged children. In terms of overall numbers, there are, in fact, more school age children than people over the age of 65 (20,444 compared to 16,969) and more children in total (25,671).

The next most noteworthy group are the retirees (mature adults) which make up a significant 14.2% of the population of Ku-ring-gai compared to 10.6% of the Sydney Statistical Division. Elderly people at nearly 3% of the population compare to only 1.6% of the population over 85 in the Sydney Statistical Division. Collectively people over the age of 65 make up 17% of Ku-ring-gai's population compared to 12.2% of the Sydney Statistical Division.

2.14.3 Structure of Dwellings

As of 2006, Ku-ring-gai remains a Local Government Area characterised by low density single dwellings but with an increasing proportion of medium to high density dwellings.

Figure 2.12: Structure of Dwellings in Ku-ring-gai 1996-2006 Census⁷⁶

Type of Dwelling	SSD 2006 (%)	KMC 2006 (%)	KMC 2006 (#)	KMC 2001 (#)	KMC 1996 (#)	KMC 1996 (%)
Separate House	57.1%	79.8%	28,853	28,922	28,400	81.3%
Medium Density (<3 storeys)	17.4%	8.0%	2,879	2,711	2,135	6.1%
High Density (3+ storeys)	17.3%	5.5%	2,002	1,805	1,823	5.2%
Caravans, cabins	0.3%	0.0%	6	4	4	0.0%
Other / Not Stated	0.5%	0.1%	52	231	608	1.8%
Subtotal Occupied Private Dwellings	92.6%	93.4%	33,792	33,673	32,970	94.4%
Total unoccupied Dwellings	7.4%	6.6%	2,384	1,864	1,944	5.6%
Total Dwellings	100.0%	100.0%	36,176	35,537	34,914	100.0%

⁷⁶ Data Source: Community Profiles for Ku-ring-gai LGA produced by id consulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

It is important to note that much of the recent development post-dates the 2006 census and will not be recorded by a census until the 2011 census. This is expected to indicate the beginnings of a proportional shift in the dwelling types though single dwelling houses will remain the dominant dwelling type in Ku-ring-gai for the life of this Contributions Plan.

2.14.4 Household Size

The size and nature of households are influenced by the type and location of dwellings and the services and amenities in the Local Government Area. The relative proportions of single dwellings and medium to high density dwellings will continue to shift during the current development phase and will influence the future demographic make-up of local households.

Figure 2.13 Household Size in Ku-ring-gai⁷⁷

Household Size	KMC 2006 [#]	KMC 2006 [%]	SSD 2006 [%]
Lone person households	5,371	16.1%	23.1%
2 person households	9,763	29.2%	31.2%
3 person households	5,336	16.0%	16.9%
4 person households	7,754	23.2%	17.2%
5 person households	3,615	10.8%	7.7%
6+ person households	1,555	4.7%	3.9%
Total households	32,394	100%	100%

The table above demonstrates that the dominant household type in Ku-ring gai is a two-person household followed by the four-person household underlining Ku-ring-gai's two dominant household types of families with older children and retirees or empty-nesters. Compared to the Sydney Statistical Division, Ku-ring-gai features a significant proportion of larger families of 4-5 persons and a much smaller proportion of single person households.

At the time of the 2006 census there were 36,177 dwellings in Ku-ring-gai of which nearly 80% were separate houses. The development of a large number of smaller apartment dwellings - 12,069 dwellings represents just over one-third of the current dwelling stock - has the capacity to significantly alter the present demography in terms of household profiles and place new - and different - demands on council provided infrastructure and services.

2.14.5 Household Structures

The structure of households in Ku-ring-gai is also an important indicator for the provision and delivery of facilities especially community facilities and the design of local parks and civic spaces.

⁷⁷ Data Source: Community Profiles for Ku-ring-gai LGA produced by id consulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

Figure 2.14: Family and Household Structures⁷⁸

Family and Household Types	KMC 2006 (#)	KMC 2006 (%)	SSD 2006 (%)
Couples with child(ren) 15 yrs & under	9,855	35.7%	32.8%
Couples with child(ren) over 15 yrs	6,134	22.2%	16.4%
Total couple with children	15,989	57.9%	49.2%
One parent families with child(ren) 15 yrs & under	922	3.3%	7.8%
One parent families with child(ren) over 15 yrs	1,722	6.2%	7.8%
Total one parent families	2,644	9.5%	15.6%
Couples without children	8,709	31.5%	33.3%
Other families	294	1.1%	1.9%
Total families	27,636	100.0%	100.0%

Family and Household Types	KMC 2006 (#)	KMC 2006 (%)	SSD 2006 (%)
Total family households ⁷⁹	27,216	81.1%	68.6%
Lone person households	5,371	16.0%	21.8%
Group households	407	1.2%	3.9%
Other not classifiable households	577	1.7	5.7%
Total households	33,571	100.0%	100.0%

In this context it is noteworthy that families with children make up a high 67.5% of family households in Ku-ring-gai being slightly higher than the 64.9% in the Sydney Statistical Division. Families generally, including couples without children, make up a very high 81.1% of households in Ku-ring-gai. Ku-ring-gai also features a significant proportion of people living alone although lower than the Sydney Statistical Division overall. In Ku-ring-gai these households are more likely to be elderly persons than in other areas of Sydney.

2.14.6 Non-Private Dwellings

While there are relatively few residents of non-private dwellings in Ku-ring-gai, none-the-less these residents are also members of the community and need to be considered in the planning and provision of services and amenities.

Some non-private dwellings are provided as stand-alone accommodation like a boarding house or hostel. In Ku-ring-gai, a number of properties incorporate both private and non-private dwellings. For example retirement villages may contain self-contained dwellings for active over 55s as well as serviced accommodation like hostels as well as nursing home beds.

Other properties may include non-private dwellings with other uses such as nurses' accommodation with a hospital complex; staff quarters within a business or institution; student accommodation within a school or tertiary establishment; and the like.

⁷⁸ Data Source: Community Profiles for Ku-ring-gai LGA produced by id consulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

⁷⁹ It should be noted that there are some households which include more than one family accounting for the apparent discrepancy between families and family households.

Figure 2.15: Ku-ring-gai Residents of Non-private Dwellings 2006 Census⁸⁰

Type of Non-Private Dwelling	Males	Females	Persons
Accommodation for the retired or aged (not self-contained)	105	532	637
Boarding house, private hotel	10	4	14
Boarding school	143	344	487
Childcare institution	4	3	7
Convent, monastery, etc	32	14	46
Corrective institution for children	0	0	0
Hostel for homeless, night shelter, refuge	5	6	11
Hostel for the disabled	0	0	0
Hotel, motel, bed and breakfast	22	11	33
Immigration detention centre	0	0	0
Nurses' quarters	38	124	162
Nursing home	127	460	587
Other and not classifiable ⁸¹	9	18	27
Other welfare institution	0	0	0
Prison, corrective institution for adults	0	0	0
Private hospital (not psychiatric)	214	277	491
Psychiatric hospital or institution	0	0	0
Public hospital (not psychiatric)	13	35	48
Residential college, hall of residence	0	0	0
Staff quarters	9	5	14
Not stated	0	0	0
Total	731	1,833	2,564

Many of these listed types of non-private dwellings provide accommodation for active people who are able to participate fully in community life and use the facilities which council provides for all its residents. Conversely it is acknowledged that not all residents of non-private dwellings will place a demand on Council's services and facilities. By way of example, the public hospital listed in this table is a palliative care facility. In the case of levying and crediting these types of accommodation, the attention of applicants is drawn to section dealing with the limited opportunities for merit exemptions from this Contributions Plan.

2.14.7 Household Mobility

The table below demonstrates that Ku-ring-gai had a relatively stable population with a total of 69.2% persons having lived in Ku-ring-gai for over five years (at the same or different addresses).

It is noted that the 2006 census effectively predates the completion and occupation of virtually the new dwellings that were developed following the gazettal of *Ku-ring-gai Local Environmental Plan 194* and census information from residents of these properties will not be captured until the 2011 census. The information in this information is therefore likely to change over the life of this Contributions Plan and will need to be updated at each review since it has implications for the facilities and services needed to integrate new residents into the community.

⁸⁰ Data Source: Ku-ring-gai Local Government Area Statistics 2006 Census; Australian Bureau of Statistics.

⁸¹ The other and not classifiable category has an explanatory note to the effect that it includes ski lodges and backpacker hostels. In the case of Ku-ring-gai, while the assumption is not verifiable, it is considered more likely to refer to the Glengarry Girl Guide Centre.

Figure 2.16: Ku-ring-gai residents between the 2001 and 2006 Census⁸²

Movement 2001-2006	Number	%
Same address 5 years ago	59,890	59.2%
Moved within Ku-ring-gai	10,076	10.0%
Moved to Ku-ring-gai from elsewhere in NSW	13,894	13.7%
Moved to Ku-ring-gai from elsewhere in Australia	1,575	1.6%
Moved to Ku-ring-gai from another country	6,795	6.7%
Moved to Ku-ring-gai – no further information	243	0.2%
NA/Not Stated	8,609	8.6%
Total	101,082	100.0%

Ku-ring-gai Council conducted a survey of residents of newly constructed dwellings and summary information from this survey as reported in **2.15 Ku-ring-gai: Emergent demographic trends** following this section. This suggests that 54.4% of respondents had moved to the newly constructed dwelling from elsewhere in Ku-ring-gai and a further 20.1% had moved to the newly constructed dwelling from elsewhere on the north shore. Only 13.4% came from elsewhere in Sydney, 9% had come from elsewhere in Australia (including elsewhere in NSW) and 3% had come directly from overseas. The new residents survey did include a number of SEPP5 developments which are less likely to make up such a large proportion of future developments accordingly Ku-ring-gai will need to continue to monitor the source of its new residents over time.

2.14.8 The Ku-ring-gai Workforce and the Ku-ring-gai Labour Force

The term 'workforce' refers to people who work in Ku-ring-gai regardless of where they live. The term 'labour force' refers to people who live in Ku-ring-gai who are also employed or looking for work. A person may be both part of the labour force and the workforce if they are employed in the Local Government Area where they live.

Figure 2.17: Area of Employment Statistics⁸³

Ku-ring-gai Employees – Area of Residence			Ku-ring-gai Residents – Area of Employment		
Ku-ring-gai	12,189	44.5%	Ku-ring-gai	12,189	25.9%
Hornsby	4,297	15.7%	Sydney	10,537	22.4%
Warringah	1,103	4.0%	Willoughby	4,419	9.4%
Baulkham Hills	1,045	3.8%	North Sydney	3,201	6.8%
Ryde	933	3.4%	Ryde	2,501	5.3%
Gosford	876	3.2%	Hornsby	2,160	4.6%
Willoughby	815	3.0%	Warringah	1,339	2.8%
Pittwater	519	1.9%	Parramatta	974	2.1%
Blacktown	504	1.8%	Lane Cove	739	1.6%
North Sydney	489	1.8%	Baulkham Hills	670	1.4%
Other Areas	4,648	17.0%	Other areas	8,343	17.7%
Total Employees of Ku-ring-gai	27,418	100.0%	Total Employed Residents	47,072	100.0%

The 2006 census recorded that a total of 27,417 people were employed within the Ku-ring-gai Local Government Area. A total of 47,072 residents of Ku-ring-gai were employed or looking for work. Of these two categories a total of 12,189 reported both

⁸² Data Source: Community Profiles for Ku-ring-gai LGA produced by id consulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

⁸³ Data Source: Community Profiles for Ku-ring-gai LGA produced by id consulting utilising data from the five yearly national census from the Australian Bureau of Statistics.

living and working within Ku-ring-gai. As such, 15,228 persons commute from outside Ku-ring-gai to come to work and 34,883 persons leave Ku-ring-gai to go to work.

In percentage terms a very significant proportion (44.5%) of Ku-ring-gai's employees also live in Ku-ring-gai. While the following table illustrates that the number of employees who work from home is high compared to the Sydney Statistical Division, it is not a large proportion of the total number of persons who both live and work in Ku-ring-gai.

The above table demonstrates that a significant number of journeys to work are from either within Ku-ring-gai or from adjoining statistical local areas. The high proportion of those trips made by car by both the workforce and the labour force (as shown in the table below) underlines the potential impact of car-related travel resulting from intensifying development.

Figure 2.18: Labour force Journey to Work Statistics

Main Mode of Transport – Journey to Work	KMC Number	KMC Percentage	SSD Percentage
Train	8,915	19.2%	12.3%
Bus	704	1.5%	5.4%
Light Rail or Ferry	7	0.0%	0.3%
Taxi	104	0.2%	0.3%
Car – as driver	23,747	51.2%	53.7%
Car – as passenger	1,616	3.5%	5.3%
Truck	179	0.4%	1.3%
Motorbike	126	0.3%	0.5%
Bicycle	139	0.3%	0.6%
Walked only	1,017	2.2%	4.2%
Other	290	0.6%	0.9%
Worked at home	3,885	8.4%	3.9%
Did not go to work	4,899	10.6%	9.5%
Not Stated	710	1.5%	1.9%
Total	46,338	100.0%	100.0%

While one of the key rationales for concentrating development around railway stations is to increase the modal share of trains, it must be noted that a large proportion of current journeys both into and out of Ku-ring-gai are cross-suburban which are not well supported by public transport.

Figure 2.19: Workforce Journey to Work Statistics

Main Mode of Transport – Journey to Work	KMC Workforce	KMC %
Train	1,978	7.2%
Bus	174	0.6%
Ferry	0	0.0%
Tram (includes light rail)	0	0.0%
Taxi	45	0.12%
Car, as driver	15,560	56.8%
Car, as passenger	1,184	4.3%
Truck	116	0.4%
Motorbike/scooter	82	0.3%
Bicycle	60	0.2%
Other	209	0.8%

Main Mode of Transport – Journey to Work	KMC Workforce	KMC %
Walked only	900	3.3%
Total	20,308	74.1%
Worked at home	3,489	12.7%
Did not go to work	3,333	12.2%
Method of travel not stated	282	1.0%
Total	27,412	100.0%

Ku-ring-gai features a high proportion of commuters who drive to work however this percentage is still less than the proportion of drivers in the Sydney Statistical Division. Characteristic of its location along a major train line, a high proportion of Ku-ring-gai's commuters use the train but relatively fewer commute by bus. A significant proportion of people worked at home in 2006 comparable in number and percentage terms to home-based workers in 2001.

The *Ku-ring-gai & Hornsby Subregional Employment Study*⁸⁴ noted that both Hornsby and Ku-ring-gai have a very high incidence of home-based work compared with other areas within the Sydney Greater Metropolitan Region. In Ku-ring-gai the highest incidence of home-based work occurs in the 'Professionals' and 'Associate Professionals' categories. Consultation in association with this study indicated that this was a business choice rather than indicative of a lack of suitable business space.

Reference to the workforce tables indicates that a significant proportion of Ku-ring-gai's regular workforce either did not go to work or worked at their own homes on the day of the 2006 Census (Tuesday 8 August 2006). This must be read in conjunction with the statistics that indicate that 44.5% of Ku-ring-gai's workforce lives in Ku-ring-gai.

2.14.9 Ku-ring-gai Employment

The table on the following page identifies the key types of businesses employing people within Ku-ring-gai. The field of employment with the largest employee numbers is health care and social assistance which is likely to continue with the consolidation of the Sydney Adventist Hospital Site.

The next most significant business field in terms of employment numbers is education and training reflecting the number of educational establishments: preschool, primary, secondary and tertiary within Ku-ring-gai. Professional, scientific and technical services are the third largest employment field which may be influenced in part by the presence of the CSIRO's National Measurement Laboratory at West Lindfield. Retail trade is the fourth largest employment field.

Together, the top four employment types account for nearly 57% of employment by type in Ku-ring-gai.

The table below as well as the following section on small businesses has important implications for the development of additional commercial floorspace in Ku-ring-gai. Ku-ring-gai Council is currently developing an Economic Development Strategy to support and guide future business location in the Local Government Area.

⁸⁴ SGS Economics and Planning Ku-ring-gai & Hornsby Subregional Employment Study May 2008

Figure 2.20: Employment by Industry within Ku-ring-gai (Place of Work)

Industry⁸⁵	Males	Females	Persons	%
Agriculture, forestry, fishing	44	30	74	0.3%
Mining	18	6	24	0.1%
Manufacturing	417	393	810	2.9%
Electricity, gas, water and waste services	59	11	70	0.3%
Construction	1,443	323	1,766	6.4%
Wholesale Trade	714	720	1,434	5.2%
Retail Trade	1,409	1,506	2,915	10.6%
Accommodation and food services	761	777	1,538	5.6%
Transport, postal and warehousing	384	164	548	2.0%
Information media & telecommunications	404	356	760	2.8%
Financial and insurance services	478	450	928	3.4%
Rental, hiring and real estate services	281	403	684	2.5%
Professional, scientific & technical services	2,162	1,500	3,662	13.4%
Administration and support services	329	406	735	2.7%
Public administration and safety	437	274	711	2.6%
Education and training	972	3,094	4,066	14.8%
Health care and social assistance	988	3,944	4,932	18.0%
Arts and recreation services	142	169	311	1.1%
Other services	415	607	1,022	3.7%
Inadequately described	208	169	377	1.4%
Industry of employment not stated	24	27	51	0.2%
Total	12,089	15,329	27,418	100.0%

2.14.10 Ku-ring-gai Businesses

The Ku-ring-gai Statistical Local Area has a large number of small and very small businesses according to the Australian Bureau of Statistics⁸⁶.

Of 12,534 individual businesses as at June 2008, 7,188 (57.3%) were classified as non-employing businesses. A further 3,909 (31.2%) employed between 1 and 4 persons and the remaining 1,437 (11.5%) employed 5 or more people.

Over the three years 2006-2008 inclusive, 5,457 new businesses were commenced in Ku-ring-gai and 5,349 businesses left Ku-ring-gai.

2.14.11 Motor Vehicles for Ku-ring-gai Households

Access to motor vehicles provides information on the usage of the street network for both essential and discretionary travel and the potential impact of additional people. Information from the 2006 census indicates that nearly half of dwellings in Ku-ring-gai have at least two motor vehicles and over 95% of households have at least one motor vehicle.

⁸⁵ It should be noted that an industry category may also include administration, governance and research services supporting that industry and does not necessarily mean direct activity in that industry.

⁸⁶ National Regional Profile: Ku-ring-gai Statistical Local Area

Figure 2.21: Access to Motor Vehicles

Number of motor vehicles ⁸⁷ per dwelling	Dwellings	Percentage
None	1,501	4.7%
1 motor vehicle	9,914	30.8%
2 motor vehicles	15,044	46.7%
3 motor vehicles	4,105	12.7%
4+ motor vehicles	1,660	5.1%
Total	32,224	100.0%

This information is further clarified by the motor vehicle census which recorded 66,274 registered motor vehicles in Ku-ring-gai as of 31 March 2006. Of these, the majority, 60,811 (91.8%), were passenger vehicles, with 2,866 light commercial vehicles (4.3%) and 1,057 motorcycles (1.6%). The remaining 2.3% includes 806 larger commercial vehicles, 684 buses and 50 campervans.

The importance of the private motor vehicle is demonstrated by the Key Transport Indicators for Ku-ring-gai.⁸⁸

Trips per average weekday: 450,000

Trips per average weekend day: 422,000

Reason for trips:

Commuting: 57,000

Work related business: 25,000

Education/childcare: 41,000

Shopping: 74,000

Personal business: 44,000

Social/recreation: 98,000

Serve passenger: 95,000

Other: 16,000

Mode of Transport for Trips:

Vehicle Driver: 51.8%

Vehicle passenger: 21.7%

Train: 6.1%

Bus: 2.2%

Walk (only): 17.0%

Other: 1.2%

Collectively, this information underlines the fundamental importance of the continuing functionality of the local road network for private vehicle travel and for pedestrians, as well as access to train based public-transport for both private vehicles and pedestrians.

2.15 Ku-ring-gai: Emergent demographic trends

Whether the current demography of the area will be continued is of key importance to estimating the future demography and, hence, future demands for specific facilities

⁸⁷ The ABS definition of motor vehicles excludes motorbikes and scooters but includes company vehicles kept at home.

⁸⁸ Key Transport Indicators by Statistical Local Area of Residence 2005 (being the most recent available) from the Transport Data Centre.

and amenities. While Ku-ring-gai has now been experiencing increasing multi-unit development approvals commencing from 2004, virtually all this development largely came onto the market after the 2006 census.

As part of the *Community Facilities Strategy* undertaken by Elton Consulting, a survey was undertaken of the residents of all new developments that had been completed and strata titled since 2004 (the majority since the 2006 census). This survey achieved a very statistically significant response rate of over 1 in 4 (27%). The following demographic trends were indicated⁸⁹:

- 54.4% of respondents had moved to the newly constructed dwelling from elsewhere in Ku-ring-gai.
- A further 20.1% had moved to the newly constructed dwelling from elsewhere on the north shore.
- Only 13.4% came from elsewhere in Sydney, 9% had come from elsewhere in Australia and 3% had come directly from overseas.
- Downsizing was the reason for the choice of dwelling given by 54.5% of respondents and the appeal of the area by 35%.
- Being close to family (15.2%) and housing affordability (13.7%) were other key reasons cited.
- Proximity to employment (6.1%) and schools (5.1%) was also cited.
- 11.9% of respondents cited other reasons including proximity to amenities and services including trains, shops and medical services; and a new, level, low maintenance dwelling with no garden to tend.⁹⁰
- All but 1.1% of respondents lived in new medium to high density developments.⁹¹
- 32% of respondents lived in Seniors Living housing.
- The residents of new developments were predominantly retirees with 32.8% aged 65-74, 19.5% aged 55-64 and 18.3% aged 75-84 (70.6%).
- Only 7.7% of residents of new housing were under 25 but nearly 20% of residents were adults aged 25-54, the largest of the three 10 year age cohorts being the 25-34 year olds.
- The dominant household type was a couple with no children at home (61.6%) or a single person (22.5%). 11.4% of households included children.
- 20% of people reported caring for a person other than an immediate family member. Of these carers, 85% were caring for at least one grandchild on a regular basis.
- Retired persons comprised 50.9% of adult residents of new dwellings.
- People employed full-time comprised 25.1% of adult residents of new dwellings with part-timers at 13.4%.
- 6.3% of people stated they were not in the workforce and 3.1% of people were studying.⁹²
- 81% of residents of new dwellings spoke only English at home. The remaining 19% represented considerable cultural diversity with no one group predominating.⁹³
- The majority of respondents to the survey fully own their new dwelling (73.1%) with 17.9% having a mortgage. Only 9% of respondents were renting.

⁸⁹ Unless otherwise stated, the given percentages are percentages of people who responded to this question (100%). In a few instances, respondents did not answer every question in the survey.

⁹⁰ Multiple responses were permitted to the question relating to the reason for choice of new dwelling accordingly the percentages do not add up to 100%.

⁹¹ The remaining 1.1% comprises separate houses in the form of dual occupancies that had been strata subdivided. Non strata dual occupancies were not targeted by the survey.

⁹² The remaining 1.2% reported answers such as volunteer, maternity leave and directorships.

⁹³ There were 22 other languages given of which the main were: Cantonese, Korean, Japanese, French, Spanish, Greek, Italian, Russian, Hindi. The remaining languages were spoken by a single household only.

Key observations include:

- The majority of residents of newly completed dwelling in Ku-ring-gai are likely to have down-sized from a larger house in Ku-ring-gai releasing that dwelling onto the market (noting the proportion of respondents that were already living in Ku-ring-gai and who own the new dwelling outright).
- Support for the concept that recent development activity has focussed on the down-sizing retiree market (noting the age of respondents in addition to the responses noted above).
- Early evidence of an emergent market of younger adults and parents with older children (noting the reported employment patterns and reasons for choosing the location).
- A noteworthy number of retirees are caring for grandchildren.

Key implications for Ku-ring-gai include:

- It is probable that continued concentration on the retiree market is likely to be unsustainable at least while the current economic situation continues and that developers will consider further the emergent market of adults in the young to middle age range.
- The young adult market is most likely to require a large mortgage and current entry prices limit accessibility to first home buyer packages.
- In the current stage of the economic cycle, price and value for money are likely to be increasingly important to retirees who have been hardest hit by share market and superannuation losses.
- Many of Ku-ring-gai's literally newly arrived residents (from outside Ku-ring-gai) will be living in the large dwellings vacated onto the market by retirees in the process of down-sizing (who are staying in Ku-ring-gai).
- Due to the cost of housing in Ku-ring-gai, these residents are likely to be second home buyers with older school age children maintaining the importance of the school age demographic in Ku-ring-gai however this trend cannot be formally confirmed until after the release of data from the 2011 census.

While it is acknowledged that this post-occupancy survey was undertaken relatively early in the development cycle and is influenced to an extent by the amount of SEPP5 development that led this development cycle, it is the only possible means of building an indicative picture of the new resident population prior to the 2011 census.

2.16 Key indicators for infrastructure planning in Ku-ring-gai

The key characteristics of the future population compared to the present population which will influence the type and design of the infrastructure planning to be funded, or partly funded, by this Contributions Plan, is summarised as follows:

- Ku-ring-gai is expected to continue to feature a significant ageing population;
- Ageing in place, dwelling downsizing and cyclical renewal as families purchase vacated family homes is expected to continue;
- Ku-ring-gai is expected to continue to feature a significant proportion of families with school aged children especially high school children;
- Younger adults being able to remain in or return to Ku-ring-gai to live as a result of a change in the dwelling mix may be an emergent trend that will be monitored;

- The number of lone person households will need to be monitored especially as the older population continues to age;
- Ethnic mix will need to be monitored;
- Population mobility (frequency) will need to be monitored as well as where new residents are coming to Ku-ring-gai from;
- Inter-censal post-occupancy surveys should be scheduled; and
- Employment statistics including journey-to-work data and new businesses will need to be monitored.

2.17 Summary of Development and Population Growth and Demand

The impact of the estimated development to occur in Ku-ring-gai through to 2031 on in the context of the characteristics above and the consequent demand for specific types of Key Community Infrastructure is detailed in the following sections under their relevant heading.

2.18 Vision for Ku-ring-gai

That: “Ku-ring-gai is a place with infrastructure and facilities that accommodate the needs of the community.”⁹⁴

⁹⁴ *Ku-ring-gai Council Strategic Plan 2030 (Draft).*

Key Community Infrastructure:

Local parks

Local sporting facilities

“park” has the same meaning as in the *Local Government Act* and, in relation to land, means an area of open space used for recreation, not being bushland.

3.0 Overview of Parkland in Ku-ring-gai

Ku-ring-gai is characterised by a bushland setting reflected by the proximity of the three peripheral National Parks: Ku-ring-gai Chase National Park, Garigal National Park⁹⁵ and Lane Cove National Park. These natural areas are concentrated in the catchments of the Lane Cove River, Middle Harbour and Cowan Creek contain a high diversity of native flora and fauna including endangered ecological communities and threatened species.

Council's developed open space consists of three (3) golf courses, seventy-one (71) tennis courts in nineteen (19) locations, an outdoor pool complex at West Pymble, forty-six (46) local sports grounds of varying sizes and facilities which are typically located on the outskirts of the urban area often adjoining, or even within, the bushland and national parks, St Ives Showground and one hundred and seventy nine (179) local parks and public gardens.⁹⁶

There are few parks that could be considered district parks – Bicentennial Park in West Pymble and St Ives Village Green being the only real candidates – and none that do not also act as a local park for their immediate community.

This Contributions Plan does not seek to expand or replicate the provision of any national park or natural bushland, St Ives Showground or specialised parkland areas like the Ku-ring-gai Wildflower Garden. It does not seek to acquire riparian corridors. It does not seek to replicate or expand regional or semi-private open space such as the golf courses.

This Contributions Plan seeks only to maintain a reasonable proportion of the current per capita provision of local open space and public gardens. Although it seeks to embellish some existing land holdings as additional sports grounds and sports facilities, it does not seek to acquire additional land for these facilities. As such, the amount of open space per capita sought by this Contributions Plan has been significantly circumscribed below the current rate of provision of local parks in order to support a reasonable contributions rate.

Attempting to maintain the per capita provision of local open space is important because of geographic nexus. New development in Ku-ring-gai is largely concentrated in or near town centres along the Pacific Highway, St Ives being the only exception. The majority of existing local parks are concentrated around the periphery of the LGA adjoining bushland reserves or in the suburban areas that developed after WWII. They do not provide a local facility for the older commercial and adjoining residential areas where development is actually expected to be concentrated.

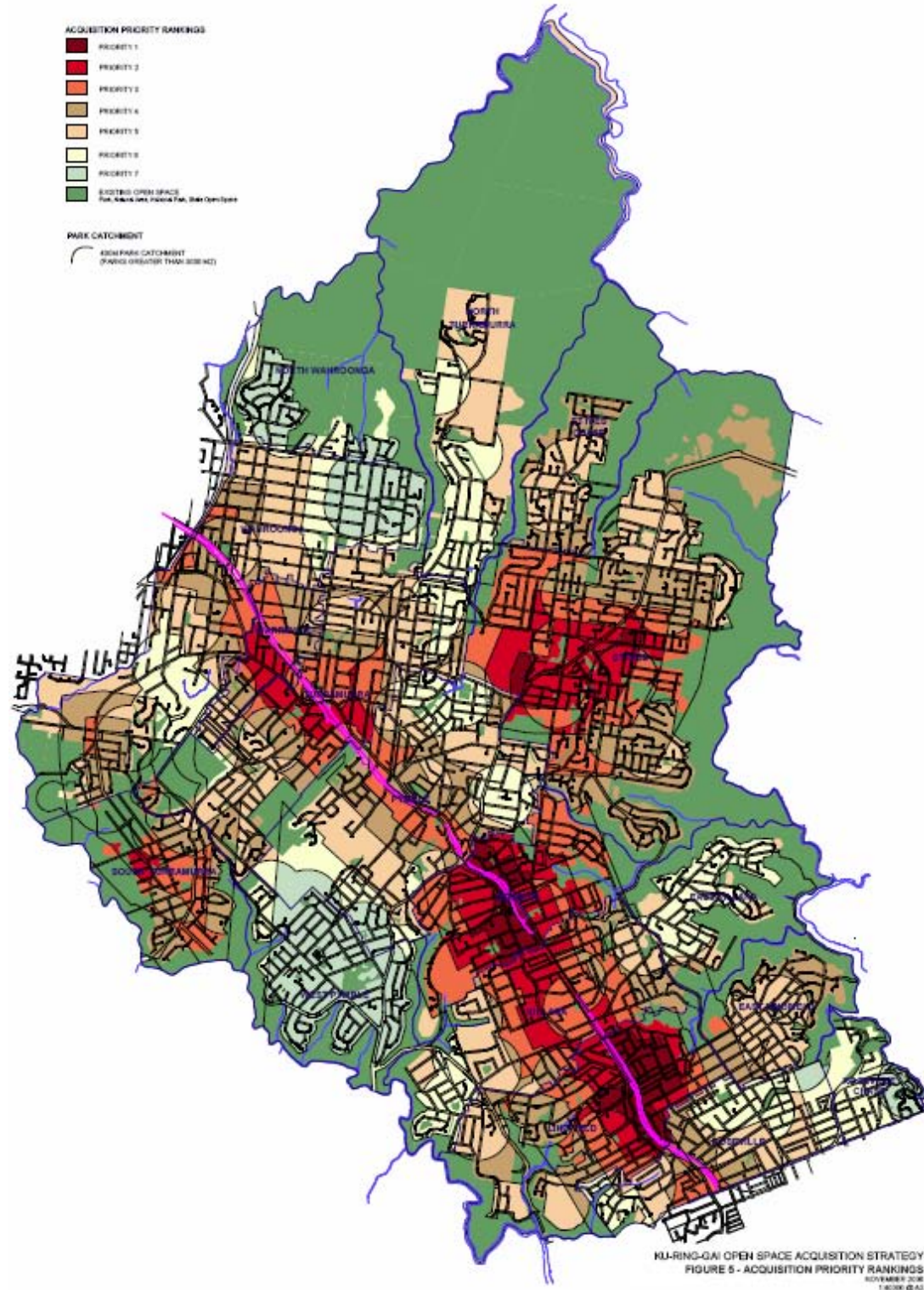
This distribution of local open space is most graphically demonstrated by the priority acquisition map from Ku-ring-gai Council's adopted *Open Space Acquisition Strategy* featured overleaf. Areas of dark red, red and orange indicate Priority 1, 2 and 3 areas which are currently poorly provided for, determined by key criteria including the size, accessibility and useability of any existing parks and reserves relative to the size of the present and future population, current and likely future rate of population growth.

⁹⁵ Garigal National Park is actually classified as local bushland as distinct from a national park in City of Cities (the Metro Strategy); Page 233.

⁹⁶ Data is derived from Ku-ring-gai Council's GIS based Land Management Units (LMUs) based on classifications under the Local Government Act.

The map below clearly demonstrates that the areas identified for concentrated population growth are the least well-served by local open space and most in need of further provision.

Figure 3.1 Priority Open Space Acquisition Map – Open Space Acquisition Strategy



Ku-ring-gai Council's adopted *Open Space Acquisition Strategy 2006* supports and guides the process of identifying and acquiring new open space in Ku-ring-gai. It identifies priorities and sets down principles for the assessment and acquisition of new parks.

3.1 Aims and Objectives

The aims and objectives of Ku-ring-gai's acquisition of land for new parks and embellishment of new and existing parks are as follows:

- To establish in this Contributions Plan the causal nexus between new development and the demand for additional open space;
- To establish in this Contributions Plan the causal nexus between new development and the demand for the embellishment of existing open space;
- To facilitate the assessment and acquisition of additional appropriate open space as efficiently as possible;
- To ensure provision of strategically located open space on a rolling programme of acquisition that meets the geographic and temporal nexus requirements of development contributions under the *Environmental Planning and Assessment Act, 1979*;
- To facilitate a balance between targeted land zoned RE1 Open Space Acquisition and land which is not specifically zoned but is flagged as capable of fulfilling key criteria, with a view to achieving both temporal and geographic nexus; and
- To plan and schedule embellishment of new and existing parks to cater for additional demand.

3.2 Nexus Overview

The works programme embraced by the terms: local parks and local sporting facilities, is essential to maintain the amenity of the local environment within Ku-ring-gai notwithstanding a considerable intensification of development in the area especially around the town centres but also incremental growth throughout the Local Government Area including some key large sites.

It is unreasonable to expect the existing population to suffer a significant progressive and cumulative reduction in access to parks and recreation facilities – and the urban amenity that results – as a result of significant population growth related to increased housing and housing choice through development. It is essential that new development provides for its fair share of new local parkland on a pro rata per capita basis.

Nexus for the provision of parks and civic spaces is further supported by the NSW State Government in acknowledging the impact of both population growth and demographic change: "Population growth and demographic change will continue to create new demands for parks, public places and cultural facilities in the subregion."⁹⁷

The consequential need for additional works is supported in the Key Directions under the North Subregion: Draft Subregional Strategy: "Key Directions: Ensure equitable access to parks and public places for all residents in the subregion."⁹⁸

3.3 Current Open Space Provision

The following sections outline the current level of provision of open space of all types and analyse the specific provision of local parks and public gardens in the Ku-ring-gai Local Government Area.

⁹⁷ North Subregion: Draft Subregional Strategy Page 92

⁹⁸ North Subregion: Draft Subregional Strategy Page 90

3.3.1 Total Open Space Provision in Ku-ring-gai

Approximately 20% of the Ku-ring-gai Local Government Area is covered by the three National Parks that form its natural boundaries to the north, east and west: Ku-ring-gai Chase National Park, Garigal National Park and Lane Cove National Park. These National Parks do not stop abruptly at the urban edge but lead into spines of natural areas following a myriad of natural creek beds and forming key wildlife corridors.

These natural areas that circle the Local Government Area constitute the majority of Ku-ring-gai's greenspace, accounting for 1,142 hectares or nearly 80% of the total greenspace. While these areas are a valuable resource, they do not fulfil the role of local open space nor are located within easy walking distance of the central road and rail spines which dissect the area and around which urban redevelopment is being concentrated.

The table below illustrates the nature of open space in Ku-ring-gai. From this table it can be clearly seen that local parks, public gardens and local sporting reserves make up just 13.8% of all types of open space in the Local Government Area.

Figure 3.2: Total Open Space in Ku-ring-gai

Category	Area in Metres ²	Area in Hectares	% of Total	Metres ² Per Capita
Urban Parks [169] ⁹⁹	614,143.6m ²	61.4ha	4.3%	6.2m ²
Public Gardens [10]	58,661.8m ²	5.9ha	0.4%	0.6m ²
Subtotal Local Parks [179]	672,805.3m²	67.3ha	4.7%	6.8m²
Sports Reserves [46]	1,207,411.2m ²	120.7ha	8.4%	12.1m ²
Tennis Courts [19]	65,469.7m ²	6.5ha	0.5%	0.7m ²
Bowling Clubs [4]	44,347.6m ²	4.4ha	0.3%	0.4m ²
Subtotal Sporting Reserves [69]¹⁰⁰	1,317,228.4m²	131.7ha	9.1%	13.2m²
Sub-total Local Parks and Sporting Reserves [248]	1,990,033.8m²	199.0ha	13.8%	20.0m²
Golf Courses & Precincts [3]	692,962.5m ²	69.3ha	4.8%	7.0m ²
Natural Areas [136]	11,422,833.7m ²	1142.3ha	79.1%	114.9m ²
Community Nursery St Ives [1]	42,424.0m ²	4.2ha	0.3%	0.4m ²
Ku-ring-gai Wildflower Garden Education Centre Precinct ¹⁰¹ [1]	41,510.1m ²	4.2ha	0.3%	0.4m ²
St Ives Showground [1]	252,205.1m ²	25.2ha	1.7%	2.5m ²
West Pymble Swimming Pool [1]	8,531.5m ²	0.9ha	0.1%	0.1m ²
Subtotal District & Other Open Space [143]	12,460,466.8m²	1246.0ha	86.3%	125.3m²
Total	14,450,500.6m²	1445.1ha	100.0%	145.3m²

⁹⁹ Figure includes areas of land recently purchased for new parks from past contributions and awaiting development as parkland.

¹⁰⁰ Local Sports Reserves are classified according to their categorisation in the GIS as at 2008. A few areas have changed classification since past recreational studies.

¹⁰¹ Ku-ring-gai Wildflower Garden is 123 hectares in total however Council's Land Management System categorises the area outside the Education Centre Precinct as a Natural Area called Ku-ring-gai Creek Reserve. Ku-ring-gai Creek Reserve also includes the natural areas surrounding St Ives Showground and the Community Nursery at St Ives. This explains the apparent discrepancy between these figures from the GIS system and the figures in various Management Plans for these facilities (which include portions of the adjoining natural reserve). Note: All figures in this table were sourced from the Geographic Information System and are mutually exclusive. As such any remaining area of the Wildflower Garden, St Ives Showground and the Nursery is counted in the Natural Areas category.

The above table clearly establishes that Ku-ring-gai Local Government Area has just less than 200 hectares in freely accessible local parks, public gardens and local sporting facilities. Council also has a number of specific purpose district facilities including St Ives Showground, Ku-ring-gai Wildflower Garden, the community nursery and West Pymble open air swimming pool as well as some semi-private open space in the form of golf courses which are not included in this figure.

3.3.2 Local Parkland Distribution in Ku-ring-gai

The distribution of local parks by street address appears to vary widely across the suburbs in the Local Government area. While the table below is provided for illustration, in fact many of the formal suburb boundaries¹⁰² encompass quite linear areas which are often bisected by the Pacific Highway and main north railway line. This means that the population is often better served by local parkland that is geographically closer and more accessible but technically in an adjoining suburb. Because of this configuration, it is much more logical to analyse the distribution of open space on a north-south basis and to consider the provision of parks within the Local Government Area as a total entity.

Figure 3.3: Local Urban Parks and Public Gardens

Suburb	Square Metres	2006 ¹⁰³ Population	Per Capita
Wahroonga	54,750.97	11,132	4.92m ²
North Wahroonga	1,906.62	2,017	0.95m ²
Warrawee	3,561.21	2,394	1.49m ²
North Turramurra	31,906.06	3,996	7.98m ²
Turramurra	59,656.71	10,978	5.43m ²
South Turramurra	32,842.70	2,847	11.54m ²
West Pymble ¹⁰⁴	103,479.39	4,834	21.41m ²
Pymble	69,741.71	9,487	7.35m ²
St Ives	87,420.96	13,806	6.33m ²
St Ives Chase	20,280.93	3,001	6.76m ²
Total North	465,547.26	64,492	7.22m²
Gordon	16,245.62	5,228	3.11m ²
Killara	90,516.58	7,360	12.30m ²
East Killara	4,820.90	2,791	1.73m ²
Lindfield	33,176.70	7,986	4.15m ²
East Lindfield	16,867.48	3,441	4.90m ²
Roseville & Chase	45,630.83	8,092	5.64m ²
Total South	207,258.12	34,898	5.94m²
Total Ku-ring-gai	672,805.38	99,390	6.77m²
Total Ku-ring-gai < Bicentennial Park	613,805.38	99,390	6.17m²

¹⁰² For an illustration, refer back to the suburb map in the demography section at the start of Part C: Strategy Plans.

¹⁰³ These figures are the Place of Enumeration Count from the 2006 census rather than the Estimated Resident Population because figures for individual suburbs were required for this table and the Estimated Resident Population is only published to Statistical Local Government Area level.

¹⁰⁴ The amount of open space in West Pymble and, consequently, in the Northern half of the Local Government Area is affected by the only district park over 2.5ha in Ku-ring-gai, Bicentennial Park, which is 5.9ha.

Figure 3.4: Local Parks and the Estimated Resident Population

Suburb	Square Metres	2006 Estimated Resident Population ¹⁰⁵	Per Capita
Total Ku-ring-gai	672,805.38	105,103	6.40m ²
Total Ku-ring-gai < Bicentennial Park	613,805.38	105,103	5.84m ²

Local parks and public gardens range in size from tiny pocket parks barely 200m² in area to the arguably district level Bicentennial Park which is 5.9ha in area. Bicentennial Park is the only park in Ku-ring-gai larger than 2.5ha which is performing a district level function, as distinct from the sports reserves discussed overleaf which are already excluded from the assessment of walkable local open space provision above.

Of the 169 local parks in Ku-ring-gai, more than half are less than 2,000m² in size and 93% are less than one hectare. In its provision of additional open space, Ku-ring-gai is looking at expanding existing smaller parks to provide for a larger range of uses as well as acquiring new parks of varying sizes.

By deleting the only arguably district level park being the 5.9ha Bicentennial Park from the West Pymble figures the per capita rate of local open space for West Pymble is reduced to 9.09m² per capita, the Total North figure is reduced to 6.3m² per capita and the total Ku-ring-gai figure is reduced to 6.17m² per capita. When applied to the Estimated Resident Population, this figure falls to 5.84m² per capita of local open space. It is this figure which is utilised to assess current per capita rates of small scale local open space currently and into the future in Ku-ring-gai.

3.3.3 Local Parks and the Ku-ring-gai Town Centres

As discussed in the overview **2.0 Ku-ring-gai in Profile** at the start of **Part C: Strategy Plans**, it is a function of the development history of Ku-ring-gai that a significant proportion of the existing local parkland tends to be located in the outer suburban areas of the Local Government Area having been created and situated during the subdivision phases of post-war and 1970s development.

These local parks, while continuing to perform an important role, are not ideally positioned to cater for the concentrated population growth in and around the town centres along the railway line, Pacific Highway and Mona Vale Road. Acquisition of better located additional local parkland within reasonable, walkable distances is required to meet this additional demand.

Only two of the town centres currently have a good sized community park of around two hectares (including tennis courts) in the immediate vicinity of the town centre being Pymble (Robert Pymble Park) and St Ives (St Ives Village Green). Both are so located that they primarily serve only that part of the town centre located on the same side of the road/railway line.

- St Ives Village Green is located on the opposite side of Mona Vale Road to the areas where much of the development in St Ives is taking place and is physically

¹⁰⁵ This figure is the Estimated Resident Population from the 2006 census. This figure is only available for the whole of Ku-ring-gai rather than by individual suburbs or sub-regions within the area. This figure is issued by the Australian Bureau of Statistics and is subject to back-casting until after the release of the 2011 census. It is possible, therefore, that this figure may change.

separated from most of the residential development by St Ives Shopping Village with the exception only of its eastern edge (Memorial Avenue).

- Robert Pymble Park is located on the eastern edge of the Pymble Town Centre and separated by both the road and the railway line from all but a small proportion of the key development area.

While the value of these larger local parks is not in question, the assessed capacity for them to absorb the significant intensification of usage that would result in the absence of alternative spaces is considered unsustainable.

3.3.4 Local sportsfields in Ku-ring-gai

The table below illustrates the total area in Ku-ring-gai that is designated as local sportsfields in Ku-ring-gai. It should be noted that the gross figures are not precisely indicative of the area of land dedicated to sportsfields because the nature of the Land Management Units results in the inclusion of substantial areas that are not directly utilised for sportsfields such as extensive curtilages beyond spectator areas such as picnic areas and playgrounds. The figures also include the North Turramurra Recreation Area which, although not yet developed as sportsfields, is designated in Council's Land Management System as a sports reserve, reflective of council's intentions. The actual development of this area into a working sportsfield is incorporated into this Contributions Plan. More detail on the actual provision of fields for active recreation is included in the **3.21 Local Sporting Facilities – Sportsfields and Ovals**. This section also provides further detail on the works specifically proposed for the North Turramurra Recreation Area.

Figure 3.5: Local Sports Reserves¹⁰⁶

Suburb	Square Metres	2006 Population	Per Capita
Wahroonga	82,497.31	11,132	7.41
North Wahroonga	117,183.66	2,017	58.10
Warrawee	0.00	2,394	0.00
North Turramurra	81,744.27	3,996	20.46
Turramurra	110,190.54	10,978	10.04
South Turramurra	82,872.23	2,847	29.11
West Pymble	53,361.12	4,834	11.04
Pymble	38,239.23	9,487	4.03
St Ives	181,705.38	13,806	13.16
St Ives Chase	26,200.25	3,001	8.73
Total North	773,993.99	64,492	12.00
Gordon	29,601.24	5,228	5.66
Killara	65,581.13	7,360	8.91
East Killara	76,826.52	2,791	27.53
Lindfield	178,470.39	7,986	22.35
East Lindfield	60,331.13	3,441	17.53
Roseville & Chase	66,954.37	8,092	8.27
Total South	477,764.78	34,898	13.69
Total Ku-ring-gai	1,251,758.77¹⁰⁷	99,390	12.59

¹⁰⁶ Includes all land classified as Sports Reserve in the Land Management Units but excludes land classified as Courts in the Land Management Units. Note: The area of land designated as sports reserve in the Land Management Units does not reflect the area of land dedicated to the oval or sportsfield but rather the presence of a sportsfield as a key land-use within that park.

¹⁰⁷ Note that the total figures include bowling clubs so are not directly comparable to the figures in Figure 3.2.

The table on the preceding page illustrates a rather random location pattern for local sportsfields with considerable variation in the per capita provision of sportsfields in certain areas. This is not considered a critical issue as sportsfields are generally quite distinct from local, neighbourhood open space in their key function. Generally people are prepared to travel to sportsfields for team matches and practice matches. It is inevitable for match play that at least one team will come from another home ground.

It is again emphasised that, in this Contributions Plan, Ku-ring-gai Council is not seeking to acquire additional land specifically for facilities such as tennis courts, netball courts, bowling greens and sportsfields. Where a demand is demonstrated for additional facilities on existing council land or newly acquired open space, embellishment budgets may be used to augment these facilities.

3.4 Causal Nexus for New Local Parks

The residents of higher density development have higher needs for access to local small-scale public open space due to more limited access to large private areas of open space.

Public space is particularly important to those who have limited private open space by providing opportunities for dog walking, social interaction, picnic tables and BBQs, children's playground equipment and informal gatherings, off-road cycling, fitness circuits and tai chi and the like.

Ku-ring-gai Council undertook as part of the *Community Facilities Strategy*, a survey of new residents which revealed that approximately 60% of the residents of new units came from another address in Ku-ring-gai and many of these are retirees down-sizing from a dwelling with a large garden.

Currently, there are relatively fewer local open space assets located within walking distance of the town centres to cater for this additional demand. Concentrating demand on the few existing local parks would impact on the quality of these spaces and result in a diminution of access to this open space for existing as well as future residents. This is inequitable and also impacts on the quality of the public domain which supports quality development.

It has been well established in case law¹⁰⁸ that seeking to maintain baseline rates of provision of local open space parkland within the Local Government Area is a reasonable approach.

3.5 Causal Nexus for New Town Centre Local Parks as Civic Spaces

Town Centres Local Parks, both village greens and the paved civic spaces located within the commercial areas of the town centres, are primarily more formal, structured, local open space areas. These spaces are a key community focal point for both informal gatherings and formal events. They are an important component of community building and sense of place in recently developed or intensified urban centres. By encouraging people to come to the public area of the centre for both social interaction and for shopping, vibrant centres are created which support the quality of the urban environment.

¹⁰⁸ Revay and Scott atts Woollahra Council; and cited in many subsequent cases.

It is a function of the high-density urban nature of the new development concentrated around the town centres along the railway line, the Pacific Highway and Mona Vale Road, that part of the demand for local parks will be satisfied by the provision of paved civic spaces in addition to, and complementary to, urban green spaces on the fringes of the town centres. The concentration of new residents in such highly urban settings as the town centres will place intense pressure on the very few such places that presently exist.

The provision of civic spaces is considered to be a component of the per capita provision of open space parkland. The form of embellishment with a greater proportion of formal seating and hard surface areas is simply a function of the provision of a more urban-type park for an urban setting. This design of park is typical of a developed urban area.

The relatively few existing local parks in the vicinity of the town centres are recognised to have a key supporting role otherwise minimising the need for further costly land acquisition. These spaces have also been identified and targeted for embellishment where they enable additional civic space to be provided without further land acquisition. These spaces will be more intensively used as a result of the concentration of development in their immediate vicinity.

