



DEVELOPMENT

CONTRIBUTIONS PLAN

1993-1998

(December 1997 Revision)

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PART A CONTRIBUTION RATES

A-1. INTRODUCTION

This document is the Hornsby Shire Development Contributions Plan for the period between July 1, 1993 to June 30, 1998. This Plan is made under Section 94 AB of the Environmental Planning & Assessment Act, 1979. It has three parts, comprising the following:-

- Part A Which includes this section, provides an outline of uses subject to special consideration and a summary of contribution rates applicable to various types of development throughout the Shire and any amendments to the plan.
- Part B This part establishes the Statutory framework of the Plan, including matters such as objectives, definitions, timing of payments, and review mechanisms.
- Part C This part outlines the Strategy of Council for the provision of public facilities throughout the Shire during the term of the Plan, the nexus between new development and proposed public facilities, and the calculation of contribution rates.

In addition to the above Appendix A provides a detailed works program for the expenditure of Section 94 funds and general Council funds for the purpose of providing public facilities during the term of this plan.

A-2. SPECIAL CONSIDERATION FOR RETIREMENT VILLAGE DEVELOPMENT

Council will consider, on an individual basis, each Retirement Village proposal lodged for Council's approval in accordance with the provisions of State Environmental Planning Policy No. 5 - Accommodation for Aged and Disabled Persons. Where Council considers it is justifiable that such a proposal contribute in the provision of additional public facilities, Council may apply to the NSW Minister for Planning to obtain approval for the levying of Section 94 Contributions as a condition of development approval.

A-3. DISCRETION RELATING TO CERTAIN NON-RESIDENTIAL USES

Projected development in the Hornsby Town Centre is based on gross leasable floor space for retail development and gross floor area for commercial development.

While the plan generally refers to "residential" and "non-residential" floor space, there may be certain uses, such as cinemas, restaurants, civic buildings and the like, which have not necessarily been included as either "commercial" or "retail" floor space. In these instances, the Council may use its discretion to determine whether the proposed use will generate a demand for public facilities which have not been provided in the Town Centre.

A-4. SUMMARY OF CONTRIBUTION RATES

A summary of the contribution rates within the Shire of Hornsby is detailed in Table 1. The table is divided into 9 districts and 3 other specific areas and describes the contribution for each general type of community facility and service. More detailed information on the contribution rates is described in Part C of this report.

A-5. AMENDED PLAN: DISTRICT 8 - CHERRYBROOK

This Contributions Plan has been amended as it applies to District 8 (Cherrybrook) due to the recognition of the contribution by Australian Housing and Land (developer of land for residential purposes) of land for the purpose of open space in the Cherrybrook area.

Australian Housing and Land (A.H. & L.), in 1993, lodged appeals with the Land and Environment Court, asserting that the developer contributions required by Council for District 8 did not reflect the land contributed to Council by A. H. & L. for public purposes (open space).

Justice Stein, in his decision of 17th September, 1993, found that whilst Section 94 contributions should be paid by A. H. & L., those rates needed to be adjusted to recognise and offset the amount of land contributed by A. H. & L. for open space purposes. Equally, contributions by other applicants needed to be adjusted to reflect the previous under-estimation of the true rate to be borne by other contributors.

The new rates reflect the appropriate discounts to A. H. & L. and adjustments to other applicants in Cherrybrook, within the context of the decision of the Land and Environment Court.

The adjustments ensure that Council can fulfil its commitments in accordance with the Work Program identified in the Contribution Plan.

For ease of monitoring and administering the Contribution Plan, the adjustment of costs within the Plan has been made to the open space contribution rate. This is considered appropriate given that the need for the amended plan has arisen due to the recognition of surplus open space contributed by A. H. & L. and the need for that surplus land to be credited against any contribution made by A. H. & L.

Amended: 30th September, 1994.

A-6. AMENDED PLAN: DISTRICT 3 - HORNSBY TOWN CENTRE

The Contributions Plan has been amended providing for inclusion of the Hornsby Town Centre urban design/landscaping project within Council's work program.

The project is intended to reinforce and enhance the Town Centre precinct as a subregional shopping and commercial centre and to upgrade the overall visual environment of the centre for pedestrians, members of the local workforce, residents and others who visit and utilise the services of the centre.

The project will be achieved through the development of defined green space linkages including detailed street planting, street furniture and upgraded footpaths and other design features which will improve the visual quality of the area and provide linkages to existing open space and parks within the area.

Amended: 31st May, 1995.

A-7. AMENDED PLAN: BUSHFIRE SERVICES

The Contributions Plan has been amended as it applies to bushfire services due to increased cost in upgrading the bushfire services brigade training facility and headquarters. The existing facilities are at capacity and have difficulty providing effective resources for the training of volunteers or operating as a base to provide or manage bushfire protection management strategies. Given the current and expected demands on the services, the time frame identified in the works program has been revised following the January 1994 bushfires.

Amended: 31st May, 1995.

A-8. AMENDED PLAN: DEDICATION OF LAND FOR ROAD WIDENING AND ROADWORKS

The Contributions Plan has been amended to clarify that Council has the power to impose conditions to a development consent related to dedication of land for road widening, roadworks and including footpaving, kerb and guttering and drainage immediately adjoining a development site under Section 94 of the Act.

Amendments are made to B.4 'The Purpose of the Plan' under Part B (Administration) at Clause B.4.0(6) and Clause B-4.0(e).

Amended: 31st May, 1995

A-9. AMENDED PLAN - 1996 REVIEW

During May - September 1996, Council undertook a major review of this Plan. This involved:

- inclusion of actual costs for all completed projects;
- inclusion of updated cost estimates for projects incomplete or not commenced; and
- inclusion of various new works eligible for funding from development contributions;
- provision for payment of development contributions for Council provided stormwater quality improvement devices in lieu of on-site provision (new section C-5);
- amendments to, or inclusion of new, open space acquisition and embellishment projects;
- inclusion of an upgraded community hall at Berowra.

Amended: 26th March, 1997

A-9. AMENDED PLAN - 1997 REVIEW

In September, 1997, Council identified significant additional residential and commercial development in the Hornsby Town Centre. This additional development justified the amendment of the Plan to allow the inclusion of a number of works required to serve the greater resident and employee population of the Town Centre.

Other amendments were made due to:

- the slightly increased Shire-wide population growth projection for the 5-year period;
- newly available, updated cost estimates for certain open space projects;
- the need to correct certain minor errors in the works program and the Plan generally;

• a newly identified need to carry out a traffic study in the north Thornleigh - Westleigh area. Amended: 15 December, 1997.

HORNSBY SHIRE CONTRIBUTIONS PLAN (H:\STRAT\WW\DL\S94PLAN.NEW)

TABLE 1 SUMMARY OF	CONTRIBUTION	ON RATES											
Public Facility													
District	D 1	D 2	D 3	D 4	D 5	D 6	D 7	D	8	D	9	Dural	Extractive
Land Use	Residential	Residential	Residential	Residential	Residential	Residential	Residential	Resid	lential	Residential	Commercial	Service	Industry
												Centre	
Localities	Beecroft	Normanhurst	Hornsby	Asquith	Berowra	Arcadia	Brooklyn	Castl	e Hill	Hornsby T	own Centre		· I
	Carlingford	Pennant Hills	ex.Town Centre	Hornsby Heights	Berowra Heights		Dangar Is	Cherry	/brook				· I
	Cheltenham	Thornleigh	Wahroonga	Mt Colah	Cowan	Dural (rural)		Dural (urban)				· I
	Eastwood	Westleigh	Waitara	Mt Kuring-gai		Galston							
	Epping	W Pennant Hills	3			Glenorie		General	AH&L				
	North Epping					Visemans Ferry							
Rate:	per person	per person	per person	per person	per person	per person	per person	per person	per person	per person	per sq. metre	per sq m	per tonne
Open Space	\$1,126.30	\$820.30	\$1,003.49	\$753.50	\$676.32	\$906.92	\$873.09	\$1,847.72	\$1,076.29	\$1,150.85	\$0.00	\$0.00	\$0.00
Civic Improvements	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$789.36	\$38.80	\$0.72	\$0.00
Community Facilities	\$186.31	\$274.57	\$156.45	\$202.68	\$185.00	\$282.31	\$156.45	\$353.93	\$353.93	\$156.45	\$14.34	\$0.00	\$0.00
Waste Management	\$42.17	\$42.17	\$42.17	\$42.17	\$42.17	\$42.17	\$42.17	\$42.17	\$42.17	\$42.17	\$0.00	\$0.00	\$0.00
Bushfire Services	\$5.48	\$5.48	\$5.48	\$5.48	\$5.48	\$5.48	\$42.86	\$5.48	\$5.48	\$5.48	\$0.00	\$0.00	\$0.00
Administration	\$57.11	\$57.11	\$57.11	\$57.11	\$57.11	\$57.11	\$57.11	\$57.11	\$57.11	\$57.11	\$1.43	\$0.00	\$0.00
Traffic Management	\$0.00	\$12.26	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$501.70	\$501.70	\$600.99	\$24.04	\$0.19	\$0.51
Total	\$1,417.37	\$1,211.89	\$1,264.70	\$1,060.94	\$966.08	\$1,293.99	\$1,171.68	\$2,808.11	\$2,036.68	\$2,802.41	\$78.61	\$0.91	\$0.51
Occupancy Rates													
Medium Density	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	2.50	1.95			
Single Allotment	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50	3.50			
Contributions													
Medium Density	\$3,543.43	\$3,029.73	\$3,161.75	\$2,652.35	\$2,415.20	\$3,234.98	\$2,929.20	\$7,020.28	\$5,091.70	\$5,464.70			
Single Allotment	\$4,960.80	\$4,241.62	\$4,426.45	\$3,713.29	\$3,381.28	\$4,528.97	\$4,100.88	\$9,828.39	\$7,128.39	\$9,808.44			
Note all rates are subje	ct to indexation	n and periodic	review										<u> </u>

TABLE 1 SUMMARY OF CON	TRIBUTION RA	ATES page	2										
	D1	D 2	D 3	D 4	D 5	D 6	D 7	D 8	D8 AH&L	D 9	HTC	DSC	Ext Ind
	\$/person	\$/person	\$/person	\$/person	\$/person	\$/person	\$/person	\$/person	\$/person	\$/person	\$/sqm	\$/sqm	\$/tonne
Open Space													
Augmentation	622.48	701.91	885.10	635.11	557.93	788.53	754.70	774.65	774.65	552.19	0.00	0.00	0.00
Acquisition	503.82	118.39	118.39	118.39	118.39	118.39	118.39	1,073.07	301.64	598.66	0.00	0.00	0.00
Civic Improvements													
Florence Mall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	314.76	10.03	0.00	0.00
Hunter Mall	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	349.08	11.12	0.00	0.00
Drainage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.63	0.00	0.00
Landscape	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	125.52	5.02	0.70	0.00
Identity Signs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Community Facilities													
Library Facilities													
Pennant Hills	29.86	29.86	0.00	0.00	0.00	0.00	0.00	29.86	29.86	0.00	0.00	0.00	0.00
Hornsby	53.29	53.29	53.29	53.29	53.29	53.29	53.29	53.29	53.29	53.29	0.00	0.00	0.00
Books	51.39	51.39	51.39	51.39	51.39	51.39	51.39	51.39	51.39	51.39	0.00	0.00	0.00
Childcare													
Hornsby TC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.34	0.00	0.00
Cherrybrook	0.00	0.00	0.00	0.00	0.00	0.00	0.00	177.59	177.59	0.00	0.00	0.00	0.00
Shire	51.77	51.77	51.77	51.77	51.77	51.77	51.77	0.00	0.00	51.77	0.00	0.00	0.00
Neighbourhood Centres			-							-			
Cherrybrook	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.90	20.90	0.00	0.00	0.00	0.00
Youth													
Cherrybrook	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.90	20.90	0.00	0.00	0.00	0.00
Community Centres/Halls	-		0.00		0.00		0.00			0.00	0.00	0.00	
Pennant Hills	0.00	88.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mt Colah	0.00	0.00	0.00	46.23	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Berowra Halls	0.00	0.00	0.00	0.00	28.55	0.00		0.00	0.00	0.00	0.00	0.00	0.00
Galston	0.00	0.00	0.00	0.00	0.00	125.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Waste Management					0.00		0.00						
Shire	42.17	42.17	42.17	42.17	42.17	42.17	42.17	42.17	42.17	42.17	0.00	0.00	0.00
Bushfire Services	12.17	12.11	12.17		12.11		12.17	12.11	12.17	12.17	0.00	0.00	- 0.00
Brooklyn	0.00	0.00	0.00	0.00	0.00	0.00	37.38	0.00	0.00	0.00	0.00	0.00	0.00
Shire	5.48	5.48	5.48	5.48	5.48	5.48		5.48	5.48	5.48	0.00	0.00	0.00
Administration	- 0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.00	0.00	0.00
Section 94 Plan	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	0.00	0.00	0.00
Drainage Strategy	9.20	9.20	9.20	9.20	9.20	9.20		9.20	_	9.20	0.00	0.00	0.00
Land Degradation Study	6.80	6.80	6.80	6.80	6.80	6.80		6.80	6.80	6.80	0.00	0.00	0.00
Open Space Plan	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.00	0.00	0.00
Social Plan	0.48	0.48	0.48	0.48	0.48	0.48		0.48	0.48	0.42	0.00	0.00	0.00
Section 94 Officer	35.75	35.75	35.75	35.75	35.75	35.75		35.75	35.75	35.75	1.43	0.00	0.00
Traffic Management	33.73	33.73	55.75	55.75	55.75	55.75	33.73	55.75	33.73	33.73	1.40	0.00	0.00
Roads	0.00	0.00	0.00	0.00	0.00	0.00	0.00	415.34	415.34	0.00	0.00	0.00	0.51
Traffic Management	0.00	0.00	0.00	0.00	0.00	0.00		23.68	23.68	341.52	13.66	0.00	0.00
Bus Shelters	0.00	0.00	0.00	0.00	0.00	0.00		10.44	10.44	0.00	0.00	0.00	0.00
LATM	0.00	0.00	0.00	0.00	0.00	0.00		41.80	41.80	0.00	0.00	0.00	0.00
Traffic Analysis	0.00	12.26	0.00	0.00	0.00	0.00		10.44	10.44	13.46	0.54	0.00	0.00
·	0.00	0.00	0.00	0.00	0.00	0.00		0.00	0.00	246.01	9.84	0.00	0.00
Romsey Bridge	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	∠46.01	9.84	0.00	0.00
	D 1	D 2	D 3	D 4	D 5	D 6	D7	D 8	D8 AH&L	D 9	HTC	DSC	Ext Ind
TOTAL	1,417.37			1,060.94				2,808.11		2,802.41	78.61	0.91	
IUIAL	1,417.37	1,∠11.89	1,∠04./0	1,000.94	90.08	1,∠93.99	1,171.68	∠,808.11	∠,∪36.68	∠,8∪∠.41	10.61	0.91	0.51

PART B ADMINISTRATION

B-1. LAND TO WHICH PLAN APPLIES

This Plan applies to all land within the Shire of Hornsby. The Shire and the individual Districts referred to in this Plan are shown on **Figure 1**.