It is also important to note that some of the needs of the significant youth population can also be met by a well-designed, safe and inclusive public domain which welcomes, rather than discourages, young people to meet and gather in public places such as public squares. As new public spaces are created, it will be important that attention is given to ways in which they can help to meet the social needs of young people. Such provision mitigates the need to provide more space in buildings, which are generally more costly to provide.¹⁰⁹

3.6 Geographic and Temporal Nexus

In 2007, Ku-ring-gai Council adopted its *Open Space Acquisition Strategy*. This detailed document supports and guides the acquisition of open space in such a manner as will meet the causal, geographic and temporal nexus requirements attached to development contributions received under this Contributions Plan and its predecessors.

Acquisitions totalling 10,987.9m² have already commenced expending accumulated contributions for the purposes for which they were required. Properties acquired for open space to date are:

3,465m² of land in Dumaresq Street, Gordon (October 2007)
 689m² of land 23 Duff Street, Turramurra (September 2008)¹¹⁰
 1,046m² of land at Lot 1 Water Street, Wahroonga (July 2008)
 929.5m² of land at 12 Woonona Avenue, Wahroonga (November 2009)
 694.9m² of land at 25 Duff Street, Turramurra (June 2010)
 585.5m² of land at 1 Allen Avenue, Turramurra (exchanged July 2010)
 929m² of land at 56 Stanley Street, St Ives (exchanged July 2010)
 2,649m² of land at 27-31 Bruce Avenue, Killara (exchanged August 2010)

¹⁰⁹ Elton Consulting *Community Facilities Strategy, June 2009*; Page 73

¹¹⁰ This property is expected to be part of a larger park as the three adjoining properties have now also been zoned RE1 for parkland acquisition under *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*.

The detailed design processes and community consultation are due to commence shortly for two of these properties with a view to having these parks publicly available as soon as feasible. Other properties are individually too small to develop into formal parkland immediately however adjoining properties are also zoned RE1 Open Space under the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*¹¹¹ effectively requiring Council to commence negotiations with the property owners at such time as they may wish to sell. Negotiations with some of the property owners of newly zoned parkland are, at the time of finalising this Contributions Plan post exhibition, well underway.¹¹²

As indicated above, the Local Environmental Plan for the Town Centres includes an additional 15,083.2m² of private land now zoned RE1 for public open space acquisition. This figure does not include existing parks or land currently in Council ownership (including land which Council has already acquired for the purposes of new local parks).

These are key strategic properties, ideally suited for the provision of additional or expanded local open space supporting the majority of development in Ku-ring-gai within a reasonable geographic area. The fact of this zoning places a direct onus on Council to acquire these properties at such time as the owner may wish to make them available. Council is, therefore, highly dependent on continued cash-flow from development contributions to effect this commitment.

The zoning of these more critical parcels of targeted land effectively secures this land as future parkland to the extent that it can be acquired by Council at any time over the life of this Contributions Plan at a time nominated by the owner when, in the ordinary course of events, the owner would normally be considering sale. It cannot, however, be ascertained in advance when this might occur. Accordingly, an alternate approach to land acquisition is also required to ensure geographic and temporal nexus.

In addition to the acquisition identified in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*, Ku-ring-gai Council has further developed its *Open Space Acquisition Strategy* to identify additional properties within these and other areas of key interest close to areas which have recently experienced and which continue to experience development such as Lindfield, St Ives, Wahroonga and Killara (the latter two suburbs not being designated town centres). Council is also monitoring the open space associated with other major development sites outside the designated town centres.

A rolling programme of targeted acquisitions – not just zoned but also not specifically zoned until post-acquisition – is considered the best balance to best meet both geographic and temporal nexus in all areas of Ku-ring-gai experiencing development. Accordingly, future open space provision under this Contributions Plan should not be limited to the few critically located areas proposed to be zoned RE1 under the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*. The ratio of targeted (zoned) to opportunistic new open space acquisition under this Contributions Plan¹¹³ is approximately 60:40.

¹¹¹ *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* was gazetted on 25 May 2010..

¹¹² It should be noted that the present elected Council has expressed a preference for opportunistic - rather than compulsory - acquisition of land for the provision of open space, however Council is still subject to owner-instigated requests for purchase and, in respect of properties zoned open space must be regarded as the only logical purchaser.

¹¹³ Areas nett of designated civic spaces.

3.7 Land Acquisition for New Open Space and New Civic Space

The new open space works programme includes all capital costs associated with delivering a completed new park or civic space for use by the public. This includes land acquisition costs and associated costs such as conveyancing, legal services and stamp duty where applicable. Embellishment costs include the estimated costs of demolition and site clearance, community consultation, earthworks and embellishments including park furniture, lighting, pathways, irrigation and security installations as well as vegetation.

Total Additional Open Space required: 57,882m²

Total Sites Identified by RE1 Zoning: 15,083.2m²

Total Located in the North: 7,449.5m²

Total Located in the South: 7,633.7m²

Total Civic Spaces: 32,375m²

Total (nett) for Future Identification¹¹⁴: 10,424m²

Potential sites for new park location or expansion of existing parks are targeted under the criteria identified in the *Open Space Acquisition Strategy* as part of Ku-ring-gai Council's on-going commitment to a rolling programme of parkland acquisition.

3.8 Land Values for the Acquisition of New Open Space

Ku-ring-gai Council commissioned HillPDA to assess generic land values for residential and commercial land within and in the vicinity of the key suburban centres (including Wahroonga and Killara) and it is on this basis that the open space land acquisition rates have been attributed. It should be noted that it would have been cost-prohibitive and beyond the scope of what is reasonable to individually value each targeted property when actual acquisition could occur any time through to 2031. Land values will be inflated in accordance with the Housing Price Index (HPI) between reviews and by new generic valuations at each review of this Contributions Plan. Properties will be individually valued only at such time as negotiations commence for formal acquisition at which time the unique and individual characteristics of the property will be assessed. Until that site-specific valuation, generic values should be regarded as indicative only for the purpose of deriving a reasonable contribution rate and must not be taken as a valuation of any individual property.

Figure 3.6: Residential and Commercial Land Estimates Acquisition Costs

Area	Generic Improved Land Value (per m ²) ¹¹⁵	Generic Commercial Land Value (per m ²) ¹¹⁶
Roseville	\$2,000	NA
Lindfield	\$2,100	NA
Killara	\$1,800	NA
Gordon	\$1,900	\$7,100

¹¹⁴ Ku-ring-gai Council has a balanced approach to additional open space acquisition with some land zoned RE1 for acquisition for open space and other land to be acquired by opportunistic acquisitions guided by the *Open Space Acquisition Strategy*. This approach facilitates geographic and temporal nexus by giving Council the flexibility to target land in areas of high development activity.

¹¹⁵ Source: Generic Land Valuations prepared for Ku-ring-gai Council February 2009 by HillPDA.

¹¹⁶ Source: Generic Land Valuations prepared for Ku-ring-gai Council February 2009 by HillPDA as amended by additional known recent Commercial Sales in the relevant town centre.

Area	Generic Improved Land Value (per m ²) ¹¹⁵	Generic Commercial Land Value (per m ²) ¹¹⁶
St Ives	\$1,400	NA
Pymble	\$1,500	NA
Turramurra	\$1,500	\$5,000
Wahroonga	\$1,400	NA
LGA Wide Infill	\$1,691	NA

Note: The cost of land in Ku-ring-gai effectively prohibits the acquisition of sufficient land to maintain current existing pro capita rates of local parkland. The targeting of additional local and civic open space at 2.75m²/capita will minimise the gradual diminution of local parkland per capita but provision will still fall from the present 5.84m²/capita to 5.32m²/capita by 2031. It should be noted that the cost of the land acquisition component of the new open space works programme has already been significantly reduced by the provision of civic spaces as part of site development, on existing council land and/or by utilising street closures and land dedications.

3.9 Properties to be zoned RE1 for Future Open Space Acquisition

The following properties totalling 15,083.2m² in area have been designated for acquisition with an RE1 zoning under the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* approved by the Ku-ring-gai Planning Panel on 27 May 2009 and gazetted on 25 May 2010. At the time of finalising this Contributions Plan, one property had already been acquired, another was under contract and formal negotiations were proceeding on others. Acquisition of targeted properties will be the subject of extensive formal procedures to ensure a fair result for both the community and the owners of the properties that are subject to rezoning under the Local Environmental Plan.

New Lindfield Park

To be located on the corner of Nelson and Havilah Roads and including eight properties totalling approximately 7,200m² in total area.

26 Nelson Road, Lindfield
28 Nelson Road, Lindfield
30 Nelson Road, Lindfield
32 Nelson Road, Lindfield
32A Nelson Road, Lindfield
16 Havilah Road, Lindfield
12 Havilah Road, Lindfield
14 Havilah Road, Lindfield

New Town Centre Civic Space in Turramurra

To be located in the heart of the Commercial Precinct opposite Turramurra Station on William Street and including four properties approximately 677m² in total area.

4 William Street, Turramurra
6 William Street, Turramurra
8 William Street, Turramurra
10 William Street, Turramurra

New Local Park in Turramurra

To be located at the corner of Duff Street and Allan Avenue and including four properties approximately 2,660m² in total area.

23 Duff Street, Turramurra (acquired September 2008)
25 Duff Street, Turramurra (acquired June 2010)
27 Duff Street, Turramurra
1 Allan Avenue, Turramurra (under contract July 2010)

Expansion of Putarri Avenue Reserve in St Ives

Putarri Avenue Reserve is a small reserve of 1,949.6m². The incorporation of two additional properties will extend the area by 1,895.4m² creating a more useable local park with three street frontages and a total area of 3,845m².

25 Shinfield Avenue, St Ives
27 Shinfield Avenue, St Ives

Extension of Bedes Forest in St Ives

Bedes Forest is currently a park of 4,925m² with frontage to Yarrabung Avenue and College Crescent. The extension of this property by 2,902m² will also facilitate access from an additional street frontage.

56 Stanley Street, St Ives (under contract July 2010)
58 Stanley Street, St Ives
60 Stanley Street, St Ives

Creation of a Civic Space adjacent to Gordon Station

The plans for the Gordon Town Centre include provision for a civic space adjacent to Gordon Station however the final location may not be confirmed before the final draft of this Contributions Plan. In the event the targeted site becomes unavailable, a comparable site will be targeted by proactive opportunistic acquisition.

1-5 St Johns Avenue, Gordon (or equivalent).¹¹⁷

These properties have been assessed in accordance with the generic values within this Contributions Plan based on land area and the adjoining potential zoning. Commercial properties have been further checked against recent similar sales. Specific land valuations will be undertaken as such time as negotiations commence with the property owner which may be at any time over the life of this Contributions Plan in the individual circumstances of the case.

¹¹⁷ 1-5 St Johns Avenue, Gordon is identified for acquisition as civic open space (RE1) in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and, as a consequence, is included in this Contributions Plan. However, the exhibition draft of the then draft *Ku-ring-gai Development Control Plan (Town Centres) 2009* showed this proposed civic space in an alternate location. This matter is yet to be finally resolved, however, while the proposed location of the Gordon Station civic space may change, Ku-ring-gai Council is still targeting the provision of additional civic space in this vicinity. The situation will be subject to further review in this Contributions Plan.

3.10 Process of land acquisition for new local parks

While it is not impossible that a developer of a large site may acquire some of the targeted land for open space provision and provide either land dedication or a completed park as a partial or full satisfaction of a monetary development contributions, this is not a particularly realistic scenario in a developed area like Ku-ring-gai except in the case of unusually large sites.

Open space land is more likely to be acquired directly by Ku-ring-gai Council as part of an on-going process of implementation through to 2031. As development is expected to occur incrementally over this period of time, not all parks will be immediately required, nor will Council have the necessary cash-flow to acquire all identified or targeted properties ahead of the anticipated demand. This is a long-term rolling works programme.

Accordingly, it is Ku-ring-gai Council's preferred position to enter into negotiation with property owners at such time as the property owner may be interested in selling in the normal course of events. Compulsory acquisition is not Council's preferred position for the acquisition of land for parkland and in December 2008 Council specifically resolved against a policy of compulsory acquisition.

While there is scope to contemplate a pro-active approach to a property owner in the case of an amalgamated site where only the final out of several sites remains to be acquired, that case would be considered on its individual merits at that point in time including, in particular, the impact on the owner of the property. In this respect, Ku-ring-gai Council's adopted *Acquisition and Divestment of Land Policy (September 2009)* reads as follows:

7.3 Council's preferred position is not to acquire land through compulsory acquisition. However, Council has an obligation to provide services to the community and if required Council MAY consider utilising its powers under the Local Government Act 1993 in respect of "compulsory acquisition".

It should be noted that temporal and geographic nexus will still be maintained by the combination of both zoned and opportunistic acquisitions of land for open space in the rolling works programme. Opportunistic acquisitions will be triggered depending on the location and rate of new development as well as an opportunity provided by a property going to market. Potential new parks not zoned RE1 will be assessed in accordance with the *Open Space Acquisition Strategy 2006*. Ku-ring-gai Council will continue to actively monitor its open space acquisition programme.

3.11 Innovative avenues for the provision of new local parks

In an established area such as Ku-ring-gai, there may be circumstances where the purchase of land currently occupied by existing development may not be the most cost-effective means of providing all new parks and civic spaces.

Preliminary investigations¹¹⁸ in respect of the Lord Street car park in Roseville indicated that the indicative cost of undergrounding the existing car park and establishing a new park on top (inclusive of the additional costs of the weight-bearing structure, waterproofing, soil depth and the drainage works inevitably required) was

¹¹⁸ Investigations instigated in response to a Notice of Motion from Councillor Shelley dated 31 October 2007.

likely to be less than the estimated cost of acquiring the equivalent amount of land in Roseville with the associated demolition and embellishment costs. The resulting park would also have the very great advantage of being very centrally located and would provide considerable benefit to the new residents and businesses of Roseville. At the time of drafting this Contributions Plan, this particular option has not proceeded to a complete comparative cost-benefit analysis to support the business case for this approach in this instance however the preliminary investigation is sufficient to indicate that such possibilities may exist and should not be excluded from the capacity for further investigation and consideration in the future.

Accordingly, where, upon further detailed investigation, it is conclusively established that an innovative solution can be identified that will result in a quality park that meets nexus requirements, being delivered in a more cost-effective way than the acquisition and embellishment of land, then this Contributions Plan specifically permits the allocation of contributions levied for the provision of new parks to facilitate such a park to be provided in the manner indicated.

While it is acknowledged that an additional item of infrastructure may also be acquired as a by-product of this approach, the achievement of a better located park is considered to be the prime criterion in the establishment of nexus. The achievement of a best outcome overall for the community in the expenditure of development contributions is a responsibility which Ku-ring-gai Council takes seriously.

3.12 Overview of Future Open Space and Recreation Needs

The future style of embellishment of new parks as well as their location is also guided by the recreation needs of the key age groups both within Ku-ring-gai and specifically residents in the new development envisaged through to 2031. The embellishment of existing parks is also guided by the demands generated by new development but, because these works are apportioned, the needs of the population residing in existing dwellings, is also considered.

In developing new, and embellishing existing, local parks however, it is also important to note the consequential flow-on effects of medium-high density redevelopment in Ku-ring-gai. The new residents survey indicated that a significant proportion of the residents of new housing in Ku-ring-gai appear, at least to date, to be part of the process of down-sizing by older people. These residents tend to release a large family home onto the market to be purchased by families with school age children, continuing the process of cyclical population renewal. This is an important indirect effect of development, which must also be taken into account in the design of facilities.

3.13 Open Space and Recreation Needs by age group

The following tables, cross-referenced with the demography tables in the preceding chapter, provide a detailed overview of the open space and recreation needs for each age group in Ku-ring-gai which will guide the design of future embellishment works in Ku-ring-gai.

3.13.1 Infants and School Aged Children

Children under the age of 18 make up a very significant 26% of the population in Ku-ring-gai mostly concentrated in the school-age groups of primary and secondary

school children. This group is expected to continue to be significant over the life of this Contributions Plan.

Infants and School-age Children 0-17 years	
Key activities	Open space and recreation needs
<p>Children's developmental needs change throughout the various stages of their physical and emotional development. Well planned and developed parks and playgrounds can accommodate these needs by providing:</p> <ul style="list-style-type: none"> ▪ opportunities for fun and enjoyment in the environment beyond home; ▪ opportunities to learn confidence and self expression; ▪ cultivation and stimulation of the senses; ▪ opportunities to experience and to have contact with nature; ▪ places to interact with peers; and ▪ opportunities to interact with a wide range of people to learn to live cooperatively in a community. <p>Kids want:</p> <ul style="list-style-type: none"> • opportunities for movement; • to play with something; • to play with some one; • scope to pretend; • opportunities to learn and socialise; • opportunities to gain an understanding the world; • to have fun; • proximal play (everything close together); • inclusive play; and • comfort elements (toilets, bubblers). 	<ul style="list-style-type: none"> • Hierarchy of playgrounds and parks – with appropriate provision for children and adult supervision that is located within 500m of residences, near schools, shops and community centres where possible. • Indoor recreation (sport, gym, fitness and dance) and swimming facilities (for recreation, fitness, water safety and motor learning skills). • Sports fields and courts, fitness, skate and cycle facilities. • Safe travel cycle tracks and recreational track links and pedestrian links between schools, homes, shops and parks and reserves. • Passive recreation spaces for lifestyle, relaxation and meeting places.

3.13.2 Young Adults

Young adults from the age of eighteen through the twenties to the early thirties are the 'missing' demographic in Ku-ring-gai making up about 15% of the population at the time of the 2006 census.

Part of the management side of the development contributions system at Ku-ring-gai will be further post-occupancy surveys and careful analysis of the 2011 census. This analysis is essential to ascertain if the facilitation of greater housing choice through the development of medium and high density development has encouraged a return of this age-group to Ku-ring-gai.

Young Adults 18 through 20s up to 34 years¹¹⁹	
Key activities	Open space and recreation needs
<ul style="list-style-type: none"> • Young people, in general, have a high rate of participation in recreation – both structured and unstructured. In fact, participation by young people (up to 25 	<ul style="list-style-type: none"> • Sports fields and courts, fitness, skate and cycle facilities. • Indoor sport, fitness and aquatic

¹¹⁹ The end of the Young Adult Years is determined more by the life stage of family formation rather than by chronological age. More recent trends towards starting a family after the age of 30 have extended this period to an extent.

Young Adults 18 through 20s up to 34 years ¹¹⁹	
Key activities	Open space and recreation needs
<p>years) in most leisure and recreation activities – including organised sport and physical activities, social life and entertainment – is significantly higher than it is for older age groups.</p> <ul style="list-style-type: none"> • Youth-friendly public space and facilities are important for young people not interested in structured activities. • Participation in sport declines slightly after 25 years but is offset by higher participation in family activities as people commence having children. 	<p>facilities.</p> <ul style="list-style-type: none"> • Cycle paths and walking trails. • Settings for meeting places, hanging out, picnics and social activities. • Areas for informal activities. • Areas for events and festivals.

3.13.3 The Middle Adult Years

The Middle adult demographic is a very significant one for the Ku-ring-gai Local Government Area with adults aged between 35 and 59 making up a substantial 36.2% of the population as at the 2006 census. These are the parents of the school-aged children in the first age group depicted above. This demographic is also expected to continue to be significant influenced by a large housing stock of dwelling houses which are released onto the market by the process of older residents down-sizing – a process which is facilitated by new development. Additionally, the emergent demographic trends suggest there is a growing demand for unit housing in this demographic arguably due to the concentration of schools in this area.

Middle Adult Years 30s and 40s - 50s ¹²⁰	
Key Activities	Open Space and Recreation Needs
<ul style="list-style-type: none"> • Participation in structured team sport and recreation activities declines but sports such as tennis, fitness remains constant and an interest in golf may begin. • Family recreation activities are popular with increased demand for support infrastructure associated with children's recreation and structured team sports. • Less structured activities – socialising while walking and walking the dog become popular. • People have a diversity of skills, interests and physical and mental abilities. Many will be regular users of 'mainstream' recreation facilities and programs. • There has been a recent increase in demand for soccer training for over 35s through over 45s in Ku-ring-gai.¹²¹ 	<ul style="list-style-type: none"> • Need for a wider range of leisure and recreation opportunities • Swimming facilities, adult education programs, social clubs and interest groups and exercise and fitness programs. • Cycle paths, walking trails, fitness trails. • Park and or natural area settings for picnics and family social activities with facilities such as toilets, BBQs and playgrounds. • Community meeting places such as dog 'off leash' areas • Outdoor events and festivals, films, concerts and meeting opportunities. • Providing facilities to enable cross generational interaction to strengthen community.

¹²⁰ The Middle Adult Years represent a life stage rather than chronological age. Recent generations have generally reached a stage of having independent adult children by their 50s. However more recent trends towards people having children in their late 30s and early 40s mean that this generation of parents will be in the 'school children at home' phase for a larger proportion of their 50s hence the broader range given for the end of this stage as we move through the horizon of this Contributions Plan into the 2030s.

Middle Adult Years 30s and 40s - 50s ¹²⁰	
Key Activities	Open Space and Recreation Needs
<ul style="list-style-type: none"> Emerging interest in community gardens. 	<ul style="list-style-type: none"> Need for easy playground access with comfort elements while supervising children.

3.13.4 Older Adult Age Groups

A very significant 22.3% of the population of Ku-ring-gai is aged over 60 of whom the majority are in the active older 60-85 year old age groups (19.5%). It should be noted that these figures are significantly higher than the Sydney Statistical Division figures for comparable age groups. Importantly, the importance of the older age group is likely to remain a noteworthy factor in the design and development of local parks and civic spaces in Ku-ring-gai.

Older Adult Age Groups – Retirees onwards	
Key Activities	Open Space and Recreation Needs
<ul style="list-style-type: none"> Participation in structured team sports and recreation activities has declined significantly but tennis remains important. Participation in traditional retirement sports such as bowls and golf increases. Family recreation activities remain popular. Demands for additional leisure facilities and programs – such as swimming facilities, hydrotherapy, adult education programs, social clubs and interest groups and gentle exercise and fitness programs. Less structured activities – socialising while walking and walking the dog remain popular. People have a diversity of skills, interests and physical and mental abilities. Some will be regular users of ‘mainstream’ recreation facilities and programs. Others will require various levels of assistance – including transport, facilities designed and constructed in accordance with access requirements and/or special programs and activities. Emerging interest in community gardens. 	<ul style="list-style-type: none"> Need for a wider range of leisure and recreation opportunities. Swimming facilities, hydrotherapy, adult education programs, social clubs and interest groups and gentle exercise and fitness programs. Cycle paths, walking trails, fitness trails. Park and or natural area settings for picnics and social activities with facilities such as toilets and access. Community meeting places such as dog ‘off leash’ areas. Outdoor events and festivals, films, concerts and meeting opportunities. Providing facilities to enable cross generational interaction to strengthen community. Need for easy playground access with comfort elements while supervising grandchildren.

¹²¹ Advice from Ku-ring-gai District Soccer Association.

In the context of Ku-ring-gai it is important to note that the Local Government Area features significant population in terms of overall numbers in every age group. There is early evidence that age groups which are a lesser proportion of the population in Ku-ring-gai than in the Sydney Statistical Division, such as young adults, are an emergent market for new multi-unit dwellings.

While this emergent trend will be carefully monitored over the life of the Contributions Plan, it is sufficient to recognise that all age-groups will require provision for their leisure activities and more refined design of future parkland, both new parks and the embellishment of existing parks, can be further refined by community consultation at the time of project initiation.

3.14 Embellishment cost for new local parks

Total embellishment costs for new local parks have been estimated at \$475 per square metre. This cost estimate, while generic, has been the subject of detailed assessment and incorporates the full cost of delivering a new park inclusive of the cost of demolition and site clearance (including the probability of asbestos removal and/or swimming pool infill), community consultation and detailed design, earthworks, turfing, garden beds and initial planting, paving including pathways, lighting, security features, fencing and some retaining walls, seating, other typical park furniture, signage, shade structures and associated utilities (electricity, water etc).

Due to the imperative of locating the majority of new local parks on the fringes of the town centres where they will meet geographic nexus requirements arising from the concentration of the majority of Ku-ring-gai's new development around the town centres, these parks will inevitably require a more urban-style design than suburban parks. Additionally, with the exception of St Ives, the town centres are located along the railway line and Pacific Highway which both follow the ridgeline. As a consequence, land on the town centre fringes invariably features degrees of slope, increasing embellishment costs. These factors have also been factored into the estimated embellishment cost per square metre.

This cost estimate does not include facilities that are considered to be additional to standard embellishment and therefore will not be included in all new parks such as playgrounds and courts. These have been separately assessed and, where appropriate, included in this Contributions Plan as a separately identifiable and costed item. While this provides clear transparency it also has the benefit of allowing these facilities to be situated in either new or existing parks as best meets the identified need. Costs have been further reduced by excluding amenities such as toilets in view of the proximity of these new parks to retail areas which already feature such facilities.

The detailed generic cost estimate was submitted to Quantity Surveyors, Page Kirkland for peer review, and is considered to be a reasonable estimate of the cost to deliver a new urban park.

Accordingly the total budget¹²² for new local park embellishment nett of civic spaces until 2031 is estimated at: $25,507\text{m}^2 \times \$475/\text{m}^2 = \$12,115,825$

¹²² It should be noted that this figure does not directly correlate to the total amount of land to be acquired for additional open space because the civic spaces and town squares have a separate embellishment budget which has been separately calculated.

3.15 Embellishment costs for civic spaces

The embellishment costs for the individual civic spaces and town squares identified in *Ku-ring-gai Development Control Plan (Town Centres) 2010* have been separately costed by the Quantity Surveyors Page Kirkland as individual works. These civic spaces by their nature have much larger areas of hard surface. The area of these spaces has been subtracted from the new parks embellishment costs to ensure there is no double-dipping. Given land areas for any components of the civic spaces where land is already in the public domain, such as street closures, are included for the purposes of estimating embellishment costs only, not for acquisition.

3.16 New and Existing Parks: Playgrounds and Child-Friendly Parks

Children are important users of local parkland. Children need access to parks for a range of healthy play activities including active recreation such as bike-riding and other wheeled activities in a safe environment, and active games involving running and balls. Opportunities for social, sensory and passive experiences are also importance aspects of children's usage of open space.

There are currently 97 formal playgrounds in the Ku-ring-gai Local Government Area ranging in size from local playgrounds¹²³ with few items of equipment to larger scale local playgrounds¹²⁴ catering for a larger number of children and a broad range of ages and abilities including such features as flying foxes, junior cycle tracks, BBQ and picnic facilities and amenities.

Child-friendly spaces need to include facilities for parental, grandparental and carer supervision relative to the age-range of the child-users. Facilities for younger children involve close parental supervision. Facilities for older children allow more peripheral parental supervision. As children become older, the likelihood (and risk) of them accessing local parks without direct parental supervision increases.

Reference to the demographic range of children in Ku-ring-gai illustrates that the majority of children are in the school age years, both primary and secondary, and that this trend is likely to continue. This demography demonstrates a need to concentrate on child-friendly parks that are challenging and interesting to children up to 14 years.

Data from the 2006 census also indicates that the percentage of people who care for children not their own or for other children as well as their own children, while the overall numbers are relatively small, significantly exceed comparable percentages for the Sydney Statistical Division.¹²⁵ Reference to the emergent demographic trends identified in the survey of residents of newly developed dwellings indicated that a significant number of older people are carers for grandchildren suggesting that the trend is likely to continue notwithstanding the process of down-sizing.

Another factor in the future demography of Ku-ring-gai is that if the process of down-sizing continues then, inevitably, large family dwellings will be released by the retiree age group for purchase by younger age-groups who are more likely to have primary to secondary school children. Added to a growing trend for children to live in units evident in parts of Sydney where urban consolidation has been trending for longer

¹²³ About 77 of the 97 playgrounds would fall into the description of a local neighbourhood playground.

¹²⁴ About 20 of the 97 playgrounds would reasonably serve a larger local catchment than small neighbourhood of which only 4 playgrounds could be considered to serve a broader catchment.

¹²⁵ 7.7% of people care for other children only, the comparable SSD figure being 6.5%.

than in Ku-ring-gai¹²⁶ underlines an on-going and growing demand for children's facilities such as playgrounds arising directly or indirectly from new development.

Playgrounds have not been included in the generic cost estimates for the embellishment of new parks because the design of each playground is individual to the site considering its topography, accessibility and visibility and the characteristics of the targeted age group. It should also be open to Council to locate a new playground in either a new or an existing park according to the specific needs identified. Accordingly there is a separate works programme for additional playgrounds.

Figure 3.7: Playground Works Programme

Future additional playgrounds¹²⁷	Proposed timing	Total Cost (Estimated)
North 3 local playgrounds at an estimated average cost of \$190,000 each 2 larger local playgrounds at an estimated average cost of \$250,000 each	Rolling annual works programme 2010-2031	\$570,000 \$500,000
South 3 local playgrounds at an estimated average cost of \$190,000 each 2 larger local playgrounds at an estimated average cost of \$250,000 each	Rolling annual works programme 2010-2031	\$570,000 \$500,000
Larger Playgrounds 1 additional ¹²⁸ larger playground drawing from a broader area within the LGA at an estimated cost of \$350,000	Medium	\$350,000
Total		\$2,490,000

Suitable locations for individual playgrounds will be determined at time of construction. On-going consultation with the community and post-occupancy surveys as well as information from the 2011 census will inform future playground locations.

3.17 New and Existing Parks: Community Gardens

A community garden is an area of shared land where people come together to cultivate fresh food, to learn, relax and to meet new friends.¹²⁹ As part of a move back to sustainable living and interest in organic food production, community gardens are, once again, becoming popular across Sydney.¹³⁰ The increasing concentration of unit development, particularly attracting people who have enjoyed the proximity of large gardens in their previous dwelling, is expected to increase the demand for the establishment of community gardens in Ku-ring-gai. The role of a community garden in establishing a sense of community in areas of new development is also very important in this context.

¹²⁶ For example parts of the former South Sydney City Council and the City of Sydney.

¹²⁷ The works programme for generic playgrounds in this table is in addition to the playgrounds identified for existing parks as part of the works programme for the embellishment of existing parks. The provision of generic playgrounds recognises the additional demand foreshadowed through to 2031 that cannot feasibly be allocated a specific location at the time of drafting this Contributions Plan but will be identified through future census information and post-occupancy surveys.

¹²⁸ There are four playgrounds that currently meet this description, a fifth identified in the works programme for existing parks for St Ives Village Green. This additional sixth park will be located with reference to the catchment of the five playgrounds as well as future demography and accessibility.

¹²⁹ Source: The Australian City Farms and Community Gardens Network.

¹³⁰ At the time of drafting community gardens had been established in the City of Sydney (8), Leichhardt Council (10), and Warringah, Willoughby, Hornsby and Ryde (1 each).

Ku-ring-gai Council has conducted surveys both through its website and at public events such as the St Ives Village Fair and Festival on the Green. At the time of drafting this Contributions Plan, 108 surveys have been received reflecting interest in organic gardening especially vegetables, composting and worm-farming, water-wise gardening, meeting like-minded people and relaxation.

Figure 3.8: Demography of Respondents interested in a Community Garden

Age Groups	%	Gender Ratio		Location	%
Under 18 years	1.9%	Male	27%	Ku-ring-gai North	67%
19-30 years	11.1%	Female	73%	Ku-ring-gai South	33%
31-50 years	57.4%				
51+ years	29.6%				
Total	100%		100%		100%

The indicative cost of establishing a community garden of a sustainable size (300m² – 500m²) is estimated to be in the vicinity of \$60,000 including: identification of a suitable site (soil testing), site preparation, compost bins, access to water, shade structure, seating and potting table, garden paths and edges, initial establishment stock and equipment, lockable shed, lighting, signage and security.

Site selection criteria for a successful community garden includes: a Council owned space of approximately 300m² – 500m² that is open and sunny, centrally located to users including close to public transport but with some vehicular access and parking availability. Proximity to water supply and other amenities is also important.

At present, the Community Garden movement is at an early stage in Ku-ring-gai¹³¹ and the level of establishment does not warrant any specific contribution for the establishment of a community garden. However, this Contributions Plan does foreshadow and, in the event future demand from the residents in the new units is established, specifically permit, the incorporation of a community garden as a component of the design of the future embellishment of a new park and/or the generic embellishment of an existing park. It is intended that the question of demand for community gardens will be included in future post-occupancy surveys of new development.

3.18 Nexus for the Embellishment of Existing Open Space

The substantial cost of acquiring additional land for new parks in Ku-ring-gai is sufficiently high as to warrant careful attention to the role existing parks can play in catering for the demands of additional users. The relationship (or causal nexus) between population growth and the pressure on existing parks is best summarised by the NSW Department of Planning in its *Metropolitan Strategy for Sydney, City of Cities*, which states:

“Challenges for Parks and Public Places

- In some residential areas, safe and direct access to open space is limited due to low quality pedestrian networks and barriers created by busy major roads and rail corridors.

¹³¹ Ku-ring-gai Council is currently piloting its first community garden at The Lookout Park, Turramurra. The start-up meeting was attended by approximately 55 people.

- As the population increases so will the demand for organised and informal sports and other activities.
- Greater pressure will be placed on existing open space in the future.
- The cost of land in Sydney is increasing.
- Future open space needs will be increasingly met by a gradual shift from land acquisition to sustainable management and park improvements.”¹³²

Changing demography as a result of population growth and cyclical renewal facilitated by the process of down-sizing also gives rises to the need for local open space to adjust to different needs. This Contributions Plan provides for a limited quantum of works to add to the accessibility and usability of local parks within the Local Government Area.

3.19 Overview of the Works Programme: Existing Parks Embellishment

With respect to the programme of embellishment for existing parkland, the works programme targeted by this Contributions Plan concentrates on works that will enhance accessibility and usability of key local parks.

Typical works include additional pedestrian access paths, additional parking facilities, cycle facilities and landscaping. The works programme also focuses on works which provide a particular service to unit dwellers who do not have access to a large garden - such as BBQ facilities and picnic tables.

In Ku-ring-gai also there are a number of linkages and linear walkways that facilitate improved access to open space, particularly access to the sort of open space that is not being replicated in the area such as district parks, sportsgrounds and bushland. These walkways are an important part of the open space network in Ku-ring-gai.

The works programme is expected to be rolled out over the Short Term, Medium Term and Intermediate Term of this Contributions Plan. The outcome of on-going development monitoring may result in alterations to this intent.

3.20 Local Sporting Facilities – Netball Courts

Ku-ring-gai Council is proposing additional netball courts in the Local Government Area. There are currently three targeted and costed locations for the purposes of this Contributions Plan at however these locations are not yet formalised and may change to other suitable locations in the vicinity area following public consultation. These additional courts will complement the twenty-nine (29) netball courts currently operating at two (2) locations in the Ku-ring-gai LGA (Canoon Road Recreation Area in South Turramurra and Lofberg Road, West Pymble).

The present provision of twenty-nine (29) netball courts for a pre-development phase population of 105,103 persons equates to a demand for thirty-five (35) netball courts for a total population of 126,151 being an additional six (6). Ku-ring-gai Council is proposing to provide an additional twelve (12) netball courts. Accordingly 50% of this works programme is directly attributable to population growth and the remaining 50% will benefit the population as a whole and must be apportioned accordingly.

¹³² City of Cities (Metropolitan Strategy) NSW Department of Planning 2005; Page 235

North (indicative site only subject to public consultation)

Warrimoo Oval - St Ives Chase (3)

South (indicative sites only subject to public consultation)

Queen Elizabeth Reserve - West Lindfield (4)

Regimental Park - Killara (5)

3.21 Local Sporting Facilities – Sportsfields and Ovals

Ku-ring-gai Council currently has forty-six (46) sports reserves which provide a total land area of 1,207,411.2m². The actual area dedicated to the sportsfields and ovals is significantly less at 539,000m². This equates to approximately 5.13m²/capita at the start of this development phase falling to 4.45m² per capita by 2031. The total number of sportsfields and ovals currently provided at these forty-six locations is fifty-five (55).

Figure 3.9: Sportsgrounds and Ovals

Name of Sports Ground	Sports Ground Playing Areas (ha)
Acron Sports Ground (1)	1.50
Allan Small Park (1)	0.70
Auluba 1 & 2 Sports Ground - Sir David Martin Reserve (2)	1.60
Auluba 3 Sportsground - Kissing Point Village Green (1)	0.80
Bannockburn Road Sportsground (2)	2.00
Barra Brui Sportsground, St Ives (1)	0.90
Brown's Field Sportsground (1)	0.55
Bryce Avenue Sportsground (1)	0.65
Carrington Road Sportsground (1)	0.55
Cliff Avenue Sportsground (2)	1.60
Comenarra Sportsground (1)	1.00
East Gordon/Darnley Sportsground (1)	0.65
Edenborough Sportsground (1)	0.60
Fiddens Wharf Road Sportsground (1)	0.60
Friar's field (1)	0.40
George Christie Sportsground (1)	1.00
The Glade Sportsground (2)	1.65
Golden Jubilee Sportsground (2)	3.40
Hassell Park Sportsground (2)	2.15
Howson Avenue Sportsground (1)	1.40
Karuah Road Sportsground (1)	0.80
Kent Road Sportsground (1)	0.80
Koola Park Sportsground (3)	4.00
Lindfield Memorial Park Sportsground 1 (1)	1.30
Lindfield Memorial Park Sportsground 2 (1)	0.75
Bicentennial Park - 26a Lofberg Sportsground (1)	0.70
Bicentennial Park - 26c Norman Griffiths Sportsground (1)	0.85
Loyal Henry Sportsground (1)	0.40
Rofe Park Mimosa Road Sportsground (1)	1.00
Princes Park Primula Sportsground (1)	1.20
Princess Ann Equestrian Arena (1)	0.80
Queen Elizabeth Sportsground (1)	0.60
Regimental Park Sportsground (1)	0.75
Roseville Chase Sportsground (1)	1.25
Roseville Park Sportsground (1)	1.00

Name of Sports Ground	Sports Ground Playing Areas (ha)
North Turramurra Park - Samuel King Sportsground (1)	0.80
St Ives Showground 1 and 2 (2)	1.40
St Ives Village Green Sportsground (1)	0.70
William Cowan Sportsground (1)	2.00
Surgeon White Reserve (1) ¹³³	3.00
Toolang Road Sportsground (1)	0.50
Turramurra Park Sportsground (1)	1.50
Killara Park - WA Bert Oldfield Sportsfield (1)	1.15
Warrimoo Avenue Sportsground (1)	1.00
East Lindfield Park - Wellington Road Sportsground (1)	1.15
Claude Cameron Grove Westbrook Sportsfield (1)	0.80
Total	53.9 ha / 539,000m²

The provision of fifty-five (55) sportsfields and ovals for the base population of 105,103 persons represents approximately 0.52 sportsfields per 1,000 persons. The proposed provision of three additional sportsgrounds at North Turramurra Recreation Area will result in the provision of fifty-eight (58) sportsfields for an anticipated 2031 population of 121,151. This equates to approximately 0.48 sportsfields per 1,000 persons.

In terms of overall area provided for sportsfields and ovals, the current provision of 539,000m² for the population of 105,103 equates to 5.13m²/capita. The current standard of sportsfield provision is 12.1m²/capita which means that the Ku-ring-gai Local Government Area is currently significantly under-provided with sportsfields. Provision of three (3) additional sportsfields / ovals will only partially prevent that level of provision falling further with the arrival of the additional population.

The proposed North Turramurra Oval is a new local sporting ground to be developed on existing land of approximately 5.2ha in size owned by Ku-ring-gai Council. The potential oval adjoins other areas of private and semi-private open space including Crown Land and the Glengarry Girl Guide Centre (55.6ha) and North Turramurra Golf Course (28.2ha). It also adjoins a 41ha area of steeply sloping bushland which is an area of significant fire threat. As such, the development of an open area of oval is an ideal use.

The three sportsfields to be created at North Turramurra Oval will join an integrated network of sportsfield provision in Ku-ring-gai from which the potential residents of all development will derive benefit.

Geographic nexus for sportsground facilities at district level is less defined than in the case of local parks as it is an inherent aspect of the use of sporting facilities for club sports that there are 'home' and 'away' games. Accordingly, participants are accustomed to travelling to take part in team sports. Use of the facilities by persons from outside the LGA is inherently balanced by the use of out-of-LGA grounds by Ku-ring-gai residents. Access to team sports is dependent on the existence of sufficient local facilities. The increase in population arising from new development will exceed the capacity of the current sportsfields in Ku-ring-gai.

¹³³ Surgeon White Reserve is not suitable for general sports facilities because of its topography. It is currently used by the Avondale Pony Club

It is important to note that Ku-ring-gai Council is not levying for additional land for the provision of additional sportsfields but the conversion of existing land holdings for new sportsfields is essential to maintaining per capita rates of provision of this specific type of facility.

The cost estimates for North Turramurra Recreation Area in the works programme relate only to the provision of the new sportsfields. There are substantial preparatory and consequential works associated with the establishment of the sportsgrounds which are not attributed in any part to development contributions under this Contributions Plan.¹³⁴

3.22 Local Sporting Facilities – West Pymble Aquatic Centre

This works programme item has been classified as a recreational facility for the purposes of this Contributions Plan and is therefore included in the next chapter of the Strategy Plans. In good faith, Ku-ring-gai Council regards this approach to be reasonable.

3.23 Apportionment for New Local Parks

The demand for new local parks as open and civic space is calculated pro rata per capita at the current per capita rate of provision of small-scale local parks which is 5.84m²/person. However, maintaining this already discounted rate of provision results in an unreasonable contribution rate. Accordingly this figure has been substantially discounted to 2.75m² per capita. This discounted figure is apportioned 100% to the new population.

It is emphasised that the amount of land acquisition that will be funded from development contributions will not even maintain current per capita rates of core local open space let alone total per capita rates of all open space. It should be further noted that the incoming population enjoys immediate access to the existing local open space resources, however only continued provision will (to a limited extent) ensure that the nature and quality of access does not fall significantly for both the incoming and the existing population.

Apportionment of 100% of the cost of the already substantially discounted additional parkland – both acquisition and the initial capital costs of establishing a new park or civic space – to the incoming population at a rate which is below the current per capita rates of provision is considered reasonable. There is a long history of case law supporting the concept that provision of additional parkland at or below the prevailing rate of open space provision in the Local Government Area is fair and reasonable. Further detail on the nature of embellishment and associated costs for new parkland is discussed later in this chapter.

In further support of the 100% apportionment of this aspect of the works programme it should be emphasised that the majority of other works in this Contributions Plan are subject to considerable apportionment to Ku-ring-gai Council for a co-contribution. It is important in facilitating a rolling works programme and supporting developers in undertaking works-in-kind that there is established, within the Contributions Plan, a balance between works which are partly apportioned and works which are wholly

¹³⁴ Ku-ring-gai Council has also secured a \$2M Federal Grant towards the cost of funding a sustainable water supply to irrigate the proposed recreation area. This cost is also excluded from the total cost estimates for works to North Turramurra Recreation Area.

apportioned. Artificially apportioning works that are fairly and reasonably wholly attributed to an incoming population can actually inhibit both the timely delivery of the works programme and the capacity for developers to undertake land dedication and works-in-kind because of the fiscal constraints on the council co-contribution. This is unreasonable and impractical and potentially disadvantages a number of larger developers and, ultimately, the entire community.

As a result of being unable to sustain current per capita rates of the provision of local open space, due to the imperative to maintain a reasonable contribution rate, as at 2031 are expected to have fallen illustrated in the table below.

Figure 3.10: Future Access to Local and Civic Open Space

Area	Total in m ²	2006 Estimated Resident Population	Per Capita	Additional open space m ²	Total in m ²	2031 Population	Per Capita
Total Ku-ring-gai	613,805.38	105,132	5.84m ²	57,882 ¹³⁵	671,687	126,151	5.32m ²

Additionally, in the absence of any further acquisition for land for new sports ovals or courts, the total provision per capita of these facilities will, also, inevitably decline.

It is reiterated that this Contributions Plan seeks only to acquire sufficient baseline open space to minimise the overall decline of open space provision in the area. Given the substantial amount of case law over the past thirty years since the inception of s94 in the *Environmental Planning and Assessment Act* in 1979 that establish the clear precedent that a target of maintaining the prevailing rates of per capita open space in the Local Government Area is an equitable approach, the limited targeted local open space and civic space works programme in this Contributions Plan is considered very reasonable.

3.24 Apportionment for Works to Existing Parks and Linkages

The majority of works to existing parks – and open space linkages to improve access to parks – are strictly apportioned between the existing and the new population to ensure that the incoming population contributes only its fair share – except where it can be proven that the primary nature of the work is to maintain per capita provision of a specific amenity e.g. netball courts and playgrounds. In such cases the selected location of these amenities could as easily be in a new park as in an existing one. Ku-ring-gai Council bears the cost of the co-contribution on behalf of the existing population for apportioned works to existing parks and linkages.

The exception to this rule is the intensive embellishment of some existing parks which are located within the heart of the town centres that are experiencing intensive redevelopment pressure. These parks will be expected to absorb a substantial intensification of their use by the proximity of the anticipated new development. These works are apportioned to the new development anticipated within that centre because of the direct nexus that can be substantiated. The extensive works to these parks would not be required but for the anticipated intensification of use and the consequent need to transform these parks from suburban parks to urban parks.

¹³⁵ This figure is the sum of 32,375m² in new civic spaces and 25,507m² in future land acquisition.

It should be noted that embellishment of these existing parks will meet some of the demand that would otherwise have to be addressed by the acquisition of additional land for new parks. The management of demand by utilising existing spaces is supported in the Metropolitan Strategy:

- Future open space needs will be increasingly met by a gradual shift from land acquisition to sustainable management and park improvements.”¹³⁶

3.25 Local parks and Local sporting facilities – Support

A budget of 1.25% of the total capital works programme for Local parks and sporting facilities has been allocated to future studies the primary purpose of which is to support the review and implementation of this Contributions Plan as well as the cost of administering and managing this Contributions Plan through the employment of a specialist coordinator. This cost is shared across each type of Key Community Infrastructure.

Further justification of the need for this inclusion is spelled out in **2.6.6 Management, Studies and Administration**.

3.26 Formulae: Local parks and Local sporting facilities

The following formulae are used to calculate the contribution rate per person. Rates for various types of dwelling (including subdivision) are based on the occupancy rates in **2.10 Residential Occupancy Rates**. For ease of reference, all the contribution rates are listed in the summary schedules at the front of this document.

The per capita contribution rate is the sum of all individual contribution rates derived from the formula below:

$$\text{Contribution per work per capita} = \frac{\text{Works Item Cost}}{\text{Contributing Population}}$$

The contribution population establishes the apportionment and is specifically listed against each work in the works programmes at the end of this document as follows:

For works attributed to the total 2031 population: 126,151¹³⁷
For works attributed to new growth in the Ku-ring-gai LGA: 21,048
For works attributed to new growth in the Northern area: 10,954
For works attributed to new growth in the Southern area: 10,094
For works attributed to new development in Gordon: 4,226
For works attributed to new development in Lindfield: 3,194
For works attributed to new development in Roseville: 1,481
For works attributed to new development in St Ives: 3,104
For works attributed to new development in Turramurra: 2,680
For works attributed to new development in Pymble: 1,523

¹³⁶ City of Cities (Metropolitan Strategy) NSW Department of Planning 2005; Page 235

¹³⁷ This division ensures that there will be a significant deemed contribution payable by Ku-ring-gai Council on behalf of the existing population.

3.27 Policy on Unanticipated Additional Funding

In the interests of maintaining a reasonable contribution rate, it is not possible to include every meritorious work in a Contributions Plan for either partial or full funding from contributions. Works are inevitably deleted from the final works programme to achieve reasonable contribution rates.

From time-to-time Local Government receives unanticipated income from State or Federal Government or the occasional bequest from local community members which can be very specific in their terms. In the event any work in this Contribution Plan receives additional funding, Ku-ring-gai Council will direct the amount otherwise intended to go towards this work on another work in the same category of contribution. That means, another park will be funded or additional or better quality embellishment will be instigated than would otherwise have been affordable. In this way all contributions will still be expended for the purposes for which they were required being:

- ✓ Key Community Infrastructure: Local parks and Local sporting facilities

3.28 Concluding Statement – Statement of Reasonableness

It has been long-established in case law that it is both lawful and reasonable to seek to maintain current LGA-wide per capita rates of open space. The amount of additional open space actually sought by this Contributions Plan will be insufficient to maintain current per capita rates of open space in view of the significant discounting undertaken in order to maintain a reasonable contribution rate. Given Ku-ring-gai Council's exposure to acquisition of zoned open space areas (RE1) which are considered essential to the vitality and viability of the town centres around which major development is clustered, no further discounting is either possible or reasonable.

Again it is emphasised that this Contributions Plan seeks only to provide for reasonable additional local open space. It does not seek to provide another district level park. It does not seek to provide additional natural areas. It does not levy for riparian corridors. While it does seek to embellish some existing land for a new sportsfield and add some additional netball courts, again to maintain per capita provision of sportsfields and netball courts into the future, it does not seek to acquire new land for sportsfields or for netball courts.

The majority of the works programme for existing parkland outside the town centres and for existing sportsfields has been appropriately apportioned to the total population as at 2031 which means that new development will only pay its fair share. This process ensures that there is a significant co-contribution for Ku-ring-gai Council to provide on behalf of the existing population. The works programme has also been significantly reduced to target works in close proximity to the town centres and to other new development sites that will provide direct benefit to the occupants of new development.

The only exception to the philosophy above relates to a small number of existing parks within the town centres that require extensive upgrades to transform them from suburban parks to urban parks. This work is required because of the intensification of use anticipated as a direct result of new development. These works are duly attributed to that development.

It should be noted that the existence of exclusions from the Contributions Plan provides capacity for Ku-ring-gai Council to seek external grants towards the funding of these works which have been excluded from the Contributions Plan. Likewise, additional works beyond the core embellishment provided for in this Contributions Plan, retain the potential for grants.

Ku-ring-gai Council has liaised with the departmental staff supporting the Contributions Review Panel and the Ku-ring-gai Planning Panel on key aspects of this Contributions Plan particularly in respect of the quantum and embellishment of new open space as required by the Minister for Planning and believes its approach, in good faith, to be reasonable.

Key Community Infrastructure:

Local recreational and cultural facilities

Local social facilities¹³⁸

¹³⁸ Social facilities include community and child care centres as well as volunteer rescue and volunteer emergency services facilities.

4.0 Overview of Community Facilities in Ku-ring-gai

In recent years Ku-ring-gai Council has taken a number of studies into various individual types of community facilities and services. In November 2008, Council appointed Elton Consulting to review the existing studies, visit each of the facilities, assess current usage, conduct community, operator and user consultation and to produce a Community Facilities Strategy for the future provision of community facilities through to 2031. Following this extensive research Elton Consulting provided the following summary of key issues and needs.

Key issues:

- The existing facilities are generally old, out-dated and no longer fit for purpose;
- They are neither capable nor appropriate to meet the needs of the future population;
- The majority are over forty years old, in relatively poor condition and require considerable on-going expenditure on repairs and maintenance;
- A significant proportion of Ku-ring-gai's community buildings were constructed in the 1950s and 1960s of relatively poor materials which have an estimated economic life of 40-50 years. As such, many are either at the end of the economic life or will shortly reach that point early in the life of this Contributions Plan;
- Many do not meet minimum standards for occupational health and safety, egress and accessibility;
- Most are not built for purpose but have been adapted meaning that internal layout constricts and restricts use;
- Despite their poor condition, facilities are well-used and at, or close to, capacity.

Key needs:

- A need to expand and upgrade library facilities to meet contemporary standards and respond to the heavy utilisation of libraries within Ku-ring-gai;
- A need for quality, multi-purpose space in accessible locations for a variety of social, leisure and cultural activities and programs, particularly for adults;
- Specific cultural facilities for performing and visual arts, including workshop, exhibition, rehearsal and performance spaces;
- Spaces for social and leisure activities and programs for young people;
- Services, leisure and learning opportunities to support an active, ageing population;
- Expansion and upgrading of facilities providing accommodation for services that address the social care needs of residents;
- More childcare facilities to help reduce existing waiting lists; and
- Indoor recreation facilities for all age groups.¹³⁹

Additionally, it should be noted that Ku-ring-gai Council is a significant land-holder in the Town Centres and that many of these key parcels have considerable scope to be amalgamated with an adjoining development site to produce a better quality outcome. However, many of these same sites are also encumbered with community facilities that are at, or reaching, the end of their economic life. It has been part of the integrated planning for the delivery of the town centres – both the development and the supporting infrastructure – that some of these facilities need to be relocated. In this context it is emphasised that no part of the replacement floorspace is attributed to

¹³⁹ Community Facilities Strategy, Elton Consulting; Page 5

development contributions which results in a significant co-contribution for Ku-ring-gai Council. However, the small proportional input from development contributions is critical to the achievement of the whole. Without that input, these sites will remain encumbered and unable to be released for redevelopment (regardless of their classification).

4.1 Aims and Objectives

The aims and objectives for the future provision of community facilities in Ku-ring-gai are expressed¹⁴⁰ as follows:

- Libraries and information centres provide the community with modern and diverse educational facilities;
- Libraries and information centres that meet and adapting to changing needs of the community;
- Community services satisfy emerging community needs;
- Community and recreational facilities that meet the needs of our changing population;
- Increased participation in social, cultural, sporting and recreational activities;
- Aquatic leisure needs of our changing population met.

4.2 Nexus for Local Social, Recreational and Cultural Facilities

The community facilities embraced by the terms: local recreational and cultural facilities, and local social facilities, provide opportunities for community engagement and interaction, lifelong learning and personal development, entertainment and social support. They enhance community cohesiveness through providing services to the community as a whole, to interest groups and to individuals. As such, the need for continued availability of adequate community facilities for the population arising from new development is critical in building community and including the new residents and businesses within the existing community.

Additionally, given the intensive usage of current facilities and the confirmation that many are at or beyond capacity, it is unreasonable to expect the existing population to suffer a significant cumulative diminution of access to facilities as a result of significant population growth arising from increased housing and housing choice through development. While facilities provided to serve both the existing and the new population must, naturally, be properly apportioned, it is reasonable to expect the incoming population to provide pro rata for the additional demand which is generated.

Community facilities embrace a wide range of facilities which are provided for the benefit of the community. The nexus arguments will vary depending on whether libraries, cultural facilities, multi-purpose facilities, childcare or recreational facilities are the subject. As such, the nexus for each type of community facility is separately argued in the following sections.

4.3 Overview of Capacity in current Community Facilities

As a key component of the *Community Facilities Strategy*, Elton Consulting undertook an analysis of Ku-ring-gai existing community facilities.

¹⁴⁰ Ku-ring-gai Council (Draft) Strategic Plan 2030 (various pages).

“The study has established that there is no spare capacity in any existing facilities which could be used to address demand likely to be generated by future population growth within Ku-ring-gai. Facilities are on the whole inadequate to meet the needs of the existing population and will not be able to absorb growing numbers of users, or respond to changing population needs, without redevelopment, expansion and the construction of additional facilities.”¹⁴¹

Each specific type of community facility that is currently provided by Ku-ring-gai Council is examined in greater detail in each relevant section below.

4.4 Local Social Facilities – Libraries

The library network in Ku-ring-gai consists of four existing libraries. The largest and most recently constructed of those libraries, by default acting as the central library, is located in Gordon. The remaining network consists of branch libraries at Lindfield, Turramurra and St Ives. Ku-ring-gai also runs a housebound library service delivering library resources to people who cannot physically access the library.

4.4.1 Role of the Local Library

The State Library of New South Wales in its publication *People Places – A Guide for Public Library Buildings in New South Wales*¹⁴² notes that libraries accommodate a range of activities and uses, attract a wide range of users for research, leisure and learning, provide a hub and focal point for the community and enable access to new technology.

4.4.2 Current Facilities and Capacity

The information below is a summary of the more comprehensive information in the *Community Facilities Strategy* prepared by Elton Consulting, which itself draws on extensive research.

Lindfield Library

Building Condition: The oldest (1954) library and one of the two smallest (300m²) in the network. The building is in poor condition due to its age and style of construction, outdated, and has limited administration space and amenities and poor access. It is essentially at the end of its economic life and becoming an increasing maintenance liability.

Current Usage: Mainly by families with young children and older people. Older students prefer Gordon library.

Challenges: Not located in the Lindfield Town Centre and some distance from the station.

Opportunities: New, centrally located library will certainly be required within the life of this Contributions Plan. Opportunity for co-location to create a community hub.

Gordon Library

Building Condition: The newest (1994) and largest (2,251m²) library in the network.

¹⁴¹ Community Facilities Strategy, Elton Consulting; Page 5

¹⁴² People Places – A Guide for Public Library Buildings in New South Wales 2nd edition (2005) by Heather Nesbitt in association with Bligh Voller Nield for the Library Council of NSW.

Current Usage: Most popular for students but group study and socialisation space is inadequate. Study rooms are in heavy demand. The 'sitting room' area is heavily utilised and popular with the groups likely to live in new apartments (older people, residents of small apartments and people from non-English speaking backgrounds). Computer/internet facilities are very heavily used and more space is required. Gordon acts as central library and includes administration for the network. Increasing use of space for archives.

Challenges: Needs additional study space and sitting areas; space to accommodate new technology. Distance from station and car parking an issue for elderly population.

Opportunities: Size sufficient only if other branch libraries increased; internal modifications required.

Turramurra Library

Building Condition: Purpose built in 1968 and 460m² in size.

Current Usage: Used by a cross-section of residents but limited space for study, references and for young people. Incorporates space for the home library service and housebound service.

Challenges: Very small and crowded for population served. Extensive car parking but isolated leading to evening safety concerns.

Opportunities: Could be extended and remodelled to up-to-date standards as Council owns the adjacent car park. Potential co-location with other community facilities to create hub.

St Ives Library

Building Condition: Constructed circa 40 years ago as part of the St Ives Shopping Centre (and enlarged and reconfigured 13 years ago) and one of the two smallest (310m²) in the network.

Current Usage: Heavily used, cramped and limited space for conflicting uses. Caters primarily for young children and primary school children but has inadequate study space for older children. Also caters for older people.

Challenges: Over-utilised and overcrowded, reaching the end of its economic life. Requires up-to-date technology and study space.

Opportunities: Potential to upgrade and expand as part of foreshadowed redevelopment of the shopping centre.

Summary of Recommendations

Lindfield Library should be replaced on a better site that is more accessible to users. St Ives Library can be expanded as part of St Ives Shopping Centre upgrade and extension. Turramurra Library can be augmented to meet future demand. The capacity of Gordon Library to meet future demand is dependent on the other branches also meeting future demands.

The libraries operate as a library network and library members can access the resources of the network at any branch or through the housebound service. Gordon Library hosts the central administrative functions and archives as well as being the key library for high school students for study purposes; Lindfield and St Ives Libraries primarily serve families with younger children and older people; Turramurra Library hosts the library bus and housebound service for the Local Government Area. The space devoted to various library-related uses such as the needs of different age-groups, provision of study and meeting facilities and space, running the library bus and housebound services, archival storage of records and resource etc, is fluid and could

potentially be accommodated at any library in the network as expansion takes place to meet future needs.

4.4.3 Floorspace Statistics and NSW State Library Standards

In total these four libraries – functioning as three branch libraries and a central library – provide a total of 3,321m² of floorspace. For the 2006 Estimated Resident Population of 105,103 this equates to a per capita provision of 0.032m² or 32m² per 1000 persons.

NSW State Library population benchmarks¹⁴³ suggest that branch libraries each serving a quarter of the population of 105,103 (approximately) should each have an area of 39m² per 1000 people (which is the benchmark for local catchments of between 20,001 and 35,000 persons) and the central library serving a total population over 100,000 persons should have an additional area recognising the additional functions of a central library. In short the appropriate provision for the 2006 estimated resident population of Ku-ring-gai would be in the order of 4,540m² representing a technical existing shortfall of approximately 1,219m². This figure is provided by way of demonstration that by merely attempting to maintain current per capita rates of library floorspace provision, Ku-ring-gai is being reasonable. Any additional space provided that may work towards off-setting the increasing shortfall, benefits the population as a whole and must be fully apportioned with Ku-ring-gai Council bearing most of the cost on behalf of the existing population.

Several of the libraries are at the end of their economic life and cannot feasibly be extended. Accordingly the works programme includes replacement of existing library floorspace in Turramurra, St Ives and Lindfield. It should be particularly noted that no part of the replacement of existing floorspace has been apportioned to development contributions. Replacement of existing floorspace is wholly apportioned to Ku-ring-gai Council on behalf of the existing population. In the context of this proportion, it should be noted that Ku-ring-gai Council is not precluded from seeking grant funding for any part of this component as it cannot be considered double-dipping since no part is part of the development contributions works programme. Nor is council precluded from seeking to address this issue through the management of its land and property holdings.

4.4.4 Libraries and the Ageing Population

Demographically, Ku-ring-gai continues to trend towards an increasing proportion of older people which has significant implications for the library network both in terms of the collection and resources and building structure.

“Already older residents are major users of libraries and this trend is likely to grow as the number of older residents with significant leisure time increases. Access to specialist collections, adult education, activities targeting seniors, increasing computer usage and browsing areas for casual users are examples of potential trends that may be experienced. Access for older residents in retirement villages and housebound services will also need to be considered. ... Designing libraries to meet the needs of our growing older population will be a major challenge in the future.”¹⁴⁴

¹⁴³ *People Places: A guide for public library buildings in NSW Second Edition 2005*, Heather Nesbitt with Bligh Voller Nield; Page 28

¹⁴⁴ *People Places – A Guide for Public Library Buildings in New South Wales 2nd edition (2005)* by Heather Nesbitt in association with Bligh Voller Nield for the Library Council of NSW. Pages 8-9

4.4.5 Libraries and Youth

Ku-ring-gai also has a higher proportion than the Sydney average of young people aged from 13 to 24 years of age. This is likely to continue to be the case due to the proximity of a number of prominent secondary schools, the continuing trend of young adults remaining at home well into their twenties and the on-going process of older residents who are down-sizing and releasing their large family homes to second home buyers who typically have older children.

"Youth is generally defined as those aged 13-24 years old with the older age group often still dependents engaged in further education. They are significant users of public libraries, major consumers of information technology, and hold social attitudes that are often different from others in our community. Education approaches have changed and the NSW Board of Studies now promotes co-operative learning, research and group interaction. Individual learning is not the sole approach used and youth are encouraged to interact, discuss and develop ideas together in a co-operative and team manner. For libraries this has a marked effect with many libraries now filled each afternoon with young people undertaking research projects, working on joint projects with fellow students and discussing project approaches and outcomes. The provision of meeting rooms, noisy areas, student research areas and facilities are some of the physical outcomes of this trend."¹⁴⁵

The need for libraries to include separate meeting rooms and areas for noisy group work as distinct from quiet individual study and reading areas is expected to increase. Additional space will be needed to cater for uses that are essentially incompatible.

4.4.6 Summary of Library Needs

The two preceding sections demonstrate that the two age groups which predominate, and are likely to continue to predominate, in Ku-ring-gai are both the greatest library users and have the greatest potential for significant conflict in the manner in which they use libraries. The movement towards smaller, multi-unit dwellings is also likely to accelerate this trend.

"The impact of urban consolidation is currently being experienced in many libraries as demand for study space and reading areas grows. Particularly in areas with concentrations of unit development, the availability of space for home study or leisure is limited and it appears that residents are opting to utilise the library instead."¹⁴⁶

The earlier sections demonstrate that the library network needs, at an absolute minimum, to maintain current per capita rates of floorspace for future library users, even though that is technically inadequate.

Specific future library needs include:

- distinctive children's areas that do not impact on quiet study or adult reading areas;
- discrete spaces for young people to study in groups or individually and to allow for socialising as well as rooms for tutoring or group study and projects;

¹⁴⁵ People Places – A Guide for Public Library Buildings in New South Wales 2nd edition (2005) by Heather Nesbitt in association with Bligh Voller Nield for the Library Council of NSW. Pages 9-10

¹⁴⁶ People Places – A Guide for Public Library Buildings in New South Wales 2nd edition (2005) by Heather Nesbitt in association with Bligh Voller Nield for the Library Council of NSW. Page 14

- extensive informal seating or lounge areas (all ages) to facilitate the library as a focal point for the community;
- quiet study space;
- increased access to computers and more space for electronic and audio-visual resources (all ages);
- space for exhibitions and displays;
- hireable meeting rooms (especially for after school tutoring and group projects);
- space for increased multi-lingual resources as ethnic diversity increases; and
- increased space for the support of the home library service to address the needs of the ageing population.

4.4.7 Geographic Nexus for the Library Network

In Ku-ring-gai the four libraries located in Gordon, St Ives, Lindfield and Turramurra operate as a library network coordinating services and distributing resources across the whole of the local area. Additionally, the library bus, which is currently based at Turramurra, brings the facilities and resources of the whole library network to people who are not as mobile regardless of their place of residence within the council area. Membership of the library brings access to the entire catalogue of library resources across the network.

The library network incorporates many patterns of usage with each of the libraries as several specialise in different aspects of library service or target particular age groups as detailed in **4.4.2 Current Facilities and Capacity**. Some libraries by virtue of their design suit some age-groups more than others. For example, Gordon Library provides more study areas for older students than the other branch libraries.

While some users primarily visit their local branch, other users attend the branch which best serves their needs such as high school students studying at Gordon and young families with younger children gravitating to Turramurra or St Ives.

Finally it should be noted that the works programme partly funded under this Contributions Plan will be rolled out over the life of the Contributions Plan to 2031. The establishment of new facilities in various parts of the LGA from time to time, well served by local public transport, is likely to prove an attraction and alter usage patterns over time.

In consideration of all the factors above, it is reasonable to conclude that geographic nexus is met by levying the population of the Local Government Area as a whole for the library network as a whole.

4.4.8 Works Programme for Libraries

As of the start of the present development phase Ku-ring-gai had four libraries including a central library with a total floorspace of 3,321m² serving an estimated resident population within the library network of 105,103 equating to 31.59m²/1000 persons. To maintain this rate of floorspace provision for an estimated resident population of 126,151 persons, Ku-ring-gai needs at least 3,985m² being a nett addition of 664m². However this level of provision is significantly below Ku-ring-gai's actual requirements.

Augmenting the *Ku-ring-gai Library Facilities Study* which was prepared by the Building and Planning Advisory Service State Library of NSW in July 2004 with the

more recent standards published in *People Places 2nd Edition 2005*, indicates that the future Ku-ring-gai population has the following calculated requirements:

- Four branch libraries each serving a population of between 20,001 and 35,000 persons require floorspace per capita of 39m² per person.
- This means each branch library should have average of 1,230m² in internal space.
- The central library, in carrying out additional functions for a total population in excess of 100,000 persons requires an additional internal floor area over and above that which serves its local area catchment which is called the Central Area Factor.
- The Central Area Factor for Ku-ring-gai is 530m² which serves a total population in excess of 100,000 persons.
- The total internal library floorspace required for Ku-ring-gai is 5,450m² being a gross floor area of 6,540m² (including circulation space)

Achieving this established standard is not realistic however Ku-ring-gai, in taking the opportunity to redevelop some libraries which are at or near the end of their economic life is planning for the future by seeking to increase the total library floorspace provision. The result of the proper apportionment of this additional work as a benefit to the total end population as detailed below results in a significant cost to council on behalf of the existing population. In this context it is emphasised that new development is only being asked to contribute its fair share.

4.4.9 Apportionment for Libraries

The decision by Ku-ring-gai Council to either augment or to replace and relocate the library assets rather than expand them underlines the need for clear apportionment. Ku-ring-gai Council must bear the entire cost of that part of the project that meets the needs of the existing population including the full cost of replacement of existing space.

Figure 4.1: Proposed Library Floorspace Analysis

New Library Floorspace Analysis	Percentage of total new floorspace proposed	Contributing Population
Proportion of New Library space that is replacement of existing library space	27.44%	NA
Proportion of New Library space that is for the purpose of maintaining current rates of floorspace provision for the new population	17.02%	21,048
Proportion of New Library space that serves total population by increasing service provision.	55.54%	126,151
Total	100.00%	

Accordingly, the cost of the works programme for libraries has been apportioned to the total end population at 2031 with requires Ku-ring-gai Council to bear the cost of the deemed contributions from the existing population.

4.5 Local Social and Cultural Facilities

Local social facilities and local cultural facilities are separately listed under Key Community Infrastructure but no separate definition of these aspects of community life appears to be available at the time of finalising the drafting this Contributions Plan.

In the Ku-ring-gai Local Government Area the use of existing community floorspace – and the likely use of future multi-purpose community floorspace – for such purposes is intermeshed with often only a temporal demarcation of the same physical space for a number of community uses. This has been clearly established in the *Community Facilities Strategy* prepared by Elton Consulting in 2008/2009. Accordingly, the use and provision of community space for a variety of social and cultural purposes is the subject of this section.

4.5.1 Local Social and Cultural Facilities – Current Facilities Providing Community Space

The table below illustrates the provision of community floorspace in the Ku-ring-gai Local Government Area. In view of the separate analysis and works programme for the library network in Ku-ring-gai, this section of the Contributions Plan relates to community floorspace nett of libraries.

This is an accurate reflection of the actual use of community space (excepting libraries) in Ku-ring-gai. While there are some dedicated facilities, the majority of community floorspace serves many different users with access to the space shared on different days and times. The model for facilities going forward is also the provision of spaces capable of multiple and flexible uses which may be allocated to particular users as the demography of the area alters over time.

Figure 4.2: Community Floorspace in Ku-ring-gai

Social, Cultural and Community Floorspace	Facilities	Square Metres by dominant use ¹⁴⁷	m ² per capita 2006 ERP (105,103)
Library Network	4	3,321	0.032
Community Centres/Meeting Rooms & Halls	8	3,629	0.034
Accommodation for Service Providers	5	1,595	0.015
Facilities for Young People	4	428	0.004
Facilities for Older People	5	1,104	0.011
Children's Services	17	4,613	0.044
Cultural Facilities	7	3,763	0.036
Total	50	18,453	0.176
Total Nett of Library Floorspace	46	15,132	0.144

As previously stated, a significant proportion of Ku-ring-gai's existing community buildings were constructed in the 1950s and 1960s of relatively poor materials which have an estimated economic life of 40-50 years. As such, many are either at the end of the economic life or will shortly reach that point early in the life of this Contributions Plan.

Ku-ring-gai is at a unique point in time where a significant new growth phase both necessitates new facilities and provides the catalyst for new, purpose-built facilities. While this inevitably results in a high apportionment of the total cost of works to Ku-ring-gai Council on behalf of the existing population, this is a point in time that is unlikely to be repeated in the current generation. It is the only time where Ku-ring-gai can feasibly plan for, and achieve, new community facilities for future generations. In

¹⁴⁷ It should be noted that in order to ensure that total floorspace figures are correct, only the dominant use of each area is included within this table. Several spaces are used for different purposes outside the hours when they are used for their dominant purpose. The total figures therefore err on the conservative side of when related to total service provision however it is also noted that it is likely that new multi-purpose will also reflect similar temporally varied usage.

the absence of a comprehensive works programme, access to community floorspace would begin to decrease both as a function of increasing population and as a result of unfit facilities becoming increasingly unavailable to the community.

Library needs, through the auspices of the State Library, can be clearly demonstrated with regard to formal, recognised standards. Generic community space does not enjoy the same availability of recognised standards. Ku-ring-gai has established its works programme through needs analysis. The reasonableness of this approach has been benchmarked by comparison with other Local Government Areas. The two LGAs illustrated are the neighbouring council in the north shore and the highly urbanised City of Sydney. In summary, data from the *Community Facilities Strategy* by Elton Consulting¹⁴⁸ reveals the following:

Council of the City of Sydney: 0.57m² per capita
Hornsby Shore Council: 0.32m² per capita

It should be noted that, as at 2031, having achieved the works programme in this Contributions Plan (which, it is emphasised, is highly apportioned to Ku-ring-gai Council on behalf of the existing population) the per capita rate of provision of community floorspace as at that date is projected to have reached 0.25m²/capita¹⁴⁹ which is still well below the rate of provision of other Local Government Areas. Ku-ring-gai Council is not currently in a position to heavily subsidise a more extensive works programme than that already included in this Contributions Plan.

4.5.2 Local Social and Cultural Facilities – Future Multi-Purpose Community Space

At the present, relatively early, stage of Ku-ring-gai's current redevelopment phase it would be illogical to precisely demarcate the future use of multi-purpose space for various demographics and special interest groups. That precision should be determined by further post-occupancy surveys and community input at the time the new multi-purpose facility is proposed for construction. At the time of drafting this Contributions Plan it is reasonable to identify the quantum of community floorspace required to ensure that new development contributes towards its fair share and to demonstrate the nexus and the case for the various types of space that could be accommodated subject to further demographic testing and community surveys. The following sections outline the on-going use and likely future demand for the types of floorspace required into the future.

4.6 Local Social and Cultural Facilities – Facilities for Young People

The Ku-ring-gai Local Government Area features a high proportion of young people and this population trend is likely to be sustained as larger single dwellings are released by the ageing/retiree population onto the market.

In Ku-ring-gai in 2006, there were 20,444 children aged between 5 and 17 years of age making up 20.7% of the population. This is a substantially greater than the average for the Sydney Statistical Division at 16.9% of the population. Total numbers and percentages have been fairly stable since the 1991 census. It will not be clear until the 2011 census how this trend is currently tracking either in terms of the general trend or in terms of whether new housing will influence this trend. In this context it should be noted that the process of down-sizing by older residents has a direct consequential

¹⁴⁸ Elton Consulting: *Community Facilities Strategy*, June 2009; Page 79

¹⁴⁹ These figures include both libraries and general community space for all three examples.

effect of releasing a substantial dwelling house onto the market. The typical purchasers of these houses are second homes buyers with primary and secondary school aged children. Additionally the survey of recently completed dwellings by Elton Consulting indicated an emergent trend for units to include young people and for proximity to schools to be listed as one of the reasons for choice of location.

The challenge of providing facilities for young people is to make young people feel welcomed rather than segregated without creating an atmosphere where other users, especially elderly people, feel threatened by congregations of youth. Youth facilities can be incorporated into multi-purpose space with careful design.

Research for the *Community Facilities Strategy* undertaken by Elton Consulting demonstrated that:

- Despite the large and growing numbers of young people in Ku-ring-gai, there is very little for young people to do within Ku-ring-gai;
- There is a need for safe places for young people to meet informally and socialise;
- A trend towards increases in anti-social behaviour amongst some groups of young people has been linked to a lack of spare space and facilities for leisure time; and
- There is little in the way of public sporting and cultural facilities for youth who attend public schools.¹⁵⁰

The anticipated growth of the youth population either as a direct or an indirect consequence of additional development points to a demand for additional space for youth activities. It should be particularly noted that the entire community benefits from the provision of adequate and appropriate facilities for youth by averting the potentially increased scope for anti-social activities.

4.7 Local Social and Cultural Facilities – Facilities for Seniors

In Ku-ring-gai in 2006, there were 14,118 mature adults aged between 65 and 84 and a further 2,851 senior adults aged over 85 representing 14.2% and 2.8% of the population respectively being 17% of the Ku-ring-gai population being over 65. This is significantly more than the average for the Sydney Statistical Division at 10.6% and 1.6% of the population respectively being a total of 12.2%. All age groups had increased in overall numbers since the 2001 census. It will not be clear until the 2011 census how this trend is currently tracking either in terms of the general trend or in terms of whether new housing will influence this trend.

There are currently two senior citizens facilities in the Ku-ring-gai Local Government Area located at Turramurra in the northern part of the LGA and at Lindfield in the southern part of the LGA. Ku-ring-gai has a support services centre at Turramurra from which is run a range of Health and Community Care (HACC) services including Meals on Wheels, Hornsby-Ku-ring-gai Aged and Disabled Transport Service and Easy Care Gardening. Several volunteer groups run services from council-owned space provided as a service to the community.

Research for the *Community Facilities Strategy* by Elton Consulting noted that the needs for services for seniors will increase in importance and use as the population ages. There will be a growing need for spaces to meet the social, leisure and learning needs of older people which wish to remain active and involved in community life.

¹⁵⁰ Elton Consulting, *Community Facilities Strategy*, June 2009; Page 46

Further, the surveys of residents of newly completed dwellings indicated that a significant proportion of respondents expect to use seniors facilities and services as they aged in place.¹⁵¹

4.8 Local Social and Cultural Facilities – Cultural Purposes

The provision of cultural facilities can be controversial even in an area with the socio-economic profile of the Ku-ring-gai Local Government Area and the question arises whether this is a core need of the community. It should be noted, however, that “participation and engagement in creative activities, such as locally based arts and crafts practice and community-driven creative projects, is important to foster a culture of creativity and innovation with local communities.”¹⁵²

Ku-ring-gai has an established tradition providing space for arts and crafts and currently provides meeting and storage facilities for users as diverse as The Knitters Guild, groups of spinners and crocheters, the Local Handicraft Association, the Ku-ring-gai Art Society, the Killara Music Club, the Ku-ring-gai Philharmonic Orchestra and the Cavalcade of Fashion. Consultation with the Ku-ring-gai population indicates a high value on cultural expression and facilities that support this.¹⁵³

Reference to the *Draft North Sub-regional Strategy* notes that residents have access to some cultural facilities within the subregion however this is relatively limited and there is a need to improve on the existing level of provision. Ku-ring-gai has a long tradition of performing arts with the Marian Street Theatre in Killara.¹⁵⁴

A stated objective of the *Draft North Subregional Strategy* is to “ensure opportunities exist for all residents to pursue cultural activities in the subregion.”¹⁵⁵

Following consultation and analysis, Elton Consulting noted that ‘it would appear that many of the needs ... could be met in well-designed multi-purpose facilities, including exhibition and display areas, meeting, seminar and function rooms, spaces for multi-cultural groups and workshop space, particularly if the multi-purpose facility had a cultural focus.’

However, Elton Consulting also noted that facilities for performing arts (dance, drama and music) require more specialist facilities such as auditorium / theatrette, acoustic rooms and sound studios / multi-media lab. Also encouragement for visual and textile arts will require more extensive workshop, studio and storage space than can be provided in a general multi-purpose facility.

This Contributions Plan provides for a cultural focus for community space within the context of the future development of new multi-purpose facilities. While Ku-ring-gai Council is proposing additional upgrade works to the Marion Street Theatre, these works are not included within this Contributions Plan. It is noted that the Marion Street Theatre arguably provides a regional benefit which would result in a high onus on Ku-ring-gai Council to fund the majority of the additional work. As a result,

¹⁵¹ Elton Consulting, *Community Facilities Strategy*, June 2009; Page 51

¹⁵² Melbourne City Council: Melbourne 2030 Strategy

¹⁵³ Elton Consulting, *Community Facilities Strategy*, June 2009 Page 75 quoting research indicating that 80% of residents placed a high importance on having access to cultural facilities and 92% considered it important that Council provide access to cultural facilities and services.

¹⁵⁴ NSW Government: North Subregion: Draft Subregional Strategy Page 92

¹⁵⁵ NSW Government: North Subregion: Draft Subregional Strategy Page 90

targeting development contributions as a small proportion of the total funding package is not the best financial strategy for this important facility.

4.9 Local Social and Cultural Facilities – Facilities for Children

In Ku-ring-gai in 2006, there were 5,238 children aged between 0 and 4 years of age making up 5.3% of the population. This is a little less than the average for the Sydney Statistical Division at 6.6% of the population. The total number was a slight decrease on the number of infants in 2001 (5,387) but an increase from the previous census in 1996 (4,935). It will not be clear until the 2011 census how this trend is currently tracking either in terms of the general trend or in terms of whether new housing will influence this trend.

Ku-ring-gai Council has recently completed a *Draft Childcare Needs Study 2008* which has been peer reviewed by Elton Consulting and incorporated within the *Community Facilities Strategy*.

Currently Ku-ring-gai Council directly provides the Thomas Carlyle Children's Centre in Lindfield which provides long day care and occasional care for children from 6 weeks to 5 years of age. Ku-ring-gai Council also operates a family day care service which recruits, trains and supports carers to provide childcare in the carers' own homes.

Ku-ring-gai Council is an indirect provider of considerably more children's services through the provision of 4,611m² of floorspace for children's services including eleven (11) preschools and long day care centres, one (1) before and after school centre, a playgroup centre, one (1) family day care centre and two (2) early childhood health centres. A further two (2) preschools operate out of dual use halls which means they are obliged to completely pack up at the end of each day.

Figure 4.1: Childcare Provision and Demand in Ku-ring-gai

Type	Current Services	Current Places	Demand for Places (required) ¹⁵⁶	Shortfall Places	Places in Current Projects ¹⁵⁷
Long Day Care	24	1,019	1,235	216	176 (4)
Home Based Day Care (Private)	9	49	54-64	6-15	-
Family Day Care Scheme	24	121	171	50	-
Preschool	25	981	1,041-1,335	60-354	40 (1)
Occasional Care	2	57	64-76	7-19	-
Total Care for Young Children	82	2,227	Variable	Variable	216
Type	Current Places		Demand for Places		
After School Care	1,320		1,320		
Before School Care	690		690		
Vacation Care	555		555		
Total care for school-aged children	2,560		2,565		

¹⁵⁶ There are a number of different industry formulae which aim to calculate the demand for, and consequent shortfall, of childcare spaces leading to a variable result. In practice each LGA has to make a reasonable judgement utilising these formulae based on its own demographic circumstances which include the socio-economic status of parents, degree and location of employment and the demand demonstrated by utilisation of existing services and references to waiting lists. These results are from the *Draft Childcare Needs Study 2008* which analyses the various formulae in detail.

¹⁵⁷ As of April 2009, Development Approval had been granted for four additional long day care centres and one pre-school.

The supply quantified in the tables above equate to:

- One (1) place in either long day care, family day care or home-based care for every seven (7) children aged less than two (2) years of age;
- One (1) place in either long day care, family day care or home-based care for every three (3) children aged two to three (2-3) years of age;
- One (1) place in either long day care, family day care or home-based care for every five (5) children aged three to six (3-6) years of age;
- There is approximately one (1) preschool place for every three (3) children aged between 3 and 5 years of age (up until the 6th birthday); and
- There is approximately one (1) occasional care place for every 104 children less than 6 years of age.
- Further, there is approximately one (1) after school care place for every nine (9) children between five (5) and twelve (12) years of age attending a primary school in Ku-ring-gai;
- There is approximately one (1) before school care place for every sixteen (16) children between five (5) and twelve (12) years of age attending a primary school in Ku-ring-gai; and
- There is approximately one (1) vacation care place for every twenty-six (26) children between five (5) and fourteen (14) years of age attending a primary school or high school in Ku-ring-gai.

It should be noted that before and after school care is particularly limited to a highly localised area, usually within or adjacent to school grounds, since young children lack the independent skills to travel safely between the school and the before or after school location. As a consequence most before and after school care is provided in direct association with the school concerned and is not the subject of this Contributions Plan notwithstanding that some council-owned space is currently used for such a service.

4.9.1 Consultation with Service Providers

Elton Consulting undertook a survey of service providers to follow up information contained in Council's *Draft Childcare Needs Study 2008*. The findings note:

- Waiting lists are generally long;
- There is a particular demand for long day care (as opposed to the shorter hours of preschool) and care for 0-2 year olds; and
- There is a perceived need to preserve a mix of different child care services to provide parents with choice.

Interviews undertaken for the *Draft Childcare Needs Study* ascertained that the majority of services were at 90-100% utilisation with waiting lists.

4.9.2 An on-going role for Local Government in the provision of Childcare

This Contributions Plan takes into account the important role of private operators in the provision of childcare. However, the current context of childcare provision must also acknowledge the recent experience arising from the collapse of a major private childcare services provider. Accordingly, it is also important to recognise that there are inherent short-comings in an over-reliance on the private provision of childcare – both in terms of total quantum and in the provision of childcare services for all target groups including very young children and special needs children. Both these groups

require higher staff to child ratios and are, therefore, more expensive to provide a childcare service to than pre-school aged children.

In summary, there is an on-going role for local government as a not-for-profit childcare provider while recognising the significant contribution also made by the private sector.

There are established social and economic benefits for individuals, families and the community generally derived from the provision of reliable, quality childcare. Investment in children's development, including the provision of childcare, is important in supporting workforce participation and productivity, leading to economic growth. Childcare facilities and programmes also contribute to the social and intellectual development of young children in preparation for school life.

In the Ku-ring-gai context, it is also noteworthy that an emergent trend identified in the surveys of residents in newly completed developments is the number of grandparents reporting a carer role for their young grandchildren.

An analysis of the demographics of the workforce indicated that there would be limited additional demand from this sector on childcare services and, accordingly, that apportionment for childcare facilities to the workforce was not warranted. This situation will be monitored throughout the life of this plan.

This Contributions Plan does not directly propose additional child-specific facilities but does allow for the allocation of generic multi-purpose space to be allocated for children's services if the demand is established throughout the life of this Contributions Plan through census data and post-occupancy surveys.

4.10 Local Social and Cultural Facilities – Community Meeting Space

Part of the challenge of establishing new communities in new dwellings and integrating that community into an active established community is the facilitation of community activities through the provision of meeting spaces. The trend towards increasing demand for meeting space is already evident.

Community Meeting Space in Ku-ring-gai – Director Community advised an increase demand for meeting space as new community groups are established, also as existing groups require additional space. In particular, there has been an increased demand for both casual and permanent use of the meeting room in the Old School Building in Gordon, due to its central location and access to public transport.¹⁵⁸

The formal approaches to council by new and existing community groups as reported above are supported by research undertaken by Elton Consulting as part of the *Community Facilities Strategy* in 2008/2009. The consultants recommended that in planning for new facilities, multi-purpose facilities should provide affordable accommodation for services and community organisations.

Research undertaken for the *Community Facilities Strategy* by Elton Consulting demonstrated:

- A need for upgraded meeting rooms and lecture theatres with modern audio visual equipment;

¹⁵⁸ Reference: Minutes of the General Manager and Directors Meeting 16 April 2009.

- A need for improved accessibility of community facilities and universal access around the Local Government Area; and
- A need for indoor recreation space for a variety of leisure and recreation activities.

Elton Consulting concluded that council's halls, meeting rooms and community centres are well used and more intense utilisation is unrealistic given the size, configuration and condition of the facilities. The facilities in local neighbourhoods are predominantly used during the day for children's activities, leaving very little space for adult activities, particularly activities for older people. There is a need for contemporary facilities which are multi-purpose and located in safe, accessible and convenient centres.¹⁵⁹

4.11 Local Social and Cultural Facilities – Provision for Service Providers

The nature of the demography of the Ku-ring-gai Local Government Area means that council is in the position of providing affordable space for non-profit service providers. These third party providers provide services that would otherwise need to be undertaken by local or state providers and are not in a position to pay market rentals.

These service providers include a number of Health and Community Care Services (HACC), Hornsby-Ku-ring-gai Aged and Disabled Transport Service, Easy Care Gardening, Meals on Wheels, Lifeline, Lifestart, JewishCare, Alcoholics Anonymous, Action for People with a Disability, and MAPS (a disability service).

Elton Consulting concluded that the facilities that Ku-ring-gai Council makes available to accommodate social care services are currently operating at full capacity and there is no ability either to meet the needs of existing providers for additional space or to accommodate any additional services and organisations. The lack of spare accommodation points to a need for provision of additional space if service providers are to meet the needs of a growing population.¹⁶⁰

4.12 Ku-ring-gai Wildflower Garden

Ku-ring-gai Wildflower Garden currently includes an area of 194m² of community floorspace which is currently used for community purposes such as education for the general community and for use as a hall. Usage of this facility is increasing significantly as the population grows and becomes more environmentally aware.

As part of the provision for additional generic community space on a pro rata per capita basis, this Contributions Plan foreshadows the potential for some of this additional community space to be allocated as an extension to the present community space.

It is acknowledged that the actual allocation of a portion of the proposed multi-purpose floorspace for this community area would be subject to further needs analysis including a proportional breakdown of demand. The future possibility of this option is simply recognised in principle as a part of this Contributions Plan and noted as subject to further investigation and research.

¹⁵⁹ Elton Consulting, *Community Facilities Strategy*, June 2009 Page 28

¹⁶⁰ Elton Consulting, *Community Facilities Strategy*, June 2009 Page 34

4.13 Local Social and Cultural Facilities – Works Programme

Key outcomes from the Community Facilities Strategy prepared by Elton Consulting highlight the need for priority to be given to the provision of multi-purpose facilities capable of meeting the needs of a range of target and interest groups for a variety of activities, programmes and services.¹⁶¹

Accordingly this Contributions Plan seeks to maintain current per capita rates of provision of floorspace for general community purposes as new development intensifies demand for additional space. This Contributions Plan also provides for additional community space apportioned over the total population thus ensuring that new development only pays its fair share.

The nature of the use for which space is required may change over the life of this Contributions Plan and over the economic life of the facility. As such, the space constructed to meet this demand will generally be flexible with the capacity to accommodate changing uses over time.

Full details of the proposed works are featured in the works programmes at the end of this document.

4.14 Local Recreational Facilities – West Pymble Aquatic Centre

The Ku-ring-gai Local Government Area does not, at present, effectively provide year round access to swimming facilities. The only local municipal swimming pool is an open air facility located in Bicentennial Park in West Pymble in a centrally accessible area of the locality.

Considerable travel distances are involved for the people of Ku-ring-gai if they are to access all-year-round indoor aquatic facilities in nearby Local Government Areas such as:

- ✓ Ryde Aquatic Centre on Victoria Road in Ryde;
- ✓ Willoughby Leisure Centre in Small Street in Willoughby;
- ✓ Lane Cove Aquatic Centre in Little Street in Lane Cove;
- ✓ Hornsby outdoor heated pool on the Pacific Highway in Hornsby; and
- ✓ Warringah Aquatic Centre off Aquatic Drive (off Allambie Road), Frenchs Forest.

Only Pittwater Local Government Area (until 1992 part of the Warringah LGA) does not have an indoor aquatic centre. Pittwater LGA does have seven ocean rock pools and three still water swimming enclosures and, together with Warringah Local Government Area, provides the nearest available beach swimming for the people of Ku-ring-gai.

In summary, all adjoining Local Government Areas are providing aquatic facilities for the people of their areas. It is reasonable to conclude, therefore, that any facility provided by Ku-ring-gai Council will be for the benefit of its local population and will not provide a regional facility.

Hornsby Shire Council currently provides four aquatic centres, of which two are indoor, for an Estimated Resident population of 159,211. Ku-ring-gai is proposing to

¹⁶¹ Elton Consulting, *Community Facilities Strategy*, June 2009 Page 2

extend its single existing outdoor facility to incorporate an additional indoor aquatic facility to serve a future estimated resident population of 126,151 within the life of this Contributions Plan. This facility is fully apportioned so that new development only pays its fair share and Ku-ring-gai Council carries the very significant co-contribution on behalf of the existing population.

As clearly identified in the demography section, Ku-ring-gai's population is characterised by a significant youth population, and their parents, and a significant elderly population. All are, and are likely to continue to be, significant users of local swimming pool facilities, all year round.

As further demonstrated in the demography section, new development is likely to continue the concentration of these age-groups within Ku-ring-gai both by creating more affordable housing for families and by allowing older people to downsize releasing substantial houses onto the second home-buyer market. In particular, the ageing population has a need for heated swimming pool facilities including capacity for a public hydrotherapy pool. Only private hydrotherapy pools are currently located in this area. The loss of the public facility at Royal North Shore Hospital further underlines this need.

The selected design of the West Pymble Aquatic Centre is supported by extensive research over several years commencing with the *Aquatic Centre Feasibility Study* by HM Leisure Planning Pty Ltd in 2006 which was publicly exhibited and updated in 2007. A selective tender process for the detailed design phase was undertaken at the end of 2008. Quantity Surveyor cost estimates were prepared in June 2009. Construction expected to commence in 2011.

Finally, it should be noted that, in accordance with the principles of its draft *Total Asset Management Strategy* Ku-ring-gai Council has considered, at design stage, the future operational and maintenance costs of the operational life of this facility and that the design of this facility reflects that analysis. The total capital cost of the facility is estimated at \$14,231,156.

4.15 Local Recreational, Social & Cultural Facilities – Support

A budget of 1.25% of the total capital works programme for Local Recreational, Social and Cultural Facilities has been allocated to future studies the primary purpose of which is to support the review to support the review and implementation of this Contributions Plan as well as the cost of administering and managing this Contributions Plan through the employment of a specialist coordinator. This cost is shared across each type of Key Community Infrastructure.

Further justification of the need for this inclusion is spelled out in **2.6.6 Management, Studies and Administration**

4.16 Overview of the Works Programmes

The works programme for Local Recreational, Social & Cultural Facilities is partly specifically delineated and partly generic. The works programmes for the library network and the West Pymble Aquatic Centre are well-defined and, in the case of the latter, well-advanced. The works programme for multi-purpose community space is less defined which is reasonable at this stage of the development phase to 2031. At present, this Contributions Plan seeks to levy for additional community space on a pro

rata per capita basis costed as a multi-purpose facility. The precise uses of the multi-purpose space will be defined by further community surveys (particularly post-occupancy surveys of new development), census data at the time of instigation. Notwithstanding, current analyses undertaken as part of the *Community Facilities Strategy* undertaken by Elton Consulting in support of this Contributions Plan, indicate a likely mix of community meeting space and associated storage, cultural facilities, aged persons, youth facilities, possible childcare and associated car parking. These needs support the basic premise of the nexus arguments which is to maintain access to community space. The formal allocation of this space will be undertaken at project instigation.

4.17 Formulae: Local social, recreational and cultural facilities

The following formulae are used to calculate the contribution rate per person. Rates for various types of dwelling (including subdivision) are based on the occupancy rates in **2.10 Residential Occupancy Rates**. For ease of reference, all the contribution rates are listed in the summary schedules at the front of this document.

The per capita contribution rate is the sum of all individual contribution rates derived from the formula below:

$$\text{Contribution per work per capita} = \frac{\text{Works Programme Costs}}{\text{Contributing Population}}$$

The contribution population establishes the apportionment and is specifically listed against each work in the works programmes at the end of this document as follows:

For works which replace existing floorspace that has reached the end of its economic life: whole of cost borne by council on behalf of existing residents

For works to maintain current per capita rates of community floorspace attributed to new growth in the Ku-ring-gai LGA: 21,048

For works providing additional floorspace attributed to the total 2031 population: 126,151¹⁶²

4.18 Location and Design Principles for Community Facilities

The future of community facilities in Ku-ring-gai to 2031 has been considered using the following principles:

4.18.1 Design

To obtain maximum use from facilities it is essential to consider providing:

- a range of spaces to cater for different activities and user groups of different ages and abilities;
- spaces that can be configured into different sizes but also minimise noise impacts;
- spaces that can be zoned or locked down to provide access to parts of a building at night or weekends;
- adequate secure storage space to facilitate sharing of larger spaces by a variety of groups;
- capacity to share kitchens between a variety of users;

¹⁶² This division ensures that there will be a significant deemed contribution payable by Ku-ring-gai Council on behalf of the existing population.

- ceiling heights to accommodate a variety of users.

4.18.2 Size, scale, location and place-making

There is a balance to be struck between the advantages of larger multi-purpose facilities and smaller scale local facilities with a walkable catchment. Fortunately, the bulk of new development is to be concentrated around the town centres and along major transport nodes (both rail and bus) facilitating this balance. Childcare facilities are often better located a short distance away from busy centres while being reasonably accessible. For community meeting spaces and cultural facilities, safe and secure access at night and on weekends is also essential to facilitate maximum usage.

4.18.3 Multi-purpose and multi-function facilities / Clustering / Co-location

Some facilities work well as a component of a multi-purpose facility particularly some cultural facilities and meeting spaces provided adequate individual storage can be provided. Others such as libraries need to be distinct but can benefit from location in a community facilities hub and/or commercial centre.

Ku-ring-gai is concerned that the new legislation may inadvertently effectively discourage larger multi-purpose facilities by deeming them to be district facilities which must meet more extensive criteria in order to obtain Ministerial approval before contributions can be sought towards their provision. A formal business plan could only be prepared when such a facility was in an advanced state of planning which may be after levying towards a generic facility for some years.

4.18.4 Sustainability and future management

While development contributions can never contribute towards the running of a facility, it would be illogical to embark upon the design of new facilities without a thorough analysis of how its future usage, including staffing, maintenance and running costs would be funded. Some potential for commercial use such as the capacity to run formal fitness classes or to provide a café may facilitate the future attractiveness, availability and use of facilities to the community into the long-term by providing additional financial capacity for maintenance and staffing.

Environmentally sustainable design from the outset is also important as there is little merit in building a facility that is functionally obsolete the day it is opened and represents an on-going liability to all ratepayers both existing and future.

4.19 Policy on Unanticipated Additional Funding

In the interests of maintaining a reasonable contribution rate, it is not possible to include every meritorious work in a Contributions Plan for either partial or full funding from contributions. Works are inevitably reduced in scale or deleted from the final works programme in the interests of achieving reasonable contribution rates.

From time-to-time Local Government receives unanticipated income from State or Federal Government or the occasional bequest from local community members which can be very specific in their terms. In the event any work in this Contribution Plan receives additional funding, Ku-ring-gai Council will direct the amount otherwise intended to go towards this work on another work in the same category of contribution. That means a facility will be extended or better quality fit-out will be provided than

would otherwise have been affordable. In this way all contributions will still be expended for the purposes for which they were required being:

- ✓ Key Community Infrastructure: Local recreational and cultural facilities and Local social facilities

4.20 Concluding Statement – Statement of Reasonableness

Ku-ring-gai Council is seeking in this Contributions Plan firstly to maintain current rates of per capita community space in order to prevent the impact of additional development resulting in a significant decline in access to facilities. In this context, contribution rates for the proportion of new works that are to maintain the established pro rata, per capita rates are apportioned wholly to new development.

Ku-ring-gai Council is also seeking to provide additional library and multi-purpose floorspace designed for current community-use standards to bring the Local Government Area up to acceptable standards of provision. This additional floorspace is apportioned to the entire benefiting population, being the total population as at 2031, thus ensuring that new development only bears its fair share. This apportionment process also ensures that Ku-ring-gai Council makes a significant deemed co-contribution on behalf of the existing population.

The strategy for future Community Facilities is supported by extensive studies including condition reports of the current community buildings and council's draft *Asset Management Strategy*. Accordingly, where it has been established that an existing structure has reached, or is about to reach, the end of its economic life and it is no longer, or will soon be no longer, fit for purpose, then Ku-ring-gai Council has taken the economically logical approach of seeking to replace that facility. In the context of reasonableness, it should be noted that development contributions are not providing for replacement of existing space; this cost is wholly apportioned to Ku-ring-gai Council. Ku-ring-gai Council, in implementing the works programme, takes the strategic approach of assessing the whole-of-life cost of that asset over time.

It is reiterated that where a new structure is proposed, that new structure is strictly apportioned as outlined above and, in more detail, within this chapter, between the incoming and the existing population and Ku-ring-gai Council will bear its fair share of the proportion of the cost on behalf of the existing community as a co-contribution over a rolling works programme over the life of this Contributions Plan. Ku-ring-gai Council also bears the whole of the proportion of the cost that represents the replacement of existing floorspace that has reached the end of its economic life. This future cost liability is recognised and is being incorporated into Ku-ring-gai Council's Long Term Financial Plan. While adding on to existing facilities would produce a much simpler mathematical apportionment it is not logical to extend a building that has reached, or will reach during the life of this plan, the end of its economic life.

While Ku-ring-gai's co-contribution is significant, these major capital works could not be undertaken but for the contributions arising from new development bringing new people and new investment to Ku-ring-gai. This Contributions Plan establishes the base for future community facilities development in Ku-ring-gai commensurate with a projected increase in population over the existing population in the vicinity of 20% concentrated along the Pacific Highway Corridor yet dispersed in five key centres along this highway and a sixth in St Ives.

Ku-ring-gai Council has liaised with the departmental staff supporting the Contributions Review Panel and the Ku-ring-gai Planning Panel on key aspects of this Contributions Plan and believes its approach, in good faith to be reasonable.

Key Community Infrastructure:

Local Roads

Local Bus Facilities

Local Drainage Works

“road” has the same meaning as in the *Local Government Act* and includes a highway, street, lane, pathway, footpath, cycleway, thoroughfare, bridge, culvert, causeway, road-ferry, ford, crossing, by-pass and trackway, whether temporary or permanent, any part thereof and any thing forming part of these. As such, ‘road’ includes the entire road reservation in the public domain between property boundaries (being the private domain) inclusive of footpaths and nature strips and any structure located on them.