B-2. NAME OF THIS PLAN

This Plan is called the "Hornsby Shire Contributions Plan" and has been amended on: 30th September, 1994: 31st May, 1995; 26th March 1997; and ... December, 1997.

B-3. RELATIONSHIP TO OTHER PLANS AND CODES

- (a) This Contributions Plan has been prepared pursuant to the provisions of Section 94 of the EP & A Act and Part 4A of the EP & A Regulations and takes effect from the date on which public notice is given pursuant to Clause 41J(4) of the EP & A Regulations.
- (b) The Contributions Plan supplements the provisions of Hornsby Local Environmental Plan 1994 and any amendment or local environmental plan which may supersede it.
- (c) The Contributions Plan supersedes all previous developer contributions policies and charges adopted by the Council prior to the adoption of this Contributions Plan.

B-4. PURPOSE OF THE PLAN

The aims and objectives of the Contributions Plan are to:

- (a) provide an overall administrative framework under which specific public facilities strategies may be implemented and co-ordinated;
- (b) enable the Council to require, as a condition of development consent, a contribution or a dedication towards the provision of public facilities including road widening or roadworks, footpaving, kerbing and guttering and drainage immediately adjacent to the development site;
- (c) enable the Council to recoup funds which it has spent in the provision of public facilities in anticipation of development;
- (d) ensure that adequate public facilities are provided for as part of any new development;
- (e) ensure that the existing community is not burdened by the provision of public facilities required as a result of future development or road widening or roadworks, footpaving, kerbing and guttering and drainage to facilitate development subject of development approval only where directly attributed to that development;
- (f) provide a comprehensive strategy for the assessment, collection, expenditure accounting and review of development contributions on an equitable basis;
 and
- (g) enable the Council to be both publicly and financially accountable in its assessment and administration of the Contributions Plan.

B-5. DEFINITIONS

"Applicant" means the person, company or organisation submitting a development application.

"Civic improvement" means a work carried out to improve the appearance or use of public areas, such as streets, malls, footpaths and the like.

"Community facility" means a building or place owned or controlled by the Council or a body of persons which may provide for the physical, social, cultural or intellectual development or welfare of the local community, but does not include a building or place elsewhere defined in this section.

"Contribution" means the dedication of land, the making of a monetary contribution or the provision of a material public benefit, as referred to in Section 94 of the EP & A Act.

"Contributions Plan" means a contributions plan referred to in Section 94AB of the EP & A Act.

"Council" means the Council of the Shire of Hornsby.

"DUAP" means the NSW Department of Urban Affairs and Planning (or its predecessor bodies)

"EP & A Act" means the Environmental Planning & Assessment Act, 1979, as amended.

"EP & A Regulations" means the Environmental Planning & Assessment Regulation, 1980, as amended.

"LEP" means a local environmental plan made by the Minister under Section 70 of the EP & A Act.

"LGA" means the local government area.

"Public facilities" means any public amenity or public service, as referred to in Section 94 of the EP & A Act, including a "community facility" and a "recreation facility", the need for which has increased or been created by development.

"Recreation facility" means a building or place used for sporting activities, recreation or leisure activities, whether or not operated for the purpose of gain, but does not include a building or place elsewhere defined in this section.

"Recoupment" means the payment of a monetary contribution to the Council to offset the cost (plus any interest) which the Council has already incurred in providing public facilities in anticipation of development.

"Settlement" means the payment of a monetary contribution, the undertaking of a work in kind or the exchange of documents for the dedication of land required as a result of new development.

"Works in kind" has the same meaning as a "material public benefit" as referred to in Section 94(2C) of the EP & A Act and means the undertaking of any work associated with the provision of a public facility.

"Works program" means the schedule of the specific public facilities for which contributions may be required, and the likely timing of provision of those public facilities based on projected rates of development, the collection of development contributions and the availability of funds from supplementary sources.

B-6. NEXUS

The Public Facilities Strategies made under this Plan must establish the nexus between the expected types of development in the area and the demand for additional public amenities and public services.

Each of the Public Facilities Strategies made under this Plan will provide a demonstration of nexus based on:

- * the anticipated nature and scope of development;
- * the capacity of public facilities currently provided in the area;
- * the anticipated demand for public facilities and infrastructure arising from the proposed development;
- * the contribution required by development to meet the anticipated demand; and
- * the nature of the works proposed to be implemented from funds generated by the development.

The contribution rates for different types of development and the proposed works to satisfy those needs are summarised in Part A and Appendix A of this report, and the formulae to be used for determining contributions is provided in Part C of this Plan

B-7. TIMING OF CONTRIBUTION

Payment of financial contributions should be finalised at the following stages -

- * development applications involving subdivision prior to the release of the linen plan;
- development application involving building work prior to the release of the building approval;
- development applications where no building approval is required at the time of issue of notification of consent, or prior to commencement of the approved development as may be determined by Council.

B-8. DEFERRED OR PERIODIC PAYMENT

- (a) Where the applicant can demonstrate that the settlement of the contribution in accordance with Clause 7 is unreasonable in the circumstances of the case, the Council may accept deferred or periodic settlement.
- (b) The applicant needs to make a written request and satisfy the Council that:
 - * there are valid reasons for deferral or periodic payment;

- * no prejudice will be caused to the community deriving benefit from the public facilities required by the proposed development;
- * no prejudice will be caused to the efficacy and operation of the plan;
- * the provision of the public facility in accordance with the adopted works schedule will not be adversely affected.
- (c) The conditions under which the Council may accept deferred or periodic settlement by way of instalments is that the instalment be paid before the work commences on any stage of the development as the amount calculated on a pro-rata basis in proportion to the overall development.
- (d) The conditions under which the Council may accept deferred or periodic settlement by way of a bank guarantee is that:
 - * the bank guarantee be by an Australian Bank for the amount of the total contribution or the amount of the outstanding contribution;
 - * the Bank unconditionally pays the guarantied sum to the Council if the Council so demands in writing not earlier than 6 months from the provision of the guarantee or completion of the work whichever occurs first:
 - * the Bank must pay the guaranteed sum without reference to the applicant or landowner or other person who provided the guarantee, and without regard to any dispute, controversy, issue or other matter relating to the development consent or the carrying out of development in accordance with the development consent;
 - * the Bank's obligations are discharged when payment to the Council is made in accordance with this guarantee or when Council notifies the Bank in writing that the guarantee is no longer required.
- (e) Any outstanding component of the contribution shall be indexed, at the date of payment, in accordance with the Indicative Borrowing Rate for NSW Local Government Authorities, as published weekly.
- (f) Indexing will be calculated from the date the contribution was due until the date of payment. The applicant will be required to pay the contribution, the accrued interest and any charges associated with establishing or operating the bank security. Where a bank guarantee has been deposited with Council, the guarantee shall not be cancelled until such time as the original contribution and accrued interest are paid.

B-9. REVIEW OF THE CONTRIBUTION RATES (INDEXATION)

- (a) The Council will review the contribution rates to ensure that the monetary contributions reflect the costs associated with the provision of the particular public facility.
- (b) The contribution rates will be reviewed, on an annual basis, through indexation of:

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 of construction costs by the Australian Bureau of Statistics' Non-dwelling Construction Implicit Price Deflator (as published in the "Australian National Accounts Income and Expenditure") in accordance with the following formula:

RC = Current IPD x C
Previous IPD

where -

"RC" is the revised contribution;

"Current IPD" is the total public Implicit Price Deflator applicable for the quarter at the time of review;

"C" is the previous contribution rate;

"Previous IPD" is the total public Implicit Price Deflator for the quarter prior to calculation of the contribution rate;

- library book purchase costs by the Consumer Price Index;
- salary costs for Council's Section 94 officer and the cost of various studies by increases in salary rates under the Local Government State Award.
- (c) The Council may also review the works schedule, the estimate of costs of the various public facilities, land acquisition costs or other aspects relating to the Contributions Plan.