“drainage” means any activity which intentionally alters the hydrological regime of any locality by facilitating the removal of surface or groundwater.

In the context of this chapter, drainage refers to drainage-related works normally found within the road reservation.

5.0 Overview of Development and Demand

Since 2005, in conjunction with comprehensive planning for the development of a minimum of 10,000 additional dwellings centred on railway stations and in St Ives, Ku-ring-gai Council has taken a number of studies into the impact such development is likely to have on accessibility within the area. Traffic studies were undertaken in 2006 and these were updated in 2008 incorporating the proposed revisions in the then draft *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* exhibited by the Ku-ring-gai Planning Panel at the end of 2008.

Key issues:

- The total of 12,069 dwellings proposed for Ku-ring-gai in current growth phase (2004-2031) represents a 33.4% increase over the 36,177 dwellings counted at the 2006 census¹⁶³.
- Around 87% of this growth is being concentrated on just 6% of the total land area in the Ku-ring-gai Local Government Area in the six key town centres plus their immediate environs representing a significant change in Ku-ring-gai from a wholly low density residential area, to featuring highly urbanised town centres.
- Additional, concentrated development will generate additional traffic, both vehicular and pedestrian, that will place an additional demand on the local street network including pedestrian facilities and spaces;
- Many key intersections are at or nearing a minimum acceptable level of service; and
- Circulation and access in some key town centres is constrained by an historical block pattern featuring long, linear blocks.

Key needs:

- To successfully effect a change from low-key suburban town centres to highly urbanised town centres in both an economically and environmentally sustainable manner;
- To maintain an acceptable level of service for key intersections despite the increase in pedestrian and vehicular traffic;
- To facilitate access within and around the town centres including access to key attractors such as public transport nodes, retail shopping and services, and key community facilities;
- To facilitate both pedestrian and vehicular access in and around Gordon as the key Town Centre within the Local Government Area maintaining its position in the retail hierarchy;
- To upgrade the pedestrian environment to revitalise the town centres as the population increases and concentrates in order to manage additional pedestrian traffic;
- To improve pedestrian amenity in town centres reinforcing local shopping and supporting future economic development and vibrancy;
- To provide the physical infrastructure that will support and encourage quality developments and ensure that Ku-ring-gai is a place where people will want to live thereby continuing to support sustainable future development; and
- To facilitate commuter car parking on the outskirts of the town centres in order to support public transport usage.

¹⁶³ This was only a nett increase of 640 dwellings since the 2001 census underlining the fact that most of the approvals between 2004 and 2006 were not yet occupied at the time of the 2006 census.

5.1 Principles of Nexus

The works programme embraced by the terms: local roads and local bus facilities, is essential to maintain the accessibility and amenity of the town centres within Ku-ring-gai notwithstanding a considerable intensification of development in the immediate vicinity.

It is unreasonable to expect the existing population to suffer a significant cumulative reduction in accessibility and amenity as a result of significant population growth arising from increased housing and housing choice through development.

Local drainage works in the context of this chapter are limited to a number of additional works essentially required within the road reservations in the vicinity of the town centres. These are required to manage stormwater run-off resulting from cumulative development located primarily along the ridgeline. In general, most stormwater management is addressed at the development consent stage and requires individual developments to manage the impact of stormwater run-off from the individual development.

5.1.1 Transport and the Journey-to-Work

Reference to demography sections (specifically 2.14.8 The Ku-ring-gai Workforce and the Ku-ring-gai Labour Force and 2.14.11 Motor Vehicles for Ku-ring-gai Households) indicates that the chief mode of transport for the journey-to-work for Ku-ring-gai's employed residents is the car with a total of 54.7% commuting journeys by private car being 51.2% as driver and 3.5% as passenger. Similarly for the workforce the total figure 61.1% represents 56.8% as driver and 4.3% as passenger.

A total of 19.2% of employed Ku-ring-gai residents report using the train to travel to work. At 8,915 persons this figure represents just 8% of the total estimated resident population in the 2006 census. Only 7.2% of Ku-ring-gai's workforce arrives by train.

5.1.2 Transport and other trips

The demography analysis in **2.14 The Demography of Ku-ring-gai** provides an analysis of the nature of trips. In **2.14.11 Motor Vehicles for Ku-ring-gai Households** it is shown that only 57,000 of 450,000 weekday trips (all modes) relate to commuting being 12.7%. This compares to a significant number of trips which are unlikely to be accommodated by public transport. For example: 98,000 weekday trips are for social/recreation purposes; 41,000 are for education or childcare; 95,000 are to provide transport for the passenger and 74,000 are for shopping trips. This leads to the outcome of 73.5% of trips being as a vehicle driver or passenger, 8.3% by public transport and 17% as a pedestrian.¹⁶⁴

One of the key arguments for the concentration of a significant proportion of the anticipated new development in the vicinity of railway stations is to increase the modal share of public transport in general and trains in particular. This emphasis in shifting the modal choice for some key journeys (commuting) while continuing to recognise the dominance of the car for leisure and shopping generates a demand for targeted works within the local street network. Given the nature of travel in Ku-ring-gai, it is unlikely that the concentration of development around the railway stations and bus-nodes is

¹⁶⁴ The final 1.2% is listed as 'Other'

likely to cause a significant reduction in the dominance of the motor vehicle except, arguably, for the actual journey-to-work. Overall vehicle demand, and its associated impact on roads and intersections, is expected to remain high.

5.1.3 Accessible pedestrian-friendly town centres

Modal shift will not be achieved unless it is attractive to leave the car behind. Every car driver, even train commuter is also a pedestrian at some point. The quality, safety and amenity of the pedestrian environment and its interface with the vehicular environment within the vibrant mix of the local streets is a very important aspect of the success – or otherwise – of urban consolidation.

Spatial priority around railway transport interchanges needs to be around pedestrians, buses and cyclists first to encourage these modes over private vehicles. Public domain works that encourage modal shift are included in this works programme.

It is important to emphasise that the anticipated intensive new development is expected to be the primary cause of significant changes to Ku-ring-gai's typically suburban town centres.

5.2 Summary of the Works Programmes

The improvements proposed for the local road-based transport and pedestrian network in Ku-ring-gai include:

- ✓ Upgrading existing intersections, including new or relocated traffic and pedestrian signals and new or augmented turning lanes;
- ✓ Widening and/or realignment of existing roads, streets and lanes;
- ✓ Local Area Traffic Management facilities such as roundabouts, kerb blisters, chicanes, redirected traffic flow and the like;
- ✓ New local roads (streets and laneways) and a railway overbridge (part funded with Railcorp);
- ✓ New commuter-orientated cycleways and cycle parking and storage facilities;
- ✓ New and upgraded public transport facilities including bus and taxi passenger facilities and interchanges and kiss and ride; and
- ✓ Public domain works within the town centres including footpath widenings and upgraded surfaces.¹⁶⁵

The nexus and apportionment for each distinct aspect of the works programme is separately considered in the following sections. Each aspect is located within the environment of the term 'local roads'.

5.3 Local Roads: Nexus for Works to Local Roads

Inherent in the challenge of catering for concentrated new development in the town centres in Ku-ring-gai is the significant change of scale in these centres from typical suburban centres to medium-high density urban centres. This brings about a significant change in urban character together with the resultant impacts of intensifying vehicular traffic, pedestrian and cycling concentrations.

¹⁶⁵ Civic Squares are included as part of the local urban parks component of the Key Community Infrastructure Item: Local parks.

The existing traffic network essentially caters for the low density development that has typified Ku-ring-gai until recently. New higher density development potential is concentrated along the Pacific Highway and, in the case of St Ives, along Mona Vale Road which intersects with the Pacific Highway between Gordon and Pymble. In each of these town centres, work is required to maintain and facilitate access to the centres, circulation within the town centres and cross-suburban access as a result of intensive redevelopment.

The existing pedestrian environment also caters for the low density development that has typified Ku-ring-gai. The concentration of nett 10,000 additional dwellings in and around the town centres will bring about a considerable increase in the pedestrian traffic. Works within the public domain (being all land outside the private domain) are required just to maintain pedestrian access within the town centres as well as facilitate adequate access to public transport and other destinations.

The works programmes have been developed and costed after extensive studies to meet the objectives of maintaining access – both vehicular and pedestrian in and around the centres. Because the inherent purpose of local roads is to facilitate access to destinations, works which serve development concentrated in and around the town centres are not necessarily wholly located within the catchment boundaries of the town centres. Notwithstanding, the functionality of the town centres with the intensive new development foreshadowed is dependent on the provision of these new roads.

Analysis of the anticipated development in the town centres indicated that, in some centres, additional local roads were needed to facilitate access both to the centre, and within the centre, to facilitate the circulation of vehicular traffic and to improve pedestrian permeability.

The nexus for the new roads and the essential modifications to the road network in each centre is further argued below in the context of the total strategy for each of the town centres.

It must be emphasised that Ku-ring-gai Council has targeted a variety of mechanisms to achieve the urban form of the town centres outlined in the sections below, minimising direct development costs provided for under this Contributions Plan. This Contributions Plan represents one aspect of the integrated infrastructure funding strategy together with mechanisms under *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010* as well as funding from Council's own resources and strategic management of Council's assets. The integration of this works programme is complex and complete and it is essential that each area fulfils its role in the delivery of the whole.

In addition to the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and the *Ku-ring-gai Development Control Plan (Town Centres) 2010*, the works identified in the following sections are further supported by the *Ku-ring-gai Public Domain Plan 2010*, *Ku-ring-gai Parking Management Plan 2010* and the *Draft Ku-ring-gai Integrated Transport Strategy 2010*. Ku-ring-gai has taken an integrated approach to planning for and supporting development in the Local Government Area.

5.3.1 Gordon Town Centre

Extensive background studies for Gordon, culminating in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010*, identified the following objectives and challenges arising from

the process of transforming a suburban centre into a major urban centre with increased vehicular and pedestrian demands - and strategies to meet those challenges.

Pedestrian Access and Circulation: Objectives and Challenges

- To improve east-west pedestrian connections on the western side of Gordon;
- To improve the safety and amenity of pedestrian paths in the retail core; and
- To improve connections across the Pacific Highway and railway between east and west sides of Gordon.

Pedestrian Access and Circulation: Strategies

- Create a clearly defined and safe pathway system along both sides of the Pacific Highway from Ryde Road to Ravenswood School;
- Provide new pedestrian crossings or pedestrian refuges at the intersection of the Pacific Highway with Merriwa Street, McIntyre Street Dumaresq Street Park Avenue, Moree Street to support pedestrian movement;
- Improve pedestrian connections in the retail core area by providing new footpaths to Wade Lane and a system of pedestrian connections through to the Pacific Highway;
- Create a new pedestrian link through the residential area on the western side of St Johns Avenue to Merriwa Street via new streets and new through-block connections;
- Open up the area around the old Gordon Public school building to allow public access all around the building;
- Maintain and upgrade existing access ways and create new access ways around and through the new Council owned civic building;
- Provide a new through-block connection within the mixed use area between the Pacific Highway and Fitzsimons Lane; and
- Upgrade and widen footpaths along Park Avenue and Henry Street connecting to the residential areas to the east.

Integrated Transport: Objectives and Challenges

- Provide a contemporary transport interchange facility on the western side of the railway station;
- Support implementation of the Mona Vale to Macquarie Strategic Bus Corridor; and
- Provide bicycle parking facilities at key destination points.

Integrated Transport: Strategies

- Upgrade and expand the existing bus stop area on the western side of the railway station to provide new interchange facilities. Include a new bus stop area catering for buses, a new taxi rank and a 'kiss and ride' area;
- Continue negotiation with Ministry of Transport and local bus companies to secure new bus route via Pacific Highway and Ravenswood Avenue to new transport interchange;
- Provide secure bicycle parking facilities for commuters at the transport interchange including lock up facilities;
- Provide new local cycle way (on-road marked) along Dumaresq Street from the Pacific Highway to Vale Street;
- Signpost the informal commuter routes on the eastern side of Gordon along Rosedale Road; and
- Provide a new bus stop for Strategic Bus Corridor located on western side of the Pacific Highway near the intersection of Ryde Road for residents and employees in the northern part of Gordon Centre.

Vehicle Access, Circulation and Parking: Objectives and Challenges

- To reduce the dominance of car parking areas on the public areas of Gordon;

- To reduce pedestrian and vehicle conflicts in the town centre streets;
- To redesign traffic signal configuration along the Pacific Highway to improve local traffic conditions and reduce congestion at key intersections;
- To facilitate widening of the Pacific Highway in key locations to three lanes in each direction;
- To introduce new roads on the western side of Gordon town centre to improve vehicle access and circulation around the retail core; and
- To modify existing roads and lanes to accommodate changes in traffic management measures.

Vehicle Access, Circulation and Parking: Strategies

- Provide new pedestrian activated traffic signals on Pacific Highway north of Moree Street, for a mid-block pedestrian crossing;
- Modify signals at the intersection of St Johns Avenue and the Pacific Highway to accommodate one-way flow, and remove right-turn from Pacific Highway to St Johns Avenue;
- Provide new traffic signals at Pacific Highway and Ravenswood Avenue to allow right turn from the Highway, to replace the right-turn removed at St Johns Avenue;
- Remove the traffic signals at Park Avenue and Pacific Highway intersection, with Park Avenue to become one-way east bound to Wade Lane. Left turn only from Pacific Highway into Park Avenue;
- Modify traffic flow on Wade Lane to be one way south bound (currently north bound);
- Modify signals at Dumaresq Street and Pacific Highway intersection to accommodate a third north-bound lane and provide pedestrian crossings to all sides;
- Acquire land for new roads between St Johns Avenue and Moree Street; Moree Street and Dumaresq Street; and Dumaresq Street and McIntyre Street;
- New service lane to be provided at rear of Gordon Centre (as part of site redevelopment);
- St John's Avenue to become one way west bound between Wade Lane and new street on the western side of the highway. Traffic signals at St Johns and Pacific Highway intersection to be modified to remove right turn movements;
- Fitzsimons Lane to be modified to provide a wider carriageway and a verge and footpath on both sides of the lane;
- Plan for widening of the carriageway of the Pacific Highway around the Dumaresq Street intersection; and
- Plan for widening of the carriageway on the western side of the Pacific Highway between Bushlands Avenue and Yarabah Avenue.

Transport modelling for the Gordon Town Centre was undertaken by GTA consultants¹⁶⁶ and updated to reflect the then draft revised *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* which was exhibited at the end of 2008 by the Ku-ring-gai Planning Panel, adopted for referral to the Minister for gazettal on 27 May 2009 and gazetted on 25 May 2010.

The analysis supported the need for the construction of several new roads to break up the long linear blocks on the western side of the Pacific Highway as follows:

A link road between Dumaresq Street and McIntyre Street

A link road between Dumaresq Street and Moree Street¹⁶⁷

¹⁶⁶ GTA Consultants: Gordon Town Centre Redevelopment – Traffic Study dated October 2008

¹⁶⁷ There are two targeted link roads between Dumaresq Street and Moree Street under the *Draft Ku-ring-gai Development Control Plan (Town Centres) 2009*. This Contributions Plan includes the area that is proposed to

A link road between Moree Street and St Johns Avenue

The Roads and Traffic Authority noted that the success of the proposed traffic management scheme depends on all new local roads being implemented.¹⁶⁸

The two remaining are regarded as critical to the functionality of the town centre into the future and, accordingly, the required land is zoned SP2 Infrastructure under the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* which was gazetted on 25 May 2010.

An additional proposed new road link between St Johns Avenue and Moree Street is also supported by the Roads and Traffic Authority of NSW.¹⁶⁹

5.3.2 Turramurra Town Centre

Extensive background studies for Turramurra, culminating in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010*, identified the following objectives and challenges arising from the process of transforming a small suburban centre into an urban centre with increased vehicular and pedestrian demands - and strategies to meet those challenges.

Pedestrian Access and Circulation: Objectives and Challenges

- To improve north-south pedestrian connections from Granny Springs Bushland Reserve via the town centre through to Turramurra Memorial Park;
- To improve access across the Pacific Highway;
- To improve connections across the railway line between Rohini Street and William Street/Ray Street;
- To improve connections from Duff Street to Kissing Point Road; and
- To improve connections from Turramurra Avenue to Eastern Road.

Pedestrian Access and Circulation: Strategies

- Provide a new path from Duff Street through Granny Springs Bushland Reserve to the new street (Stonex Street);
- Create a new through-block pedestrian link from the new street (Stonex Street) through to the Pacific Highway (provided as part of future site redevelopment);
- Create a new through-block pedestrian link from the Pacific Highway through to Forbes Lane (provided as part of future site redevelopment);
- Create a new through-block pedestrian link between Rohini Street and Gilroy Lane (provided as part of future site redevelopment);
- Create a new through-block pedestrian link from the Pacific Highway through to Gilroy Lane (provided as part of future site redevelopment);
- Create a new through-block pedestrian link from Gilroy Road through to Cameron Park (provided as part of future site redevelopment);
- Provide improved pedestrian connections to Turramurra Memorial Park via Gilroy Road;

be zoned SP2 for infrastructure provision under *Draft Ku-ring-gai Local Environmental Plan (Town Centres) 2008*. The other potential link road is not included in this Contributions Plan works programme in the interests of maintaining a reasonable contribution rate but is intended to be sought by direct negotiation depending on the nature and timing of key development sites.

¹⁶⁸ Letter from the Roads and Traffic Authority in response to the s62 notification for Gordon and Pymble Town Centres originally dated 25 September 2006 and reiterated 24 October 2008.

¹⁶⁹ Roads and Traffic Authority of NSW: Draft LEP – Section 62 Notification and Pymble and Gordon Town Centres Traffic Changes, letter dated 24 October 2008.

- Provide a new pedestrian link from Ray Street over the railway line via a new bridge at the northern end of Rohini Street (provided as part of future site redevelopment);
- Encourage the incorporation of a pedestrian bridge over the highway where it is properly integrated into new developments on both sides of the highway (provided as part of future site redevelopment); and
- Provide a public access way from Boyd Street to the Pacific Highway through the Hill View Estate (provided as part of future site redevelopment).

Integrated Transport: Objectives and Challenges

- To provide a contemporary bus facility on the northern side of the railway station in cooperation with Ministry of Transport and local bus companies;
- To provide bicycle parking facilities at key destination points;
- To support the provision of additional bus services to Turramurra Station; and
- To provide a continuous cycle way link from Kissing Point road to Turramurra Memorial Park.

Integrated Transport: Strategies

- Provide a new on-road marked cycle way along Kissing Point Road, Pacific Highway, Rohini Street and Eastern Road;
- Provide a new off-road shared pedestrian/cycle way via Hill View Estate, Pacific Highway (by addition of structure to existing road bridge), Turramurra Avenue and Gilroy Road;
- Provide bicycle parking facilities at key destination points such as the town square, Rohini Street and the railway station;
- Investigate opportunity for integrated bicycle/commuter parking as part of the enhanced transport interchange in Rohini Street;
- Provide new location specifically designed for taxi ranks in Forbes Lane and Rohini Street;
- Provide new pull over area specifically designed for kiss-and-ride in Forbes Lane, Rohini Street and Boyd Street;
- Provide a new covered walkway over the rail line at the station in cooperation with Rail Corp Easy Access Upgrade; and
- Provide new alternative bus routes via proposed road bridge at Ray Street and proposed new road between Turramurra Avenue and Gilroy Road.

Vehicle Access, Circulation and Parking: Objectives and Challenges

- To reduce the dominance of at-grade car parking areas on the public areas of Turramurra;
- To reduce pedestrian and vehicle conflicts in the town centre streets;
- Redesign traffic signals configuration along the Pacific Highway to improve local traffic conditions and reduce congestion at key intersections;
- To facilitate the widening of the Pacific Highway between Ray Street and the railway to three lanes in each direction; and
- To introduce new roads on the northern and southern sides of Turramurra to improve vehicle access and circulation around retail core.

Vehicle Access, Circulation and Parking: Strategies

- Acquire land for a new two-way local road between Gilroy Road and Turramurra Avenue along the northern boundary of the Uniting Church;
- Provide new two-way road bridge over the railway connecting Ray Street and Rohini Street (provided as part of future site redevelopment);
- Provide a new two-way local road between Kissing Point Road and Duff Street (provided as part of future site redevelopment);
- Remove the existing traffic signals at Rohini Street and provide new signals at the intersection of Turramurra Avenue and the Pacific Highway (including new right turn access into/out of Pacific Highway);

- Provide at grade car parking adjacent to community facilities for short stay visitors;
- Facilitate the widening of the Pacific Highway between Ray Street and William Street (along the northern side) to increase number of lanes (provided as part of future site redevelopment);
- Widen Gilroy Lane and Forbes Lane to create pedestrian priority streets that include two-way traffic and on street parking;
- Reduce road width of Rohini Street and reduce traffic speeds; and
- Make provision for the widening of Kissing Point Road at the intersection with the highway for a dedicated left-turn lane.

Transport modelling for the Turramurra Town Centre was undertaken by GTA consultants¹⁷⁰ and updated to reflect the then draft revised *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* exhibited at the end of 2008 by the Ku-ring-gai Planning Panel.

The analysis supported the need for the construction of a new road to connect Gilroy Avenue to Turramurra Avenue. This road is regarded as critical to the functionality of the town centre into the future and, accordingly, the required land is zoned SP2 Infrastructure under the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* which was gazetted on 25 May 2010.

5.3.3 Lindfield Town Centre

Extensive background studies for Lindfield culminating in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010*, identified the following objectives and challenges arising from the process of transforming a small suburban centre into an urban centre with increased vehicular and pedestrian demands - and strategies to meet those challenges.

Pedestrian Access and Circulation: Objectives and Challenges

- To improve north-south pedestrian connections from Gladstone Parade to Balfour Street;
- To improve access across the Pacific Highway at Lindfield; and
- To improve north-south pedestrian connections from Tryon Road and Woodside Avenue.

Pedestrian Access and Circulation: Strategies

- Create a new pedestrian link from Bent Street through to Beaconsfield Parade;
- Create a new through-block pedestrian link from the Pacific Highway through to Woodford Lane (provided as part of future site redevelopment);
- Create a new through-block pedestrian link between Lindfield Avenue and Milray Street (provided as part of future site redevelopment);
- Create a new through-block pedestrian link from the Woodside Avenue to Havilah Road (provided as part of future site redevelopment);
- Provide pedestrian crossings or similar on Lindfield Avenue coordinated with main pedestrian routes;
- Encourage the incorporation of a pedestrian bridge over the highway where it is properly integrated into new developments on both sides of the highway (provided as part of future site redevelopment);

¹⁷⁰ GTA Consultants: Turramurra Town Centre Redevelopment – Traffic Study dated September 2008

- Relocate the existing signalised pedestrian crossing on Lindfield Avenue to the intersection of Lindfield and Tryon Road;
- Upgrade the pedestrian precinct and pedestrian crossings across the Pacific Highway and Lindfield Avenue to better link the east and west town centre precincts;
- Provide traffic calming measures at the corner of Tryon Road and Milray Street; and
- Investigate the inclusion of a pedestrian crossing at the intersection of Havilah Road and Lindfield Avenue.

Integrated Transport: Objectives and Challenges

- To upgrade access to Lindfield Station in association with Rail Corp;
- To provide a contemporary bus facility on Lindfield Avenue adjoining the railway station in cooperation with Ministry of Transport and local bus companies;
- To provide bicycle parking facilities at key destination points;
- To support the provision of additional bus services to Lindfield Station; and
- To provide a continuous cycle way link from the eastern to the southern side of Lindfield.

Integrated Transport: Strategies

- Provide a new covered walkway and lifts at the rail station in cooperation with the Rail Corp Easy Access Upgrade;
- Upgrade the existing bus stop on the eastern side of the railway station to support increased bus services to and from Lindfield Station. (In partnership with Ministry of Transport);
- Provide new 'kiss-and-ride' facilities on Lindfield Avenue and Woodford Lane;
- Provide accessible parking spaces on Tryon Lane;
- Provide a new on-road marked cycle way along from Balfour Street, across the highway to Lindfield Avenue;
- Provide bicycle parking facilities at key destination including Tryon Place, Woodford Lane and the new town square; and
- Signpost the informal commuter cycle route on the eastern side of Lindfield, along Nelson Road and Trafalgar Avenue.

Vehicle Access, Circulation and Parking: Objectives and Challenges

- To reduce the dominance of at-grade car parking areas on the public areas of Lindfield;
- To reduce pedestrian and vehicle conflicts in the town centre streets;
- Redesign traffic signals configuration along the Pacific Highway to improve local traffic conditions and reduce congestion at key intersections;
- To introduce new roads on the western side of Lindfield to improve vehicle access and circulation around the retail core; and
- To make modifications to existing streets and lanes to improve local vehicle access.

Vehicle Access, Circulation and Parking: Strategies

- Acquire land for a new two-way local road between Bent Street and Beaconsfield Road;
- Close the existing Balfour Lane and relocate to a new alignment with car parking to be relocated to basement parking (as part of site redevelopment);
- Widen Woodford Lane and Bent Lane to create a pedestrian priority street that includes two-way traffic, on-street parking as well as footpaths. Extend Woodford Lane directly through to Beaconsfield Parade;
- Modify signals at the intersection of Balfour Street and the Pacific Highway to maintain traffic flows;

- Relocate the pedestrian activated traffic signals on Lindfield Avenue to the intersection of Lindfield Avenue and Tryon Road, to improve traffic flow, pedestrian access and safety and integrate with Lindfield station Easy Access Upgrade;
- Widen Havilah Lane to create a pedestrian priority street that includes two-way traffic, on-street parking as well as footpaths;
- Widen Kochia Lane footpath through increased setbacks, to improve pedestrian access between Lindfield Avenue and Havilah Lane; and
- Close Tryon Place and Tryon Lane and replace with new service lane system (part of site redevelopment).

Transport modelling for the Lindfield Town Centre was undertaken by ARUP consultants¹⁷¹ and updated to reflect the then draft revised *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* which was exhibited at the end of 2008 by the Ku-ring-gai Planning Panel.

The analysis supported the need for the construction of a new civic street between Beaconsfield Parade and Bent Street. This road is regarded as critical to the functionality of the town centre into the future and, accordingly, the required land is zoned SP2 Infrastructure under the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* which was gazetted on 25 May 2010.

5.3.4 Pymble Town Centre

Extensive background studies for Pymble culminating in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010*, identified the following objectives and challenges arising from the process of transforming a small suburban centre into an urban centre with increased vehicular and pedestrian demands - and strategies to meet those challenges.

Pedestrian Access and Circulation: Objectives and Challenges

- To provide a new continuous pedestrian connection from Telegraph Road to Station Street via the town centre and Pymble Park;
- To improve connections from the residential areas to the south-west across the Pacific Highway and across the railway line to Grandview Street;
- To improve connections from Grandview Street to Robert Pymble Park;

Pedestrian Access and Circulation: Strategies

- Create a pedestrian accessway from Park Crescent to Grandview Street (as part of site redevelopment);
- Widen Park Crescent footpath to allow improved pedestrian circulation and the potential for footpath dining;
- Provide a new mid-block pedestrian link between Station Street and Telegraph Road (as part of site redevelopment);
- Create a new through-block pedestrian access way from Grandview Lane public car park to Station Street;
- Upgrade and widen (as part of site redevelopment) the existing Council owned pedestrian access way from Grandview Lane public car park to Grandview Street;
- Continue to work with Rail Corp to achieve an upgrade of the station with new lifts and pedestrian bridge;
- Upgrade the pedestrian underpass to create a well lit safe access route under the Pacific Highway. Continue discussions with the Roads and Traffic Authority

¹⁷¹ ARUP Consultants: Ku-ring-gai Council Lindfield Town Centre – Extension to Traffic and Parking Study dated September 2008

regarding future widening of highway through Pymble and potential for new and wider pedestrian underpass; and

- Increase the pedestrian amenity and safety in Grandview Street and Park Crescent by providing an additional pedestrian crossing/traffic island narrowing.

Integrated Transport: Objectives and Challenges

- To provide bicycle parking facilities at key destination points.
- To support the provision of additional bus services to Pymble Station.
- To provide a continuous cycleway link from Telegraph Road to Station Street.
- To upgrade the access to Pymble Station.

Integrated Transport: Strategies

- Upgrade the existing bus stop in Grandview Street to meet the required level of service;
- Provide new 'kiss and ride' bays and taxi ranks on Grandview Street and Everton Street;
- Continue to work with Rail Corp regarding Easy Access Upgrade of Pymble Station including the provision of lifts and a wider walkway;
- Provide a new on-road marked cycleway from Pymble Avenue via Everton Street, Pacific Highway to Station Street;
- Provide a new off-road shared pedestrian path/cycle way between Telegraph Road and Station Street via Robert Pymble Park; and
- Provide bicycle parking facilities at key destination points such as Robert Pymble Park and the railway station.

Vehicle Access, Circulation and Parking: Objectives and Challenges

- To increase the number of on-street and off-street car parking areas to support businesses in Pymble town centre;
- To reduce pedestrian and vehicle conflicts in the town centre streets;
- Redesign traffic signals configuration along the Pacific Highway to improve local traffic conditions and reduce congestion at key intersections;
- Facilitate the widening of the Pacific Highway to three lanes in each direction through Pymble town centre;
- To introduce new roads on the northern side of Pymble to improve vehicle access and circulation around the retail core;
- To make modifications to existing streets and lanes to improve local vehicle access;

Vehicle Access, Circulation and Parking: Strategies

- Reduce the width of Grandview Street to become one way south bound and angle parking on the southern side between Pacific Highway and Alma Street;
- Realign Grandview Lane to meet Park Crescent at a X-junction;
- Acquire land to extend Grandview Lane through to Station Street;
- Acquire land to extend Post Office Lane through to Park Crescent;
- Facilitate the widening of the Pacific Highway at Livingstone Avenue to improve traffic flow (setbacks provided as part of site redevelopment);
- Provide a new and expanded public parking area on Grandview Lane;
- Modify traffic signals at Livingstone Avenue to maintain traffic flows; and
- Provide a dedicated left turn lane on the Pacific Highway on the northern side at the intersection with Telegraph Road.

Transport modelling for the Pymble Town Centre was undertaken by ARUP consultants¹⁷² and updated to reflect the then draft revised *Ku-ring-gai Local*

¹⁷² ARUP Consultants: Ku-ring-gai Council Pymble Town Centre – Extension to Traffic and Parking Study dated September 2008

Environmental Plan (Town Centres) 2008 exhibited at the end of 2008 by the Ku-ring-gai Planning Panel.

The analysis supported the need for a one-way connecting road from the end of Post Office Lane to Park Crescent. This road is regarded as critical to the functionality of the town centre into the future and, accordingly, the required land is zoned SP2 Infrastructure under the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* which was gazetted on 25 May 2010.

Additionally, the Roads and Traffic Authority supports provision of a new road connecting Beechworth Road and Avon Road.¹⁷³

5.3.5 Pymble Business Park

Council has analysed the impact on the existing Pymble Business Park of the additional growth potential incorporated in *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* which includes a significant proportion of the Pymble Business Park plus additional development potential in the remainder of the Business Park. This additional development potential was foreshadowed in the *Ku-ring-gai and Hornsby Sub-regional Employment Lands Study*. The draft *Pymble Business Park – Traffic and Transport Study*¹⁷⁴ identified the following objectives and challenges. The strategies below are the result of further feedback from the Roads and Traffic Authority (RTA):

Pedestrian Access and Circulation: Objectives and Challenges

- The Business Park is located 650m (minimum) walking distance from Pymble Station or approximately ten minutes walking time and is relatively direct;
- The Business Park is located 900m (minimum) walking distance from Gordon Station or approximately fifteen minutes walking time however entries are limited to Bridge Street or West Street which significantly increases walking distances and times; and
- The topography of Bridge Street results in relatively steep pedestrian grades.

Pedestrian Access and Circulation: Strategies

- Improved pedestrian linkages between Pymble Station and Pymble Business Park;
- Provision of a pedestrian through-site link between Bridge Street and Ryde Road;
- Improve bicycle access by widening footpaths to accommodate dual pedestrian/bicycle paths; and
- Modification of the intersection of Pacific Highway and Bridge Street to include pedestrian provision across the Pacific Highway.

Integrated transport: Objectives and Challenges

- There are regular buses travelling past the site on Ryde Road and linking to West Pymble and Macquarie Park and Mona Vale via Gordon with bus-stops on or near the Ryde Road/Pacific Highway intersection ramps; and
- There are no regular bus services between Pymble Station and Pymble Business Park.

Integrated transport: Strategies

- Improve bus stop provision servicing the Business Park.

¹⁷³ Roads and Traffic Authority of NSW: Draft LEP – Section 62 Notification and Pymble and Gordon Town Centres Traffic Changes, letter dated 24 October 2008.

¹⁷⁴ It should be noted that, at the time of preparing the draft Contributions Plan, this document was an internal working draft based on preliminary analysis. Following preliminary consultation with the Roads and Traffic Authority (RTA), further analysis and traffic network modelling is now being undertaken. This process is expected to be completed in 2010 concurrent with the Principal LEP for Ku-ring-gai. As such the proposed strategies may be modified as part of the process of formally negotiating RTA concurrence.

Vehicle Access, Circulation and Parking: Objectives and Challenges

- Additional development is likely to significantly reduce the level of service at the intersection of Pacific Highway and Bridge Street especially in the afternoon peak;
- Afternoon peak congestion will also be exacerbated in West Street;
- There are limited egress options from the Business Park compared to ingress contributing to afternoon peak congestion;

Vehicle Access, Circulation and Parking: Strategies

- Improve access into and out of West Street by the installation of new traffic signals at the intersection of the Ryde Road off-ramp and West Street whereby only northbound vehicles on Ryde Road and vehicles turning out of West Street would be stopped; and
- Provision for dual left turn lanes out of West Street into Ryde Road.

5.3.6 St Ives Town Centre

Extensive background studies for St Ives culminating in *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010*, identified the following objectives and challenges arising from the process of transforming a small suburban centre into an urban centre with increased vehicular and pedestrian demands - and strategies to meet those challenges.

Pedestrian Access and Circulation: Objectives and Challenges

- To improve north-south pedestrian connections across Mona Vale Road to the Village Green;
- To improve connections from Cowan Road to Memorial Avenue via Village Green Parade;
- To provide continuous pedestrian access around the Village Green;
- To improve connections from Stanley Street to Porters Lane via Stanley Lane and the old school precinct; and
- To improve connections from Collins Drive on the eastern edge of the town centre, to Link Road.

Pedestrian Access and Circulation: Strategies

- Create a clearly defined and safe pathway system along both sides of Mona Vale Road between Link Road and Cowan Road;
- Establish new pedestrian arcade through the St Ives Shopping Village (as part of the redevelopment process) from Mona Vale Road to the Village Green.;
- Provide new pedestrian access way from Collins Road to Link Road as part of the redevelopment process;
- Upgrade the footpaths on Denley Lane between Mona Vale Road and the Village Green;
- Open up the area around the old school to allow public access all around the building;
- Maintain and upgrade existing Council access way between Gillot Way and Mona Vale Road;
- Maintain and upgrade existing Council access way between Killeaton Street and Myrtle Place;
- Maintain and upgrade existing Council access way between Link Road and Newhaven Place;
- Provide a continuous footpath connection between Stanley Street and Porters Lane via the old school area; and
- Upgrade and widen footpaths along all streets connecting to the surrounding residential areas.

Integrated transport: Objectives and Challenges

- To support implementation of the Mona Vale to Macquarie Strategic Bus Corridor;
- To support implementation of the Hornsby to Chatswood Strategic Bus Corridor; and
- To provide bicycle parking facilities at key destination points.

Integrated transport: Strategies

- Continue negotiation with the Ministry of Transport and local bus companies to secure preferred bus route for the Hornsby to Chatswood Strategic Bus Corridor via Memorial Avenue and Stanley Street;
- Provide a new well-designed bus stops, bus shelters, information boards and secure bicycle parking at Rotary Park and on Mona Vale Road near the entry to the St Ives Shopping Village to cater for the Strategic Bus Corridor;
- Provide new taxi ranks on Denley Lane in close proximity to the retail core precinct;
- Provide secure bicycle parking facilities for commuters at the transport interchange including lock up facilities;
- Provide new local cycle way (on-road marked) along Stanley Street and Yarrabung Road towards Mona Vale;
- Provide a new children's recreational cycle track in the Village Green to cater for younger children and families;
- Provide a new shared pedestrian/cycle way (off-road) from the Village Green via Collins Road to Killeaton Street then west bound (links with existing shared way on Link Road heading south);
- Provide bicycle parking facilities at key destination points such as the town square, Village Green, Old School Building precinct and Stanley Street shops; and
- Upgrade existing bus stops along Mona Vale Road, Killeaton Street and Link Road.

Vehicle Access, Circulation and Parking: Objectives and Challenges

- To improve vehicle access to the St Ives Shopping Village for cars and service vehicles;
- Improve vehicle circulation around the St Ives Shopping Village;
- To reduce the dominance of at-grade car parking on the public areas of St Ives;
- To reduce pedestrian conflicts;
- To reduce traffic movements at the Mona Vale Road intersections; and
- To facilitate pedestrian access across the road adjacent to the shopping centre pedestrian entry plaza.

Vehicle Access, Circulation and Parking: Strategies

- Modify existing traffic signals along Mona Vale Road to reduce the number of vehicle movements and improve operation of the network;
- Modify existing traffic signals at the intersection of Mona Vale Road and Memorial Avenue/Rosedale Road to reduce the number of vehicle movements and improve operation of the network;
- Provide new traffic signals on Mona Vale Road mid-way between the existing signals at Cowan Road and Memorial Avenue, for direct access to the retail centre.
- Modify the Village Green Parade to be a narrow low-speed one-way street with on-street parking. Exits via Denley Lane or Memorial Avenue;
- Streets around Memorial Park to be modified to one-way traffic flow;
- Relocate public car parking along the Village Green Parade to basement parking areas generally. Retain the area of public parking adjoining Memorial Avenue;
- Limit the traffic accessing the retail core from Memorial Avenue by modifying the intersection with Village Green Parade;
- Provide setbacks on the southern side of Stanley Street to allow for road widening and other improvements at the intersection of Mona Vale Road and Stanley Street;

- Provide setbacks to allow for future road widening and intersection improvements at Link Road and Mona Vale Road;
- Provide new traffic signals at the intersection of Cowan and Killeaton Streets to replace the existing pedestrian activated signals near Collins Road; and
- Widen Stanley Lane as part of site redevelopment to include on-street parking.

Transport modelling for the St Ives Town Centre was undertaken by Transport and Urban Planning consultants¹⁷⁵ and updated to reflect the then draft revised *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* exhibited at the end of 2008 by the Ku-ring-gai Planning Panel.

5.3.7 Roseville Town Centre

Extensive background studies for Roseville culminating in the *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010*, identified the following objectives and challenges arising from the process of transforming a small suburban centre into an urban centre with increased vehicular and pedestrian demands - and strategies to meet those challenges.

Pedestrian Access and Circulation: Objectives and Challenges

- To improve pedestrian connections between Larkin Lane and the Pacific Highway;
- To increase the number of pedestrian connections in the block between Bancroft Avenue and Roseville Avenue and Hill Street;
- To improve the safety and amenity of pedestrian paths in the retail core; and
- To improve connections across the railway between east and west sides of Roseville.

Pedestrian Access and Circulation: Strategies

- Create a new through-block pedestrian links between Bancroft Lane to Hill Street (as part of site redevelopment);
- Create a new through-block pedestrian links between Roseville Lane to Hill Street (as part of site redevelopment);
- Expand the entry forecourt to the station entry from the western precinct to improve public access to the station and connection to the eastern side of the railway;
- Upgrade and widen (as part of site redevelopment) the existing Council owned pedestrian access lanes - Sixth Mile Lane and the Rifleway; and
- Continue to work with Rail Corp to achieve an access upgrade of Roseville station with a wider pedestrian bridge.

Integrated Transport: Objectives and Challenges

- To support the provision of additional bus services to Roseville Station from surrounding residential areas;
- To provide a continuous cycleway link along the eastern side of the rail line;
- To upgrade access to Roseville station in cooperation with Rail Corp;
- To provide integrated transport facilities within close proximity to the station including upgraded bus stops, kiss-and-ride, taxi ranks and accessible parking in cooperation with the Ministry of Transport and local bus companies; and
- To provide bicycle parking facilities at key destination points.

Integrated Transport: Strategies

- Upgrade the existing bus stop in Hill Street to meet contemporary standards and include bus shelters and information boards;

¹⁷⁵ Transport and Urban Planning: Extension to St Ives Town Centre Traffic and Parking Study dated July 2008

- Continue to liaise with the Ministry of Transport regarding future requirements in relation to buses in Roseville;
- Provide new 'kiss and ride' bays on Hill Street and Larkin Lane;
- Upgrade taxi ranks on Hill Street with additional lighting in consultation with the Taxi Council;
- Continue to work with Rail Corp regarding Easy Access upgrade of Roseville Station including the provision of lifts;
- Provide a new on-road marked cycleway from Boundary Road to Clanville Road via Hill Street and along Lord Street;
- Provide bicycle parking facilities at key destination points such as Robert Pymble Park and the railway station; and
- Upgrade the existing bus stop in Hill Street.

Vehicle Access, Circulation and Parking: Objectives and Challenges

- To increase the number of on-street and off-street car parking areas on the western side of the Pacific Highway to support local businesses;
- To introduce new lanes to the rear of the retail buildings on the eastern side of Roseville to improve vehicle access and circulation around the retail core; and
- To make modifications to existing streets and lanes to improve local vehicle access.

Vehicle Access, Circulation and Parking: Strategies

- Realign and widen Larkin Lane to provide direct access off MacLaurin Parade and increase the potential number of car spaces (additional land to be provided as part of redevelopment of adjoining site);
- Roseville Lane is to be realigned at Lord Street end to provide a straight road way (additional land to be provided as part of redevelopment of adjoining site);
- Bancroft Lane is to be extended through to meet Lord Street (additional land to be provided as part of redevelopment of adjoining site);
- Facilitate the widening of the Pacific Highway between Corona Avenue and the retail precinct to increase number of lanes and traffic flow; and
- Alter the traffic signals at MacLaurin Parade to incorporate dedicated right-turn signal from Pacific Highway to MacLaurin Parade and to accommodate a 3rd northbound lane on the Pacific Highway.

Transport modelling for the Roseville Town Centre was undertaken by Arup Consultants¹⁷⁶ and updated to reflect the then draft revised *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* exhibited at the end of 2008 by the Ku-ring-gai Planning Panel. The study confirmed the need for a number of changes including, in particular, road alignment changes and signal changes to intersection on the Pacific Highway as well as widening to accommodate three northbound lanes and a dedicated right-turn lane into MacLaurin Parade from the Pacific Highway.

5.4 Local Roads: Local Area Traffic Management and Intersections

Occupants of anticipated development in Ku-ring-gai will utilise a transport network comprising:

- facilities for private vehicles, including roads and intersections;
- facilities for public transport, including rail infrastructure and services, bus infrastructure services and other transport services; and
- facilities for walking and cycling.

¹⁷⁶ ARUP Consultants: Ku-ring-gai Council Roseville Town Centre – Extension to Traffic and Parking Study dated September 2008 dated September 2008

The existing transport network has generally been planned and developed to serve existing development in the area, and, in many cases, cannot absorb traffic movements arising from the additional anticipated development without additional facilities.

There are deficiencies in the performance or level of service of the road network serving the town and village centres. Expected development will create additional trips that will, in turn, have a cumulative adverse effect on the performance of components of the network, whether those components are currently performing satisfactorily or unsatisfactorily.

This is particularly the case with intersections serving the key town centres around which the majority of new development will be concentrated. With the exception of St Ives, all of the key town centres rely heavily on the Pacific Highway for access. In the case of St Ives, access is heavily reliant on the performance of Mona Vale Road. Some of these intersections are currently performing poorly at peak demand times.

As part of the master planning process for the new development that will be concentrated around the town centres, strategies to facilitate the extra trips arising from new development include a package of measures including the upgrading of key intersections, the provision of new streets and alternative access routes around centres, and facilitating multiple occupancy of vehicles and non-private vehicle modes of travel.

The access and transport strategies for the Ku-ring-gai town centres¹⁷⁷ have identified a number of transport infrastructure upgrades that will be essential to mitigate the impacts of the expected development in and around the key town centres just to maintain current levels of service. The classes of improvements include the following:

- Upgrading of existing intersections, including new or relocated traffic and pedestrian signals and new or augmented turning lanes;
- Widening and/or realignment of existing roads and streets;
- Local area traffic management facilities and strategies, such as redirection of traffic flows, roundabouts, kerb blisters and the like;
- New streets, primarily to facilitate intra-centre vehicle access as well providing a release valve to better distribute the additional vehicular traffic generated by developments concentrated in and around the town centre developments. New streets and extensions/widening of existing streets also have a broader role in improving pedestrian permeability and streetscape amenity in the town centres;
- New cycleways (both on and off road) and cycle parking/storage facilities;
- New or upgraded public transport facilities, including kiss and ride, taxi and bus passenger facilities;
- New public car parking facilities, both as a response to the additional parking demands generated by development concentrated in and around key town centres or required as a consequence of existing car parking facilities proposed to be displaced by centre development;¹⁷⁸

¹⁷⁷ Refer to Part D: Dictionary and References for a full list of studies and strategies used to determine the demand for access and transport facilities included in this Contributions Plan.

¹⁷⁸ Non-integrated car parking facilities giving rise to a separate car parking contribution rate were deleted from the *Ku-ring-gai Town Centres Development Contributions Plan 2008* following exhibition. This principle has been carried into the consolidated Contributions Plan. Accordingly, to the extent these works are required they will not be funded from contributions under this Contributions Plan.

Technical details demonstrating the need for the local road access and transport facilities attributable to the expected development in and around the Ku-ring-gai town centres are contained in both the transport strategies and assessments for each centre¹⁷⁹ and the Development Control Plan.

5.5 Apportionment for Local Roads: Intersection Treatments

The design of intersection treatments has been determined with regard to the traffic modelling and assessment carried out for each of the Ku-ring-gai Town Centres.

The majority of intersection works have been planned and specified to achieve a performance goal for all turning movements at all intersections of Level of Service D or better.¹⁸⁰ However, where, either because of excessive cost and/or State Government responsibility, this standard cannot be assured, facilities that allow existing conditions to be maintained at current performance levels (that is, at Level of Service E or F) have been specified and included in this Plan. Such works are essential so that future development does not further worsen existing conditions. Accordingly, where such works merely maintain the present Level of Service and do not generate any improvement, they are 100% apportioned to new development. However, where an improvement is achieved which will, to some extent, benefit all users, the works have been apportioned between new and existing development. In these cases, each apportionment has been separately determined based on the specific improvements arising from that intersection. The apportionment for each particular intersection is specified in the works programme.

5.6 Development of New Roads: Land and Construction Costs

There are two key financial mechanisms for the delivery of new roads under the planning schemes for the development of the six Town Centres. This Contributions Plan is one mechanism. The other mechanism is transferable floor space and supporting controls in the *Ku-ring-gai Development Control Plan (Town Centres) 2010*.

In some cases, both mechanisms are active with respect to a single new road demarcated such that the land is to be dedicated in return for transferable floor space but the construction of the road is valued by this Contributions Plan.

Where land is zoned SP2 Infrastructure under *Ku-ring-gai Local Environmental Plan (Town Centres) 2010*, there is no capacity for transferable floor space, accordingly, Ku-ring-gai Council will be required to purchase the affected site at full market value within the life of this Contributions Plan. In these cases, both the land values and the construction costs are included in this Contributions Plan.

Ku-ring-gai Council has been innovative in its approach by limiting the scope of new roads wholly identified in this Contributions Plan to those which are considered absolutely essential to traffic and pedestrian flow around the town centres and which are supported by the Roads and Traffic Authority. By minimising land acquisition costs, the resultant contribution rate has been significantly reduced. The amount of

¹⁷⁹ Refer to Part D: Dictionary and References for a full list of studies and strategies used to determine the demand for access and transport facilities included in this Contributions Plan.

¹⁸⁰ Refer to Table 4.2 of Guide to Traffic Generating Developments, Roads and Traffic Authority of NSW, Version 2.2, October 2002 for more information on intersection performance and planning criteria.

land for new roads targeted for acquisition represents only 53% of the total that council seeks to achieve.

5.6.1 Properties to be zoned SP2 for Future Local Road Acquisition

A total of 7,372m² worth of land located on properties totalling 9,920.8m² have been designated with a SP2 Infrastructure zoning for acquisition for new roads under *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* approved by the Ku-ring-gai Planning Panel on 27 May 2009 and gazetted on 25 May 2010.

Figure 5.1: Sites with Land Zoned Infrastructure SP2 under the Town Centres LEP

Suburb	Address	Purpose	Area (m ²)	SP2 Area (m ²)	Other Area (m ²)
Gordon	33 Moree St	New public road between Moree Street & Dumaresq Street	1,472	1,065	407.0
Gordon	32 Dumaresq St		1,448	1,050	398.0
Gordon	36 McIntyre St	New public road between McIntyre Street & Dumaresq Street	1,043	1,000	43.0
Gordon	41 Dumaresq St		1,000	1,000	0.0
Gordon	23 St Johns Ave	New public road between St Johns Avenue & Moree Street	866.3	488	378.3
Gordon	4A Moree St		500	450	50.0
Lindfield	12 Bent St	New public road between Beaconsfield Pde & Bent St	1,075	550	525.0
Pymble	12A Park Cres	New public lane between Post Office Ln & Park Cres	462.3	180	282.3
Pymble	4 Station St	New public lane between Alma Street & Station Street	537.4	344	193.4
Turramurra	15 Gilroy Rd	New public road between Gilroy Road & Turramurra Avenue	723.4	1245	271.8
Turramurra	12 Turramurra Ave		793.4		
Totals			9,920.8	7,372	2,548.8

In total, eleven properties are targeted for acquisition for the provision of new roads and are zoned as such under *Ku-ring-gai Local Environmental Plan (Town Centres) 2010* which was formally endorsed by the Ku-ring-gai Planning Panel and gazetted on 25 May 2010.

The largest amount of new road infrastructure (and the greatest associated cost) is concentrated in Gordon. In this context it should be noted that Gordon is the only designated town centre in the Draft North Subregional Strategy¹⁸¹ in the Ku-ring-gai Local Government Area sub-ordinate to Hornsby which is a major centre. Gordon is the administrative centre of Ku-ring-gai and features higher order land uses such as being the centre for Local Government. It also features higher order retail such as a Harvey Norman and Bunnings Department Stores in addition to supermarkets, professional consulting rooms and smaller retail.

¹⁸¹ Gordon is designated a Town Centre under the Draft North Subregional Strategy being the only such centre in Ku-ring-gai.

Ku-ring-gai Council has not valued these eleven sites individually at this point in time partly because that valuation will be long outdated by the time acquisition actually occurs and partly because this would require access to what is presently private property. This is unreasonable and may cause unwarranted concern to owners who have no immediate plans to relocate.

For the purposes of this Contributions Plan it is sufficient and reasonable to use generic valuations for the local area for residential and for commercial land respectively to derive an estimated total acquisition cost with a percentage for contingencies.

These estimates have not been provided individually for each property in the table as they do not take into account the individual characteristics of these properties which may result in the real value being greater or less than the generic estimate. This may give rise to false expectations or unnecessary concern. As such, and until site-specific valuations are carried out, generic valuations by suburb should be regarded as indicative only for the purposes of deriving a reasonable contribution rate and must not be taken as a valuation of any individual property.

The estimated land value of these properties totals \$25,062,710 based on known areas and generic land valuations.¹⁸²

5.6.2 Other properties targeted for New Roads and Linkages

Further an additional amount of land totalling 9,837m² is targeted within the Development Control Plan for the Town Centres and is to be acquired by alternate mechanisms by negotiation as part of the site development. Where reasonable, construction costs are included within this Contributions Plan.

Figure 5.2: Sites with Land Targeted under the Ku-ring-gai Town Centres DCP

Suburb	Address	Purpose	Area (m ²) ¹⁸³
Gordon	6 Dumaresq Street	New public road between Dumaresq Street and Moree Street	1,080
Gordon	7 Moree Street		
Gordon	880-916 Pacific Hwy	Widening of Fitzsimmons Lane	760
Gordon	737-795 Pacific Hwy	Wade Lane road widening	830
Lindfield	321-329 Pacific Hwy and 1-5 Tryon Road	New laneway	240
Lindfield	358-374 Pacific Hwy	Bent Street widening	180
Lindfield	302-356 Pacific Hwy	Woodford Lane widening	680
Lindfield	23-25 Lindfield Avenue & 2 Kochia Lane	Kochia Lane widening	190
Lindfield	2 Kochia Lane, 27-31 Lindfield Avenue & 9 Havilah Lane	Havilah Lane widening	120
Pymble	67-81 Grandview Street	Alma Street road widening	114
Pymble	85-89 Grandview Street	Alma Street road widening	54
Pymble	939-985 Pacific Hwy	Widening of Pacific Hwy	650

¹⁸² For further information on the generic land values utilised in this Contributions Plan, please refer to 3.8 Land Values for the Acquisition of New Open Space noting the targeted roads generally have the same proximity to the town centres as the targeted open space.

¹⁸³ These roads and streets are expected to be developed as works in kind on a larger development site with the result that there is no imperative for the Contributions Plan to consider the possibility of residual land.

Suburb	Address	Purpose	Area (m ²) ¹⁸³
Roseville	37-41 Hill Street	Extension of existing lane	96
Roseville	25-35 Hill Street & 1,3,5 Lord Street	Extension of existing lane	210
Roseville	19-23 Hill Street	Extension of existing lane	102
St Ives	213-237 Mona Vale Rd	Widening and extension of existing lane and footpath widening	750
St Ives	166-188 Mona Vale Rd	Widening of Pacific Hwy and footpaths	1,150
St Ives	190-200 Mona Vale Rd	Widening of Pacific Hwy and footpaths	330
St Ives	2 Memorial Avenue	Footpath Widening	40
St Ives	15-17 Stanley Street	Footpath widening	75
Turramurra	1301-1333 Pacific Hwy	New public road with footpaths and on street parking	202
Turramurra	1 Ray Street	New public road with footpaths and on street parking	272
Turramurra	1380-1388 Pacific Hwy	New public road	495
Turramurra	1293-1333 Pacific Hwy	Widening of Pacific Highway	462
Turramurra	17-21 Rohini Street & 1251-1267 Pacific Hwy	Gilroy Lane widening	295
Turramurra	27-39 Rohini Street	Gilroy Road widening	205
Turramurra	1364-1378 & 1390-1396 Pacific Hwy	Widening of Pacific Highway	255
Total			9,837

5.6.3 Apportionment for New Streets and Modifications to Existing Streets

New streets are 100% apportioned to all the anticipated additional development in the town centres (both residential and commercial) and based on the anticipated trip generation from each type of development. In this context it is emphasised that none of this work would be required but for the intensity of development around the town centres and the proposed work is essential to the functionality of the town centres. The NSW Roads and Traffic Authority in its commentary on the then draft *Ku-ring-gai Local Environmental Plan (Town Centres) 2008* as exhibited has generally supported these proposed works as noted in the preceding sections.¹⁸⁴

It is important in supporting developers to undertake works-in-kind and to facilitate a rolling works programme that there is established, within the Contributions Plan, a balance between works which are partly apportioned and works which are wholly apportioned based on site and development characteristics. In this context, the majority of new roads are physically located on anticipated development sites. Artificially apportioning works that are fairly and reasonably wholly attributed to an incoming population can actually inhibit both the timely delivery of the works programme and the capacity for developers to undertake land dedication and works-in-kind because of the fiscal constraints on the council co-contribution. This is unreasonable and impractical - and potentially disadvantages a number of larger developers which, ultimately, would disadvantage the community as a whole.

Modifications to existing streets to facilitate traffic flow are similarly apportioned to both residential and commercial development. Many are 100% apportioned but not all.

¹⁸⁴ Following the completion of the exhibition draft of this Contributions Plan, a consultation draft of new Guidelines for the preparation and administration of development contributions plans was provided by the Department of Planning for comment. In determining the appropriate type of apportionment, five key questions should be asked of which the first is: If the anticipated development did not occur, would this community infrastructure be required? In respect of these new roads, the answer is that they would not.

The degree of apportionment relates directly to the present level of service and whether any additional improvement beyond the maintenance of the present level of service is anticipated. Further detailed on intersection apportionment appears at **5.5 Apportionment for Local Roads: Intersection Treatments** above.

5.6.4 Apportionment by Trip Generation

The apportionment of works to local streets and intersections is related to the expected traffic demand arising from different types of dwellings and from commercial floorspace. This plan utilises the following assumptions with respect to trip generation¹⁸⁵:

Figure 5.3: Trip Generation by land use

Development Type	Trip Generation (peak hour vehicle trips per hour)
Bedsits / studios / single bed dwelling units	0.40
2 bedroom dwelling units	0.50
3+ bedroom dwelling units	0.65
Dwelling Houses (credits)	0.85
Seniors Living dwellings	0.45
Non-Private dwellings ¹⁸⁶	0.00
Retail floorspace (per 100m ² GLFA)	4.60
Business floorspace (per 100m ² GFA)	2.00

The relative demands arising from each type of development is used to apportion the specific works which address this demand between each type of development depending on the relative proportion of the demand directly attributable.

5.6.5 Policy for the Treatment of Residual Acquired Land

Unlike land for the provision of additional open space where the entire property is required for the park, in the case of new roads there will, in most cases, be residual land from the property to be acquired that is not an essential component of the road reservation. These areas vary in size averaging around 250m² but all are characteristically long and narrow. The options for treatment of this land are as follows:

On-sale to the adjoining property owner – in this case there is only one realistic purchaser and that purchaser is likely to be a developer of the adjoining site(s). The possibility of achieving fair market value in the case where there is only one possible purchaser cannot be guaranteed at the time of drafting accordingly Ku-ring-gai Council regards the acquisition of the whole property from development contributions as reasonable in the circumstances.

Use for another community purpose valued by the Contributions Plan – it is also possible that this land could become a linear park, rest area or civic space enhancing the public domain and adding to the separation between the new road and the adjoining property.

¹⁸⁵ Source: RTA Guidelines for Traffic Generating Development.

¹⁸⁶ The majority of non-private dwellings in Ku-ring-gai are either accommodation for the frail aged, boarding schools, children's or youth facilities, and/or co-located with places of employment leading to a negligible impact when compared to self contained dwellings and business centres. The majority are also located remote from the town centres and are unlikely to generate a measurable contribution to the peak hour trips around the town centres.

Both options generate legal concerns for the appropriate use of land acquired through the expenditure of contributions levied for the purpose of enhancing local accessibility.

Accordingly, this Contributions Plan stipulates Ku-ring-gai Council's policy with respect to the treatment of this residual land.

In the event a fair market value price *can* be agreed with an adjoining purchaser, then any money paid for the purchase of that land shall be returned to the contributions reserves for this category and directed towards those works which are important but which had to be deleted from the works programme to this Contributions Plan in order to maintain a reasonable contribution rate. A list of these works can be found at **5.13 Facilities not included in this Contributions Plan.**

In the event a fair market value *cannot* be agreed with the adjoining land owner, Council will retain this land for the purposes of a linear park and the reserves for local open space acquisition shall reimburse the reserves for local roads. That income shall, as in the case above, be directed towards those works which are important but which had to be deleted from the works programme to this Contributions Plan in order to maintain a reasonable contribution rate. A list of these works can be found at **5.13 Facilities not included in this Contributions Plan.**

5.7 Local Roads: Nexus for Streetscape and the Public Domain

A key aspect of the planning vision for each of the town centres in Ku-ring-gai is the development of higher density housing and commercial premises in a more dense urban form than is characteristic of Ku-ring-gai. This represents a significant change from the large private gardens that predominate in Ku-ring-gai. To mitigate this impact and to create a good quality urban amenity, works are proposed to the public domain within the road reservation (i.e. outside the private property boundaries).

5.7.1 Key role of the public domain

Key support for the nexus between intensifying development and works to the public domain is found in the NSW Government's Draft North Subregional Strategy:

"In addition to parks and sports grounds, public places also comprise other aspects of the public domain such as urban civic space such as town squares, widened footpaths and boulevards. Ku-ring-gai Council is working towards developing new civic spaces through the progression of an LEP for six of their centres."¹⁸⁷

Recent new development has targeted a significant market segment of down-sizing retirees seeking to remain in the area post-retirement but in a smaller, low-maintenance dwelling unit. The key alternate apartment market in Ku-ring-gai is the young to middle adult market with or without children. This demographic also coincides with people who may have grown up in the area but are unable to afford larger free-standing homes in the area yet wish to be close to family and ageing parents. To both these markets, the environment of the development is particularly important.

It must be noted that this Contributions Plan does not include all the public domain improvements works considered desirable for a high quality urban environment but

¹⁸⁷ North Subregion: Draft Subregional Strategy Page 92

not all works could be included due to the necessity of maintaining a reasonable contribution rate.

Streetscape works in the public domain include paving, street trees, street furniture and lighting. In key town centre areas, the estimated capital cost also includes the undergrounding of the power lines.

The Metropolitan Strategy outlines some key aspects of successful centres as:

- Accessible and pedestrian friendly;
- Providing good public transport options;
- Containing high-level jobs, learning opportunities and cultural activities; and
- Having attractive and safe public domain spaces.¹⁸⁸

The first and fourth dot points and the facilitation of access to the public transport identified in the second dot point together underline the importance of the quality of the public domain to the successful function and economic life of the town centres.

In this context it should also be noted that the new development is located to take maximum advantage of the location of public transport and core services which, in turn, demands the facilitation of access to these facilities.

The design of the public domain also facilitates outdoor cultural events, festivals and fairs which, in turn, help build a sense of community. The vitality of these centres is essential to support the continued attractiveness and economic sustainability of the higher density development in and around them. Ku-ring-gai Council will be continuing and expanding its commitment to good economic development through its *Draft Economic Development Strategy 2009* currently under preparation and review. Ku-ring-gai Council now takes, and will continue to take, an integrated approach to all strategic planning.

Lastly it must be noted that the total amount of targeted new local open space has been substantially reduced from an average of 4.37m²-5.82m²/capita in past contributions plans to 2.75m²/capita inclusive of new civic spaces. The role of the public domain as an additional urban passive recreation space compensating to some degree the under-provision of local open space, should not be underestimated. The use of the street for passive recreation is well documented in other urban centres in Sydney featuring intensive residential and mixed residential-commercial development such as Green Square and Chatswood.

5.7.2 Additional roles of the public domain

Research carried out by Elton Consulting for the *Community Facilities Strategy* also demonstrated support for the design of the public domain in contributing towards the future community needs of the area.

For example, some of the needs of the significant youth population can be met by a well-designed, safe and inclusive public domain which welcomes, rather than discourages, young people to meet and gather in public places such as public squares. As new public spaces are created, it will be important that attention is given to ways in which they can help to meet the social needs of young people. Such provision

mitigates the need to provide more space in buildings, which are generally more costly to provide.¹⁸⁹

It is not only the needs of youth for recreational and meeting space that can be met by the public domain. It is characteristic of urban centres that the street themselves, become a recreational and leisure resource. The *Metropolitan Strategy for Sydney* notes that walking for exercise is the most popular form of physical activity among people in NSW with some 21% of people participating.¹⁹⁰

In this context the demarcation between the functions of the lineal works to the public domain that comprise streetscape improvements to the pedestrian area of the street as 'transport' or 'leisure' becomes blurred. In fact, streetscapes in urban centres fulfil both roles. Additionally, the recent post-occupancy surveys undertaken for the Community Facilities Strategy by Elton Consulting noted that there is already an emergent demand for civic improvements within the community emphasising a need for non-commercial spaces for informal meeting and social interaction.¹⁹¹

In summary, given concentration of new development around the town centres in an increasingly urban setting, the role of the proposed townscape works in off-setting the significant discounting of the proposed new local parkland acquisition should not be under-estimated. The streetscape and public domain works programme will be critical in mitigating the impact of the reduction in proposed per capita open space.

5.7.3 Design principles for the public domain

While the financing package for works to the public domain draws on a combination of methods, and not all works can be the subject of development contributions, the design principles as a whole for each town centre are also important in establishing the vision that is intended to ensure that the intensive development surrounding each centre is accommodated in a public domain that contributes to a vibrant community.

The design approach for the public domain for the Ku-ring-gai town centres is based on developing an urban and landscape design strategy which aims to provide environmental, aesthetic, cultural, social and economic benefits to each of the town centres and the greater community. The design principles aim to recognise, reinforce and enhance the overall character of Ku-ring-gai creating a consistent public domain image which focuses on the creation of stimulating outdoor spaces and successful pedestrian circulation. The design for the public domain needs to be high quality unifying future development and encouraging economic and physical vitality within the centres.

The urban and landscape design principles for the public domain include town centre identity, streetscape and interface design, the rationalisation and treatment of pedestrian spaces, routes and access points, the design of paving, lighting, street furniture and soft landscape and the integration of public artwork and community elements.

The public domain needs to accommodate space for all users, commercial, residential and visitors alike. Design needs to cater for the two dominant stage-of-life cohorts in Ku-ring-gai: young high-school aged people and older people, most particularly as the

¹⁸⁹ Elton Consulting *Community Facilities Strategy, June 2009*; Page 73

¹⁹⁰ NSW Government: *Metropolitan Strategy for Sydney (2005)*; Page 39

¹⁹¹ Elton Consulting *Community Facilities Strategy, June 2009*; Page 28

dominance of both age-groups are likely to be sustained directly and indirectly by new development.

Ku-ring-gai Public Domain Plan 2010 identifies design objectives, strategies, function and quality for each town centre. Subtle differentiations in design elements provide opportunity to give each town centre its own identity and special character. This may be specifically the case around the heritage precincts and conservation areas. Through the selection of design elements and materials a clear hierarchy and street character is created within each centre reflecting the location and function of each street and precinct. Cost estimates allow for streetscape elements including paving, furniture and lighting to be chosen for their quality, durability, sustainability, accessibility and minimal maintenance.

A palette of visually strong urban elements will identify the town centre precincts along the two main roads being the Pacific Highway and Mona Vale Road. High quality large format unit pavers, street furniture, lighting and underground power together with street trees will reflect the scale and character of the main road and commercial/retail precincts.

The town centre streets and civic spaces provide the main areas for cafés and public life adjacent to the retail and commercial developments. The proposed public domain treatment will reflect the smaller scale streets and places with finer smaller scaled elements, seats trees and high quality pavements. Where possible, power will be underground and good pedestrian lighting will encourage outdoor dining and night life. Street trees will include species to identify each town centre precinct and will be selected for solar amenity, seasonal interest, wind amelioration, scale, mature size and maintenance requirements.

Laneways that connect streets, commercial precincts and open spaces will be designed for a more intimate scale. Smaller unit / interlocking pavers will be used and integrated where beneficial with storm water infiltration systems. Street trees will be incorporated where pavement widths allow together with street furniture, lighting and underground power.

5.7.4 Apportionment for Works to the Streetscape and the Public Domain

In the case of public domain works, these are required directly and specifically as a result of the intensive concentration of development that will materially change the presentation of the six designated town centres.

Ku-ring-gai is set to experience a 33.3% growth in the number of dwellings from 36,177 to 48,246. But for a few large sites elsewhere in the Local Government Area, this new growth will be almost entirely concentrated on just 6% of the land in Ku-ring-gai in six suburban centres and existing medium density zones along the Pacific Highway but outside the designated town centres (totalling less than 10% of the LGA). These town centres currently present a predominantly two-storey urban character that will transition into urban centres of five to nine storeys in height.

This proposal represents a significant change in urban form which justifies the consequential changes to the public domain being wholly attributed to this growth. These existing centres will simply not be economically or physically sustainable without this works programme. For development of this scale to succeed, let alone be done well, public domain works are essential.

These public domain improvements therefore directly arise from this development and chiefly benefit the residents and businesses in these developments which derive a daily direct benefit from improvements quite literally right on their doorsteps. These works not only would not have been provided but for these developments – they could not have been. The integration of this Contributions Plan in its draft form into the Long Term Financial Plan demonstrated that the co-contributions Ku-ring-gai Council is committed to under this Contributions Plan are at maximum financially sustainable capacity. If further co-contribution were required, works programmes would have to be scaled back significantly potentially threatening the on-going economic viability of future quality development.

Ku-ring-gai Council has already been innovative in utilising a range of mechanisms under *Ku-ring-gai Local Environment Plan (Town Centres) 2010* and *Ku-ring-gai Development Control Plan (Town Centres) 2010* for the town centres to provide some works by other mechanisms such as transferable floorspace and design benefits. The scope of these alternative mechanisms has essentially been limited to works on sites that are, at the time of development, in private ownership. The Department of Planning expressed its opinion to Ku-ring-gai Council as part of the finalisation process of then draft *Ku-ring-gai Local Environment Plan (Town Centres) 2008* that works to the public domain should be incorporated within the development contributions system.

5.8 Local Roads: Cycleways

It is now increasingly accepted that Australia's urban environment faces a number of transport, health and environmental challenges and there is a consequent need to:

- provide for the safe, affordable and enjoyable movement of people and goods;
- reduce the environmental and health impacts of transport, for instance by reducing motor vehicle greenhouse gas and noise emissions;
- increase physical activity by Australian people; and
- combat rising traffic congestion, which is increasing travel times and industry costs.

In order to meet these needs, as a population, we need to reduce our dependence on the motor vehicle, provide a system that offers attractive choices for travel other than the private vehicle and increase the use of 'active transport' such as walking, cycling and public transport.¹⁹²

Nexus for the provision of cycleways as well as pedestrian routes is further supported by the NSW State Government in acknowledging the relationship between land use and demand as well as the imperative of managing future transport sustainability in the urban context by facilitating alternative modes of accessibility. The Metropolitan Strategy makes particular reference to the role of cycleways and pedestrian facilities:

- ✓ Land use relationships and local infrastructure improvements will need to ensure that opportunities are provided to enable increased use of active transport particularly walking and cycling.¹⁹³

¹⁹² Paraphrased from The Australian National Cycling Strategy 2005-2010; Page 4.

¹⁹³ North Subregion: Draft Subregional Strategy Page 44

- ✓ With better facilities and better alignment of the local walking and cycling networks with public transport routes ... many short trips currently made by car could also be made by walking or cycling.¹⁹⁴

Cycling facilities are required as part of the range of transport options inherent in developing a balanced transport strategy for intense redevelopment centred on key transport nodes.

The opportunity to cycle is supported by a number of support facilities including line-marking and grade separation for cycle paths, and cycle storage facilities at railway stations and other key destinations.

The opportunity to establish cycling as a viable form of transport for residents of new development in and around the town centres is in the early years of the growth phase. It is challenging to retro-fit cycling facilities into the established urban environment. This challenge can only be met with a coordinated works in the road environment and in the public domain. The provision of cycle routes, facilities for cyclists and cycle storage at key destinations are all integral parts of the works to the road environment and to the public domain.

5.9 Responsibilities of State and Local Government

The provision of infrastructure that facilitates access is a responsibility of both State and Local Governments. Most roads are the responsibility of Local Government to provide and maintain however some roads which serve a higher order traffic function such as 'classified' roads or arterial roads are a shared responsibility between State and Local government. There are also higher order roads where the road environment is the responsibility of State government but where the pedestrian environment along these roads may be the responsibility of the local government authority.

Public transport facilities mainly fall within the province of State Government with Local Government having some role in providing passenger amenities (bus shelters, taxi stands, kiss and ride facilities) which are the interface between the public transport and the pedestrian and, in some case, vehicular, public domain. The State Government has recently foreshadowed responsibility for the provision of transport interchange works at local railways stations, however this has not yet resulted in a firm commitment to Ku-ring-gai.

This Contributions Plan requires contributions towards the provision of local streets: access and transport facilities where these are wholly or partly the responsibility of Council to provide.

The level of contribution (that is, apportionment factor) for individual access and transport facilities included in this Plan has been determined with regard to both:

- whether Council or the State Government has a key responsibility to provide the facility; and
- the level of demand generated by the expected development.

In the interests of clarity: the Pacific Highway, Mona Vale Road, Ryde Road and Boundary Street are all classified roads.

¹⁹⁴ North Subregion: Draft Subregional Strategy Page 70

Ku-ring-gai Council has liaised extensively with the NSW State Government Roads and Traffic Authority concerning the provision of treatments at intersections with State roads such as the Pacific Highway. The RTA has advised:

“It should be noted that the proposed changes were made necessary primarily due to the increase in traffic demand from the proposed redevelopment of the two town centres. It is therefore reasonable to expect these improvements to be funded, fully or partially, by developer contributions including through S94 Contributions.”¹⁹⁵

It is clear that, in order to achieve these works in a reasonable time commensurate with the increase demand that these works need to be proportionally funded by the cumulative development that generates the demand for the works.

5.10 Works required by Conditions of Consent

A range of access and transport works are not appropriately addressed within a Contributions Plan because they have a key direct relationship with one particular development rather than arising from cumulative smaller-scale development. Such works may be required by Ku-ring-gai Council to be undertaken directly by the developer as conditions of consent under section 80A(1)(f) of the *Environmental Planning and Assessment Act*. The type of works, the demand for which is considered to be specifically generated by individual developments in the Ku-ring-gai town centres may include:

- access driveways, local access roads, footpaths and street tree planting not addressed by this Contributions Plan and located within or in immediate proximity to proposed developments; and
- traffic management devices and treatments on local roads not addressed by this Contributions Plan (both temporary and permanent) which are required in order to provide safe, efficient and convenient access to the development.

5.11 Formulae: Local roads, Local bus infrastructure and Local drainage

The contributions for the works programme for the category of Key Community Infrastructure that includes local roads, local bus infrastructure and local drainage (in the road reservation) are determined in two different ways depending on whether the demand is generated per capita or as a result of increased traffic generation. While these totals could have been added to derive a total contribution rate for this category, in the interests of clarity they have been calculated and listed separately in the contributions rates schedules at the front of this document.

5.11.1 Formulae: Works in the road environment

The total contribution payable is the sum of all these contributions as they apply to the individual development.

¹⁹⁵ Letter from the Roads and Traffic Authority in relation to the s62 notification for Roseville and Lindfield Town Centres originally dated 23 February 2007 and reiterated 24 October 2008.

Contribution for Works in the Road Environment	=	Contribution for new local roads: calculated as Works Cost / Proportional Contribution to Trip Generation by Centre	+	Contribution for intersection upgrades and road modifications: calculated as Works Cost / Proportional Contribution to Trip Generation by Centre
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The components of this general formula are derived from the land use analysis in the table below. **Note:** Due to the complexity of the calculation which apportions the contribution across all types of development based on the respective proportional contributions towards the total additional traffic generation by centre, contributions for each type of dwelling unit, gross lettable retail area and gross commercial floorspace have been separately calculated in the works programmes by centre. The total contribution rate by type of development by centre is stated in the contributions schedules at the front of this document.

Figure 5.4: Trip Generation by Land Use by Town Centre

Area	Town Centre Data	Residential				Commercial	
		1 bedroom & below	2 bedrooms	3+ bedrooms	Seniors Living	Retail	Business
St Ives	3,104	9.23%	45.97%	39.80%	5.00%	70%	30%
St Ives Unit Mix (#) / Floorspace Mix (m ²)	3,104	286	1427	1236	155	12,533.3	7,161.9
St Ives Trip Generation	2,421	115	713	803	70	577	143
Total %	100%	5%	29%	33%	3%	24%	6%
Turramurra	2,680	9.23%	45.97%	39.80%	5.00%	80%	20%
Turramurra Unit Mix (#) / Floorspace Mix (m ²)	2,680	247	1232	1067	134	4,932.6	1,644.2
Turramurra Trip Generation	1,728	99	616	693	60	227	33
Total %	100%	6%	36%	40%	3%	13%	2%
Pymble	1,523	9.23%	45.97%	39.80%	5.00%	65%	35%
Pymble Unit Mix (#) / Floorspace Mix (m ²)	1,523	141	700	606	76	1,169.0	39,282.3
Pymble Trip Generation	1,674	56	350	394	34	54	786
Total %	100%	3%	21%	24%	2%	3%	47%
Gordon	4,226	9.23%	45.97%	39.80%	5.00%	40%	60%
Gordon Unit Mix (#) / Floorspace Mix (m ²)	4,226	390	1943	1682	211	11,467.5	22,935.0
Gordon Trip Generation	3,302	156	971	1093	95	528	459
Total %	100%	5%	29%	33%	3%	16%	14%
Lindfield	3,194	9.23%	45.97%	39.80%	5.00%	65%	35%
Lindfield Unit Mix (#) / Floorspace Mix (m ²)	3,194	295	1468	1271	160	5,696.9	4,090.1
Lindfield Trip Generation	2,094	118	734	826	72	262	82
Total %	100%	6%	35%	39%	3%	13%	4%
Roseville	1,481	9.23%	45.97%	39.80%	5.00%	70%	30%
Roseville Unit Mix (#) / Floorspace Mix (m ²)	1,481	137	681	590	74	893.0	510.3
Roseville Trip Generation	863	55	340	383	33	41	10
Total %	100%	6%	39%	44%	4%	5%	1%

5.11.2 Formulae: Works to the pedestrian environment, local transport infrastructure, streetscape and the public domain

The following formulae are used to calculate the contribution rate per person. Rates for various types of dwelling (including subdivision) are based on the occupancy rates in **2.10 Residential Occupancy Rates**. For ease of reference, all the contribution rates are listed in the summary schedules at the front of this document.

The per capita contribution rate is the sum of all individual contribution rates derived from the formula below:

$$\text{Contribution per work per capita} = \frac{\text{Works Item Cost}}{\text{Contributing Population}}$$

The contributing population establishes the apportionment and is specifically listed against each work in the works programmes at the end of this document as follows:

For works attributed to the total 2031 population: 126,151¹⁹⁶
 For works attributed to new growth in the Ku-ring-gai LGA: 21,048
 For works attributed to new growth in the Northern area: 10,954
 For works attributed to new growth in the Southern area: 10,094
 For works attributed to new development in Gordon: 4,226
 For works attributed to new development in Lindfield: 3,194
 For works attributed to new development in Roseville: 1,481
 For works attributed to new development in St Ives: 3,104
 For works attributed to new development in Turramurra: 2,680
 For works attributed to new development in Pymble: 1,523
 For works attributed to new development in Wahroonga: 1,529

5.12 Facilities not included in this Contributions Plan

There are many works which should be provided as part of the new development in Ku-ring-gai which have been excluded from this Contributions Plan in the interests of maintaining a reasonable contribution rate.

It is also recognised that, in the case of works to the transport network, more than any other work, there is opportunity for assistance from the State or Federal Government which may arise without warning after the adoption of this Contributions Plan. A recent example is the offer of State Government funding for transport interchanges at railway stations which resulted in the removal of these works programme items from the future works programme. Additionally, there is scope for some additional works to be funding arising from the essential land acquisition programme detailed in **5.3 Local Roads: New Streets**.

For these reasons, this section details an additional works programme which consists of works which are considered important to the functionality of the town centres and are justifiable under nexus requirements but which cannot be incorporated in this Contributions Plan in the interests of achieving a reasonable contribution rate. These are works which Ku-ring-gai Council aims to fund through general revenue and/or through grant money. Alternatively, in the event that any works that are included within the Local Roads area are funded by an alternate mechanism, or if additional

¹⁹⁶ This division ensures that there will be a significant deemed contribution payable by Ku-ring-gai Council on behalf of the existing population.

funding is generated as part of the process of managing and implementing the works programmes, then these works will be instigated as a first priority.

The key works deleted from this Contributions Plans in the interests of maintaining a reasonable contribution rate are as follows:

All Town Centres

- ✂ All works associated with new footpaths and verges beyond the immediate commercial areas into areas of high density residential development;
- ✂ Some higher quality works to the town centres public domain – in particular the replacement of granite pavers with polished concrete;
- ✂ Some street planting beyond the key commercial areas of the town centres;
- ✂ Works associated with relocating overhead powerlines in some streets within the town centres;
- ✂ Aerial bundling of powerlines in commercial streets in the town centres;¹⁹⁷
- ✂ Aerial bundling of powerlines in residential streets around the town centres; and
- ✂ Undergrounding of car parks for the provision of additional civic spaces.
- ✂ Additionally, the scope and extent of proposed street lighting and the associated undergrounding of powerlines has been truncated in most town centres. Extension as originally proposed and exhibited is also considered prime work for the expenditure of any additional funding.

Gordon

- ✂ Moree Street works to provide an additional civic area;
- ✂ One new street between Moree Street and Dumaresq Street;
- ✂ One new pedestrian way between Pacific Highway and Fitzsimmon Lane; and
- ✂ Streetscape works involving permeable pavers and stormwater harvesting.

Lindfield

- ✂ Widening of the railway overpass on Havilah Road, near Pacific Highway, including improved pedestrian provision;
- ✂ Construction of a new pedestrian link from Woodside Road to Havilah Road; and
- ✂ Construction of a new pedestrian lane between Pacific Highway and Woodford Lane.

Pymble

- ✂ Widening of the Pacific Highway at Pymble railway bridge;
- ✂ Streetscape works involving permeable pavers and stormwater harvesting;
- ✂ Additional civic areas alongside Pymble Town Hall;
- ✂ Pedestrian accessways in the town centre;
- ✂ New off-road cycleway from Telegraph Road to Station Street; and
- ✂ Improved pedestrian facilities linking the Pymble Business Park with Pymble Town Centre.

¹⁹⁷ This line item was deleted from the town centres works programme following exhibition and is considered first priority for expenditure of any additional funding.

Roseville

- ✂ Realignment of Clanville Road with Shirley Road by constructing new bridge over railway and modifying intersection and traffic signals to accommodate new layout;
- ✂ Improvement of pedestrian access over the new bridge by providing widened footpaths; and
- ✂ Widening and upgrading of the existing pedestrian laneway (Sixth Mile).

St Ives

- ✂ Modifications to intersection Mona Vale Road and Link Road to provide dedicated right turn bays from Mona Vale Road (south-westerly) to Link Road (north-easterly);
- ✂ Associated modifications to Killeaton Street between Link Road and Mona Vale Road, to take into account above changes; and
- ✂ Modifications to Cowan Road (at intersection of Mona Vale Road), to provide additional capacity.

Turramurra

- ✂ Provision of a new roundabout at intersection Rohini Street and Eastern Road;
- ✂ Widening of the Pacific Highway bridge over railway line to improve pedestrian and bicycle access and circulation;
- ✂ New lighting in Duff Street; and
- ✂ Construction and embellishment of a pedestrian way between Turramurra Avenue and Turramurra Green.

These works will be given first priority in the event alternative or additional funding is received for any of the works which are listed in the works programmes.

5.13 Local Roads and Local Bus Infrastructure - Support

A budget of 1.25% of the total capital works programme for Local Roads and Local Bus Facilities has been allocated to future studies the primary purpose of which is to support the review and implementation of this Contributions Plan as well as the cost of administering and managing this Contributions Plan through the employment of a specialist coordinator. This cost is shared across each type of Key Community Infrastructure.

Further justification of the need for this inclusion is spelled out in **2.6.6 Management, Studies and Administration**.

5.14 Concluding Statement – Statement of Reasonableness

Ku-ring-gai Council has taken the approach that new development should provide for the improvements that are essential to ensure that the status quo with respect to all aspects of accessibility is not diminished by the fact of intense and concentrated development. This includes works which maintain the current level of service of an existing intersection.

Where these facilities also provide a direct benefit to others these are apportioned to the population as a whole. This apportionment process results in Ku-ring-gai Council

bearing a significant co-contribution on behalf of the existing population. The benefits of intersection works have been assessed individually to ensure that development only pays its fair share in each particular case. In the few cases where the intersections works will deliver a greater benefit than the maintenance of the pre-development phase level of services, those works have been duly discounted.

In the case of public domain works, these are required directly and specifically as a result of the intensive concentration of development that will materially change the presentation of the six designated town centres. Ku-ring-gai is experiencing a 33.3% growth in the number of dwellings from 36,177 at the start of this development phase to a total of 48,246. These new dwellings will be almost entirely concentrated in suburban town centres whose current urban form is that of predominantly two-storey development in the form of late-Victorian and early 20th-century terrace shopping strips. These town centres, comprising less than 10% of the land area in the Ku-ring-gai Local Government Area, will become urban centres featuring development of five to nine storeys. This development represents a significant change in urban form which wholly justifies the consequential changes to the public domain being fully attributed directly to this growth. The existing local centres will simply not be economically or physically sustainable without this proposed works programme.

The proposed public domain improvements directly arise from this development and chiefly benefit the residents and businesses in these developments which derive a daily direct benefit from improvements right on their doorsteps. The role of public domain works (as a passive recreational resource) in mitigating the impact of substantially discounted rates of provision of new local parks should also not be underestimated.

It is emphasised that these works would not have been provided but for these developments. It is emphasised that this scale of redevelopment will not be economically, physically or environmentally sustainable but for these works. It is emphasised that Ku-ring-gai Council cannot subsidise the provision of these works beyond the shortfall arising from development that received consent prior to the 'in force' date of *Ku-ring-gai Town Centres Development Contributions Plan 2008 which was the first plan to levy contributions towards works to the public domain in the six designated town centres.*

Ku-ring-gai Council has liaised with the departmental staff supporting the Contributions Review Panel and the Ku-ring-gai Planning Panel on key aspects of this Contributions Plan in particular on the extent and apportionment of works to the public domain. While opinions have not always wholly coincided, Ku-ring-gai Council has taken all opinions on board and believes it has taken the only approach, in the circumstances of the case, that will achieve the town centre works which it has demonstrated in this Contributions Plan to be essential to support economically sustainable development in each of the town centres – within a reasonable time.

Part D: Dictionary and References

6.1 Dictionary

The following terms inform the operation of this Contributions Plan:

“Act” means the *Environmental Planning and Assessment Act, 1979*.

“adaptable housing” means housing that is designed and built to accommodate future changes to suit occupants with mobility impairment or life cycle needs. For the purposes of this Contributions Plan, where this housing is limited to occupation by seniors or persons with a disability, it will be treated as such for the purposes of calculating a contribution.

“applicant” means the person or the organisation submitting a development application.

“apportionment” means the process by which the assessed demand or cost is related specifically to the development from which contributions may be sought. Apportionment seeks to ensure that new development only pays its share or portion of the cost of the facility or work for which it has created a demand.

“area” means the land to which this contributions plan applies, the land over which the need for infrastructure has been assessed or the land which may be served by the facilities or works to be provided. In the context of development contributions, an area may also be a catchment.

“bedroom” means, for the purposes of this Contributions Plan any room which is, in the opinion of Council, by its physical design, capable of being used as a bedroom. Separately accessible rooms designated a bedroom, study, studio, den, attic, home office or the like, including in some circumstances partially enclosed spaces or mezzanine levels, may be classified as bedrooms for the purposes of this plan.

“bedsit” or **“studio”** means a dwelling without a separately accessible bedroom up to a maximum of 110m² in area. Dwellings larger than 110m² without fixed internal walls will be deemed to be two bedroom dwellings for the purposes of this Contributions Plan.

“co-location” means the location of a range of services within the one facility. Service providers would share resources such as kitchens, meeting rooms, bathrooms and storage.

“commercial floorspace” means any floorspace for the purposes of any for-profit activity including but not necessarily limited to commercial, retail, office, business, industrial, private education, private health, private childcare facilities or other commercial enterprise.

“commercial premises” means a building or place used for business or commercial or industrial purposes including but not limited to offices, shops, supermarkets, retail complexes, entertainment establishments, clubs, restaurants and cafes, factories, warehouses, transport terminals, for-profit activities and any other place which, in the opinion of Council, either generates a demand for facilities and services by means of the nature of the business and/or employs people who may generate a need for services and facilities which Council has a responsibility to provide. “Commercial premises” is a collective term used for all business activities for the purposes of this Contributions Plan.

“community facilities” means a building or place that is owned or controlled by a council and used for the physical, social, cultural or intellectual development and welfare of the local community.

“community infrastructure” has the same meaning as 116C of the *Environmental Planning and Assessment Act, 1979* and means public amenities and public services, but does not include water supply or sewerage services.

“construction cost” means the physical cost of construction inclusive of demolition if required but does not include contingencies, project management costs, builders margins or soft fitout.

“contribution” means the making of a monetary contribution, dedication of land or the providing of a material public benefit as works in kind, or any combination of the above as referred to in the *Environmental Planning and Assessment Act* for the provision of infrastructure or community facilities or amenities.

“Contributions Plan” means a plan in force for the purposes of seeking a contribution from development that, in the opinion of Council, increases the demand for facilities and services. The term may refer to plans in force under Part 5B of the *Environmental Planning and Assessment Act* or to plans brought into force under the former legislation in Division 6 of the Act commonly known as Section 94.

“cost” means the full cost of providing a work, a facility or amenity from inception to operation. This may include, but is not limited to, land costs, conveyancing, legal fees, stamp duty, design costs, public consultation, demolition and site clearance, service relocation, decontamination, excavation, project management, earthworks, construction, landscaping, lighting, security, initial full fit-out, contingencies and risk.

“Council” means Ku-ring-gai Council, its heirs and successors including any properly appointed body exercising some or all of the functions of Council.

“development” has the meaning under Section 4 of the *Environmental Planning and Assessment Act, 1979* which in relation to land means:

- (a) the erection of a building on that land;
- (b) the carrying out of a work in, on, over or under that land;
- (c) the use of that land or of a building or work on that land; and
- (d) the subdivision of that land.

“drainage” has the meaning in the standard template and means any activity which intentionally alters the hydrological regime of any locality by facilitating the removal of surface or groundwater. It may include the construction, deepening, extending, opening, installation or laying of any canal, drain or pipe, either on the land or in such a manner as to encourage drainage of adjoining land.

“dual occupancy” has the meaning in the standard template and means two self-contained dwellings (whether attached or detached) on one lot of land but does not include a granny flat.

“dwelling” has the meaning in the standard template and means a room or suite of rooms occupied or used or so constructed or adapted as to be capable of being occupied or used as a separate domicile.

“dwelling house” has the meaning in the standard template and means a building containing only one dwelling (or one dwelling and a granny flat allowed by the relevant LEP), but does not include a building permanently used otherwise than for the purpose of a dwelling.

“existing population” means the population that exists on a site at the time of application for development consent or, in the case of a redevelopment site, which existed immediately prior to the point when occupiers began to vacate the site for the specific purpose of yielding the site for redevelopment. It does not mean any use that ceased, or any residential population which departed the site, prior to the most recent census for which figures were available at the time the contributions plan was written.

“granny flat” or **“secondary dwelling”** has the meaning in the standard template and means a dwelling the use and occupation of which is connected and subordinate to another larger dwelling on the same lot, whether physically connected to the other dwelling or not and is on the same lot as the principle house and is not on a separate lot, in a strata plan or in a community title scheme. For the purposes of this Contributions Plan, Council will determine what constitutes ‘larger’ and ‘subordinate’.

“gross floor area” has the meaning in the standard template and means the sum of the floor area of each storey of the building measured from the internal face of external walls including mezzanine levels but excluding plant rooms and the like, basement storage and vertical circulation space like lifts and stairs. For a full technical definition please refer to the standard LEP template.

“habitable room” means any room or area used for normal domestic activities such as a bedroom, living room, lounge room, kitchen, dining room, study, play room, sun room and the like but excludes a bathroom, separate toilet and laundry.

‘heritage item’ means a building, work, archaeological site, tree, place or Aboriginal object that is:

- (a) shown on the Heritage Map as a heritage item, and
- (b) the location and nature of which is described in Schedule 5, and
- (c) specified in an inventory of heritage items that is available at the office of the Council.

‘item of environmental heritage’ is an older definition and has been replaced in the Standard LEP Template by the term **‘heritage item’**

“labour force” means employed residents living in an area regardless of where they work.

“landmarks” means prominent visual features or objects of any Local Government Area. They act as points of reference which people experience from outside and which assist local navigation and contribute to a sense of location. Some landmarks are very important elements of urban form. Landmarks enhance definition and identification of the urban environment.

“LEP” means a Local Environmental Plan made by the Minister under the *Environmental Planning and Assessment Act, 1979*.

“LGA” means the Local Government Area being, from the in force date of this plan, the Ku-ring-gai Local Government Area.

"LGA-wide level facilities" means a facility to serve the whole LGA. In the case of parkland this means a cumulative provision of local parks. In the case of community facilities these are centrally accessibly located local facilities.

"library resources" means library collection items such as books, audio-visuals, serials, CD ROMs, fixtures, computers and the like. While predecessor Contributions Plans have levied specifically for the provision of additional library resources on a per capita basis, this Contributions Plan does not. The management of library resources will be managed through Council's standard Capital Works Programme without specific additional input from contributions other than the capital expenditure of contributions previously levied as required by the legislation.

"local parks" are items of key community infrastructure and includes items formally commonly referred to as **"open space"** in predecessor Contributions Plans.

"local roads" are items of key community infrastructure and are taken to have the same meaning as 'road' in the *Local Government Act, 1993* which includes the entire road reservation between property boundaries inclusive of footpaths and nature strips (see **"road"** for a full definition).

"loft apartment" means an apartment dwelling with few (if any) fixed internal walls. For a **"bedsit"** or **"studio"** type loft apartment see the separate definition under this section. For loft-style apartments whether or not a single bedroom is enclosed it should be noted that, for the purposes of this Contributions Plan, dwellings of this type larger than 110m² will be deemed to be two bedroom dwellings.

"lot" means an area of topographical space shown on an approved plan of subdivision and on which it is intended to erect a building.

"material public benefit" means a facility or work which is offered by a developer as a finished entity either in return for a reduction in the amount of monetary contributions required or as an additional or partial additional benefit under a Planning Agreement.

"nexus" means the relationship between the expected types of development in the area and the demand for additional public facilities to meet that demand.

"non-habitable room" means a bathroom, laundry, separate toilet, food storage pantry, walk-in wardrobe, corridor, hallway, lobby, clothes drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.

"non-private dwelling" means places of residence that are not separate dwellings such as institutions, hostels, boarding houses, boarding school accommodation, seminaries, nurses accommodation and other staff accommodation but does not include short-term tourist accommodation or camping grounds (e.g. Girl Guides and Scouts).

"open space" in the context of this plan, means publicly accessibly parkland or civic space that may exist or may be provided in accordance with this plan. The term **"local parks"** refers to a form of **"open space"** and, for the purpose of this Contributions Plan, the terms may be used interchangeably.

"planning agreement" means a planning agreement referred to in Section 93 of Division 6 of the *Environmental Planning and Assessment Act, 1979* until the commencement of amendments to that Act assented in June 2008 and thereafter in Part 5B of the

Environmental Planning and Assessment Act, 1979. Note: as of November 2010, that legislation had not been commenced in relation to planning agreements.

“private open space” means an open area of land or building attached to a dwelling or dwellings and intended for the exclusive use of the occupants of the dwelling, or group of dwellings, for private outdoor living activities.

“provision of public infrastructure” has the same meaning as 116C of the *Environmental Planning and Assessment Act, 1979* and includes:

- a) the provision, extension and augmentation (or the recoupment of the cost of providing, extending or augmenting) public infrastructure and
- b) the funding of recurrent expenditure relating to the provision, extension and augmentation of public infrastructure, and
- c) the conservation or enhancement of the natural environment, and
- d) any action of a planning authority in connection with the exercise of any statutory function under this Act, including the carrying out of research or investigation and the preparation of any report, study or instrument.

“public domain” means public land and may include parks, streets, footpaths, street closures and the like. For the purposes of this Contributions Plan, improvements to the public domain in the form of streetscape improvements have been included as part of the Local Road item of Key Community Infrastructure.

“public infrastructure” has the same meaning as 116C of the *Environmental Planning and Assessment Act, 1979* and includes public amenities and public services, affordable housing, and transport infrastructure but does not include water supply or sewerage services.

“recoupment” means the seeking of monetary contributions to repay the cost to Council of providing facilities or works prior to the contribution being levied in anticipation of future demand.

‘Regulation’ means the *Environmental Planning and Assessment Regulation, 2000*

“road” has the same meaning as in the *Local Government Act, 1993* and includes a highway, street, lane, pathway, footpath, cycleway, thoroughfare, bridge, culvert, causeway, road-ferry, ford, crossing, by-pass and trackway, whether temporary or permanent, any part thereof and any thing forming part of these. As such, ‘road’ includes the entire road reservation in the public domain between property boundaries (being the private domain) inclusive of footpaths and nature strips and any structure located on them.

“secondary dwelling” or “granny flat” has the meaning in the standard template and means a dwelling the use and occupation of which is connected and subordinate to another larger dwelling on the same lot, whether physically connected to the other dwelling or not and is on the same lot as the principle house and is not on a separate lot, in a strata plan or in a community title scheme. For the purposes of this Contributions Plan, Council will determine what constitutes ‘larger’ and ‘subordinate’.

“Section 94 Development Contributions Plan” means a contributions plan adopted and brought into force under the legislation referred to in Division 6 of the *Environmental Planning and Assessment Act, 1979* until the commencement of legislation assented in June 2008 and thereafter in Part 5B of the *Environmental Planning and Assessment Act*

1979. Note: as of November 2010, that legislation had not been commenced in relation to development contributions.

“studio” or **“bedsit”** means a dwelling without a separately accessible bedroom up to a maximum of 110m² in area. Dwellings larger than 110m² without fixed internal walls will be deemed to be two bedroom dwellings for the purposes of this Contributions Plan.

“study” means, if capable of being used as a separate habitable room, a bedroom. For example, this means that a unit described as a one bedroom plus study is a two bedroom dwelling for the purposes of this Contributions Plan unless the study is, by virtue of its design, incapable of being used as a bedroom.

“total capital cost” means the construction cost plus additional allowances for, depending on the particular work, contingencies, project management costs, builders margins and, if required to complete the project such as in the case of a community building, soft fitout. Summary capital costs also include land acquisition costs where relevant together with an allowance for costs associated with land acquisition such as valuations and legal costs.

“unit” generally means a dwelling within a group of dwellings but may include a small dwelling attached to a house or a business/commercial premises including a shop. This definition refers to residential units only not to commercial or industrial units which are assessed on floorspace for the purposes of this Contributions Plan.

“workforce” means employed persons who work in an area regardless of where they live.

“works in kind” means the carrying out of work which is identified in the costed works schedules which form part of this contributions plan in return for a reduction in the amount of monetary contributions (but not a reduction in the total quantum of contributions) required for the same category of contribution.