PART C CONTRIBUTION STRATEGIES

C-1. OPEN SPACE AND RECREATION FACILITIES (Shire-Wide)

In establishing an appropriate level for the future provision of open space through Section 94 contributions, it is important to consider the historical level and nature of provision and establish the capacity of the Shire to provide open space resources to meet the anticipated future demand.

Hornsby Shire has enjoyed a very high level of open space for its population size over the years. The great bulk of area can be characterised as bushland, constituting more than 5000 ha in total, most of which is considered of regional importance. An examination of non-regional open space in the Shire also indicates a substantial resource of open space, when compared to many outer-ring suburbs of Sydney, with more than 4.5 hectares per 1000 persons of non-regional open space.

It is clear from the Hornsby Recreation Needs Study (1991) that residents consider this to be an important reason for living in the Shire and that there is a community expectation that this level of resource will need to be maintained to meet the needs of the future population, without compromise to the existing population.

The geographical distribution of the open space resource, having developed over many years is such that there are marked variations in both setting types, area and number of reserves between planning districts. These variations do not necessarily reflect population levels. To address this inequity, Council has instigated The Urban and Rural Park System. The purpose of this System is to provide an equitable distribution of district level parks to serve the Shire's population.

Whilst a number of reserves currently identified are now well developed, the program is intended to run over a number of years. Council also maintains a rolling five year plan for open space development. In both cases the proposals address the needs of both the existing and expected future population and thus must necessarily be funded from both Section 94 and other Council funding sources.

An examination of typical reserve sizes in the Shire, particularly at the local reserve level, tends to confirm the problems associated with an approach to open space planning that emphasises the quantitative rather than qualitative aspects. Whilst many reserves are of a high standard, a substantial number of local reserves are less than 0.5 ha in size. Of these, many have been offered as land dedication from developers. The sites have often been on steeper, less developable land, frequently fulfilling a drainage role, or affected by an overhead cable easement. Often they have poor access and many are not readily supervisable. In such cases their enjoyment as an open space resource, even if for non-structured purposes, may be seriously curtailed and the opportunities for embellishment/augmentation, and adequate long-term maintenance, are limited.

It is therefore a purpose of this Plan to provide a sustainable and equitable basis for drawing together the findings of the Hornsby Recreation Needs Study (1991) and the identified strategies of Council for Open Space in the Shire, with the expected levels of population increase and their anticipated needs. From these cross references will be derived a contribution rate per person/dwelling for future population that will meet the anticipated costs of facility and land provision.

C-1.1 Anticipated Growth and Development

In order to address the issues raised in the foregoing section, and to meet the nexus requirements of the Section 94 legislation, it is the purpose of this Contributions Plan to take a strategic approach to the levying and apportionment of Section 94 contributions. This approach is based on the following key criteria:

- Reflecting anticipated demand and preferences.
- * Being qualitative as well as quantitative in nature.
- * Matching existing levels of provision.
- * Being compatible with Council's corporate and strategic aims.
- * Being compatible with current trends in open space planning.
- * Meeting accepted accessibility criteria.

C-1.1.1 Anticipated Demand

Current trends in open space planning in NSW and Australia are emphasising the need to establish a more demand-orientated, rather than a simple standard-based, approach (refer to Department of Planning publication "Outdoor Recreation and Open Space", 1992).

A demand-orientated approach does not of itself eschew all standards. However, it develops a significantly more sophisticated and cogent argument for the level and extent of open space and recreational provision (meeting the expressed demands of a relevant population) against which standards may be tested. The principal advantages of the demand-orientated strategy over the standards based approach may be summarised as:

- * More accurate targeting takes account of population and community profile;
- * Greater flexibility can be revised when new information becomes available;
- * More realisable matches demand with location:
- * More cost effective maintains provision at appropriate levels.

The first step in assessing anticipated demand must necessarily involve analysis of expected growth and community type.

C-1.1.2 Growth Projections

A summary of growth patterns and age projections is provided below:

District 1	1,079 persons
District 2	737 persons
Districts 3 and 9	2,526 persons*
District 4	914 persons
District 5	1,297 persons
District 6	274 persons
District 7	412 persons
District 8	4,912 persons
Total	12,151 persons*

Table 2: Projected Population Increase 1993 - 1998 by District (Council Sources 1993 & * 1997)

(Note: the above population growth projections do not reflect recent State Government policy changes regarding urban consolidation nor the preparation of the Hornsby Residential Strategy by Council. They may be, therefore, subject to change before the end of this Plan's five-year life.)

While the figures above can be calculated reasonably accurately from a range of criteria, it is less easy to quantify the anticipated profile of that community at this stage. In the absence of any detail in this respect, it is fair and reasonable to assume that the incoming profile largely reflects the age profile of the existing community taken from the 1991 census.

The age profile ranges from district to district. Nonetheless the ranges for the whole Shire are broadly representative of the average trends throughout the districts. The principal differences are that the second most populous age bracket for Districts 1, 3, 7 and 9 is the 60+ years age range, rather than the 10-19 years age range for the other districts including District 8.

Age Bracket (Yrs)	No. Persons	% of Total
0 to 4	8,820	7%
5 to 9	9,877	8%
10 to 19	21,069	16%
20 to 49	55,658	44%
50 to 59	12,482	10%
60+	19,821	16%
TOTAL	127,727	100%

^{*} Sum of individual components may not total 100% due to rounding

Table 3: Existing Shire Wide Age Distribution (1991 Census)

The above figures clearly indicate the most populous age range as being in the 20 to 49 bracket with the 10 to 19 and 60+ ranges being equal in coverage. In terms of expected open space recreation requirements, it will be clear that a future population of this nature will have a wide range of requirements.

It is noted that the majority of projected population growth in the Shire can be attributed to District 8 (Cherrybrook Urban Release Area). District 8, being a newly forming urban area, is comprised of a higher proportion of its population in the lower age groups, which are more demanding of open space and outdoor recreation facilities.

For the purposes of establishing a population (total number) base for the start of the term of this Plan, the 1993 population of the Shire can be calculated by extrapolating the annual compound growth rate between the 1986 and 1991 census. This method calculates the estimated 1993 population for the Shire as 132,034 persons. It is noted that the projected population during the term of this plan represents an additional 9.03% onto the 1993 base population of the Shire.

C-1.2 Nexus

C-1.2.1 Recreation Preference and Demand

To establish existing demand and preference and as a key component of the Shire's proposed Open Space Plan, Council appointed consultants to undertake a Recreational Needs Study in 1991.

The directions gained from this Study were aimed at a longer term Open Space Plan, which contributes significantly to the immediate issue of Section 94. In particular a number of issues have specific relevance to the Section 94 Contributions Plan, in respect of anticipated demand. The major relevant findings of the Study may be summarised as:

- (i) Recreational activities preferred (in descending order):
 - Visiting parks and gardens
 - Picnics/BBQ's
 - Walking/walking the dog
 - Bushwalking
 - Swimming
 - Driving for pleasure
 - Taking the kids to the park, and
 - Tennis
- (ii) The most preferred recreational setting (in descending order):
 - Bushland
 - Outdoor sports facilities
 - Parkland
 - Waterways
 - Indoor sports facilities
 - Playgrounds and
 - Formal gardens

- (iii) A bushland setting and the activities undertaken in such an environment are extremely popular throughout the community. Analysis indicated such a setting is appreciated for its recreational opportunities as well as scenic and natural qualities and should be preserved.
- (iv) Passive recreational activities, such as visiting parks and gardens, picnicking, walking for pleasure or bushwalking and swimming, are more popular than the organised team activities of cricket or soccer with the population as a whole. However, those involved with organised team activities (typically 5 24 year olds) participate often and indicated a preference for such activities over non-sporting pursuits.
- (v) Recreational opportunities for youths are important to the whole community and should be provided by Council. This was indicated by recreational organisations and those 25-39 years and over 64 years of age in particular.
- (vi) Facilities for youths are limited to organised sport activities. Considering the large proportion of youths in Hornsby, additional facilities such as skateboard ramps/roller skating areas, BMX tracks and youth centres with activities such as basketball and snooker are desired.
- (vii) New development areas are supporting younger populations but lacking the recreational facilities to meet youths needs. This has resulted in overcrowding at facilities throughout the community.
- (viii) Residents are motivated to recreate in order to do something with family; to be with friends; get away from the usual demands of life; and to keep fit.
- (ix) There are six distinct experience type user groups in the Shire. Council should consider the needs of these groups when planning recreational settings.
- (x) The provision of facilities is considered equitable as there are no disadvantaged social groups.
- (xi) Overall, analysis indicated the lack of facilities such as cycleways, heated swimming pool, golf course, tennis courts, horse riding and youth facilities are barriers to recreational pursuits.
- (xii) The provision of night lighting at active areas such as sports fields, tennis courts and swimming pools would extend hours of use and thus provide more opportunities for use by the community.
- (xiii) There is interest in water sports but they are not pursued due to the pollution levels in the Hawkesbury River.
- (xiv) Current level of funding for recreational groups should be maintained and those aimed at specialised youth orientated activities should be increased, eg. mini bike riding, basketball.

The above findings must be considered the principal guidelines for the apportionment of Section 94 contributions when considered in association with projected growth and anticipated community profile.

C-1.2.2 Quality of Open Space

In evaluating the suitability of a given site for an open space reserve dedication/acquisition, it is critical that the quality as well as the quantity of the site and the intended augmentation be appraised. When Council has established that the land to be acquired/dedicated is of adequate size and capable of matching the demand created by development, it should be satisfied that the qualitative aspects of that land and its augmentation are appropriate. Criteria to be considered should include, but not be exclusive to, the following matters:

- Is the land of suitable gradient for the intended purposes/setting?
- Is the land readily accessible and visible from a street frontage or other public access route?
- Do any easements (drainage/transmission lines) substantially prejudice the intended purpose/enjoyment of the open space?
- Is the land bounded by the rear (rather than the side) of adjacent properties? (rear boundaries can cause dumping/access problems).
- Is the area readily supervisable where facilities for children are to be supplied?
- Is the intended purpose of facilities at the open space compatible with the private enjoyment of the adjoining properties?

C-1.2.3 Accessibility Criteria

The publication "Outdoor Recreation and Open Space Planning" (DUAP, 1992) recommends that the catchment for local and district reserves be based on accessibility criteria rather than population numbers:

- * District facility Typically comprising one local government area where users will normally not drive more than 15-30 minutes.
- * Local facility Catering to a local area where users predominantly walk or cycle to use the facility.

Given that travel times from boundary to boundary within the Shire on the longest north/south axis is generally less than 30 minutes (except in the extreme north of the Shire, where population growth is projected as minimal over the period of this Plan) it can be assumed that district facilities anywhere within the Shire are mostly capable of serving developments at any location in the Shire.

The DUAP's publication also indicates that local reserves should ideally be within 500 metres of any residence. However, where obstructions to direct access may occur (buildings, highways, railways etc), the criteria of a 10 minute walk may be a more appropriate approach (Just, 1989).

It is noted that the distinction between local, district and regional open space is not absolute and for example there will be users of local reserves attracted from a district catchment. Regional Reserves and Playing fields are considered to be separate categories of open space with a Shire wide catchment.

C-1.2.4 Compatibility with Existing Provision

Where the extent of a Section 94 contribution has been contested, the Land and Environment Court has historically 'tested' the contribution against the current level of provision enjoyed by the existing community.

It can be expected that, in the absence of any other substantiation for an increased level of provision for a future population, the court will continue to find on this basis. This Contributions Plan therefore applies existing levels of provision as the basis for future provision.

C-1.2.5 Compatibility with Current Open Space Guideline Documents

This contributions Plan has been compiled with reference to the guidelines provided from two key documents:

- (i) Outdoor Recreation and Open Space Planning Guidelines for Local Government (NSW DUAP, 1992).
- (ii) Section 94 Contributions Plans Manual (NSW DUAP, 1992)

Other references employed in developing open space strategies for this plan include:

- * Hornsby Recreation Needs Study (Manidis Roberts, 1991).
- Open Space in the Sydney region (DUAP, 1982)
- * Australian Model Code for Residential Development (Green Street Joint Venture, 1990)
- * Appropriate Amounts and Design of Open Space (Just, 1989)
- * The Urban and Rural Park System (Hornsby Shire Council)
- * Five Year Program of Improvement Works, Parks and Gardens Branch (Hornsby Shire Council 1992 and 1993)

C-1.3 Calculation of Contribution Rate

C1.3.1 Methodology Basis

As has previously been established, the principle upon which all contributions will be levied is that of existing provision of open space in the Shire. The methodology employed avoids complex formulae and is based on:

- (i) The ratio of existing population to the existing area of reserves (local, district and playing fields).
- (ii) By using the ratio determined in (i) above deriving the area of new reserves (local, district and playing fields) required to meet the demand generated by the new population.
- (iii) Converting the area required in each open space category to a number of reserves in each category, by using a standard average size for each component of the open space categories identified later within this plan.

The methodology is used to derive two components of contribution:

- Acquisition of land for new local and district reserves and playing fields.
- (ii) Augmentation of existing local and district reserves and playing fields.

The strategies and implementation proposals that follow are predicated on this approach. Also, adjustments to the contribution rates and apportionment, based on projected growth and community profile in the respective districts, have necessarily bben made. Each step in the establishment of a contribution rate and the proposed apportionment considers the relevant key components as follows:

- * Demand projections based on expressed demand of existing population (Recreation Needs Study) or, where unavailable, on accepted broad trends in recreational demand.
- * Standards-used in two ways:
 - where currently considered appropriate by the Department of Planning; and
 - where demand information is not available.
- * Existing provision using current reserves and basic facility provision as a key element in establishing future requirement models.
- * Demographics projection of population increase/decrease and anticipated community profile to establish expected demand.
- * Accessibility based on travel times around and within the LGA.

* Costs - anticipated expenditure based on existing recurrent costs and appropriate indexing.

C-1.3.2 Existing Provision of Reserves

Council has formulated an open space inventory as an appendix to its Recreation Needs Study. For simplicity, when formulating the Section 94 contributions plan, reserves in the inventory have been classified into regional (shire-wide) reserves, district reserves, local reserves and playing fields. Only those existing reserves which have been augmented/embellished to allow them to function in the designated open space categories were included.

The existing areas of open space within each of these categories are:

Regional (shire-wide) reserves 4,141ha

District reserves 113ha

Playing fields 101.6ha

Local reserves 85.4ha

In nine cases, such as Galston Reserve, where a large reserve has components of both a playing field and a district park with non-sporting recreation settings, the reserve has been counted twice. However, to avoid 'double dipping' in the calculations, the areas of these nine reserves were apportioned between district reserves and playing fields.

It is considered that sufficient provision in area and number exists for regional parks to meet both existing demand and that generated by the new population. However, to meet the need identified in the Recreation Needs Study for a variety of recreation settings such as bushland walking tracks and bicycle tracks, a program of augmentation of these parks has been formulated. A total of 9.03% of this program will be funded from Section 94 Contributions, the remainder from the General Fund and grant sources. The proportion of funding to be attributed to Section 94 Contributions reflects the anticipated demand created by the new population for these shire-wide facilities.