6.2 References

This Contributions Plan is based on various studies, plans and policies which have been undertaken by or on behalf of Ku-ring-gai Council. Relevant documents which support this plan include:

Projections and Demography

SGS Economics and Planning Pty Ltd: *Ku-ring-gai Development and Demographic Forecasts*, Final Report May 2008 [TRIM: 954313]

SGS Economics and Planning Pty Ltd: *Ku-ring-gai & Hornsby Subregional Employment Study*, Final Report May 2008 [TRIM: 974648]

Hill PDA: *Ku-ring-gai Retail Centres Study*, prepared for Ku-ring-gai Council, July 2005 [TRIM: 775597]

Census Profiles for Ku-ring-gai Local Government Area produced by .id (being a company of demographers, housing analysts, forecasters and census data experts) utilising census data from the Australian Bureau of Statistics and located at: <http://www.id.com.au/profile/default.aspx?id=236> [TRIM: 2009/157862, 2009/157863, 2009/157864, 2009/157865, 2009/157866, 2009/157867, 2009/157869, 2009/157870, 2009/157871, 2009/157872, 2009/157873, 2009/157874, 2009/157875, 2009/157877, 2009/157880, 2009/157881, 2009/157882, 2009/157884]

Land Valuations

Generic Land Valuations prepared for Ku-ring-gai Council, February 2009, HillPDA [TRIM: 2009/040777]

BEM Property Consultants Pty Ltd: *Valuation / Consultancy Report - Ku-ring-gai Commercial Centres - Provision of Estimated Acquisition Costs for Targeted Land within the Draft Contributions Plan*, Valuation No. 08-1832, 14 March 2008 [TRIM: 909978]

HillPDA: *Ku-ring-gai Council S94 Contributions Plan Land Costing Estimates Prepared for Ku-ring-gai Council October 2007* [TRIM: 838406]

Cost Estimates

Page Kirkland: *Revision of Cost Estimates for the Development Contributions Plan 2009*, September 2009 [TRIM: 2009/170180, 2009/170181, 2009/170183, 2009/170184, 2009/170186, 2009/170188]

Rawlinsons: *Australian Construction Handbook, Edition 26, 2008* [Hard copy]

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Currie and Brown: *Ku-Ring-Gai Council West Pymble Pool - Option C* [Hard copy]

Local Parks and Sporting Facilities (Open Space)

Environmental Partnership and Recreation Planning: *Open Space Acquisition Strategy*, November 2006 [TRIM: 2009/027620]

Ku-ring-gai Council: *People, Parks and Bushland - Open Space Strategy for Ku-ring-gai*, September 2005 [TRIM: 571040]

Ku-ring-gai Council: *Playground Safety Compliance Plan*, April 2007 [TRIM: 2009/037460]

Spackman & Mossop: *North Turramurra Recreation Area Concept Masterplan*, March 2007 [TRIM: 767046]

Ku-ring-gai Council: *North Turramurra Recreation Area Plan of Management North Turramurra Recreation Area*, February 2009. [TRIM: 2009/018228]

Ku-ring-gai Council Section 94 Recreation/Open Space Background Report (2004) [Hard copy]

New Walking Track Links across Ku-ring-gai LGA [TRIM: 2009/224288 and 2009/224229]

Local Social Facilities; Local Recreational & Cultural Facilities (Community Facilities)

Ku-ring-gai Council: *Ku-ring-gai Draft Childcare Needs Study* (2008) [TRIM: 2008/042086]

Australian Bureau of Statistics: *Information Paper Early Childhood Learning and Care: Data sources, gaps and opportunities Australia 2008* [TRIM: 2009/074423]

Elton Consulting: *Ku-ring-gai Community Facilities Strategy* (2009) [TRIM: 2009/170689]

Heather Nesbitt Planning for the State Library of NSW: *People Places: A Guide for Public Libraries in New South Wales, 2nd Edition* (2005) [TRIM: 2009/144684]

Jones, Dr D J (2004), *Ku-ring-gai Council Library Facilities Study* [TRIM: 420404 & 2009/157301]

HM Leisure Planning Pty Ltd with Prior+ Cheney Pty Ltd: *Ku-ring-gai Council Aquatic and Leisure Facility Development and Feasibility Study, 2006* [TRIM: 884172]

MCP-AMIS Operations, Asset and Maintenance Management Engineers & Consultants, *Ku-ring-gai Council Condition Assessment Audit – Final Report* (2008) [TRIM: 938890 & 939020]

Ku-ring-gai Council: *Ku-ring-gai Community Plan 2005-2009; May 2006* [TRIM: 618160 and 628687]

Ku-ring-gai Council: *Ku-ring-gai Community Plan 2005-2009 Progress Report July 2008* [TRIM: 2009/138718]

Australia Street: *Cultural Centre Feasibility Study: final report: 12 May 2005* [TRIM: 6378856]

Ku-ring-gai Council: *Business Strategy for West Pymble Pool*, October 2003 [TRIM: 365450 and 367999]

Ku-ring-gai Council Section 94 Community Facilities Background Report (2004) [Hard copy]

Local Roads; Local Bus Infrastructure (Traffic & Transport and the Public Domain)

GTA Consultants: *Gordon Centre Redevelopment Traffic Study*, October 2008 [TRIM: 2009/111352]

Arup: *Lindfield Town Centre Extension to Traffic and Parking Study*, September 2008 [TRIM: 2009/111358]

Arup: *Pymble Town Centre Extension to Traffic and Parking Study*, September 2008 [TRIM: 2009/111390]

Arup: *Roseville Town Centre Extension to Traffic and Parking Study*, September 2008 [TRIM: 2009/111396]

Transport and Urban Planning: *Extension to St Ives Town Centre Traffic and Parking Study*, July 2008 [TRIM: 2009/111404]

GTA Consultants: *Turramurra Town Centre Redevelopment – Traffic Study*, September 2008 [TRIM: 2009/111416]

GTA Consultants: *Gordon Town Centre Traffic and Car Parking Study*, July 2006 [TRIM: 2009/111348 and 2009/111344]

Arup: *Lindfield Town Centre Traffic and Parking Study, Urban Design Traffic Analysis*, August 2006 [TRIM: 111356]

Arup: *Pymble Town Centre Traffic and Parking Study, Urban Design Traffic Analysis*, July 2006 [TRIM: 2009/111364]

Arup: *Roseville Town Centre Traffic and Parking Study, Urban Design Traffic Analysis*, August 2006 [TRIM: 2009/111393 and TRIM: 2009/111394]

GTA Consultants: *Turramurra Town Centre Traffic and Car Parking Study*, July 2006 [TRIM: 2009/111412]

Transport and Urban Planning: *Draft St Ives Town Centre Traffic and Parking Study*, November 2005 Revision [TRIM: 111402]

Roads and Traffic Authority: *Section 62 Notification: Pymble and Gordon Town Centres Traffic Changes*; letter dated 24 October 2008 [TRIM: 2008/037181]

Roads and Traffic Authority: *Section 62 Notification: Roseville and Lindfield Town Centres Traffic Changes*; letter dated 24 October 2008 [TRIM: 2008/033480]

Roads and Traffic Authority: *Section 62 Notification: Turramurra and St Ives Town Centres – Traffic Changes*; letter dated 24 October 2008 [TRIM: 2008/039968]

Ku-ring-gai Bicycle Transport Plan, August 1995 [TRIM: 2008/053596]

The Australian National Cycling Strategy 2005-2010; Austroads, 2005 [TRIM: 963754]

Ku-ring-gai Council: *Draft Parking Management Plan 2009* [TRIM: 2009/061452]

Ku-ring-gai Council: *Draft Pymble Business Park – Traffic and Transport Study* [TRIM: 2009/179815]

Ku-ring-gai Council: *Draft Public Domain Plan (Town Centres) 2009* [TRIM: 2009/211718, 2009/211771, 2009/211675, 2009/211678, 2009/211683, 2009/211689, 2009/211692, 2009/211697, 2009/211700, 2009/211707, 2009/211703]

Development Contributions - Technical

Department of Infrastructure, Planning and Natural Resources (2005), *Development Contributions Practice Notes – July 2005*, New South Wales Planning Reforms [Source: Department of Planning website]

Environmental Planning and Assessment Act, 1979 [Source: Legislation website]

Environmental Planning and Assessment Regulation 2000 [Source: Legislation website]

Environmental Planning and Assessment Amendment Bill 2008 as passed by both houses & assented [Source: Parliamentary Website]

Housing Affordability, Economic Viability and Financial Management

Note: All of these reports have the potential to be assessed as **Commercial-in-Confidence** because they relate to, or refer to, the financial viability of potential developments that are not yet final. This list is intended to demonstrate Ku-ring-gai Council's commitment to ensuring that contributions do not undermine the economic viability of development projects. Release of these documents may be determined to be detrimental to the public interest and may, if released, have the effect of impacting on council's future capacity to receive impartial specialist professional advice and/or have the effect of discouraging future economic testing of contributions. Neither outcome would be in the public interest.

National Housing Supply Council: State of Supply Report 2008, Commonwealth of Australia, 2008. [TRIM: 2009/040607]

Ku-ring-gai Council, \$20,000 Section 94 Levy Limit – Report of the Impacts on Property Development Economics; Sphere Property Corporation, John Harston, February 2009 [TRIM: 2009/031122]

Ku-ring-gai Town Centre Asset Review, APP Corporation June 2008 [TRIM: 974252]

Ku-ring-gai Council Chambers Site – Cost Estimate and Delivery Options, Sphere Property Corporation, November 2008

Ku-Ring-Gai Planning Panel - Town Centres Principal LEP and DCP 2009 – Review and Advice on Economic Feasibility for Key Sites in Each of the Six Town Centres, Sphere Property Corporation, 2009

Turramurra Town Centre – Precinct “C” Review Of Public Responses To Draft LEP/DCP, Sphere Property Corporation, August 2007 [TRIM: 867519]

Turramurra Town Centre – Precinct “C” Review of Development Viability, Sphere Property Corporation, March 2007

Review of public submissions Lindfield and Roseville, Draft LEP 2006, 2006, BEM Property Consultants

Review of public submissions Gordon and Pymble Draft LEP 2006, November 2006, Sphere Property Corporation

Review of public submissions Turramurra Draft LEP 2006, November 2006, HillPDA

Review of public submissions St Ives Draft LEP 2006, October 2006, HillPDA

St Ives Developer Contributions Strategy – Provision of Economic Advice, HillPDA, 2006

Lindfield Town Centre, Precinct P, Sphere Property Corporation November 28, 2006

Response to Masada College and North Shore Synagogue Submission Regarding Draft LEP 2006 [TRIM: 713532]

Lindfield Commercial Centre Economic Feasibility Study, BEM Property Consultants, August 2006 [TRIM:]

Roseville Commercial Centre Economic Feasibility Study, BEM Property Consultants, August 2006 [TRIM:]

Gordon Town Centre, Economic Feasibility Study Report, Sphere Property Corporation, July 2006 [TRIM: 648179]

Pymble Town Centre, Economic Feasibility Study Report, Sphere Property Corporation, July 2006 [TRIM: 648178]

Gordon Town Centre Retail and Commercial Development Advice, SGS Economics and Planning 2006 [TRIM: 565298]

Turramurra Town Centre Feasibility Report HillPDA, September 2006 [TRIM: 680750]

St Ives Centre Feasibility, HillPDA December 2005 [TRIM: 565298]

Residential Development Strategy Economic Feasibility Report, Hill PDA, January 2004 [TRIM: 376240]

Ku-ring-gai Council (KMC) Draft Contributions Plan as at December 2009 Opinion of Impact of Draft Rates on Project Viability, Sphere Property Corporation (SPC) [TRIM: 2010/099293]

Past Contributions Plans and Supporting Documents

Ku-ring-gai Council: *Section 94 Development Contributions Plan No. 1* (1993) [TRIM: 522282]

BBC Consulting Planners: *Ku-ring-gai Section 94 Contributions Plan 2004-2009 – Residential Development* (2004) [TRIM: 732178]

BBC Consulting Planners: *Ku-ring-gai Section 94 Contributions Plan 2004-2009 – Residential Development (Amendment No. 1)* (2007) [TRIM: 2009/156560]

BBC Consulting Planners: *Ku-ring-gai Section 94 Contributions Plan 2004-2009 – Residential Development (Amendment No. 2)* (2008) [TRIM: 2008/016728]

Newplan: *Ku-ring-gai Town Centres Development Contributions Strategy*, prepared for Ku-ring-gai Council, Final Draft, August 2007 [TRIM: 816159]

Newplan: *Ku-ring-gai Town Centres Development Contributions Plan 2008*, prepared for Ku-ring-gai Council, July 2008 including works programme mapping prepared by staff of Ku-ring-gai Council [TRIM: 2008/015296, 975667, 975665, 975675, 975677, 975668, 975670, 975671]

Other Supporting and Reference Documents

Ku-ring-gai Council: *Draft Ku-ring-gai Development Control Plan (Town Centres) 2008 – Exhibition Version* [TRIM: 2009/119190, 2009/119218, 2009/119216, 2009/119221, 2009/119194, 2009/119220, 2009/119196, 2009/119213, 2009/119198, 2009/119201, 2009/119203, 2009/119204, 2009/119215, 2009/119205, 2009/119206, 2009/119207, 2009/119211]

Ludvik and Associates Pty Ltd (2006), *Report on Public Hearing – Draft Ku-ring-gai Local Environmental Plan 2006 (Town Centres) Amendment No.2 – Reclassification of*

Community Land as Operational Land - Pymble Centre, November 2006 [TRIM: 695530]

Ludvik and Associates Pty Ltd (2006), *Report on Public Hearing - Draft Ku-ring-gai Local Environmental Plan 2006 (Town Centres) Amendment No.2 - Reclassification of Community Land as Operational Land - Turramurra Centre*, November 2006 [TRIM: 692083]

Walsh, P: *Report to Ku-ring-gai Council: Proposed Land Reclassification Gordon Town Centre*, November 2006 [TRIM: 696106]

Walsh, P: *Report to Ku-ring-gai Council: Proposed Land Reclassification St Ives Town Centre*, October 2006 [TRIM: 688400]

Works Programmes

Works Programmes: Local parks, Local sporting facilities – North

Area: Northern Area										
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities										
Works Programme Items			Works Details							Contribution
Description of Work	Location of Work	Land Area (sqm)	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Catchment	Timing	SMILER	Per Person
Catchment = Northern Area as shown on Figure 1.1										
Local Parks and Local Sporting Facilities: New Open Space acquisition and embellishment										
Northern Area and attributed part of LGA wide Generic Open Space per Capita (at 2.75m ² /person) New Playgrounds LGA wide	30,123.5m ² less the area in specified civic spaces below 3 small local playgrounds and 2 larger local playgrounds in the north and the south plus one larger playground (share of whole of LGA works)	20,554	\$32,426,568	\$9,762,913	\$42,189,480	10,954	North	S-L		\$3,851.51
Allowance for conveyancing and legal costs		NA	\$0	\$2,490,000	\$2,490,000	21,048	LGA	S-L		\$118.30
Subtotal		NA	\$0	\$200,000	\$200,000	10,954	North	S-L		\$18.26
			\$32,426,568	\$12,252,913	\$44,879,480					\$3,988.07
Local Parks and Local Sporting Facilities: Embellishment of new urban spaces and town squares (part of new urban open space north)										
St Ives town centre Closure of lane to create new civic space New urban public space (Council owned land off Porters Lane)	Durham Lane, St Ives Old School area off Porters Lane	800	NA	\$659,000	\$784,210	10,954		M/E		\$71.59
New Town Square (land to be dedicated to Council)	Adjoining Village Green Parade near Denley Lane	1,000	NA	\$1,025,830	\$1,220,738	10,954	North	M		\$111.44
New Village Green Promenade (on Council land)	Southern side of Village Green Parade	1,450	NA	\$2,241,073	\$2,666,876	10,954		M/E		\$243.46
Subtotal St Ives		2,520	NA	\$759,620	\$903,948	10,954		M/E		\$82.52
			5,770	\$4,685,522	\$5,575,772					\$509.02
Turramurra town centre Construction and embellishment of William Square including partial closure of William Street and improvements to railway garden (Part on Council land and part acquisition as RF1 Public Recreation)	William Street and Higgs Lane area.	3,000	Partial Acquisition	\$3,933,253	\$4,680,572		Total contribution for category based on generic land values	North	M/E	
Construction and embellishment of new urban park and area within private land	Extension of Granny Springs Reserve off Stonex Street	800	NA	\$406,122	\$483,285			I/E		
Subtotal Turramurra		3,800	\$3,385,000	\$4,339,375	\$8,548,857	10,954				\$780.43
TOTAL FOR EMBELLISHMENT OF NEW URBAN SPACES AND TOWN SQUARES			9,570		\$14,124,628					
Local Parks and Local Sporting Facilities: Existing Open Space Embellishment										
St Ives town centre Upgrade existing centre parks to urban park standard	Village Green and William Cowan Oval	81,930	NA	\$2,546,296	\$3,030,092	3,104		M		\$976.19
Upgrade existing centre parks to urban park standard	Rotary Park	2,060	NA	\$904,034	\$1,075,800	3,104	St Ives	S		\$346.59
Upgrade existing centre parks to urban park standard	Putarri Reserve	2,025	NA	\$620,370	\$738,240	3,104		S		\$237.84
Upgrade existing centre parks to urban park standard	Bedes Forest	5,200	NA	\$1,612,962	\$1,919,425	3,104		S		\$618.37
Subtotal St Ives		91,215		\$5,683,662	\$6,763,558					\$2,178.98
Turramurra town centre Upgrade existing centre parks to urban park standard	Turramurra Village Park	870	NA	\$270,510	\$321,907	2,680	Turramurra	S		\$120.11
Subtotal Turramurra		870		\$270,510	\$321,907					\$120.11
Pymble town centre Upgrade existing centre parks to urban park standard	Robert Pymble Park	16,620	NA	\$1,182,737	\$1,407,457	1,523	Pymble	S		\$924.13
Upgrade existing centre parks to urban park standard	Cresswell O'Reilly Lookout	3,750	NA	\$304,535	\$362,397	1,523		M		\$237.95
Subtotal Pymble		20,370		\$1,487,272	\$1,769,854					\$1,162.08
Local Parks and Local Sporting Facilities: Supporting Information and Management										
Management, Data and supporting studies	At 1% of total project costs	NA	NA	NA	\$848,243	10,954	North	S-L		\$77.44
Subtotal					\$848,243					
TOTAL KEY COMMUNITY INFRASTRUCTURE CATEGORY: LOCAL PARKS AND LOCAL SPORTING FACILITIES					\$68,707,670					
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities (St Ives): Contribution Rates										\$6,753.51
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities (Turramurra): Contribution Rates										\$5,475.07
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities (Pymble): Contribution Rates										\$6,517.04
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities (Non Town Centres): Contribution Rates										\$5,354.96

Works Programmes: Local parks, Local sporting facilities – South

Area: Southern Area										
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities										
Works Programme Items			Works Details							Contribution
Description of Work	Location of Work		Land Area	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Catchment	Timing SMILER	Per Person
Catchment = Southern Area as shown on Figure 1.1										
Local Parks and Local Sporting Facilities: New Open Space acquisition and embellishment										
Southern Area and attributed part of LGA wide Generic Open Space per Capita (at 2.75m ² /person) New Playgrounds LGA wide	27,758.5m ² less the area in specified civic spaces below 3 small local playgrounds and 2 larger local playgrounds in the north and the south plus one larger playground (share of whole of LGA works)		11,844	\$25,242,848	\$5,625,663	\$30,868,511	10,094	South	S-L	\$3,058.10
Allowance for conveyancing and legal costs			NA	\$0	\$2,490,000	\$2,490,000	21,048	LGA	S-L	\$118.30
Subtotal			NA	\$0	\$200,000	\$200,000	10,094	South	S-L	\$19.81
				\$25,242,848	\$8,115,663	\$33,558,511				\$3,196.22
Local Parks and Local Sporting Facilities: Embellishment of new urban spaces and town squares (part of new urban open space south)										
Gordon Town Centre Embellishment of new railway square works Construction of embellishment of urban park (on Council owned land) Construction of embellishment of urban park (Council owned land) Construction of embellishment of urban park (Council owned land) Establishment of a New Civic Space in the vicinity of Gordon Station	St John's Avenue and Wade Lane Corner Park Avenue and Werona Avenue Dumaresq Street (Behind Council building) Wade Lane Wade Lane		900 1,000 3,465 3,000 -	NA NA NA NA NA	\$481,154 \$621,500 \$2,349,270 \$1,864,500 \$4,760,000	\$572,573 \$739,585 \$2,795,631 \$2,218,755 \$5,664,400	10,094 10,094 10,094 10,094 10,094		S I M/E M M	\$56.72 \$73.27 \$276.96 \$219.81 \$561.17
Subtotal Gordon			8,365		\$10,076,424	\$11,990,945				\$1,187.93
Lindfield Town Centre New Town Square (Council owned land) New Village Green (Council owned land) New Public Space (road reserve)	Tryon Road Woodford Lane/Drovers Way Tryon Place		2,500 2,600 550	NA NA NA	\$865,580 \$1,185,370 \$970,387	\$1,030,040 \$1,410,590 \$1,154,761	10,094 10,094 10,094	South	S M I	\$102.04 \$139.75 \$114.40
Subtotal Lindfield			5,650		\$3,021,337	\$3,595,391				\$356.19
Roseville Town Centre New urban square New town park with playground facilities	Western Rail Station Entry off Pacific Highway Lord Street Council Carpark		160 1,740	NA NA	\$190,066 \$907,299	\$226,179 \$1,079,686	10,094 10,094	South	S I	\$22.41 \$106.96
Subtotal Roseville			1,900		\$1,097,365	\$1,305,864				\$129.37
TOTAL FOR EMBELLISHMENT OF NEW URBAN SPACES AND TOWN SQUARES			15,915		\$14,195,126	\$16,892,200				
Local Parks and Local Sporting Facilities: Existing Open Space Embellishment										
Gordon town centre Upgrade existing centre parks to urban park standard Upgrade existing centre parks to urban park standard Upgrade existing centre parks to urban park standard	Gordon Recreation Grounds, Werona Avenue Heritage Square, St Johns Avenue Annie Forsyth Reserve		9,600 950 950	NA NA NA	\$1,050,900 \$142,600 \$316,400	\$1,250,571 \$169,694 \$376,516	4,226 4,226 4,226	Gordon Town Centre	S S S	\$295.92 \$40.15 \$89.10
Subtotal Gordon			10,550		\$1,509,900	\$1,796,781				\$425.17
Lindfield town centre Upgrade existing centre parks to urban park standard	Ibbotson Park		1,800	NA	\$472,200	\$561,918	3,194	Lindfield TC	M	\$175.93
Subtotal Lindfield			1,800		\$472,200	\$561,918				\$175.93
Roseville town centre Upgrade existing centre parks to urban park standard Upgrade existing centre parks to urban park standard	Roseville Memorial Park Railway Gardens Hill Street and Pacific Highway		1,600 200	NA NA	\$322,276 \$70,000	\$383,508 \$83,300	1,481 1,481	Roseville TC	M S	\$258.95 \$56.25
Subtotal Roseville			1,800		\$392,276	\$466,808				\$315.20
Local Parks and Local Sporting Facilities: Supporting Information and Management										
Management, Data and supporting studies	At 1% of total project costs		NA	NA	NA	\$632,328	10,094	South	S-L	\$62.64
Subtotal						\$632,328				
TOTAL KEY COMMUNITY INFRASTRUCTURE CATEGORY: LOCAL PARKS AND LOCAL SPORTING FACILITIES										
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities (Gordon): Contribution Rates										\$5,294.88
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities (Lindfield): Contribution Rates										\$5,108.28
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities (Roseville): Contribution Rates										\$5,247.55
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities (Non Town Centre South): Contribution Rates										\$4,932.35

Works Programmes: Local parks, Local sporting facilities – Whole of Ku-ring-gai Local Government Area

Area: Whole of Local Government Area Works Programme									
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities									
Works Programme Items			Works Details						Contribution
	Description of Work	Location of Work	Land Area (sqm)	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person
Catchment = Whole of Ku-ring-gai LGA (apportionment as stated)									
Local Parks and Local Sporting Facilities: Existing Open Space Embellishment									
	Embellishment Works to Existing Parks								
	Expand the accessibility and usability of both parks by linking them with a bridge, improving the entry points and providing additional parking. Amenities and club and cafe buildings to be extended to cater for increased demand, plus picnic area with shelters, tables & BBQs.	Turrumurra Memorial Park and Karuah Park, Turrumurra	NA	NA	\$733,000	\$872,270	126,151	S	\$6.91
	Expand usage by addressing stormwater issues, extending the viewing area (earthworks), additional pathways, steps and associated landscaping and adding group picnic and BBQ shelter area.	The Glade, Wahroonga	NA	NA	\$650,000	\$773,500	126,151	S	\$6.13
	Expand the usage capacity of this park by adding group picnic and BBQ Shelter area and children's facilities including a cycle track.	Hassell Park, St Ives	NA	NA	\$400,000	\$476,000	126,151	M	\$3.77
	Expand the usage capacity by new earthworks and walls plus additional picnic shelters.	Canoon Road Recreation Area, South Turrumurra	NA	NA	\$250,000	\$297,500	126,151	M	\$2.36
	New cycleway and exercise path (6000m in length)	St Ives Showground Precinct	NA	NA	\$4,500,000	\$5,355,000	126,151	M	\$42.45
	New mountain bike park	In the vicinity of the North Wahroonga Fire Trail and Clissold Street	NA	NA	\$150,000	\$178,500	126,151	S	\$1.41
	Increase usability by adding an amenities block.	Friars Field, Pymble	NA	NA	100,000	\$119,000	126,151	S	\$0.94
	Provide safer second pedestrian access from adjacent 83 Stanhope Road which directly links to Shot Machine Track and Swain Gardens, disabled toilet and additional parking	Swain Gardens, Stanhope Road, Killara	NA	NA	\$172,000	\$204,680	126,151	M	\$1.62
	Additional picnic, shelter and toilet facilities to extend usage.	Killara Park, Killara	NA	NA	\$185,000	\$220,150	126,151	M	\$1.75
	Group picnic area, electric BBQ and shelter	Lindfield Soldiers Memorial Park, Lindfield	NA	NA	\$125,000	\$148,750	126,151	M	\$1.18
	Outdoor amphitheatre in park for performances next to Marian Street Theatre.	Selkirk Park, Killara	NA	NA	\$50,000	\$59,500	126,151	M	\$0.47
	Walking Track 2.135km (links growth areas to natural areas)	Turrumurra Station to Darri Track, North Turrumurra	NA	NA	\$1,067,500	\$1,270,325	126,151	S	\$10.07
	Walking Track 1.873km (links growth areas to natural areas)	Koola Park to Rocky Creek to Middle Harbour	NA	NA	\$936,500	\$1,114,435	126,151	M	\$8.83
	Walking Track 2.468km (key natural resource for all Ku-ring-gai)	St Ives heritage walk at showground	NA	NA	\$1,234,000	\$1,468,460	126,151	M	\$11.64
	Walking Track 5.637km (links growth area to sporting facility)	Wahroonga Station via The Glade to George Christie Playing Field	NA	NA	\$2,818,500	\$3,354,015	126,151	M	\$26.59
	Walking Track 2.718km (links growth area to sporting facility)	Wahroonga Station to Howson Oval	NA	NA	\$1,359,000	\$1,617,210	126,151	M	\$12.82
	Walking Track 3.998km (links growth areas to natural areas)	Wahroonga Station to Grosvenor Street to Bobbin Head National Park	NA	NA	\$1,999,000	\$2,378,810	126,151	I	\$18.86
	Walking Track 1.770km (links growth areas to sporting reserve)	North Turrumurra Recreation Area link to Timbara Avenue via Darri Track	NA	NA	\$885,000	\$1,053,150	126,151	I	\$8.35
	Walking Track 2.160km (links growth areas to natural areas)	Showground precinct to access Middle Harbour and Harbour to Hawkesbury (Roseville to Warringah link)	NA	NA	\$1,080,000	\$1,285,200	126,151	M	\$10.19
	Walking Track 1.795km (Department of Planning) (links growth areas to natural areas)	Lindfield station to Edenborough Oval to Lane Cove National Park	NA	NA	\$897,500	\$1,068,025	126,151	S	\$8.47
	Walking Track 2.286km (Department of Planning) (links growth areas to natural areas)	Lindfield station via Abingdon Road to Lane Cove National Park via Blue Gum Creek Track	NA	NA	\$1,143,000	\$1,360,170	126,151	S	\$10.78
	Walking Track 1.614km (links growth areas to natural areas)	Wombin Reserve circular track then to Lindfield station	NA	NA	\$817,000	\$972,230	126,151	S	\$7.71
	Subtotal embellishment to existing parks				\$21,552,000	\$25,646,880			\$203.30

Area: Whole of Local Government Area Works Programme										
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities (continued)										
Works Programme Items			Works Details					Contribution		
	Description of Work	Location of Work	Land Area (sqm)	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	
Local Parks and Local Sporting Facilities: Ku-ring-gai Sporting Facilities										
	Sportfields - General									
	Construction of new sportfields and netball training courts, plus associated car parking, seating, changerooms, storage & amenities and landscaping	North Turramurra Recreation Area, North Turramurra	NA	NA	\$3,610,600	\$4,296,614	21,048	S	\$204.13	
	Expand usage by upgrading playing surface and floodlights, installing automated irrigation utilising stormwater and adding a new turf wicket	Lindfield Soldiers Memorial Oval No.1, Lindfield	NA	NA	\$750,000	\$892,500	126,151	S	\$7.07	
	Extend and expand usage by upgrading playing surface and installing automated irrigation utilising stormwater	Norman Griffiths Oval, West Pymble	NA	NA	\$700,000	\$833,000	126,151	S	\$6.60	
	Expand usage by upgrading playing surface and installing automated irrigation utilising stormwater and floodlights.	Brown's Field, Wahroonga	NA	NA	\$700,000	\$833,000	126,151	S	\$6.60	
	Expand usage by upgrading main arena sportsfield, floodlights, seating and amenities	St Ives Showground sportsfields, St Ives	NA	NA	\$2,500,000	\$2,975,000	126,151	S	\$23.58	
	Expand usage by upgrading playing surface, installing automated irrigation utilising stormwater and adding floodlights, seats, fencing, landscaping	Primula Oval, West Lindfield	NA	NA	\$700,000	\$833,000	126,151	S	\$6.60	
	Expand usage by upgrading playing surface, seats, fencing, landscaping	Mimosa Sportsground, Turramurra	NA	NA	\$400,000	\$476,000	126,151	S	\$3.77	
	Expand usage by upgrading playing surface, installing automated irrigation utilising stormwater, upgrading floodlights, and adding a new turf wicket	Turramurra & Karuah Ovals, Turramurra	NA	NA	\$900,000	\$1,071,000	126,151	S	\$8.49	
	Expand usage by upgrading playing surface and installing automated irrigation utilising stormwater and floodlights.	Bryce Avenue Sportsground, St Ives	NA	NA	\$350,000	\$416,500	126,151	M	\$3.30	
	Expand usage by upgrading playing surface, installing automated irrigation utilising stormwater and floodlights, plus new pathways, seats, huddlers	Fiddens Wharf Road Sportsground, West Lindfield	NA	NA	\$350,000	\$416,500	126,151	M	\$3.30	
	Expand usage by upgrading playing surface and installing automated irrigation utilising stormwater	Cliff Oval No.1, North Wahroonga	NA	NA	\$500,000	\$595,000	126,151	M	\$4.72	
	Extend and expand usage by upgrading playing surface and upgrading floodlighting.	William Cowan Oval, St Ives	NA	NA	\$700,000	\$833,000	126,151	M	\$6.60	
	Extend and expand usage by upgrading playing surface and upgrading floodlighting.	Warrimoo Sportsground, St Ives Chase	NA	NA	\$500,000	\$595,000	126,151	M	\$4.72	
	Extend and expand usage by upgrading playing surface and installing floodlights.	Kent Road sportsground, Turramurra	NA	NA	\$500,000	\$595,000	126,151	M	\$4.72	
	Extend and expand usage by upgrading playing surface and installing floodlights.	Karuah Sportsground, Turramurra	NA	NA	\$500,000	\$595,000	126,151	M	\$4.72	
	Extend and expand usage by upgrading playing surface and installing floodlights.	Roseville Park Oval, Roseville	NA	NA	\$500,000	\$595,000	126,151	M	\$4.72	
	Extend and expand usage by upgrading playing surface	George Christie Sportsground, Wahroonga	NA	NA	\$300,000	\$357,000	126,151	I	\$2.83	
	Extend and expand usage by upgrading playing surface	Howson Oval, Turramurra	NA	NA	\$500,000	\$595,000	126,151	I	\$4.72	
	Expand usage and improve accessibility by upgrading car park areas, internal access roads, picnic areas, and open space areas.	Bert Oldfield Oval, Killara			\$400,000	\$476,000	126,151	I	\$3.77	
		St Ives Showground (additional apportioned works)	NA	NA	\$3,000,000	\$3,570,000	126,151	M	\$28.30	
	New hockey field and multi-purpose sportsfield	Current Nursery Site, St Ives	NA	NA	\$4,500,000	\$5,355,000	126,151	S	\$42.45	
		Subtotal				\$22,860,600	\$27,204,114			\$385.72
	Sportsfields - Netball									
	Netball satellite site: Extend usage by court expansion, new fencing, floodlights	Queen Elizabeth Reserve, West Lindfield	NA	NA	\$250,000	\$297,500	See Division below	S	See Division below	
	Netball satellite site: Extend usage by court expansion, new fencing, floodlights	Regimental Park, Killara	NA	NA	\$350,000	\$416,500		S		
	Netball satellite site: Extend usage by court expansion and associated fencing.	Warrimoo Oval St Ives Chase	NA	NA	\$600,000	\$714,000		S		
		Subtotal				\$1,200,000	\$1,428,000			\$39.58
		Cost wholly attributed to new population at existing pro rata per capita provision of netball courts	NA	NA	\$600,000	\$714,000	21,048			\$33.92
		Cost benefiting the whole population by increasing overall number of netballs courts per capita	NA	NA	\$600,000	\$714,000	126,151			\$5.66
		Total Sporting Facilities				\$24,060,600	\$28,632,114			
		TOTAL LOCAL GOVERNMENT AREA WORKS				\$49,707,480	\$54,278,994			
	Local Parks and Local Sporting Facilities: Supporting Information and Management									
		Management, Data and supporting studies	At 1% of total project costs	NA	NA	NA	\$678,487	21,048	S-L	\$32.24
			Subtotal				\$678,487			
	TOTAL KEY COMMUNITY INFRASTRUCTURE CATEGORY: LOCAL PARKS AND LOCAL SPORTING FACILITIES					\$54,957,481				
Key Community Infrastructure Category: Local Parks and Local Sporting Facilities (Whole of LGA Works):										
\$660.84										

Works Programmes: Local recreational and cultural facilities, and Local social facilities

Area: Local Government Area of Ku-ring-gai									
Key Community Infrastructure Category: Local Recreational and Cultural Facilities, Local Social Facilities									
Works Programme Items									Contribution
	Description of Work	Location of Work	Land Area	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person
Catchment = Whole of Ku-ring-gai LGA (apportionment as stated)									
Local Recreational and Cultural Facilities, Local Social Facilities: The Library Network									
	The Library Network: Lindfield Branch Library Space 1200m ² includes site clearance and preparation, construction, full internal fitout, security, lighting and the like	Lindfield Town Centre Target Site: Adjoining New Town Square in Tryon Road	NA	\$0	\$4,254,000	\$6,114,660		M	
	The Library Network: St Ives Branch Library Space 1200m ² includes site clearance and preparation, construction, full internal fitout, security, lighting, landscaping and additional associated carparking.	St Ives Town Centre Target Site: Redevelopment of St Ives Shopping Village co-located with multi purpose centre	NA	\$0	\$4,734,000	\$6,685,860		M/E	
	The Library Network: Turramurra Branch Library Space 1500m ² includes site clearance and preparation, construction, full internal fitout, security, lighting, landscaping and additional associated carparking.	Turramurra Town Centre Target Site: Redevelopment Site in Ray and William Streets	NA	\$0	\$4,980,000	\$6,978,600		M/E	
	Subtotal				\$13,968,000	\$19,779,120			
	Apportionment Analysis Cost of replacing existing library floorspace in Turramurra, St Ives and Lindfield Cost wholly attributed to new population at existing pro rata per capita provision of libraries Cost benefiting the whole population by increasing overall space per capita closer to the established library standards					\$5,426,579 \$3,367,351 \$10,985,190	Council contribution 21,048 126,151	See timing above	\$0.00 \$159.98 \$87.08
	Total					\$19,779,120			\$247.06
	Car Parking required for Community Facilities Car Parking required for Library and Community Facilities Car Parking required for Community Facilities	Tryon Road (50 spaces) Between Ray and William Streets	NA NA	\$0 \$0	\$2,100,000 \$5,082,000	\$2,499,000 \$6,047,580	126,151 126,151	M M/E	\$19.81 \$47.94
	Subtotal			\$0	\$7,182,000	\$8,546,580			\$67.75

Area: Local Government Area of Ku-ring-gai									
Key Community Infrastructure Category: Local Recreational and Cultural Facilities, Local Social Facilities (continued)									
Works Programme Items									Contribution
	Description of Work	Location of Work	Land Area	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person
Local Recreational and Cultural Facilities, Local Social Facilities: Multi-Purpose Space									
	Multi-purpose community floorspace: Lindfield Multi-purpose space 1800m ² includes site clearance and preparation, construction, full internal fitout, security, lighting, landscaping and additional associated carparking.	Lindfield Town Centre Target Site: Woodford Lane	NA	\$0	\$4,342,500	\$5,167,575		L	
	Multi-purpose community floorspace: St Ives Multi-purpose community centre 1800m ² includes site preparation, construction, full internal fitout, security, lighting, landscaping and initial set-up costs.	St Ives Town Centre Target Site: Redevelopment of St Ives Shopping Village co-located with library	NA	\$0	\$7,101,000	\$8,450,190		M/E	
	Multi-purpose community floorspace: Turramurra Multi-purpose space 2000m ² includes site clearance and preparation, construction, full internal fitout, security, lighting, landscaping and additional associated carparking and initial set-up costs.	Turramurra Town Centre Target Site: Redevelopment Site in Ray and William Streets	NA	\$0	\$5,840,000	\$6,949,600		M/E	
	Multi-purpose community floorspace: Gordon Multi-purpose Community Facility 4,372m ² Likely to be provided as part of a larger facility or commercial building most of which cannot be attributed to development contributions accordingly it is primarily internal space that is costed.	Gordon Town Centre Site to be formally identified subject to Council endorsement	NA	\$0	\$6,414,485	\$7,633,237		I	
	Subtotal				\$23,697,985	\$28,200,602			
	Apportionment Analysis Cost wholly attributed to new population at existing pro rata per capita provision of community space Cost benefiting the whole population by providing new co-located community space					\$8,319,466	21,048	See timing above	\$395.26
						\$19,881,137	126,151		\$157.60
	Total					\$28,200,602			\$552.86
Local Recreational and Cultural Facilities, Local Social Facilities: Upgrade of Existing Facilities to meet additional need									
	Upgrade of Community Buildings for more intense usage Upgrade Community Buildings includes installation of a lift for accessibility	St Ives Town Centre Porters Lane Heritage Precinct	NA	\$0	\$689,000	\$819,910		S	
	Subtotal				\$689,000	\$819,910	126,151		\$6.50
Local Recreational and Cultural Facilities, Local Social Facilities: Aquatic Centre									
	Aquatic Centre for the Ku-ring-gai Local Government Area West Pymble Indoor Aquatic and Leisure Centre	Contingency & Design included in figure	NA	NA	NA	\$14,231,156	126,151	S-M	
	Subtotal					\$14,231,156			\$112.81
	TOTAL COMMUNITY FACILITIES			\$0	\$45,536,985	\$71,577,368			
Local Recreational and Cultural Facilities, Local Social Facilities: Supporting Information and Management									
	Management, Data and supporting studies	At 1% of total project costs				\$894,717	21,048	S-L	\$42.51
	Subtotal					\$894,717			
Key Community Infrastructure Category: Community Facilities: Totals						\$72,472,085			\$1,029.49

Works Programmes: Local roads; Local bus facilities and Local drainage facilities - Gordon

Area: Gordon Town Centre																
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage																
Works Programme Items		Works Details				Contribution		Contributions by Trip Generation								
Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre ² Retail	Per metre ² Business	
Catchment = Gordon Town Centre									0.85	0.40	0.50	0.45	0.45	4.60	2.00	
Local Roads, Local Bus Infrastructure and Local Drainage: New Streets and Street Modifications									Levy/Credit	4.72%	29.42%	33.11%	2.88%	16%	14%	
Traffic Signals and Intersections																
Modification to traffic signals to suit one way flow	Intersection of Pacific Highway and St Johns Avenue (Note: discounted to 57% of \$273,700 TCC) due to benefit beyond current Level of Service)	No	NA	\$131,100	\$156,009	All new development based on additional trip generation	I/E	NA	NA	40.16	\$18.90	\$23.62	\$30.71	\$21.26	\$2.17	\$0.94
New pedestrian activated signals	Pacific Highway north of Moree Street	No	NA	\$268,000	\$318,920		I	NA	NA	82.10	\$38.63	\$48.29	\$62.78	\$43.46	\$4.44	\$1.93
Modification to traffic signals	Intersection of Pacific Highway and Dumaresq Street (Note: discounted to 57% of \$238,000 TCC) due to benefit beyond current Level of Service)	No	NA	\$114,000	\$135,640		I/E	NA	NA	34.92	\$16.43	\$20.54	\$26.71	\$18.49	\$1.89	\$0.82
New Traffic Signals	Intersection Pacific Highway and Ravenswood Avenue	No	NA	\$230,000	\$273,700		M/E	NA	NA	70.46	\$33.16	\$41.45	\$53.88	\$37.30	\$3.81	\$1.66
Removal of traffic signals	Intersection Pacific Highway and Park Avenue	No	NA	\$39,000	\$46,410		I/E	NA	NA	11.95	\$5.62	\$7.03	\$9.14	\$6.32	\$0.65	\$0.28
New roundabout (Note: cost reduced 50% - RTA funding)	Intersection Vale and Dumaresq Streets	No	NA	\$45,000	\$53,550	S		NA	NA	13.78	\$6.49	\$8.11	\$10.54	\$7.30	\$0.75	\$0.32
New roundabout (Note: cost reduced 50% - RTA funding)	Intersection Park Ave, Pearson Ave and Werona Ave	No	NA	\$48,000	\$57,120			NA	NA	14.70	\$6.92	\$8.65	\$11.24	\$7.78	\$0.80	\$0.35
New roundabout (Note: cost reduced 50% - RTA funding)	Henry Street and Railway underpass	No	NA	\$45,000	\$53,550			NA	NA	13.78	\$6.49	\$8.11	\$10.54	\$7.30	\$0.75	\$0.32
	Subtotal		NA	\$720,100	\$1,094,719			NA	281.86	\$132.64	\$165.80	\$215.54	\$149.22	\$15.25	\$6.63	
New Streets																
New 13m wide street, two way traffic, no onstreet parking	Between McIntyre and Dumaresq Streets, Gordon 135m	Purchase	Aggregated below based on generic land values	\$694,875	\$826,901	All new development based on additional trip generation	M	NA								
New 13m wide street, two way traffic, no onstreet parking	Between Dumaresq Street and Moree Street, Gordon 145m	Purchase		\$599,750	\$713,703		L	NA								
New 15m wide street, two way traffic, with onstreet parking	Between Moree Street and St Johns Avenue, Gordon 70m	Purchase		\$320,300	\$381,157		M	NA								
	Subtotal			\$19,130,430	\$1,614,925			NA	5,419.32	\$2,550.27	\$3,187.83	\$4,144.18	\$2,869.05	\$293.28	\$127.51	
Road Modifications																
One way road narrowing	Park Avenue 30m	No	NA	\$31,500	\$37,485	All new development based on additional trip generation	I/E	NA	9.65	\$4.54	\$5.68	\$7.38	\$5.11	\$0.52	\$0.23	
Reconstruct and widen new laneway with new footpaths	Wade Lane - 250m	No	NA	\$373,000	\$443,870		M	NA	114.26	\$53.77	\$67.21	\$87.38	\$60.49	\$6.18	\$2.69	
Road Widening	Fitzsimons Lane	No	NA	\$49,000	\$58,310		M/E	NA	15.01	\$7.06	\$8.83	\$11.48	\$7.95	\$0.81	\$0.35	
One way traffic and other modifications	St Johns Avenue (east and west)	No	NA	\$141,500	\$168,385		I/E	NA	43.35	\$20.40	\$25.50	\$33.15	\$22.95	\$2.35	\$1.02	
Widening and modifications	Pacific Highway - 160m (south side between Yarabah and Bushlands)	Dedication by Negotiation	NA	\$421,340	\$501,418		M/E	NA	129.08	\$60.74	\$75.93	\$98.71	\$68.33	\$6.99	\$3.04	
Widening and modifications	Pacific Highway - 90m (Around Park Avenue and Dumaresq Street)	NA	\$448,780	\$534,048		I/E	NA	137.48	\$64.69	\$80.87	\$105.13	\$72.78	\$7.44	\$3.23		
Allowance for stormwater treatment & detention (5 locations)	Wade Lane and new streets around the Gordon Town Centre	No	NA	\$210,000	\$249,900	S		NA	64.33	\$30.27	\$37.84	\$49.19	\$34.06	\$3.48	\$1.51	
Allowance for clearing/preparing sites and installation of three Gross Pollutant Traps within the road reservation	Rosedale Road, Vale Street and Bushlands Avenue	No	NA	\$40,000	\$71,400	S		NA	18.38	\$8.45	\$10.81	\$14.86	\$9.73	\$0.99	\$0.43	
	Subtotal			\$0.00	\$1,735,140	\$2,064,817			531.83	\$250.13	\$312.67	\$406.44	\$281.40	\$28.77	\$12.51	
	TOTAL NEW STREETS AND ROAD MODIFICATIONS			\$19,130,430	\$4,270,165	\$24,211,924			NA	\$6,232.70	\$2,933.04	\$3,646.30	\$4,766.19	\$3,299.67	\$337.30	\$146.65
Local Roads, Local Bus Infrastructure, Local Drainage: Transport and Pedestrian Improvements																
Pedestrian Through-Block Connections																
Modifications to railway bridge for wider footpaths	Park Avenue	No	NA	\$225,000	\$267,750	4,226	S	\$63.36								
Improvements to existing pedestrian way	Between Dumaresq Street and McIntyre Street	No	NA	\$695,140	\$827,217	4,226	S	\$195.74								
Improvements to existing pedestrian way	From Pacific Highway to Wade Lane	No	NA	\$77,000	\$91,630	4,226	M/E	\$21.68								
New pedestrian way	From Merriwa Street to McIntyre Street	No	NA	\$70,400	\$84,014	4,226	M/E	\$19.88								
	Subtotal			\$1,067,740	\$1,270,611			\$300.67								
Transport																
Upgrade of bus stop	Werona Avenue (Rail Corp land)	No	NA	\$121,500	\$144,585	4,226	S	\$34.21								
Construction of new bus interchange	Henry Street (Rail corp land)	No	NA	\$929,875	\$1,106,551	4,226	S	\$261.84								
Modifications for new bus route	Henry Street and Ravenswood Avenue	No	NA	\$60,000	\$71,400	4,226	M	\$16.90								
Construction of new bicycle ways (on-road)	Dumaresq Street - 70m (Both sides Council Chambers - Pacific Hwy)	No	NA	\$5,300	\$6,307	4,226	S	\$1.49								
Concrete - Shared Cycle/Pedestrian path	Park Avenue - 150m (Northern side west end)	No	NA	\$129,000	\$153,510	4,226	S	\$36.33								
New bus stops	Along Pacific Highway	No	NA	\$60,000	\$71,400	4,226	S	\$16.90								
	Subtotal			\$1,305,675	\$1,553,793			\$367.67								
	TOTAL TRANSPORT, CYCLE AND PEDESTRIAN MANAGEMENT			\$2,373,415	\$2,824,364			\$668.33								
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - footpaths																
Streetscape Improvements																
Polished Concrete - Full Width of Footpath																
Streetscape Works - Main Commercial Streets	Pacific Highway - 320m (Eastern side, McIntyre St - St John's Ave)	No	NA	\$396,800	\$472,192	4,226	S	\$111.73								
Streetscape Works - Main Commercial Streets	Pacific Highway - 360m (Western side, McIntyre St - St John's Ave)	No	NA	\$444,400	\$531,216	4,226	S	\$125.70								
Streetscape Works - Main Commercial Streets	St John's Avenue - 80m (East of Hwy both sides)	No	NA	\$289,400	\$344,624	4,226	S	\$81.55								
Streetscape Works - Main Commercial Streets	St John's Avenue - 75m (West of Hwy north side, new street - Pacific Hwy)	No	NA	\$93,170	\$110,872	4,226	S	\$26.24								
Streetscape Works - Main Commercial Streets	Moree Street - 100m (Both sides, new street - Pacific Hwy)	No	NA	\$141,000	\$167,790	4,226	S	\$39.70								
Streetscape Works - Main Commercial Streets	Dumaresq Street - 70m (Both sides Council Chambers - Pacific Hwy)	No	NA	\$98,700	\$117,453	4,226	S	\$27.79								
Streetscape Works - Main Commercial Streets	McIntyre Street - 70m (Both sides, East end - Pacific Hwy)	No	NA	\$131,400	\$156,346	4,226	M	\$47.90								
Streetscape Works - Main Commercial Streets	Park Avenue - 90m (Both sides Pacific Hwy - bridge, bridge - Pearson Rd)	No	NA	\$157,500	\$187,425	4,226	S	\$44.35								
Streetscape Works - Main Commercial Streets	Werona Avenue - 60m (Both sides, Khartoum Ave - Robert St)	No	NA	\$84,600	\$100,674	4,226	S	\$23.82								
Polished Concrete - Landscape Verges																
Streetscape Works - Main Commercial Streets	Pacific Highway - 400m (Eastern side, Mona Vale Rd - McIntyre St)	No	NA	\$344,000	\$409,360	4,226	M	\$96.87								
Streetscape Works - Main Commercial Streets	Pacific Highway - 400m (Western side, Mona Vale Rd - McIntyre St)	No	NA	\$459,200	\$546,448	4,226	M	\$129.31								
Streetscape Works - Main Commercial Streets	Merrima Street - 90m (Pacific Hwy - Fitzsimons Lane)	No	NA	\$131,400	\$156,346	4,226	M	\$37.00								
Streetscape Works - Main Commercial Streets	Werona Ave-280m(Both sides,Park Ave-Khartoum St,Robert St - Railway)	No	NA	\$394,800	\$469,812	4,226	M	\$111.17								
Streetscape Works - Main Commercial Streets	Henry Street - 170m (Both sides, St John's Ave - Railway bridge)	No	NA	\$239,700	\$285,243	4,226	S	\$67.50								
Streetscape Works - Main Commercial Streets	Fitzsimons Lane - 240m (Both sides)	No	NA	\$366,600	\$436,254	4,226	M	\$103.23								
Streetscape Works - Main Commercial Streets	Ryde Road - 60m (Pacific Hwy - Vale St)	No	NA	\$43,800	\$52,122	4,226	I	\$12.33								
	Subtotal			\$3,857,370	\$4,590,270			\$1,086.20								