For the purposes of this plan, the additional area of local and district reserves and playing fields, equivalent to the demand generated by the anticipated additional population and based on proportional extension of the existing area and standard of open space was calculated.

Based on the figures derived from the inventory in April 1991 and the population at that time, the area of existing open space in each of three categories per head of population was calculated. This calculation yields the following results (see below):

Category	Total area of existing augmented/embellished reserves (ha)	Area/person (m2)				
Local reserve District reserve	85 113	6.7 8.7				
Playing field Total	101.6 299.6	8.0 23.4				
Table 4: Area of existing open space per head of population						

For the anticipated additional population during the term of this plan, the required additional open space in each category would yield:

Category	Area/person (m2)	Required additional area (ha)				
Local reserve (pop. 7,00 Cherrybrook (pop. 4,912 District reserve	2) [*] 8.7	4.7 As per Precinct Plan 10.37				
Playing field	8.0	9.53				
Table 5: Required additional open space						

In examining provision of open space throughout the Shire, a number of reserves were identified as being in a non-embellished/augmented state. This means they have not been provided with basic facilities which enable them to function in any designated open space category. However, many are assessed as having the necessary size, topography, ease of access and potential range of recreation settings to enable them to function within a designated open space category, subject to appropriate augmentation/embellishment. These existing non-embellished/augmented reserves occur near to areas of projected population increase. This further enhances their potential to satisfy the open space and outdoor recreation demands of the population generated by future development.

Therefore, it is anticipated that the majority of the demand for additional open space can be met by embellishing/augmenting existing non-embellished/augmented reserves.

To convert raw area figures to a relevant works program, the average size of existing reserves in each category was calculated and converted to reserve numbers (see below):

Category		d Additional ea (ha)	Average siz			
				area required average size existing		
Local reser Cherrybroo		4.7	0.48	17 As per Precinct Plan		
District rese	erve ´	10.37	3.66	3		
Playing field	d	9.53	2.70	3.5		
Table 6: Number of reserves required						

The above average sizes of existing reserves are also the size of reserves considered by Council's Parks and Gardens Branch to be practical in the provision of reserves which can adequately function in the relevant open space category.

An analysis of the open space inventory for the Hornsby Shire, the Hornsby Recreation Needs Study (1991), the locations of projected population growth and Council's Statutory planning controls identifies the need to acquire eleven additional reserves during the 1993-98 term of this plan. These reserves are located at:

- * Cherrybrook (refer to Figure 2) 9 reserves
- * Epping (refer to Figure 3) 1 reserve
- Berowra (refer to Figure 3) 1 playing field

The designated reserve fronting Essex Street, Epping will function as a local park providing a range of recreational experiences to residents of an area physically separated from other local recreational resources by main roads, railway lines and a proposed freeway. The site whilst providing for recreational needs of the future population of the area will have the added advantage of providing additional recreational opportunities to residents of nearby residential flats. The reserve, although limited in size, will provide for picnicking, local playground and rest park opportunities in anticipation of the future demographics of the area.

The proposed playing field at Berowra having an area of near 1.8ha will provide for active recreation and formalised sporting pursuits on a Shire wide basis. The site is located where significant population growth is expected. It is readily accessible to a majority of urban areas of the Shire in terms of travel time standards.

The Cherrybrook site north of Georges Creek will function at a level near to that of a general local reserve, but with added facilities to cater for the specific needs of the area as identified within Council's Recreation Needs Study. Accordingly, the area of this site is greater than the average area of local reserves in the Shire. The Hastings Road site will operate as a District Reserve, while the other reserves will operate at a local level.

It is noted that these reserves may be dedicated in whole or part in conjunction with the development of surrounding lands.

It is considered that the balance of the open space demands of the projected population from new development can be met by the embellishment/augmentation of existing non-embellished/augmented reserves in the Shire. It is emphasised that these existing non-embellished/augmented reserves have not been included in the calculation of the existing provision of open space. Accordingly this approach will discount the provision of land for open space where the land exists but has not been sufficiently embellished/augmented to function within the designated open space categories.

The number of non-embellished/augmented properties capable of being embellished/augmented to meet the need is:

Local reserves 11
District reserves 2
Playing fields 3

These reserves are located where the greatest population growth is expected. The properties identified to be embellished/augmented are listed in Council's works program included as Appendix A to this report. It is noted that sites to be acquired will also be required to be embellished/augmented to fuel existing Shire standard.

In addition, arising from the Berowra - Cowan Planning Strategy (1995), additional minor open space embellishment at three sites (Bambil Road, Yeramba Crescent and Turner Road) is proposed. These works have been identified as necessary in order to ensure adequate open space provision in this district. The reserves have been or will be acquired by way of free-of-cost dedication to Council. The additional embellishment works are to serve a projected population increase in District 5 of approximately 10%. Accordingly, 10% of the costs has been allocated to development contributions from District 5.

In 1997, revised development and population data suggested that population growth in District 3 was significantly lower than previously anticipated, while population growth in District 9 was significantly higher. As a result, Hornsby Park, which lies on the boundary of Districts 3 and 9, has been reallocated from District 3 to District 9. In addition, the greater population growth in District 9 (Hornsby Town Centre) has required the provision of yet further additional local open space. This matter is dealt with in Section C-1.4 Additional Open Space Requirements in District 9.

Council has also identified the need to upgrade the hockey fields at Pennant Hills Park, including the provision of one field with an all-weather synthethic surface. The estimated cost is \$743,000. As these fields are already being used at their capacity, the upgrading is necessary to allow the greater use due to the projected population increase. On this basis, it would be reasonable to levy the full cost from new development. However, the majority of the cost will be met by the primary user (the Hockey Association). In light of this, total

development contributions will be limited to 9.03% of the cost, reflecting projected population growth.

Council is to provide additional playing fields by embellishment/augmentation at Dural Park. One of these is in lieu of field previously to expected to be provided at Erlestoke Park, Cherrybrook. The total cost is estimated to be \$818,000.

Council will also construct a boardwalk, with interpretive signage, through river-side mangroves at Brooklyn Park, at a cost of \$8,000 (excluding State funding). As this is essentially a tourist/regional facility, it will be levied for on a Shire-wide basis.

Fagan Park was developed in the late 1980's as the Shire's main shire-wide leisure facility. Development was funded by the General Fund, State and Federal Bicentennial Grants and Section 94. The total General Fund contribution towards development in the period 1984-1993 was in excess of \$500,000.

Development at Fagan Park consists primarily of picnic facilities with the attraction of a large, well-developed garden area. The picnic facilities, including shelters, tables, barbecues, toilets and car parking have reached saturation use at peak periods. It is considered that an increase in the Shire's population will lead to an increased need for picnic facilities or else diminution of the recreational opportunities will occur. Therefore, a program to expand picnic facilities has been included in the five year program, to be funded fully from Section 94, divided proportionally across all new development.

* Development of Local Reserves

The cost of the development of local reserves is detailed within the works program included as Appendix A. The eight local reserves to be created by embellishment/augmentation and the eleven additional local reserves to be acquired are located near the areas of expected growth. Nine of the nineteen new local reserves are in Cherrybrook, the main growth area.

(Erlestoke Park, which was originally to be playing field, funded on a Shire-wide basis, is now to be completed as a local reserve and has been reallocated as such. An additional local reserve has also been acquired at Franklin Road, Cherrybrook. This was acquired after Brokenwood Reserve was dedicated to Council free-of-cost. Franklin Road was acquired as Brokenwood was found to be not completely suitable for use as a local reserve.)

* Development of District Reserves

The costs of embellishing district reserves are included in the works program at Appendix A. Such embellishment and augmentation includes active recreation facilities such as tennis or netball courts and shall include bushland walking tracks or bushland rehabilitation. Because district parks are accessed by car, there is a more than district-wide benefit to any such given park. The additional district parks to be provided will ensure that the anticipated new population does not cause overuse of existing

district parks. However, there is a clear link between the siting and provision of new (non-embellished/augmented at present) district parks and new development.

Further embellishment work is proposed at Greenway Park, Cherrybrook. This includes the construction of further car parking (\$164,000) and a cycleway circuit within the park (\$42,000).

These works will allow Greenway Park to better fulfill its function as a district park.

* Development of Playing Fields

Playing fields have a similar user catchment to district parks as already discussed. They are generally more expensive to provide at the existing Shire standard than district reserves and, for that

reason, are treated separately in the works program (Appendix A). In general, the works program provides conservative cost estimates as basic earthworks, usually provided by the developer, are not included.

The analysis of existing provision and derivation of additional playing field requirements produced 3.5 playing fields. Two of these can be provided at existing non-embellished/augmented sites in the Cherrybrook / Dural area with a third at land to be obtained and embellished at The Gully Road, Berowra.

Originally, Council planned to provide the Cherrybrook playing fields at James Henty and Erlestoke Parks. Erlestoke Park is now to be completed as a local reserve. An additional playing field is now to be provided at Dural Park in lieu of the Erlestoke field.

The remaining 0.5 portion will be expended at Berry Park, Mt Colah, where a small field with no amenities can be expanded and serviced to the expected standard allowing for increased usage.

* Regional (Shire-wide) Reserves

Hornsby Shire has five Regional (Shire-wide) parks. These are Pennant Hills Park, Berowra Valley Bushland Park, McKell Park, Fagan Park and Berowra Waters. Included in the works program are programs to further embellish and augment these parks to meet community needs as identified in the Recreation Needs Survey. It is noted that the provision of Regional (Shire wide) reserves is resource based and therefore cannot be appropriately calculated on an area basis. Notwithstanding the extent of Regional (shire wide) reserves to be provided by proposed embellishment/augmentation works, it is considered contribution rates are at a low and reasonable level.

It is considered that the additional projected population will place demand on the resources in the shire-wide parks, creating at least part of the need for the new embellishment/augmentation except Fagan Park which has facilities currently at capacity. On this basis, 9.03% of the program will be funded by Section 94 contributions, the remainder from Council's General Fund, except

Fagan Park augmentation which will be 100% funded from Section 94 contributions.

C-1.3.3 Bushland

Hornsby Shire has a very large area of bushland in public reserves (almost 5,000 hectares). Most residences in the Shire are within one kilometre of bushland and new development, situated largely on fringe areas, has an inherent nexus with bushland.

It can be demonstrated that urban development causes degradation of bushland areas - urban runoff which kills native vegetation growth and promotes weeds, dumping of garden wastes and firebreak clearing are all important factors. This is particularly so in Hornsby Shire where much of the bushland is downslope of urban areas.

Examining the main areas of expected population growth, it has been estimated that 52 hectares will be adversely affected by proposed development if improvement works are not carried out. These affected areas are outlined below:

Bushland Area	Area Affected
Devlins and Byles Creek	8 ha
Upper Georges Creek	7 ha
Upper Pyes Creek	3 ha
Old Man's Valley, Hornsby	8 ha
Hornsby Heights vicinity	18 ha
Berowra Heights vicinity	18 ha
Total	68 ha

Council intends to carry out improvements to these bushland areas to prevent further degradation arising from increased future development. Such improvements would include bushland regeneration, rehabilitation planting and destruction of weeds at their source. The work, based on Council experience, will cost an average of \$15,000 per hectare, totalling \$1,020,000. The work will progress over the five years of the plan.

In addition, Council intends to acquire further bushland in the Byles Creek (Cheltenham - Beecroft) area. The subject land has been reserved for open space purposes since the 1960s. It is currently in private ownership but is zoned Open Space A (Public Recreation - Local). The land has been identified as a significant fauna corridor and "core bushland" in the Bushland in Hornsby Shire Study (May 1994). It has been valued at \$2,530,000.

No quantitative standard exists for the provision of bushland open space. Nonetheless, it is considered that new development increases usage and other pressures on the bushland open space in the Shire.

On this basis, it is considered reasonable that additional bushland open space be purchased and that new development contribute to the cost of acquisition. Existing bushland open space is considered to be Shire-wide open space. Given this and despite the current zoning of

the land, contributions will be sought from Shire-wide development. As existing residents and development will also benefit from the Byles Creek bushland, only 9.03% of the total costs of acquisition will be apportioned to and sought from new development.

C-1.3.4 Methodology Applied

To apply the above methodology, the process adopted requires an evaluation of the practical application of acquisition and augmentation to expected opportunities "on the ground".

* Acquisition of Land and Appropriate Land Area.

The delineation of the ten areas of open space to be acquired is based on Council's experience in the provision of functional reserves and Council's current planning controls, which zones or identifies land for public recreation purposes. Council has examined existing local, district and regional reserves (urban and rural parks and playing fields) within the Shire and has determined that adequate reserves exist (subject to the acquisition of ten reserves) that are capable of augmentation to meet the balance of needs of the anticipated five year population increase.

* Dwelling Stock

In assessing the expected population over the period of this Plan, the use of expected additional persons has been adopted. To convert these figures to dwelling types, the use of occupancy rates should be established. Occupancy rates in the Shire range from 1.8 per dwelling to 3.7 per dwelling depending on dwelling type and area.

For the purposes of this plan an average occupancy rate per dwelling type is used to establish an expected total funding calculation. In application of the Plan, contributions should be calculated on actual occupancy expected within the given development.

* Land Values

In order to establish expected costs to acquire land in various locations throughout the Shire, this Plan uses land values for the reserves to be acquired, as identified by Valuer consultants for Council in April 1993.

C-1.3.5 Summary of Contribution Rate Calculations

From the foregoing, the calculations used to derive the different contribution rates (detailed in the tables in Part A of this Plan) are summarised below. Note that all contribution rates shown below are per person.

For ease of calculation projects have been grouped into either a district or a Shire wide basis depending on the level of demand for the facility. Projects which are considered on a district basis are local parks and District parks. Projects which are considered on a shire wide basis are playing fields, shire wide parks and bushland regeneration.

It should be noted that the amended plan (30.9.94 for Cherrybrook) takes into account the costings for the local reserves, district reserves and playing fields for Cherrybrook. The credit to A. H. & L. will be offset by the increased contributions by other applicants. This will ensure that the commitments can be met in accordance with this Plan.

It is expected that the total contributions received for District 8 (following the adoption of the amended plan on 30th September, 1994) for open space purposes will be in accordance with the projections and costings identified in the Contribution Plan as adopted by Council on 14th July, 1993.

(i) Acquisition

Sites for acquisition are located in District 1, 5 and 8, of which there is two sites (Gully Road, Berowra and Hastings Road, Dural) that can be attributed on a Shire wide basis. The calculations and contributions are summarised in the table below, based on the calculation:

Contribution =	. Cost of acquisition .
(per person)	Population increase in the next 5 years.

District	1	2	3	4	5	6	7	8*	9 ###	Shire Wide
No. Sites Cost (\$,000)	1 416	0 -	0 -	0 -	0	0 -	0 -	9 2,653	0 -	3 1,438.5
Pop increase	1,079	-	-	-	-	-	-	4,912	-	12,151
Contribution District (\$) Shire wide(\$)	385.54 118.39	0 118.39	0 118.39	0 118.39	0 118.39	0 118.39	0 118.39	890.93 182.14	### 118.39	- 118.39
Total (\$)	503.82	118.39	118.39	118.39	118.39	118.39	118.39	1073.07	118.39	-

^{*} Amended to reflect redistribution of costs within District 8, due to dedication of land by Australian Housing & Land.