Area: Gordon Town Centre																
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage (continued)																
Works Programme Items			Works Details						Contribution	Contributions by Trip Generation						
Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre ² Retail	Per metre ² Business	
									0.85	0.40	0.50	0.65	0.45	4.60	2.00	
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - Street and Pedestrian Lighting																
Street and Pedestrian Lighting																
Main Road Town Centre (Area 1) 9m high street lighting 15m c/c	Pacific Highway, Park Avenue, Dumaresq Street, Moree Street, St Johns Ave	No	NA	\$632,500	\$752,675	4,226	S	\$178.11								
Main Road Town Centre Adjacent to Rail (Area 1) 9m high street lighting 15m c/c	Werona Avenue,	No	NA	\$154,000	\$183,260	4,226	S	\$43.36								
Main Road - Adjacent to residential (Area 2) 9m high street lighting 15m c/c	Werona Avenue, Henry Street	No	NA	\$297,000	\$353,430	4,226	S	\$83.63								
Minor Road - Adjacent to residential (Area 4) 6m high street lighting 10m c/c	St Johns Avenue, Moree Street	No	NA	\$90,000	\$107,100	4,226	S	\$25.34								
Laneway Town Centre (Area 5) 4.5m high street lighting 10m c/c	Wade Lane, Clipsam Lane	No	NA	\$238,000	\$283,220	4,226	M	\$67.02								
Laneway Adjacent to residential (Area 6) 4.5m high street lighting 10m c/c	Henry Street	No	NA	\$73,500	\$87,465	4,226	S	\$20.70								
Subtotal				\$1,485,000	\$1,767,150			\$418.16								
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - undergrounding of overhead powerlines																
Undergrounding of Overhead Powerlines																
Undergrounding of power on main commercial streets	Henry Street	No	NA	\$280,000	\$333,200	4,226	S	\$78.85								
Undergrounding of power on main commercial streets	Wade Lane	No	NA	\$280,000	\$333,200	4,226	M	\$78.85								
Undergrounding of power on main commercial streets	St Johns Avenue	No	NA	\$350,000	\$416,500	4,226	S	\$98.56								
Initial undergrounding of powerlines	New Street (A)	No	NA	\$75,000	\$89,250	4,226	M	\$21.12								
Initial undergrounding of powerlines	New Street (B)	No	NA	\$105,000	\$124,950	4,226	M	\$29.57								
Undergrounding of power on main commercial streets	Moree Street	No	NA	\$1,050,000	\$1,249,500	4,226	S	\$295.67								
Undergrounding of power on main commercial streets	Dumaresq Street	No	NA	\$1,225,000	\$1,457,750	4,226	S	\$344.95								
Undergrounding of power on main commercial streets	MacIntyre Street	No	NA	\$1,225,000	\$1,457,750	4,226	M	\$344.95								
Subtotal				\$4,590,000	\$5,462,100			\$1,292.50								
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Street tree planting																
Town Centre Main Road - Native/exotic																
Town Centre - Retail/Commercial - Native /Exotic	Werona Avenue, Wade Lane, St Johns Avenue, Henry Street, Dumaresq,	No	NA	\$324,000	\$385,560	4,226	S	\$91.24								
Character Street - Civic Spine/Avenue Planting	Moree, New Street (D), Church Hill Lane	No	NA	\$5,000	\$7,140	4,226	S	\$1.69								
Commercial Street - Native	Fitzsimmons Lane, Merriwa Street	No	NA	\$17,600	\$20,944	4,226	M	\$4.96								
Subtotal				\$347,600	413,644			\$97.88								
TOTAL STREETScape IMPROVEMENTS				\$12,653,385	\$15,067,528			\$3,677.22								
TOTAL GORDON TOWN CENTRE WORKS				\$19,130,430	\$16,923,550											
Local Roads, Local Bus Infrastructure, Local Drainage: Supporting Information and Management																
Management, Data and supporting studies	At 1% of total project costs	No	NA	NA	\$490,868	4,226	S-L	\$116.15								
Subtotal					\$490,868											
TOTAL KEY COMMUNITY INFRASTRUCTURE CATEGORY: LOCAL STREETS AND ROADS; AND LOCAL BUS INFRASTRUCTURE					\$39,760,323											

Works Programmes: Local roads; Local bus facilities and Local drainage facilities - Lindfield

Area: Lindfield Town Centre																
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage																
Works Programme Items			Works Details						Contribution	Contributions by Trip Generation						
Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre ² Retail	Per metre ² Business	
Catchment = Lindfield Town Centre										0.85	0.40	0.50	0.65	0.45	4.60	2.00
Local Roads, Local Bus Infrastructure and Local Drainage: New Streets and Street Modifications										Levy/Credit	5.63%	35.06%	39.46%	3.43%	12.51%	3.91%
Traffic Signals and Intersections																
Remove existing traffic signals and install new traffic signals	Tryon Road and Lindfield Avenue (Note: discounted to 44% of \$285,600 TCC) due to benefit beyond current Level of Service)	No	NA	\$105,600	\$125,664	All new development based on additional trip generation	S	NA	\$51.01	\$24.00	\$30.00	\$39.01	\$27.00	\$2.76	\$1.20	
Modifications to the intersection to suit one way flow	Lindfield Ave and Havilah Rd at railway underpass	No	NA	\$70,000	\$83,300		S	NA	\$33.81	\$15.91	\$19.89	\$25.86	\$17.90	\$1.83	\$0.80	
Extend right turn bay	On Pacific Hwy and Balfour Street/Havilah Rd intersection (Note: discounted to 27% of \$38,080 TCC) due to benefit beyond current Level of Service)	No	NA	\$8,640	\$10,282		S/E	NA	\$4.17	\$1.96	\$2.45	\$3.19	\$2.21	\$0.23	\$0.10	
New traffic Signals	Strickland Ave and Pacific Highway (Note: discounted to 48% of \$273,700 TCC) due to benefit beyond current Level of Service)	No	NA	\$110,400	\$131,376		M	NA	\$53.33	\$25.09	\$31.37	\$40.78	\$28.23	\$2.89	\$1.25	
Subtotal				\$294,640	\$350,622				\$142.32	\$66.97	\$83.72	\$108.83	\$75.34	\$7.70	\$3.35	
New Streets																
Construction of new 12m wide street	Drovers Way - Between Beaconsfield Parade and Bent Street	Purchase	See below	\$1,041,800	\$1,239,742	All by trip generation	M	NA	See Totals							
Construction of new road	Between Pacific Highway and Tryon Lane	Dedication	NA	\$519,720	\$618,467		M/E	NA								
Subtotal				\$2,257,500	\$1,561,520				\$1,670.57	\$786.15	\$982.69	\$1,277.50	\$884.42	\$90.41	\$39.31	
Road modifications																
Upgrade and widening of laneway	Bent Lane - 70m	No	NA	\$271,440	\$323,014	All new development based on additional trip generation	I/E	NA	\$131.11	\$61.70	\$77.12	\$100.26	\$69.41	\$7.10	\$3.08	
Upgrade and widening of laneway	Woodford Lane - 200m	No	NA	\$781,900	\$930,461		L/E	NA	\$377.68	\$177.73	\$222.14	\$288.81	\$199.95	\$20.44	\$8.89	
Widening and modification to existing street	Kochia Lane - 160m	No	NA	\$545,720	\$649,407		M/E	NA	\$263.60	\$124.04	\$155.06	\$201.57	\$139.55	\$14.27	\$6.20	
Widening and modification to existing street	Havilah Lane - 185m	No	NA	\$708,110	\$842,651		M/E	NA	\$342.03	\$160.96	\$201.20	\$261.56	\$181.08	\$18.51	\$8.05	
Clearing/preparing site and installation of three Gross Pollutant Traps within the road reservations	Milray Street, Bent Street and Beaconsfield Parade	No	NA	\$60,000	\$71,400	All by trip generation	S	NA	\$28.98	\$13.64	\$17.05	\$22.16	\$15.34	\$1.57	\$0.68	
Allowance for stormwater treatment & detention within the road reservation (3 locations)	Tryon Road town square, Woodford Lane, Drovers Way	No	NA	\$120,000	\$142,800		S	NA	\$57.96	\$27.28	\$34.10	\$44.32	\$30.69	\$3.14	\$1.36	
Subtotal				\$2,487,170	\$2,959,732				\$1,201.34	\$565.35	\$705.68	\$918.69	\$636.01	\$65.01	\$28.27	
TOTAL NEW STREETS AND STREET MODIFICATIONS				\$2,257,500	\$4,343,330				\$3,014.25	\$1,418.47	\$1,773.09	\$2,305.02	\$1,595.78	\$163.12	\$70.92	
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Transport and Pedestrian Improvements																
Transport																
New kiss and ride zone and taxi ranks	Woodford Lane and Lindfield Avenue	No	NA	\$48,200	\$57,358	3,194	S	\$17.96								
Bicycle route (on-road)	Lindfield Avenue	No	NA	\$4,000	\$4,760	3,194	S	\$1.49								
Bicycle route (off-road)	Beaconsfield, Lindfield Avenue, Kochia Lane	No	NA	\$487,225	\$579,798	3,194	S	\$181.53								
Upgrade bus stops	Pacific Highway and Lindfield Avenue	No	NA	\$90,000	\$107,100	3,194	S	\$33.53								
Bicycle parking	Woodford Lane, Tryon Place and Tryon Road Town Square	No	NA	\$12,000	\$14,280	3,194	S	\$4.47								
Subtotal				\$641,425	\$763,296			\$238.98								
Through-Block Connections																
New pedestrian link	Lindfield Ave to Havilah Road 60m, Havilah Road to Milray Street 70m	Dedication by Negotiation	NA	\$141,600	\$168,504	3,194	M/E	\$52.76								
Subtotal				\$141,600	\$168,504			\$52.76								
TOTAL TRANSPORT, CYCLE AND PEDESTRIAN MANAGEMENT				\$783,025	\$931,800			\$291.73								
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - footpaths																
Streetscape Improvements																
Polished Concrete - Full Width of Footpath																
Streetscape Works - Main Commercial Streets	Pacific Highway - 400m (Western side, Balfour St - Beaconsfield Pde)	No	NA	\$496,000	\$590,240	3,194	S	\$184.80								
Streetscape Works - Main Commercial Streets	Pacific Highway - 400m (Eastern side, Wolseley Road - Beaconsfield Pde)	No	NA	\$496,000	\$590,240	3,194	S	\$184.80								
Streetscape Works - Main Commercial Streets	Lindfield Avenue - 280m (Eastern side, Havilah Rd - Tryon Rd)	No	NA	\$470,960	\$560,442	3,194	S	\$175.47								
Streetscape Works - Main Commercial Streets	Lindfield Avenue - 240m (Western side, Havilah Rd - Tryon Rd)	No	NA	\$379,200	\$451,248	3,194	S	\$141.28								
Streetscape Works - Main Commercial Streets	Balfour Street - 90m (North side, Pacific Hwy - Balfour Lne)	No	NA	\$157,500	\$187,425	3,194	S	\$58.68								
Streetscape Works - Main Commercial Streets	Tryon Road - 60m (Both sides, Lindfield Ave - Chapman Lne)	No	NA	\$74,400	\$88,536	3,194	S	\$27.72								
Polished Concrete - Landscape Verge																
Streetscape Works - Main Commercial Streets	Pacific Highway - 180m (South side, Wolseley Rd - Highfield Rd)	No	NA	\$195,300	\$232,407	3,194	M	\$72.76								
Streetscape Works - Main Commercial Streets	Lindfield Ave - 100m (West side, Tryon Rd - Russell Rd, East side, Tryon Lane - Russell Ave)	No	NA	\$92,500	\$110,075	3,194	M	\$34.46								
Streetscape Works - Main Commercial Streets	Tryon Road - 150m (North side, Lindfield Ave - Milray St)	No	NA	\$138,750	\$165,113	3,194	M	\$51.69								
Streetscape Works - Main Commercial Streets	Bent Street - 70m (Both sides, Pacific Hwy - Woodford Lne)	No	NA	\$75,775	\$90,172	3,194	M	\$28.23								
Streetscape Works - Main Commercial Streets	Beaconsfield Parade - 45m (North side, Pacific Hwy - Woodford Lne)	No	NA	\$101,870	\$121,225	3,194	M	\$37.95								
Polished Concrete Footpath																
Streetscape Works - Main Commercial Streets	Kochia Lane - 160m (Carriageway + footpaths to both sides)	No	NA	\$171,200	\$203,728	3,194	M	\$63.78								
Streetscape Works - Main Commercial Streets	Chapman Lane - 70m (Carriageway + footpaths to both sides)	No	NA	\$98,700	\$117,453	3,194	M	\$36.77								
Streetscape Works - Main Commercial Streets	Havilah Lane - 190m (Carriageway + footpaths to both sides)	No	NA	\$267,900	\$318,801	3,194	M	\$99.81								
Streetscape Works - Main Commercial Streets	Bent Lane - 70m (Carriageway + footpaths to both sides)	No	NA	\$98,700	\$117,453	3,194	I	\$36.77								
Streetscape Works - Main Commercial Streets	Woodford Lane - 200m (Carriageway + footpaths to both sides)	No	NA	\$282,000	\$335,580	3,194	L	\$105.07								
Streetscape Works - Main Commercial Streets	Tryon Place - 300m (Carriageway + footpaths to both sides)	No	NA	\$423,000	\$503,370	3,194	M/E	\$157.60								
Streetscape Works - Main Commercial Streets	Tryon Lane - 240m (Carriageway + footpaths to both sides)	No	NA	\$338,400	\$402,696	3,194	M/E	\$126.08								
Subtotal				\$4,358,155	\$5,186,204			\$1,623.73								

Area: Lindfield Town Centre																	
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage (continued)																	
Works Programme Items			Works Details							Contribution	Contributions by Trip Generation						
Method	Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre² Retail	Per metre² Business	
											0.85	0.40	0.50	0.65	0.45	4.60	2.00
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - Street and Pedestrian Lighting																	
	Street Pedestrian Lighting																
	Main Road Town Centre (Area 1) 9m high street lighting 15m c/c	Pacific Highway, Lindfield Avenue, Beaconsfield Parade,	No	NA	\$275,000	\$327,250	3,194	S	\$102.46								
	Main Road Town Centre Adjacent to Rail (Area 1) 9m high street lighting 15m c/c	Pacific Highway, Lindfield Avenue, Havilah Road	No	NA	\$236,500	\$281,435	3,194	S	\$88.11								
	Main Road - Adjacent to residential (Area 2) 9m high street lighting 15m c/c	Lindfield Avenue	No	NA	\$49,500	\$58,905	3,194	S	\$18.44								
	Minor Road - Town Centre (Area 3) 6m high street lighting 10m c/c	Kochia Lane, Bent Lane, Woodford Lane	No	NA	\$112,500	\$133,875	3,194	I	\$41.91								
	Minor Road - Adjacent to residential (Area 4) 6m high street lighting 10m c/c	Havilah Road, Havilah Lane, Kochia Lane, Milray Street, Tryon Road, Bent Street, Balfour Street	No	NA	\$661,500	\$787,185	3,194	M	\$246.46								
	Laneway - Town centre (Area 5) 6m high street lighting 10m c/c	Chapman Lane, Tryon Lane	No	NA	\$189,000	\$224,910	3,194	M/E	\$70.42								
	Subtotal				\$1,524,000	\$1,813,560			\$567.80								
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - undergrounding of overhead powerlines																	
	Undergrounding of Overhead Powerlines																
	Undergrounding of power on main commercial streets	Havilah Road	No	NA	\$560,000	\$666,400	3,194	S	\$208.64								
	Undergrounding of power on main commercial streets	Havilah Lane	No	NA	\$240,000	\$285,600	3,194	M	\$89.42								
	Undergrounding of power on main commercial streets	Kochia Lane	No	NA	\$160,000	\$190,400	3,194	M	\$59.61								
	Undergrounding of power on main commercial streets	Chapman Lane	No	NA	\$60,000	\$71,400	3,194	M	\$22.35								
	Undergrounding of power on main commercial streets	Milray Street	No	NA	\$210,000	\$249,900	3,194	S	\$78.24								
	Undergrounding of power on main commercial streets	Tryon Road	No	NA	\$560,000	\$666,400	3,194	S	\$208.64								
	Undergrounding of power on main commercial streets	Beaconsfield Parade	No	NA	\$350,000	\$416,500	3,194	S	\$130.40								
	Undergrounding of power on main commercial streets	Woodford Lane	No	NA	\$180,000	\$214,200	3,194	L	\$67.06								
	Undergrounding of power on main commercial streets	Bent Street	No	NA	\$525,000	\$624,750	3,194	S	\$195.60								
	Undergrounding of power on main commercial streets	Bent Lane	No	NA	\$70,000	\$83,300	3,194	I	\$26.08								
	Undergrounding of power on main commercial streets	Balfour Street	No	NA	\$420,000	\$499,800	3,194	S	\$156.48								
	Subtotal				\$3,335,000	\$3,968,650			\$1,242.53								
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - All Streets - Street tree planting																	
	Street Tree Planting																
	Town Centre - Main Road - Native/Exotic	Pacific Highway	No	NA	\$156,000	\$185,640	3,194	S	\$58.12								
	Town Centre - Retail/Commercial - Native /Exotic	Balfour Lane, Balfour Street, Bent Street, New Street, Woodford Lane, Lindfield Avenue, Havilah Lan, Kochia Lane, Chapmane Lane, Milray Street	No	NA	\$468,000	\$556,920	3,194	M	\$174.36								
	Character Street - Civic Spine/Avenue Planting	Tryon Road	No	NA	\$13,600	\$16,184	3,194	S	\$5.07								
	Subtotal				\$637,600	\$758,744			\$237.55								
	TOTAL STREETScape IMPROVEMENTS				\$10,637,780	\$12,658,956			\$4,041.96								
	TOTAL LINDFIELD TOWN CENTRE WORKS				\$2,257,500	\$14,981,110											
Local Roads, Local Bus Infrastructure, Local Drainage: Local Streets and Local Bus Infrastructure:Supporting Information and Management																	
	Management, Data and supporting studies	At 1% of total project costs	No	NA	NA	\$251,063	3,194	S-L	\$78.60								
	Subtotal					\$251,063											
	TOTAL KEY COMMUNITY INFRASTRUCTURE CATEGORY: LOCAL STREETS AND ROADS; AND LOCAL BUS INFRASTRUCTURE					\$20,336,084											

Works Programmes: Local roads; Local bus facilities and Local drainage facilities - Pymble and Business Park

Area: Pymble Town Centre and Pymble Business Park																
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage																
Works Programme Items		Works Details							Contribution	Contributions by Trip Generation						
Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre ² Retail	Per metre ² Business	
Catchment = Pymble Town Centre and Pymble Business Park										0.85	0.40	0.50	0.65	0.45	4.60	2.00
Local Roads, Local Bus Infrastructure and Local Drainage: New Streets and Street Modifications										Levy/Credit	3.36%	20.91%	23.54%	2.05%	3.21%	46.93%
Traffic Signals and Intersections																
Pedestrian crossing traffic island	Park Crescent	No	NA	\$25,000	\$29,750		S	NA	\$15.11	\$7.11	\$8.89	\$11.55	\$8.00	\$0.82	\$0.36	
Pedestrian crossing traffic island	Grandview Street from the station	No	NA	\$25,000	\$29,750		S	NA	\$15.11	\$7.11	\$8.89	\$11.55	\$8.00	\$0.82	\$0.36	
Road widening and modifications to intersection	Intersection Livingstone Ave and Pacific Highway	No	NA	\$300,000	\$357,000		S	NA	\$181.27	\$85.31	\$106.63	\$138.62	\$95.97	\$9.81	\$4.27	
Alterations to traffic signals and consequential localised road modifications	Intersection Bridge Street and Pacific Highway															
Modifications to existing traffic signals and intersection to facilitate additional local access to the Business Park	Intersection of West Street and Ryde Road	By dedication	NA	\$100,000	\$119,000		E	NA	\$60.42	\$28.44	\$35.54	\$46.21	\$31.99	\$3.27	\$1.42	
		No	NA	\$300,000	\$357,000		I	NA	\$181.27	\$85.31	\$106.63	\$138.62	\$95.97	\$9.81	\$4.27	
Subtotal				\$750,000	\$892,500				\$453.18	\$213.26	\$266.58	\$346.55	\$239.92	\$24.53	\$10.66	
New Streets																
Extension of existing Lane	(Grandview Lane) Alma Street to Station Street - 200m	Purchase	Generic Est	\$2,737,750	\$3,257,923		I	NA								
Subtotal				\$752,360	\$2,737,750	\$4,010,283			\$2,036.29	\$958.26	\$1,197.82	\$1,557.17	\$1,078.04	\$110.20	\$47.91	
Road Modification																
New one way lane 10m wide	Off Post Office Street - 40m	No	NA	\$109,645	\$130,478		I/E	NA	\$66.25	\$31.18	\$38.97	\$50.66	\$35.07	\$3.59	\$1.56	
Modifications to existing road for one way traffic and increased on street parking	Grandview Street between Pacific Highway and Alma Street - 85m	No	NA	\$165,635	\$197,106		S	NA	\$100.08	\$47.10	\$58.87	\$76.53	\$52.99	\$5.42	\$2.35	
Modifications to existing road	Post Office Street - 75m	No	NA	\$126,125	\$150,089		S	NA	\$76.21	\$35.86	\$44.83	\$58.28	\$40.35	\$4.12	\$1.79	
Minor roadworks to improve access	Everton Street/Avon Street - 150m	No	NA	\$173,000	\$205,870		S	NA	\$104.53	\$49.19	\$61.49	\$79.94	\$55.34	\$5.66	\$2.46	
Modifications of existing roads	Post Office Lane 170m	No	NA	\$783,370	\$932,210		I/E	NA	\$473.35	\$222.75	\$278.44	\$361.97	\$250.60	\$25.62	\$11.14	
Modifications of existing roads	Park Crescent 130m	No	NA	\$603,100	\$598,689		I/E	NA	\$304.00	\$143.06	\$178.82	\$232.47	\$160.94	\$16.45	\$7.15	
Modifications of existing roads	Alma Street 65m	No	NA	\$321,975	\$383,150		I/E	NA	\$194.55	\$91.55	\$114.44	\$148.77	\$103.00	\$10.53	\$4.58	
Allowance for stormwater treatment & detention at three locations all within the road reservations	Roads adjoining Robert Pymble Park and laneways	No	NA	\$120,000	\$142,800		S	NA	\$72.51	\$34.12	\$42.65	\$55.45	\$38.39	\$3.92	\$1.71	
Clearing preparing site and installing five Gross Pollutant Traps all within the road reservations	Avon Road, Livingstone Avenue, Orinico Street	No	NA	\$100,000	\$119,000		S	NA	\$60.42	\$28.44	\$35.54	\$46.21	\$31.99	\$3.27	\$1.42	
Subtotal				\$2,402,850	\$2,857,392				\$1,451.91	\$683.25	\$854.06	\$1,110.28	\$768.66	\$78.57	\$34.16	
TOTAL NEW STREETS AND STREET MODIFICATIONS				\$752,360	\$5,890,600	\$7,762,174			\$3,941.39	\$1,854.77	\$2,318.46	\$3,014.00	\$2,086.62	\$213.30	\$92.74	
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Transport and Pedestrian Improvements																
Transport																
New bicycle way (on-road)	Station Street then turning south on Grandview Street 1100m	No	NA	\$16,000	\$19,040	1,523	S	\$12.50								
New bicycle way (on-road)	Pymble Avenue - Pymble Station - 475m	No	NA	\$7,750	\$9,223	1,523	S	\$6.06								
Bicycle parking facilities	Grandview Street	No	NA	\$3,000	\$3,570	1,523	S	\$2.34								
Bicycle parking facilities	Robert Pymble Park	No	NA	\$3,000	\$3,570	1,523	S	\$2.34								
New bus stop facilities	Grandview Street	No	NA	\$30,000	\$35,700	1,523	S	\$23.44								
Two new kiss and ride facilities	Everton Street	No	NA	\$30,500	\$36,295	1,523	S	\$23.83								
Subtotal				\$90,250	\$107,398			\$70.52								
Through-Block Connections																
New 5-6m wide access way corridor	Telegraph Road to Park Crescent	By dedication	NA	\$10,000	\$11,900	1,523	M/E	\$7.81								
Improvements to existing pedestrian rail underpass	Under Pacific Highway to Everton Street	No	NA	\$34,000	\$40,460	1,523	S	\$26.57								
Upgrade existing access way	Grandview Lane to Grandview Street	No	NA	\$41,800	\$49,742	1,523	I/E	\$32.66								
Subtotal				\$85,800	\$102,102			\$67.04								
TOTAL TRANSPORT, CYCLE AND PEDESTRIAN MANAGEMENT				\$176,050	\$209,500			\$137.56								
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes (pedestrian environment)																
Streetscape Improvements																
Polished Concrete - Full Width of Footpath																
Streetscape Works - Main Commercial Streets	Pacific Highway - Southern side - 150m (Pymble Hotel - Railway bridge)	No	NA	\$186,000	\$221,340	1,523	M	\$145.33								
Streetscape Works - Main Commercial Streets	Pacific Hwy - Nth side - 240m(Through Block Connection - Post Office St, Railway Bridge - Livingstone Ave)	No	NA	\$297,600	\$354,144	1,523	S	\$232.53								
Streetscape Works - Main Commercial Streets	Post Office Street - 50m (Nth side, Pac Hwy - Post Office Lne+Sth Side)	No	NA	\$113,000	\$134,470	1,523	S	\$88.29								
Streetscape Works - Main Commercial Streets	Alma Street - 60m (Alma St - Park Cres)	No	NA	\$145,800	\$173,502	1,523	I/E	\$113.92								
Streetscape Works - Main Commercial Streets	Station Street - 100m (Grandview St - King Edward St)	No	NA	\$175,000	\$208,250	1,523	I	\$136.74								
Streetscape Works - Main Commercial Streets	Grandview Street - 150m (Both sides, Railway St Entry - Pacific Hwy)	No	NA	\$466,500	\$555,135	1,523	S	\$364.50								
Polished Concrete - Landscape Verge																
Streetscape Works - Main Commercial Streets	Pacific Highway - Southern side - 150m (Railway Bridge - Livingstone Ave)	No	NA	\$104,500	\$124,355	1,523	S	\$81.65								
Streetscape Works - Main Commercial Streets	Pacific Highway - Northern side - 300m (Livingstone Ave - Mona Vale Rd)	No	NA	\$219,000	\$260,610	1,523	M	\$171.12								
Streetscape Works - Main Commercial Streets	Post Office Street - 25m (Northern side, Post Office Lne - Park Cres)	No	NA	\$18,250	\$21,718	1,523	S	\$14.26								
Streetscape Works - Main Commercial Streets	Park Cres - 120m (Nth side, Alma St - Post Office St)	No	NA	\$201,348	\$241,685	1,523	S	\$152.20								
Streetscape Works - Main Commercial Streets	Grandview Street - 150m (Both sides, Railway St Entry - Station St)	No	NA	\$211,500	\$251,685	1,523	S	\$165.24								
Subtotal				\$2,106,350	\$2,506,587			\$1,645.80								

Area: Pymble Town Centre and Pymble Business Park																
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage (continued)																
Works Programme Items			Works Details						Contribution	Contributions by Trip Generation						
Method	Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre ² Retail	Per metre ² Business
										0.85	0.40	0.50	0.65	0.45	4.60	2.00
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - Street and Pedestrian Lighting																
	Street Pedestrian Lighting															
	Main Road Town Centre (Area 1) 9m high street lighting 15m c/c	Pacific Highway, Grandview Street,	No	NA	\$341,000	\$405,790	1,523	S	\$266.44							
	Main Road Town Centre Adjacent to Rail (Area 1) 9m high street lighting 15m c/c	Pacific Highway, Grandview Street,	No	NA	\$220,000	\$261,800	1,523	S	\$171.90							
	Main Road - Adjacent to residential (Area 2) 9m high street lighting 15m c/c	Pacific Highway, Telegraph Road,	No	NA	\$231,000	\$274,890	1,523	S	\$180.49							
	Minor Road - Town Centre (Area 3) 6m high street lighting 10m c/c	Post Office Street, Alma Street	No	NA	\$90,000	\$107,100	1,523	L	\$70.32							
	Minor Road - Adjacent to residential (Area 4) 6m high street lighting 10m c/c	Post Office Street, Station Street, Grandview Street	No	NA	\$355,500	\$423,045	1,523	S	\$277.77							
	Laneway Adjacent to residential (Area 6) 4.5m high street lighting 10m c/c	Post Office Lane, New Lane (Off Post Office Street)	No	NA	\$185,000	\$220,150	1,523	I/E	\$144.55							
	Subtotal				\$1,422,500	\$1,692,775			\$1,111.47							
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - undergrounding of overhead powerlines																
	Undergrounding of Overhead Powerlines															
	Undergrounding of power on main commercial streets	Pacific Highway	No	NA	\$1,190,000	\$1,416,100	1,523	S	\$929.81							
	Undergrounding of power on main commercial streets	Grandview Street	No	NA	\$1,400,000	\$1,666,000	1,523	S	\$1,093.89							
	Undergrounding of power on main commercial streets	Post Office Street	No	NA	\$280,000	\$333,200	1,523	S	\$218.78							
	Undergrounding of power on main commercial streets	Alma Street,	No	NA	\$210,000	\$249,900	1,523	L/E	\$164.08							
	Undergrounding of power on main commercial streets	Park Cres	No	NA	\$1,400,000	\$1,666,000	1,523	S	\$1,093.89							
	Subtotal				\$4,480,000	\$5,331,200			\$966.92							
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - All Streets - Street tree planting																
	Street Tree Planting															
	Town Centre Main Road - Native/exotic	Pacific Highway	No	NA	\$216,000	\$257,040		S								
	Commercial Street - Native	Bridge Street, Suakin Street	No	NA	\$30,000	\$35,700	1,523	S	\$23.44							
	Subtotal				\$246,000	\$292,740			\$23.44							
	TOTAL STREETScape IMPROVEMENTS				\$8,430,900	\$10,032,771			\$4,031.25							
	TOTAL PYMBLE TOWN CENTRE AND PYMBLE BUSINESS PARK WORKS				\$752,360	\$14,321,500	\$17,794,945									
Local Roads, Local Bus Infrastructure, Local Drainage: Local Streets and Local Bus Infrastructure:Supporting Information and Management																
	Management, Data and supporting studies	At 1% of total project costs	No	NA	NA	\$222,437	1,523	S-L	\$146.05							
	Subtotal					\$222,437										
	TOTAL KEY COMMUNITY INFRASTRUCTURE CATEGORY: LOCAL STREETS AND ROADS; AND LOCAL BUS INFRASTRUCTURE					\$18,017,382										

Works Programmes: Local roads; Local bus facilities and Local drainage facilities – Roseville

Area: Roseville Town Centre																	
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage																	
Works Programme Items			Works Details						Contribution		Contributions by Trip Generation						
	Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre ² Retail	Per metre ² Business	
Catchment = Roseville Town Centre										0.85	0.40	0.50	0.65	0.45	4.60	2.00	
Local Roads, Local Bus Infrastructure, Local Drainage: Traffic, Cycle and Pedestrian Management											Levy/Credit	6%	39%	44%	4%	5%	1%
	Traffic Signals and Intersections Road widening to accommodate 3 northbound lanes and dedicated right turn lane into MacLaurin Parade	Pacific Highway between Boundary Street and MacLaurin Parade	NA	NA	\$335,000	\$398,650		L/E	NA	\$392.72	\$184.81	\$231.01	\$300.31	\$207.91	\$21.25	\$9.24	
	Subtotal				\$335,000	\$398,650				\$392.72	\$184.81	\$231.01	\$300.31	\$207.91	\$21.25	\$9.24	
	New streets and modifications to existing streets Upgrading existing laneway (proposed car parking excluded) Widening and realignment of existing laneway Extension and widening of existing laneway Allowance for Stormwater treatment & detention at five locations within the road reservations Clearing/preparing site and installation of four Gross Pollutant Traps within the road reservations	Larkin Lane Roseville Lane from Roseville Avenue to Lord Street Bancroft Lane Larkin Lane Car Park, Six Mile Lane, Bancroft Lane, Roseville Lane and The Rifflway Glencroft Avenue, Bancroft Avenue, Lockley Avenue, MacLaurin Parade	NA By negotiation By negotiation No No	NA NA NA NA NA	\$138,000 \$289,480 \$281,200 \$150,000 \$80,000	\$164,220 \$344,481 \$334,628 \$178,500 \$95,200	All new development based on additional trips	I L/E L/E S S	NA NA NA NA NA	\$161.78 \$339.35 \$329.65 \$175.84 \$93.78	\$76.13 \$159.70 \$155.13 \$82.75 \$44.13	\$95.16 \$199.62 \$193.91 \$103.44 \$55.17	\$123.71 \$259.51 \$252.08 \$134.47 \$71.72	\$85.65 \$179.64 \$174.52 \$93.09 \$49.65	\$8.75 \$18.37 \$17.84 \$9.52 \$5.08	\$3.81 \$7.98 \$7.76 \$4.14 \$2.21	
	Subtotal				NA	\$938,680	\$1,117,029			NA	\$1,100.41	\$517.84	\$647.30	\$841.49	\$582.57	\$59.55	\$25.89
	TOTAL NEW STREETS AND STREET MODIFICATIONS					\$1,273,680	\$1,515,679				\$1,493.12	\$702.65	\$876.31	\$1,141.80	\$790.48	\$80.80	\$35.13
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Transport and Pedestrian Improvements																	
	Transport Kiss and Ride Kiss and Ride and Public Transport Architecture Cycleways (on road) Cycleways (off road) Provision of bicycle parking New bus stop Upgrade existing and new bus stops	Larkin Lane Hill Street Larkin Lane, Hill Street, Roseville Avenue, Roseville Lane The Rifflway and Railway Station concourse Hill Street and Pacific Highway Corner of Hill Street and Lord Street Hill Street and Pacific Highway	No No No No No No No	NA NA NA NA NA NA NA	\$54,200 \$84,200 \$33,000 \$901,800 \$6,000 \$160,000 \$120,000	\$64,498 \$100,198 \$39,270 \$1,073,142 \$7,140 \$190,400 \$142,800	1,481 1,481 1,481 1,481 1,481 1,481 1,481	L/E S M M S S S	\$43.55 \$47.66 \$26.52 \$724.61 \$4.82 \$128.56 \$96.42								
	Subtotal					\$1,359,200	\$1,617,448			\$1,092.13							
	Through-block connections Upgrade existing pedestrian access way	Pacific Highway to Sixth Mile Lane	No	NA	\$28,500	\$28,500	1,481	S	\$19.24								
	Subtotal		No	NA	\$28,500	\$28,500			\$19.24								
	TOTAL TRANSPORT, CYCLE AND PEDESTRIAN MANAGEMENT					\$1,387,700	\$1,645,948			\$1,111.38							
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - footpaths																	
	Streetscape Improvements Polished Concrete Full Width of Footpath Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Polished Concrete and Landscaping to Verge Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Polished Concrete to Footpath Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets Streetscape Works - Main Commercial Streets	Pacific Highway - 240m (Nth Side - Railway Entry, 5th Side - Cinema - RSL) Hill Street - Western Side - 200m (Roseville Ave - Bancroft Ave) Hill Street - Eastern Side - 200 metres (Roseville Ave - Bancroft Ave) MacLaurin Parade - 45 metres (Nth side, Pacific Hwy - Larkin Lane) Roseville Avenue - 50 metres (5th side, Hill St - Larkin Lane) Lord Street - 100 metres (Both sides, Hill St - Roseville/Bancroft Lanes) Bancroft Avenue - 35 metres (Nth side, Hill St - Bancroft Lane) Pacific Hwy - 5th Side - 240m (Shirley Rd - Cinema, RSL - MacLaurin Pde) Pacific Hwy - Nth Side - 340m (Clanville - Railway Ave, Railway Ent - MacLaurin) Hill Street - 250 metres (Both sides, Clanville Rd - Roseville Ave) Roseville Lane - 100 metres Bancroft Lane - 110 metres Larkin Lane - 210 metres The Rifflway - 55 metres (Pacific Hwy - Larkin Lane) Six Mile Lane - 60m	No No No No No No No No No No No No No No No No No No No No	NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA NA	\$523,800 \$180,000 \$190,000 \$55,970 \$104,500 \$107,000 \$43,570 \$194,400 \$356,400 \$430,000 \$141,000 \$154,700 \$977,760 \$96,250 \$105,000	\$623,322 \$214,200 \$226,100 \$66,604 \$124,355 \$127,330 \$51,848 \$231,336 \$424,114 \$511,700 \$167,790 \$184,093 \$1,163,534 \$114,538 \$124,950	1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481 1,481	I S S I I I I I I L L L L L L L L L	\$420.88 \$144.63 \$152.67 \$44.97 \$83.97 \$85.98 \$35.01 \$156.20 \$286.37 \$345.51 \$113.30 \$124.30 \$785.64 \$77.34 \$84.37								
	Subtotal					\$3,660,350	\$4,355,817			\$2,941.13							
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - Street and Pedestrian Lighting																	
	Street Pedestrian Lighting Main Road Town Centre (Area 1) 9m high street lighting 15m c/c Main Road Town Centre Adjacent to Rail (Area 1) 9m high street lighting 15m c/c Main Road - Adjacent to residential (Area 2) 9m high street lighting 15m c/c Minor Road - Town Centre (Area 3) 6m high street lighting 10m c/c Minor Road - Adjacent to residential (Area 4) 6m high street lighting 10m c/c laneway - Town Centre (Area 5) 4.5m high street lighting 10m c/c Laneway Adjacent to residential (Area 6) 4.5m high street lighting 10m c/c	Pacific Highway, Hill Street Pacific Highway, Hill Street Pacific Highway Lord Street, Bancroft Avenue Lord Street, Bancroft Avenue, Roseville Avenue, MacLaurin Parade, The Rifflway, Six Mile Lane Larkin Lane, Roseville Lane, Bancroft lane,	No No No No No No No	NA NA NA NA NA NA NA	\$214,200 \$143,000 \$44,000 \$63,000 \$162,000 \$98,000 \$287,000	\$254,898 \$170,170 \$52,360 \$74,970 \$192,780 \$116,620 \$341,530	1,481 1,481 1,481 1,481 1,481 1,481 1,481	I I I I I S L	\$172.11 \$114.90 \$35.35 \$50.62 \$130.17 \$78.74 \$230.61								
	Subtotal					\$1,011,200	\$1,203,328			\$812.51							

Area: Roseville Town Centre																
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage (continued)																
Works Programme Items			Works Details						Contribution	Contributions by Trip Generation						
Method	Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre² Retail	Per metre² Business
										0.85	0.40	0.50	0.65	0.45	4.60	2.00
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - undergrounding of overhead powerlines																
	Undergrounding of Overhead Powerlines															
	Undergrounding of power on main commercial streets	Pacific Highway	NA	NA	\$840,000	\$999,600	1,481	I	\$674.95							
	Undergrounding of power on main commercial streets	MacLaurin Parade	NA	NA	\$210,000	\$249,900	1,481	I	\$168.74							
	Undergrounding of power on main commercial streets	Larkin Lane	NA	NA	\$210,000	\$249,900	1,481	M	\$168.74							
	Undergrounding of power on main commercial streets	The Rifleway	NA	NA	\$60,000	\$71,400	1,481	S	\$48.21							
	Undergrounding of power on main commercial streets	Six Mile Lane	NA	NA	\$60,000	\$71,400	1,481	S	\$48.21							
	Undergrounding of power on main commercial streets	Hill Street	NA	NA	\$875,000	\$1,041,250	1,481	S	\$703.07							
	Undergrounding of power on main commercial streets	Roseville Avenue	NA	NA	\$227,500	\$270,725	1,481	I	\$182.80							
	Undergrounding of power on main commercial streets	Lord Street	NA	NA	\$227,500	\$270,725	1,481	I	\$182.80							
	Undergrounding of power on main commercial streets	Bancroft Lane	NA	NA	\$75,000	\$89,250	1,481	I	\$60.26							
	Undergrounding of power on main commercial streets	Roseville Lane	NA	NA	\$75,000	\$89,250	1,481	I	\$60.26							
	Subtotal				\$2,860,000	\$3,403,400			\$674.95							
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - All Streets - Street tree planting																
	Street Tree Planting															
	Town Centre - Main Road - Native/Exotic	Pacific Highway	No	NA	\$132,000	\$157,080	1,481	M	\$106.06							
	Town Centre - Retail/Commercial - Native/Exotic	Hill Street, Lord Street, Bancroft Avenue, Six Mile Lane, The Rifleway, MacLaurin Parade, Larkin Lane, Bancroft Lane, Roseville Lane	No	NA	\$324,000	\$385,560	1,481	I	\$260.34							
	Subtotal				\$456,000	\$542,640			\$366.40							
	TOTAL ROSEVILLE TOWN CENTRE WORKS				\$0	\$10,648,930			\$6,013.28							
Local Roads, Local Bus Infrastructure, Local Drainage: Supporting Information and Management																
	Management, Data and supporting studies															
	At 1% of total project costs		No	NA	NA	\$158,335	1,481	S-L	\$106.91							
	Subtotal					\$158,335										
	TOTAL KEY COMMUNITY INFRASTRUCTURE CATEGORY: LOCAL STREETS AND ROADS; AND LOCAL BUS INFRASTRUCTURE					\$12,825,147										

Works Programmes: Local roads; Local bus facilities and Local drainage facilities – St Ives

Area: St Ives Town Centre																	
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage																	
Works Programme Items				Works Details				Contribution		Contributions by Trip Generation							
	Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre ² Retail	Per metre ² Business	
Catchment = St Ives Town Centre											0.85	0.40	0.50	0.65	0.45	4.60	2.00
Local Roads, Local Bus Infrastructure, Local Drainage: Traffic, Cycle and Pedestrian Management											Levy/Credit	4.73%	29.47%	33.18%	2.89%	23.82%	5.92%
	Traffic Signals and Intersections	Intersection of Mona Vale Road, Memorial Avenue and Rosedale Road															
	Alterations to traffic signals and intersection layout to accommodate partial closure of Rosedale Road		No	NA	\$279,300	\$332,367	All new development based on additional trip generation	M/E	NA	\$116.71	\$54.92	\$68.65	\$89.25	\$61.79	\$6.32	\$2.75	
	Install new traffic signals and remove existing pedestrian operated signals near Collins Road	Intersection Killeaton Street and Cowan Road (Note: discounted to 20% of \$471,240 TCC) due to benefit beyond current Level of Service)	No	NA	\$79,200	\$94,248		M	NA	\$33.09	\$15.57	\$19.47	\$25.31	\$17.52	\$1.79	\$0.78	
	Extension of right turn bay on Mona Vale Road into Stanley Street, modification to signals and provision of new right turn lane	Intersection of Mona Vale Road and Stanley Street	No	NA	\$282,000	\$335,580		L/E	NA	\$117.84	\$55.45	\$69.31	\$90.11	\$62.38	\$6.38	\$2.77	
		Subtotal			\$640,500	\$762,195			NA	\$267.64	\$125.95	\$157.43	\$204.66	\$141.69	\$14.48	\$6.30	
	New streets and modifications to existing streets	Village Green Parade from Cowan Rd to Denley Lane	No	NA	\$592,000	\$704,480	All new development based on additional trip generation	M/E	NA	\$247.37	\$116.41	\$145.51	\$189.17	\$130.96	\$13.39	\$5.82	
	New one way road with on street parking	Mona Vale Road	No	NA	\$580,250	\$690,498		M/E	NA	\$242.46	\$114.10	\$142.62	\$185.41	\$128.36	\$13.12	\$5.70	
	Upgrade and widening of existing main road	Stanley Street	No	NA	\$18,500	\$22,015		L/E	NA	\$7.73	\$3.64	\$4.55	\$5.91	\$4.09	\$0.42	\$0.18	
	Modify Parking arrangements	Porters Lane	No	NA	\$60,300	\$71,757		M	NA	\$25.20	\$11.86	\$14.82	\$19.27	\$13.34	\$1.36	\$0.59	
	Modify/narrow street	Stanley Lane	Dedication by Negotiation	NA	\$339,500	\$404,005		L/E	NA	\$141.86	\$66.76	\$83.45	\$108.48	\$75.10	\$7.68	\$3.34	
	Widening of existing lane	Denley Lane to Village Green Parade (40m)	Dedication by Negotiation	NA	\$504,560	\$600,426		M	NA	\$210.83	\$99.22	\$124.02	\$161.23	\$111.62	\$11.41	\$4.96	
	Upgrade and widening of existing laneway	Village Green Parade	No	NA	\$30,000	\$35,700		M	NA	\$12.54	\$5.90	\$7.37	\$9.59	\$6.64	\$0.68	\$0.29	
	Allowance for stormwater treatment & detention	Village Green and Killeaton Road area	No	NA	\$100,000	\$119,000	S	NA	\$41.79	\$19.66	\$24.58	\$31.95	\$22.12	\$2.26	\$0.98		
	Stormwater detention and other works to address local flooding issues	Killeaton Street, Stanley Street, Dorset Drive, Lancaster Drive	No	NA	\$80,000	\$95,200	S	NA	\$33.43	\$15.73	\$19.66	\$25.56	\$17.70	\$1.81	\$0.79		
	Clearing/preparing site and installation of four Gross Pollutant Traps within the road reservations				\$2,305,110	\$2,743,081			NA	\$963.20	\$453.27	\$566.59	\$736.57	\$509.93	\$52.13	\$22.66	
	Subtotal			\$2,945,610	\$3,505,276			NA	\$1,280.84	\$579.22	\$724.02	\$941.23	\$651.62	\$66.61	\$28.96		
TOTAL NEW STREETS AND STREET MODIFICATIONS																	
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Transport and Pedestrian Improvements																	
	Transport	Denley Lane	No	NA	\$30,000	\$35,700	3,104	M/E	\$11.50								
	New Taxi rank	Memorial Avenue and Stanley Street	No	NA	\$60,000	\$71,400	3,104	S	\$23.00								
	New bus stop including shelters	As identified within St Ives Town Centre	No	NA	\$112,000	\$133,280	3,104	S	\$42.94								
	Upgrade existing bus stops	Village Green Pde; Village Green/Collins Rd; Killeaton St (east of Mona Vale Rd)	No	NA	\$176,700	\$210,273	3,104	S	\$67.74								
	New cycleways (off road)	Mona Vale Road; Link Road; Stanley Street; Collins Road (north)	No	NA	\$39,900	\$47,481	3,104	S	\$15.30								
	New cycleways (on road)	Village Green, new Civic building, Corner Stanley Street and Mona Vale Road, Council Car Park at the end of Stanley Lane	No	NA	\$30,000	\$35,700	3,104	S	\$11.50								
	Bicycle Parking				\$448,600	\$533,834			\$171.98								
	Pedestrian Through-Block Connections	College Crescent to Link Road (150m x 5m wide)	Dedication by Negotiation	NA	\$312,750	\$372,173	3,104	M/E	\$119.90								
	Construction of pedestrian way (land dedication to Council at no cost)	College Crescent to Passionist Site (100m x 5m wide)	Dedication by Negotiation	NA	\$178,500	\$212,415	3,104	I/E	\$68.43								
	Construction of pedestrian way (land dedication to Council at no cost)				\$491,250	\$584,588			\$188.33								
		Subtotal			\$939,850	\$1,118,422			\$360.32								
	TOTAL TRANSPORT, CYCLE AND PEDESTRIAN MANAGEMENT																
	Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes (pedestrian environment)																
		Streetscape Improvements															
		Full width footpath (of varying widths) with polished concrete	Mona Vale Rd - Nth side - 240m (Through Block connection - Rotary Pk)	No	NA	\$542,400	\$645,456	3,104	M/E	\$207.94							
Streetscape Works - Main Commercial Streets		Mona Vale Road - Southern side - 240m (Memorial Pk - Stanley St)	No	NA	\$410,340	\$488,305	3,104	M	\$157.31								
Streetscape Works - Main Commercial Streets		Memorial Avenue - 75m (Both sides, Mona Vale Rd - Village Green Pde)	No	NA	\$245,500	\$292,145	3,104	S	\$94.12								
Streetscape Works - Main Commercial Streets		Stanley Street Western Side - 45m (Mona Vale Rd - Stanley Lane)	No	NA	\$101,870	\$121,225	3,104	I	\$39.05								
Two metre (2m) wide footpath with polished concrete and landscaped verge		Mona Vale Road - 370m (Nth side, Cowan - Through block connection, Rotary Pk - Stanley St)	No	NA	\$333,000	\$396,270	3,104	M/E	\$127.66								
Streetscape Works - Main Commercial Streets		Mona Vale Road - 370m (Sth side, Porters Lane - Shinfeld Ave)	No	NA	\$370,500	\$440,895	3,104	M	\$142.04								
Streetscape Works - Main Commercial Streets		Memorial Avenue - 300m (Both sides, Village Green Pde - Killeaton St)	No	NA	\$555,000	\$660,450	3,104	S	\$212.77								
Streetscape Works - Main Commercial Streets		Rosedale Road - 50m (Both sides, Mona Vale Road to Porters Lane)	No	NA	\$92,500	\$110,075	3,104	M	\$35.44								
Streetscape Works - Main Commercial Streets		Porters Lane - 70m (Both sides, Rosedale Road - Mona Vale Road)	No	NA	\$129,500	\$154,105	3,104	M	\$49.65								
Streetscape Works - Main Commercial Streets		Cowan Road - 300m (Eastern side, Mona Vale Rd - Kanoona Ave)	No	NA	\$277,500	\$330,225	3,104	I	\$106.39								
Streetscape Works - Main Commercial Streets		Village Green Parade 340m (Nth Side)	No	NA	\$314,500	\$374,255	3,104	M/E	\$120.57								
Streetscape Works - Main Commercial Streets		Village Green Parade 280m (Sth Side)	No	NA	\$925,400	\$1,101,226	3,104	M/E	\$354.78								
		Subtotal			\$4,298,010	\$5,114,632			\$1,647.76								

Area: St Ives Town Centre																
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage (continued)																
Works Programme Items			Works Details						Contribution	Contributions by Trip Generation						
Method	Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre ² Retail	Per metre ² Business
										0.85	0.40	0.50	0.65	0.45	4.60	2.00
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - Street and Pedestrian Lighting																
	Street Pedestrian Lighting															
	Main Road Town Centre (Area 1) - 9m high street lighting @ 15m centres	Mona Vale Road,	No	NA	\$302,500	\$359,975	3,104	M/E	\$115.97							
	Main Road - Adjacent to residential (Area 2) 9m high street lighting @ 15m centres	Mona Vale Road, Memorial Avenue, Stanley Street,	No	NA	\$484,000	\$575,960	3,104	M/E	\$185.55							
	Minor Road - Town Centre (Area 3) 6m high street lighting @ 10m centres	Rosedale Road, Porters Lane	No	NA	\$162,000	\$192,780	3,104	M	\$62.11							
	laneway - Town Centr (Area 5) 4.5m high street lighting @ 10m centres	Village Green Parade, Denley Lane	No	NA	\$588,000	\$699,720	3,104	M/E	\$225.43							
	Subtotal				\$1,536,500	\$1,828,435			\$589.06							
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - undergrounding of overhead powerlines																
	Undergrounding of Overhead Powerlines															
	Undergrounding of power on main commercial streets	Cowan Road	No	NA	\$1,750,000	\$2,082,500	3,104	M/E	\$670.91							
	Undergrounding of power on main commercial streets	Mona Vale Road	No	NA	\$2,240,000	\$2,665,600	3,104	M/E	\$858.76							
	Undergrounding of power on main commercial streets	Memorial Avenue	No	NA	\$1,260,000	\$1,499,400	3,104	M	\$483.05							
	Undergrounding of power on main commercial streets	Rosedale Road	No	NA	\$245,000	\$291,550	3,104	M	\$93.93							
	Subtotal				\$5,495,000	\$6,539,050			\$2,106.65							
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre Streets - Street tree planting																
	Street Tree Planting															
	Town Centre - Main Road - Native/Exotic	Mona Vale Road	No	NA	\$36,000	\$42,840	3,104	M/E	\$13.80							
	Town Centre - Retail/Commercial - Native /Exotic	Village Green Parade, Denley lane, Durham Lane, Memorial Avenue, Porters Lane, Stanley Street, Stanley Lane	No	NA	\$56,000	\$66,640	3,104	M/E	\$21.47							
	Character Street - Civic Spine/Avenue Planting	Memorial Avenue	No	NA	\$19,200	\$22,848	3,104	S	\$7.36							
	Subtotal				\$111,200	\$132,328			\$42.63							
	TOTAL STREETScape IMPROVEMENTS				\$12,380,560	\$14,732,866			\$4,820							
	TOTAL ST IVES TOWN CENTRE WORKS				\$0	\$15,326,170										
Local Roads, Local Bus Infrastructure, Local Drainage: Supporting Information and Management																
	Management, Data and supporting studies	At 1% of total project costs	No	NA	NA	\$227,977	3,104	S-L	\$73.45							
	Subtotal					\$227,977										
	TOTAL KEY COMMUNITY INFRASTRUCTURE CATEGORY: LOCAL STREETS AND ROADS; AND LOCAL BUS INFRASTRUCTURE					\$18,466,119										

Works Programmes: Local roads; Local bus facilities and Local drainage facilities - Turramurra

Area: Turramurra Town Centre																	
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage																	
Works Programme Items			Works Details						Contribution	Contributions by Trip Generation							
	Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre ² Retail	Per metre ² Business	
Catchment = Turramurra Town Centre											0.85	0.40	0.50	0.65	0.45	4.60	2.00
Local Roads, Local Bus Infrastructure, Local Drainage: Traffic, Cycle and Pedestrian Management										Levy/Credit	5.72%	35.64%	40.12%	3.49%	13.13%	1.90%	
	Traffic Signals and Intersections									NA							
	New traffic signals	Intersection Turramurra Avenue and Pacific Highway	No	NA	\$386,000	\$459,340	All new development based on additional trip generation	M	NA	\$225.90	\$106.31	\$132.88	\$172.75	\$119.59	\$12.23	\$5.32	
	Road widening and improvements to intersection	Intersection of Ray Street and Pacific Highway	No	NA	\$230,000	\$273,700		M/E	NA	\$134.60	\$63.34	\$79.18	\$102.93	\$71.26	\$7.28	\$3.17	
	Removal of traffic signals and modifications to intersection	Intersection of Rohini Street and Pacific Highway	No	NA	\$39,000	\$46,410		M	NA	\$22.82	\$10.74	\$13.43	\$17.45	\$12.08	\$1.24	\$0.54	
	Modification to intersection	Intersection of Kissing Point Road and Pacific Highway	No	NA	\$255,000	\$303,450		M/E	NA	\$149.24	\$70.23	\$87.79	\$114.12	\$79.01	\$8.08	\$3.51	
	Widening of Pacific Highway (south bound) to three lanes each direction and side-by-side turn bays	Between Ray Street and William Street	No	NA	\$535,700	\$637,483		L/E	NA	\$313.51	\$147.53	\$184.42	\$239.74	\$165.98	\$16.97	\$7.38	
		Subtotal			\$1,445,700	\$1,720,383				NA	\$846.07	\$398.15	\$497.69	\$647.00	\$447.92	\$45.79	\$19.91
	New Streets																
	Construction new street (ROW 15m wide, two way traffic)	Between Gilroy Road and Turramurra Avenue, Turramurra	Yes	Aggregate	\$457,315	\$782,205	Trip Generation	M	NA	See Totals							
	Construction new street (ROW 15m wide, two way traffic)	Stonex Street, between Duff Street and Kissing Point Road - 200m	Yes	Generic	\$1,443,300	\$1,717,527		M/E	NA								
		Subtotal			\$2,275,200	\$2,100,615					\$2,348.28	\$1,105.08	\$1,381.34	\$1,795.75	\$1,243.21	\$127.08	\$55.25
	Road Modifications																
	Turramurra Pedestrian Rail Bridge Modifications	Turramurra	No	NA	\$362,219	\$362,219	All new development based on additional trip generation	R	NA	\$178.14	\$83.83	\$104.79	\$136.22	\$94.31	\$9.64	\$4.19	
	Modification to roadway for footpath widening	Rohini Street, Turramurra - 150m	No	NA	\$305,750	\$363,843		M	NA	\$178.94	\$84.21	\$105.26	\$136.83	\$94.73	\$9.68	\$4.21	
	Improvements to lane	Gilroy Lane, Turramurra - 190m	No	NA	\$572,070	\$680,763		M	NA	\$334.80	\$157.55	\$196.94	\$256.02	\$177.24	\$18.12	\$7.88	
Widening of existing lane and provide parking bay, kiss and ride bay and taxi rank	Forbes Lane between Ray Street and William Street, Turramurra	No	NA	\$612,510	\$728,887	M/E		NA	\$358.46	\$168.69	\$210.86	\$274.12	\$189.77	\$19.40	\$8.43		
Allowance for stormwater treatment & detention at four locations within the road reservations	Stonex Street, Rohini Street, Gilroy Road and Gilroy Lane, Turramurra	No	NA	\$160,000	\$190,400	S		NA	\$93.64	\$44.06	\$55.08	\$71.61	\$49.57	\$5.07	\$2.20		
Installation of three Gross Pollutant Traps within the road reservations	Brentwood Avenue Womerah Street, Duff Street, Turramurra	No	NA	\$60,000	\$71,400				NA	\$35.11	\$16.52	\$20.66	\$26.85	\$18.59	\$1.90	\$0.83	
	Subtotal			\$1,710,330	\$2,397,512					\$1,179.08	\$554.86	\$693.58	\$901.65	\$624.22	\$63.81	\$27.74	
	TOTAL NEW STREETS AND STREET MODIFICATIONS			\$2,275,200	\$5,256,645	\$8,892,827				\$4,373.44	\$2,058.09	\$2,572.61	\$3,344.40	\$2,315.35	\$236.68	\$102.90	
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Transport and Pedestrian Improvements																	
	Transport																
	Works related to new bus route	Rohini Street via new street to Turramurra Avenue and Pacific Highway	No	NA	\$32,000	\$38,080	2,680	M	\$14.21								
	Improvements to existing bus interchange area	Rohini Street	No	NA	\$186,500	\$221,935	2,680	M	\$82.81								
	Bicycle route (on-road)	Kissing Point Road, Stonex Street, Boyd Street, Pacific Highway, Rohini Street, Eastern Road, Turramurra Avenue and Wonga Wonga	No	NA	\$27,500	\$32,725	2,680	S	\$12.21								
	Bicycle route (off-road) 3m wide path	From Boyd St to Karuah Park via Hillview Estate & Turramurra Ave-640m	No	NA	\$291,300	\$346,647	2,680	M	\$129.35								
	New Kiss and ride	Boyd Street	No	NA	\$16,350	\$19,457	2,680	M	\$7.26								
	Bicycle parking	Stonex Lane, Pacific Highway, William Square, Railway Station, Turramurra Green	No	NA	\$15,000	\$17,850	2,680	S	\$6.66								
		Subtotal			\$568,650	\$676,694				\$252.50							
		TOTAL TRANSPORT, CYCLE AND PEDESTRIAN MANAGEMENT			\$568,650	\$676,694				\$252.50							
	Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - footpaths																
	Streetscape Improvements																
	Full width footpath (of varying width) with polished concrete																
	Streetscape Works - Main Commercial Streets	Rohini Street - 400m (Northern side, Pacific Hwy - Olive Lne)	No	NA	\$496,000	\$590,240	2,680	I	\$220.24								
	Streetscape Works - Main Commercial Streets	Ray Street - 40m (Eastern side, Forbes Lane - Pacific Hwy)	No	NA	\$50,960	\$60,642	2,680	M/E	\$22.63								
	Streetscape Works - Main Commercial Streets	Eastern Rd-120m (West side,Rohini St-Olive Lne,East side, Rohini-Gilroy)	No	NA	\$152,880	\$181,927	2,680	S	\$67.88								
	Streetscape Works - Main Commercial Streets	Gilroy Road - 60m (South side, Eastern Rd - Gilroy Lane)	No	NA	\$105,000	\$124,950	2,680	S	\$46.62								
	Streetscape Works - Main Commercial Streets	Turramurra Ave - 50m (West side, Pacific Hwy - Gilroy Lne)	No	NA	\$87,500	\$104,125	2,680	M/E	\$38.85								
	Streetscape Works - Main Commercial Streets	Pacific Hwy - 280m (North side, Ray-Railway bridge,Rohini - Turramurra)	No	NA	\$728,000	\$866,320	2,680	S	\$323.25								
	Streetscape Works - Main Commercial Streets	Kissing Point Road - 130m (Both sides, Pacific Hwy - Stonex Lne)	No	NA	\$261,500	\$311,185	2,680	M/E	\$116.11								
	Streetscape Works - Main Commercial Streets	Forbes Lane - 175m (Both sides)	No	NA	\$235,550	\$280,305	2,680	M/E	\$104.59								
	Streetscape Works - Main Commercial Streets	Gilroy Lane - 190m (Both sides)	No	NA	\$267,900	\$318,801	2,680	L/E	\$118.94								
	Two metre (2m) wide footpath with polished concrete and landscaped verge																
	Streetscape Works - Main Commercial Streets	Rohini St-140m (Nth side, Olive - Ray St, Sth side, Ray St - Eastern Rd)	No	NA	\$546,800	\$650,692	2,680	M	\$242.80								
	Streetscape Works - Main Commercial Streets	Ray St-200m (West, Pacific Hwy-Railway, East side,Forbes Lne-Railway)	No	NA	\$542,200	\$645,218	2,680	M	\$240.75								
		Subtotal			\$3,474,290	\$4,134,405				\$1,542.69							

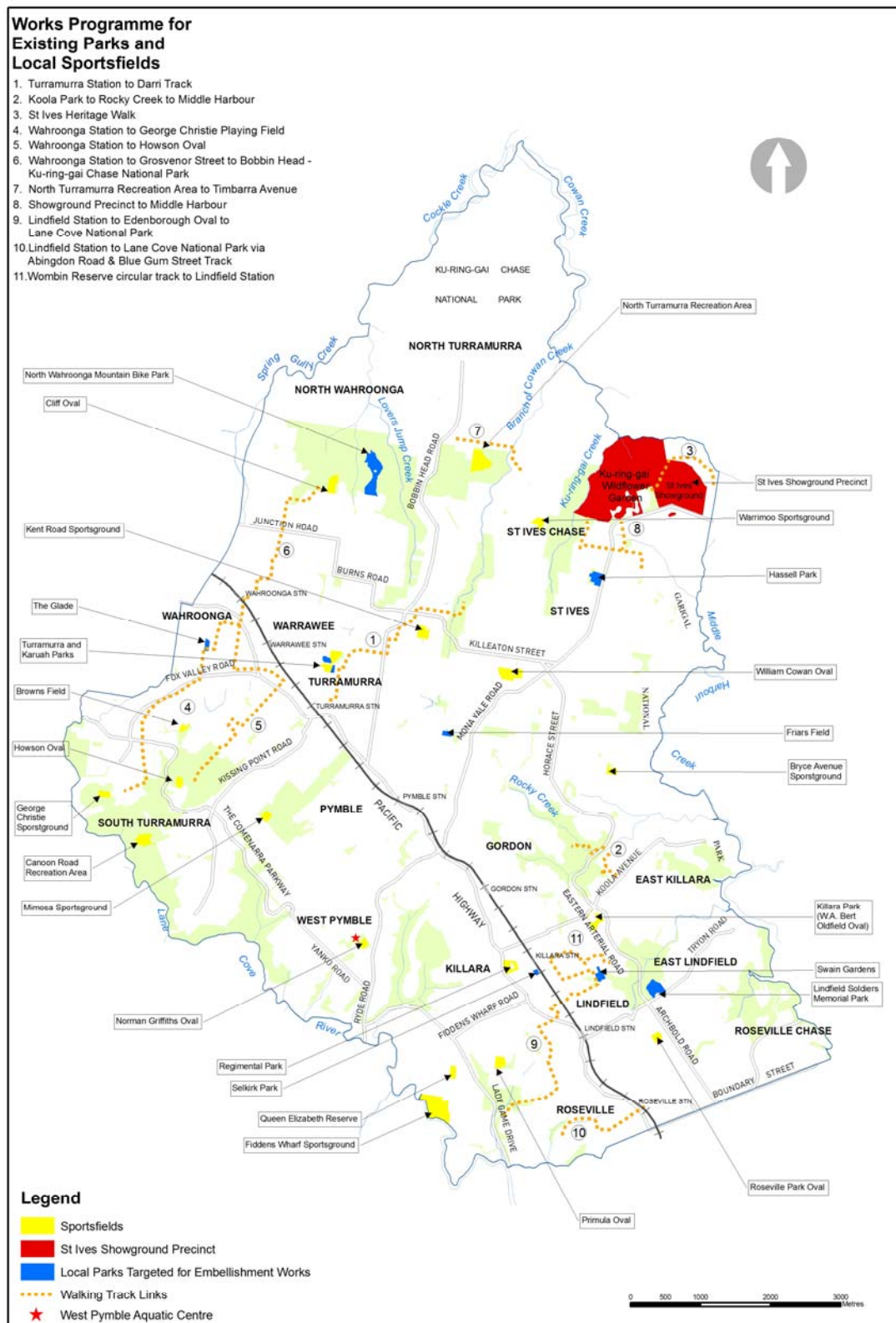
Area: Turramurra Town Centre																
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage (continued)																
Works Programme Items			Works Details						Contribution	Contributions by Trip Generation						
Method	Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person	Dwelling House	Bedsit Studio 1B	Dwellings 2 bedroom	Dwellings 3+ bedroom	Dwelling Seniors	Per metre ² Retail	Per metre ² Business
										0.85	0.40	0.50	0.65	0.45	4.60	2.00
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - Street and Pedestrian Lighting																
	Street and Pedestrian Lighting															
	Main Road Town Centre (Area 1) 9m high street lighting 15m c/c	Rohini Street, Pacific Highway, Ray Street, Kissing Point Road, Turramurra Avenue, Eastern Road	No	NA	\$792,000	\$942,480	2,680	M	\$351.67							
	Main Road Town Centre Adjacent to Rail (Area 1) 9m high street lighting 15m c/c	Rohini Street, Pacific Highway	No	NA	\$160,000	\$190,400	2,680	M	\$71.04							
	Main Road - Adjacent to residential (Area 2) 9m high street lighting 15m c/c	Kissing Point Road	No	NA	\$45,000	\$53,550	2,680	M	\$19.98							
	Minor Road - Adjacent to residential (Area 4) 6m high street lighting 10m c/c	Ray Street, Gilroy Road	No	NA	\$535,500	\$637,245	2,680	L	\$237.78							
	Laneway Town Centre (Area 5) 4.5m high street lighting 10m c/c	Stonex Lane, Gilroy Lane, Forbes Lane	No	NA	\$147,000	\$174,930	2,680	M	\$65.27							
	Subtotal				\$1,679,500	\$1,998,605			\$745.75							
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - Town Centre streets and lanes - undergrounding of overhead powerlines																
	Undergrounding of Overhead Powerlines															
	Undergrounding of power on main commercial streets	Rohini Street	No	NA	\$1,225,000	\$1,457,750	2,680	M	\$543.94							
	Undergrounding of power on main commercial streets	Pacific Highway	No	NA	\$1,400,000	\$1,666,000	2,680	M	\$621.64							
	Undergrounding of power on main commercial streets	Turramurra Avenue	No	NA	\$1,225,000	\$1,457,750	2,680	M	\$543.94							
	Undergrounding of power on main commercial streets	Gilroy Road	No	NA	\$1,050,000	\$1,249,500	2,680	L	\$466.23							
	Undergrounding of power on main commercial streets	Ray Street	No	NA	\$332,500	\$395,675	2,680	M	\$147.64							
	Undergrounding of power on main commercial streets	Kissing Point Road	No	NA	\$315,000	\$374,850	2,680	M	\$139.87							
Subtotal				\$5,547,500	\$6,601,525			\$2,463.26								
Local Roads, Local Bus Infrastructure, Local Drainage: Streetscape Improvements - All Streets - Street tree planting																
	Street Tree Planting															
	Town Centre - Main Road - Native/Exotic	Pacific Highway	No	NA	\$180,000	\$214,200	2,680	M	\$79.93							
	Town Centre - Retail/Commercial - Native /Exotic	Ray Street, Forbes Lane, Duff Street, Stonex Lane, Kissing Point Road, Rohini Street, Gilroy Lane, Gilroy Road, New Street, Turramurra Avenue	No	NA	\$456,000	\$542,640	2,680	M-L	\$202.48							
	Subtotal				\$636,000	\$756,840			\$282.40							
	TOTAL STREETSAPES				\$11,905,940	\$14,168,049			\$5,394.15							
TOTAL TURRAMURRA TOWN CENTRE WORKS					\$2,275,200	\$17,162,585	\$23,060,895									
Local Roads, Local Bus Infrastructure, Local Drainage: Supporting Information and Management																
	Management, Data and supporting studies	At 1% of total project costs	No	NA	NA	\$288,261	2,680	S-L	\$107.56							
	Subtotal					\$288,261										
	TOTAL KEY COMMUNITY INFRASTRUCTURE CATEGORY: LOCAL STREETS AND ROADS; AND LOCAL BUS INFRASTRUCTURE						\$23,349,156									

Works Programmes: Local roads; Local bus facilities and Local drainage facilities - Wahroonga

Area: Wahroonga Local Centre									
Key Community Infrastructure Category: Local Roads, Local Bus Infrastructure and Local Drainage									
Works Programme Items				Works Details					Contributions
	Description of Work	Location of Work	Land Acquisition	Total Land Cost	Construction Cost	Total Capital Cost	Contributing Population	Timing SMILER	Per Person
Catchment = Wahroonga Local Centre									1529
Local Roads, Local Bus Infrastructure and Local Drainage: New Streets and Street Modifications									
	Road Modifications								
	Road modification/footpath widening and minor drainage works	Redleaf Lane	NA	NA	\$75,000	\$89,250	1,529	M	\$58.37
	New traffic signals	Intersection Illoura Avenue and Millewa Avenue	NA	NA	\$250,000	\$297,500	1,529	I	\$194.57
	Complete partial/existing pedestrian crossing	Millewa Avenue/Coonanbarra Rd	NA	NA	\$10,000	\$11,900	1,529	S	\$7.78
	Subtotal		NA	NA	\$335,000	\$398,650			\$260.73
Local Roads, Local Bus Infrastructure and Local Drainage: Streetscape Improvements - Commercial Town Centres									
	Streetscape Works - Main Commercial Streets								
	Footpath works, planter beds and landscaping, new roundabout	Redleaf Avenue, Railway Avenue and Coonanbarra Road, Wahroonga Town Centre (Stages 2 and 3 only)	NA	NA	\$270,000	\$321,300	1,529	R	\$210.14
	Stage 2: 2004-2005 and Stage 3: 2005-2006								
	Note: Only works which were funded by Council are included in this Contributions Plan. Some works were funded by the Wahroonga Chamber of Commerce and these are <u>not</u> subject to recoupment or additional funding.								
	Subtotal				\$270,000	\$321,300			\$210.14
	TOTAL WAHROONGA LOCAL CENTRE WORKS		NA	NA	\$605,000	\$719,950			\$476.75
Local Roads, Local Bus Infrastructure, Local Drainage: Supporting Information and Management									
	Management, Data and supporting studies	At 1% of total project costs	NA	NA	NA	\$8,999	1,529	S-L	\$5.89
	Subtotal					\$8,999			
	TOTAL KEY COMMUNITY INFRASTRUCTURE CATEGORY: LOCAL STREETS AND ROADS; AND LOCAL BUS INFRASTRUCTURE					\$728,949			

Works Programme Mapping

The following pages are the works programme maps for all categories of Key Community Infrastructure.



TOWN CENTRES FACILITIES PLAN - GORDON

Issued - November 2010

LOCAL ROADS

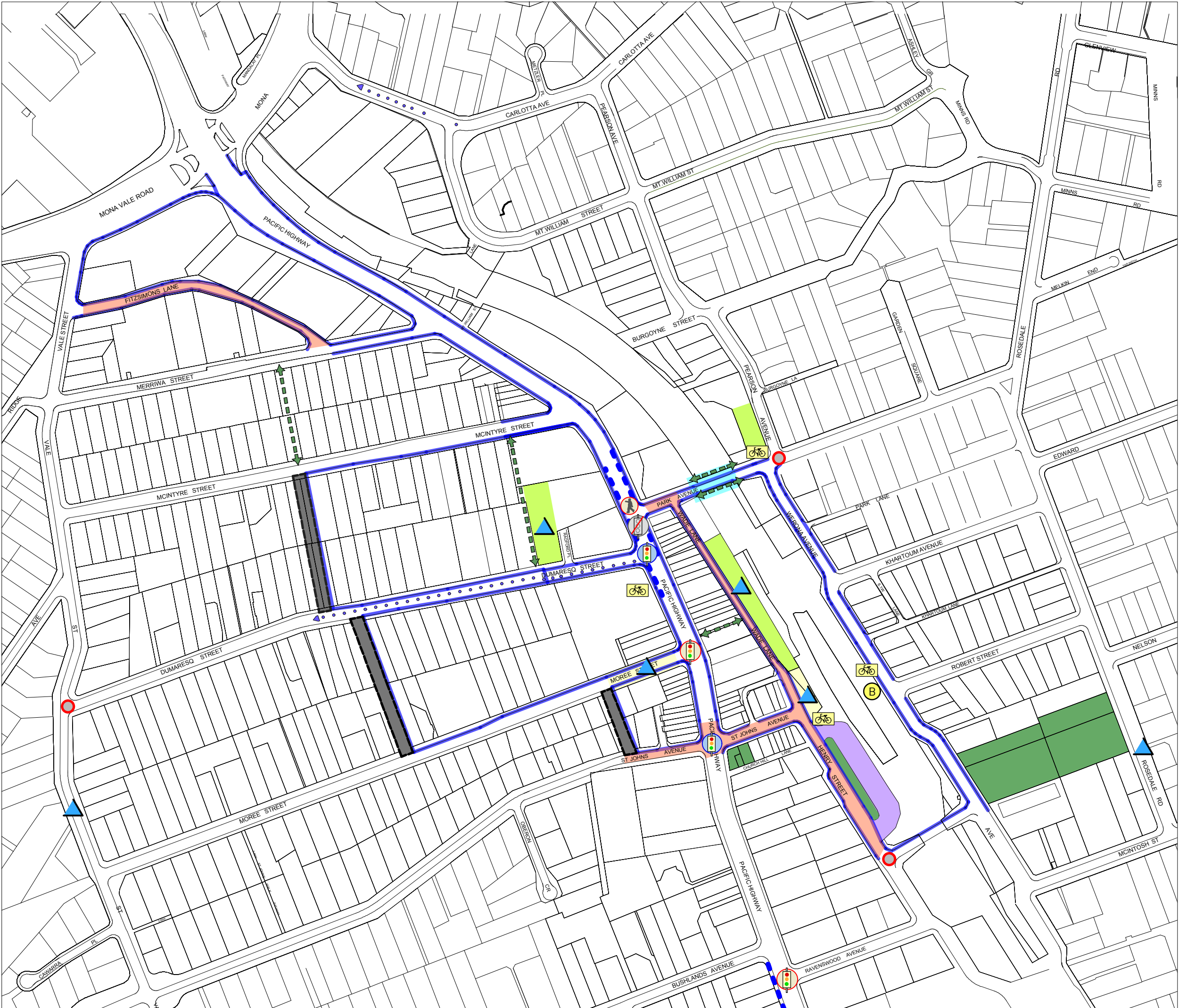
- NEW ACCESS ROADS / LANES
- PACIFIC HIGHWAY WIDENING
- MODIFICATIONS TO EXISTING ROADS AND TRAFFIC FLOW
- NEW ROUNDABOUT
- NEW SIGNALS
- ALTERED SIGNALS
- REMOVAL OF SIGNALS
- NEW PEDESTRIAN ACTIVATED SIGNALS
- STORMWATER TREATMENT SYSTEM
- NEW TAXI RANK
- NEW/UPGRADED BUS STOPS
- BICYCLE PARKING AND CYCLEWAY
- STREETScape IMPROVEMENTS
PAVING, STREET TREES, UNDERGROUND POWERLINES, STREET FURNITURE, LIGHTING
- PEDESTRIAN CONNECTIONS-IMPROVEMENTS TO EXISTING, OR NEW
- RAIL BRIDGE - IMPROVEMENTS

LOCAL SOCIAL FACILITIES

- NEW AND/OR IMPROVED COMMUNITY FACILITIES

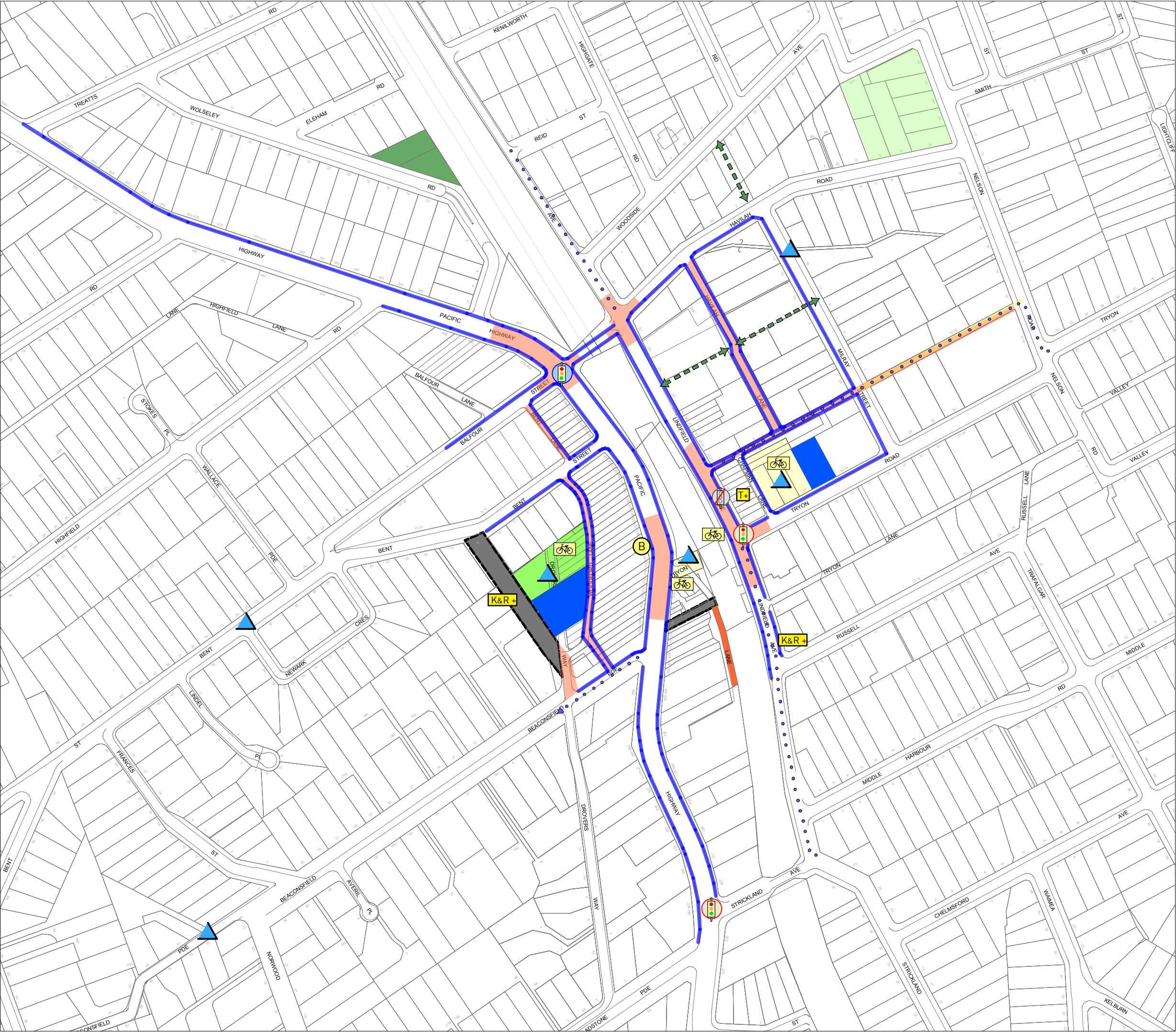
LOCAL PARKS

- EXISTING PARKS TO BE UPGRADED TO URBAN PARK STANDARD
- NEW CIVIC SPACES
- NEW URBAN PARK



TOWN CENTRES FACILITIES PLAN - LINDFIELD

Issued - November 2010



LOCAL ROADS

- NEW ACCESS ROADS / LANES
- MODIFICATIONS TO EXISTING ROADS AND TRAFFIC FLOW
- STREETScape IMPROVEMENTS
PAVING, STREET TREES, UNDERGROUND POWERLINES, STREET FURNITURE, LIGHTING
- NEW ROUNDABOUT
- NEW SIGNALS
- ALTERED SIGNALS
- REMOVAL OF SIGNALS
- NEW PEDESTRIAN ACTIVATED SIGNALS
- STORMWATER TREATMENT SYSTEM
- NEW TAXI RANK
- NEW KISS AND RIDE
- NEW/UPGRADED BUS STOPS
- BICYCLE PARKING AND CYCLEWAY
- PEDESTRIAN CONNECTIONS-IMPROVEMENTS TO EXISTING, OR NEW

LOCAL SOCIAL FACILITIES

- NEW AND/OR IMPROVED COMMUNITY FACILITIES

LOCAL PARKS

- EXISTING PARKS TO BE UPGRADED TO URBAN PARK STANDARD
- NEW CIVIC SPACES
- NEW URBAN PARK

TOWN CENTRES FACILITIES PLAN - PYMBLE

Issued - November 2010

LOCAL ROADS

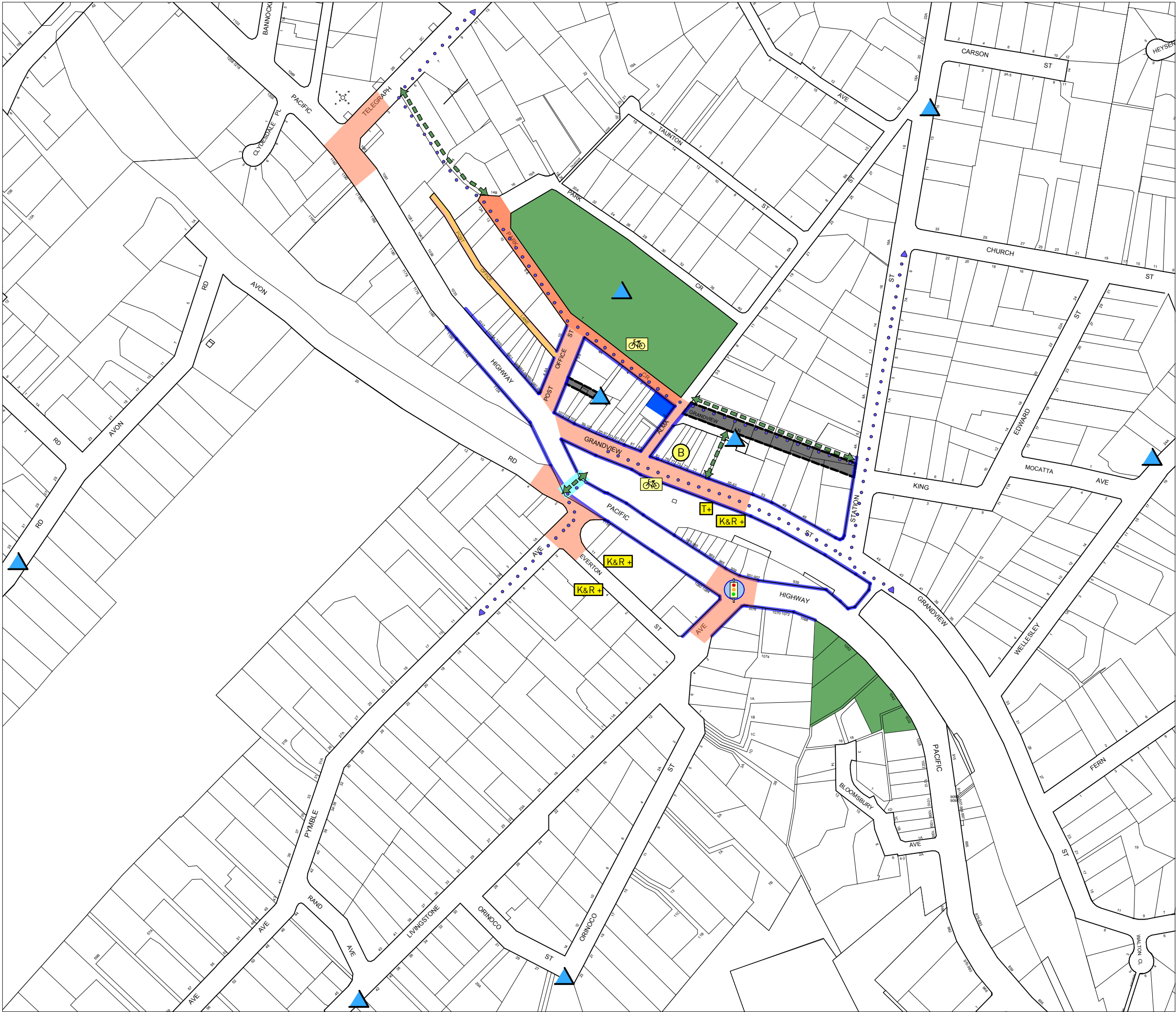
- NEW ACCESS ROADS / LANES
- MODIFICATIONS TO EXISTING ROADS AND TRAFFIC FLOW
- NEW ROUNDABOUT
- NEW SIGNALS
- ALTERED SIGNALS
- REMOVAL OF SIGNALS
- NEW PEDESTRIAN ACTIVATED SIGNALS
- STORMWATER TREATMENT SYSTEM
- NEW TAXI RANK
- NEW KISS AND RIDE
- NEW/UPGRADED BUS STOPS
- BICYCLE PARKING AND CYCLEWAY
- STREETSCAPE IMPROVEMENTS
PAVING, STREET TREES, UNDERGROUND POWERLINES, STREET FURNITURE, LIGHTING
- PEDESTRIAN CONNECTIONS-IMPROVEMENTS TO EXISTING, OR NEW
- IMPROVEMENTS TO EXISTING PEDESTRIAN UNDERPASS

LOCAL SOCIAL FACILITIES

- NEW AND/OR IMPROVED COMMUNITY FACILITIES

LOCAL PARKS

- EXISTING PARKS TO BE UPGRADED TO URBAN PARK STANDARD
- NEW CIVIC SPACES
- NEW URBAN PARK



TOWN CENTRES FACILITIES PLAN - ROSEVILLE

Issued - November 2010

LOCAL ROADS

- NEW ACCESS ROADS / LANES
- PACIFIC HIGHWAY WIDENING
- MODIFICATIONS TO EXISTING ROADS AND TRAFFIC FLOW
- NEW ROUNDABOUT
- NEW SIGNALS
- ALTERED SIGNALS
- REMOVAL OF SIGNALS
- NEW PEDESTRIAN ACTIVATED SIGNALS
- STORMWATER TREATMENT SYSTEM
- NEW TAXI RANK
- NEW KISS AND RIDE
- NEW/UPGRADED BUS STOPS
- BICYCLE PARKING AND CYCLEWAY
- STREETScape IMPROVEMENTS
PAVING, STREET TREES, UNDERGROUND POWERLINES, STREET FURNITURE, LIGHTING
- PEDESTRIAN CONNECTIONS-IMPROVEMENTS TO EXISTING, OR NEW

LOCAL SOCIAL FACILITIES

- NEW AND/OR IMPROVED COMMUNITY FACILITIES
- RELOCATION OF EXISTING COMMUNITY FACILITIES

LOCAL PARKS

- EXISTING PARKS TO BE UPGRADED TO URBAN PARK STANDARD
- NEW CIVIC SPACES
- NEW URBAN PARK



TOWN CENTRES FACILITIES PLAN - ST IVES

Issued - November 2010

LOCAL ROADS

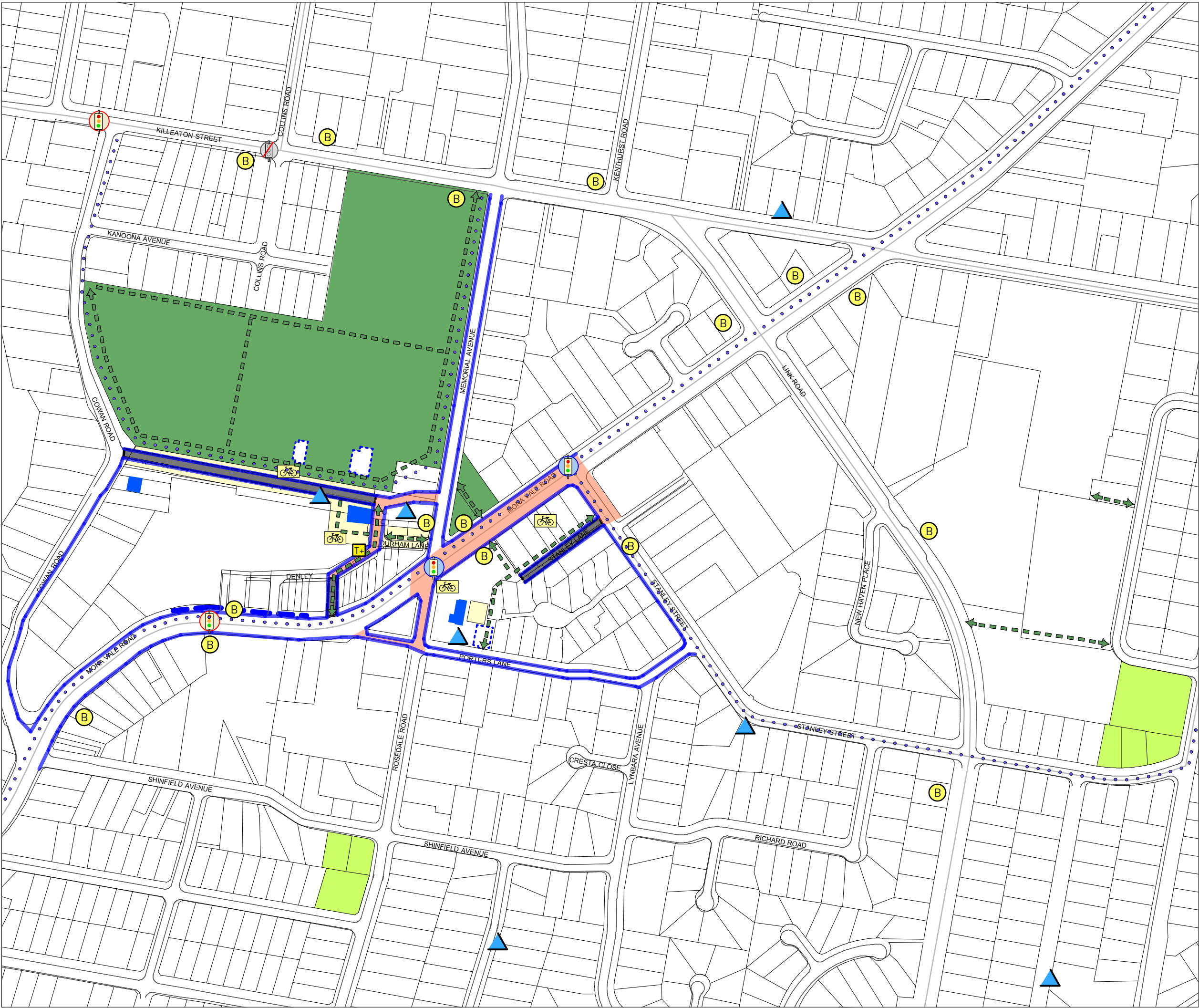
- NEW ACCESS ROADS / LANES
- MAIN ROAD WIDENING
- MODIFICATIONS TO EXISTING ROADS AND TRAFFIC FLOW
- NEW ROUNDABOUT
- NEW SIGNALS
- ALTERED SIGNALS
- REMOVAL OF SIGNALS
- NEW PEDESTRIAN ACTIVATED SIGNALS
- STORMWATER TREATMENT SYSTEM
- NEW TAXI RANK
- NEW/UPGRADED BUS STOPS
- BICYCLE PARKING AND CYCLEWAY
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PAVING, STREET TREES, UNDERGROUND POWERLINES, STREET FURNITURE, LIGHTING
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LOCAL SOCIAL FACILITIES

- NEW AND/OR IMPROVED COMMUNITY FACILITIES
- RELOCATION OF EXISTING COMMUNITY FACILITIES

LOCAL PARKS

- EXISTING PARKS TO BE UPGRADED TO URBAN PARK STANDARD
- NEW CIVIC SPACES
- NEW URBAN PARK



TOWN CENTRES FACILITIES PLAN - TURRAMURRA

Issued - November 2010

LOCAL ROADS

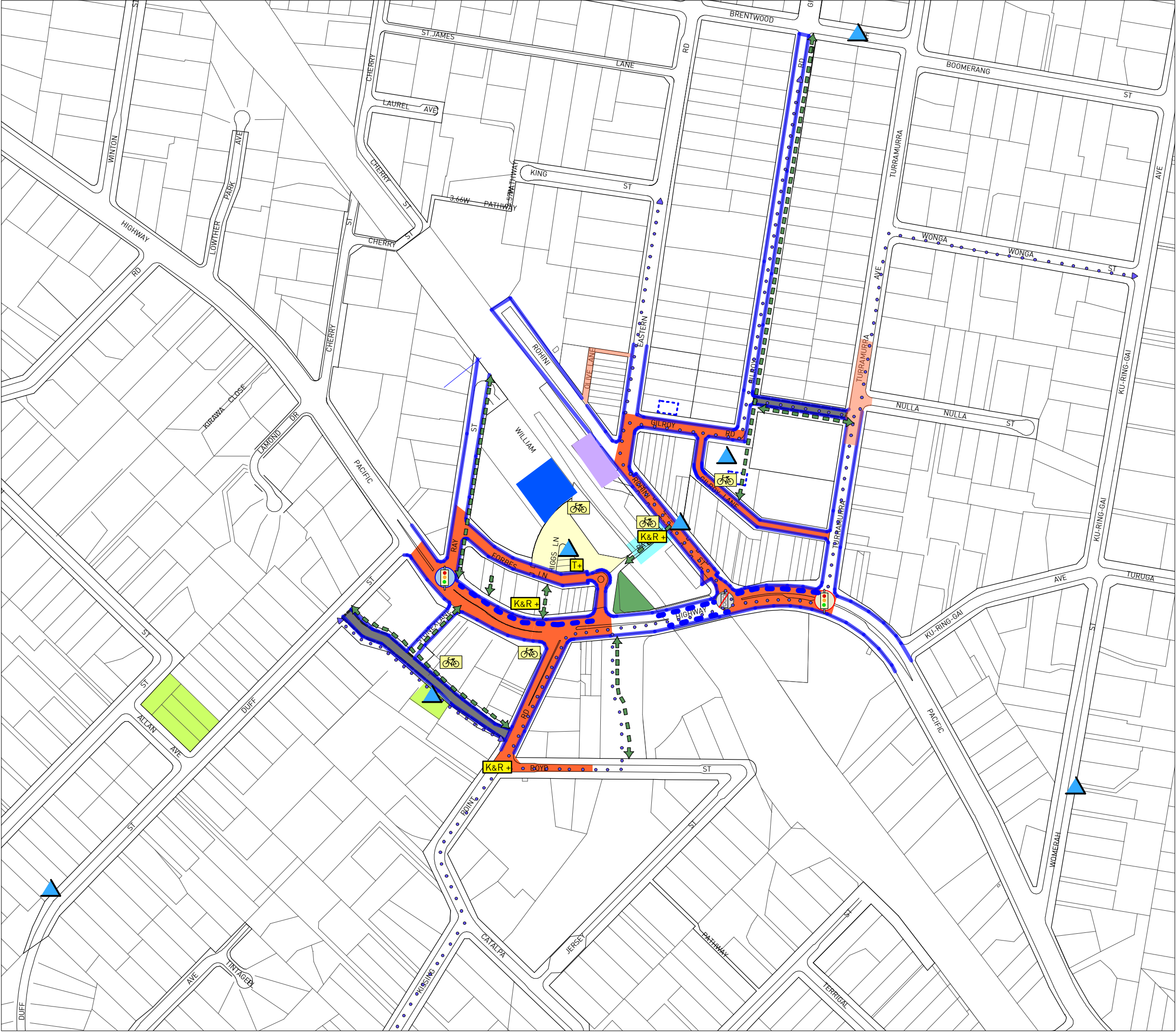
- NEW ACCESS ROADS / LANES
- PACIFIC HIGHWAY WIDENING
- MODIFICATIONS TO EXISTING ROADS AND TRAFFIC FLOW
- NEW ROUNDABOUT
- NEW SIGNALS
- ALTERED SIGNALS
- REMOVAL OF SIGNALS
- NEW PEDESTRIAN ACTIVATED SIGNALS
- STORMWATER TREATMENT SYSTEM
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PAVING, STREET TREES, UNDERGROUND POWERLINES, STREET FURNITURE, LIGHTING
- PEDESTRIAN CONNECTIONS-IMPROVEMENTS TO EXISTING, OR NEW
- IMPROVEMENTS TO EXISTING PEDESTRIAN OVERPASS

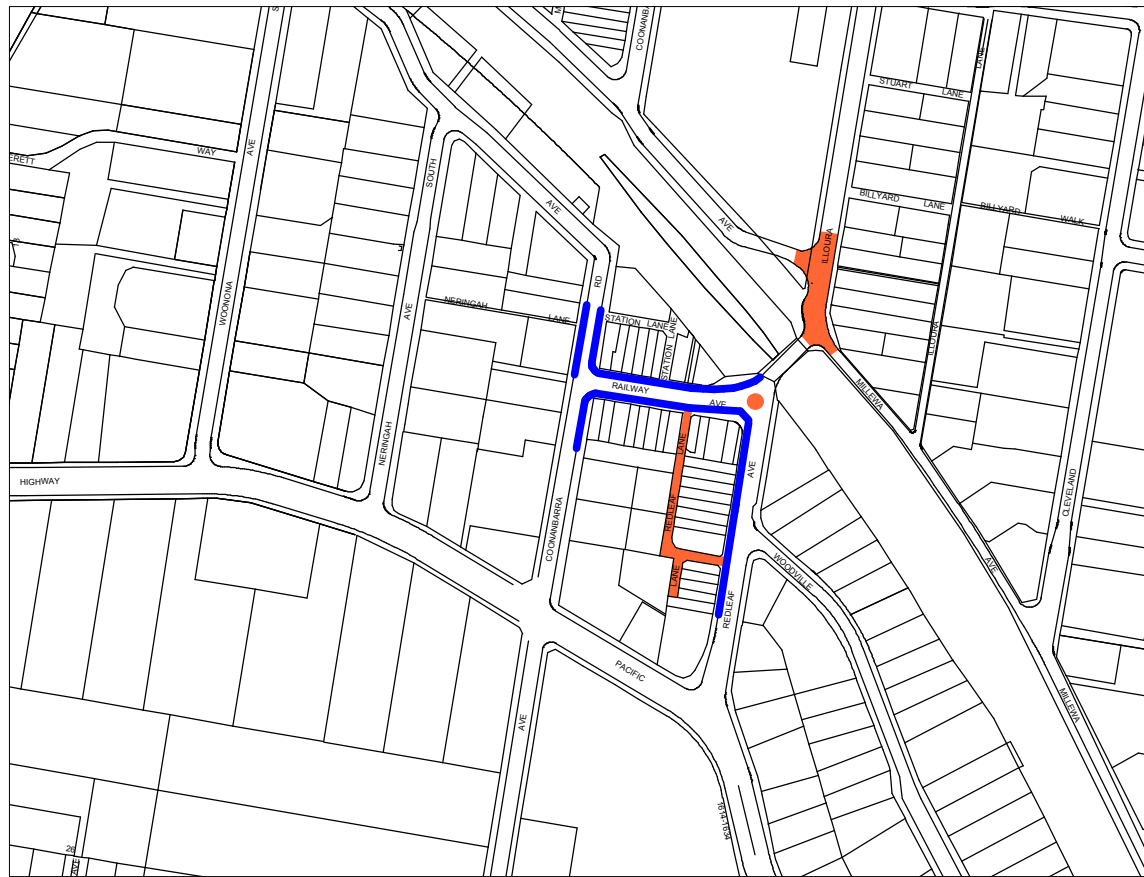
LOCAL SOCIAL FACILITIES

- NEW AND/OR IMPROVED COMMUNITY FACILITIES
- RELOCATION OF EXISTING COMMUNITY FACILITIES

LOCAL PARKS

- EXISTING PARKS TO BE UPGRADED TO URBAN PARK STANDARD
- NEW CIVIC SPACES
- NEW URBAN PARK





LOCAL CENTRE FACILITIES PLAN - WAHROONGA

Issued - November 2010

LOCAL ROADS

-  MODIFICATIONS TO EXISTING ROADS AND TRAFFIC FLOW
-  STREETScape IMPROVEMENTS
PAVING, STREET TREES, UNDERGROUND POWERLINES, STREET FURNITURE, LIGHTING