Table 7: Acquisition of Open Space Lands

^{###} See Section C-1.4 for additional District 9 contributions as required under the December 1997 amendment.

(ii) Augmentation

Sites for augmentation are located in all Districts and there is one site that can be attributed on a Shire wide basis. The calculations are based on the calculation below. Contributions are summarised in the subsequent table.

Contribution = <u>Cost of augmentation</u>. (per person) Population increase in the next 5 years.

District	1*	2*	3*	4	5	6*	7	8	9 ###	Shire Wide
No. Sites Cost (\$,000)	2 184.7	2 184.7	1 92.4	2 168.0	5 138.3	1 92.4	1 125.0	11 1,588.3	1 92.4	9 5483.8
Population Increase	1,079	737	884	914	1,297	274	412	4,912	2,313	12,151
Contribution District (\$) Shirewide(\$)	171.18 <i>451.30</i>	250.61 <i>451.30</i>	433.80 <i>451.30</i>	183.81 <i>451.30</i>	106.63 <i>451.30</i>	337.23 <i>4</i> 51.30	303.40 <i>451.30</i>	323.35 451.30	39.95 <i>451.30</i>	- 451.30
Total (\$)	622.48	701.91	885.10	635.11	557.93	788.53	754.70	774.65	491.25	=

See Section C-1.4 for additional District 9 contributions as required under the December 1997 amendment.

Table 8: Augmentation of Open Space

C-1.3.6 Application and Apportionment

Given the variations between districts in the level of expected growth and relative land values, contribution rates are derived to provide an equitable levy to reflect those variations. The tables identify these variations.

There is one general exception to the above. Where dedication of land on the development site itself is identified as meeting the criteria stated under the requirements for reserve land dedication (see Land Dedication/Acquisition), the amount of land to be acquired will be assessed on an area rate, applied uniformly, that corresponds to existing levels of local open space population/dwelling in the Shire.

The following are the guidelines under which the differing contribution types should be applied:

Land Dedication/Acquisition

Where land is to be dedicated on a development site or acquired elsewhere by Council from monetary contributions, the parameters for assessing the appropriateness of that land for a local reserve should be:

- Adequate area and nature to fulfil the intended open space purpose and demand in a location where no existing accessible local reserve can be augmented to match the expected demand.
- Be in proximity to and usable by residents of the development(s) from which the contribution has been raised.

In accepting a dedication of land or in acquiring land for a local reserve, Council should attempt to achieve a consolidated minimum 0.3 ha size being an area Council has historically found as more readily acquired in practice, particularly in developed areas. However, in some circumstances this is not always relevant in application. Accordingly, Council should be satisfied that land of a lesser area should meet at least one of the following criteria:

- The land forms a movement orientated link (cycle path or similar),
- The land forms a stand-alone reserve where no other local reserve of adequate capacity or land of larger size is available in the vicinity,
- The land contains existing vegetation or other natural feature that is considered of significance in the locality, in an open space context,
- The land consolidates existing open space or land zoned for open space,
- The land links two or more areas of open space to form a larger reserve, or
- The land adjoins a drainage area or other easement where viable dual use for open space can be achieved at minimal additional cost.

The above are general guidelines. Council has the discretion to vary the parameters where the specific details of the site may so determine.

At the time of transfer of the open space land to Council, the developer should have:

- Cleared the area of all building debris,
- Made good or replaced significant indigenous vegetation damaged during construction,
- Provided a water connection to the boundary of the area (unless otherwise required), and
- Completed works-in-kind (if so agreed).

Monetary Contribution for Augmentation

All monetary contributions levied for augmentation to district and/or local reserves shall be apportioned to new or existing reserves in line with priorities detailed in the Works Program.

* Works-in-kind

Except where otherwise agreed all works-in-kind shall be to the value of the monetary contribution for local reserve augmentation required of that development.

Where a developer is dedicating land on the development site for local open space, Council may choose at its discretion to accept a smaller area of land but increase the value of the works-in-kind proportionately. In so doing Council should be satisfied that a smaller area retains long term viability for open space.

Over and above the administrative requirements associated with works-in-kind, Council should establish with the developer:

- An acceptable standard of workmanship and materials,
- Timing of inspection or works in progress,
- A program for completion of works, and
- An appropriate Defects Liability Period.

Where the value of the agreed works-in-kind is less than the monetary value of augmentation required from that development, the shortfall should be made good as monetary contribution.

C-1.3.7 Apportionment of Augmentation Funds

The emphasis of apportionment to augmentation at district and local reserve level, as indicated in the Works Program, is derived from three key processes:

- (a) Analysis of Council's Corporate and Strategic aims
- (b) Community expressed demand (Recreation Needs Study)
- (c) Expected community profile of the incoming population

All of the above have been discussed briefly under previous headings.

In evaluating apportionment to match these factors items (b) and (c) require some further consideration. Using the information provided previously, the general priorities for apportionment may be summarised as:

* High apportionment to bushland settings (planting, shade, seating, etc) where addresses universal requirements.

- * Attention to parkland (picnic tables, planting for shade, tables etc) also universally popular for all age ranges.
- * Movement orientated and active sports facilities for reserves where younger age range (10-19 age group) well represented. Typically ovals, courts, paved paths specifically for bicycles, skateboards, roller blades etc.
- * Night lighting at sports facilities (where not currently provided) for greater potential user hours.

In no case should apportionment be so exclusive as to prejudice the enjoyment of a particular age group or background, as all groups will be represented to some degree in every district. Thus it is important that augmentation where possible matches universal demand. In this respect provision of tree planting, seating, paths etc can be considered to be universally appropriate and enduring, thus not requiring substantial changes when populations recycle.

C-1.3.8 Program of Expenditure

In order that the facilities to be provided as a part of this Contributions Plan can be enjoyed by the contributors, it is important that the facilities be implemented in a 'reasonable' time. In some areas of the Shire the extent of development and the lack of existing facilities in an area will mean that the early implementation will be more important than in areas of limited development with existing facilities in the vicinity.

By way of example, when considering reserve land acquisition and augmentation it is appropriate to provide reserves in the Cherrybrook area at an early stage of the anticipated development, given the extent of expected development and the relatively undeveloped local open space infrastructure in the area.

The works program identifies a threshold level for provision of all facilities, varying between contribution types and between geographical areas. The trigger levels for provision of the facility are based on percentages of expected additional population. By this means, provision of the facility will relate more closely to real development/demand, rather than being tied to an arbitrary date.

In all cases the full implementation of Section 94 funded facilities is proposed within the period of this Contribution Plan. Where facilities are programmed for full implementation prior to completion of anticipated development, funds will be collected from subsequent development to recoup the costs incurred by Council, owing to early implementation.

C-1.4 Additional Open Space Requirements in District 9

C1.4.1 Nexus

In 1997, Council determined that residential development in District 9 exceeded the projections included in this Plan. Such development will result in a greater population than can be adequately served by the local open space to be embellished under this Plan, either in District 9

or in immediately adjacent parts of District 3. Further, no suitable reserves exist for embellishment to serve the area where additional development has occurred (ie east of the Town Centre).

The Plan has not levied development in District 9 for local open space, on the basis that existing reserves adequately meet the projected demand. Now that additional growth has been identified, Council is now required to provide additional local open space. As indicated above, no suitable reserves exist for further embellishment, necessitating the acquisition of additional land for open space in the area.

Council has identified a property for acquisition adjacent to the eastern boundary of District 9. This property, 49 Burdett Street, Hornsby, has a frontage to Sherbrook Road and will connect two existing small reserves - Holman and Neal Parks. It contains a heritage building of State significance - Edgeworth David House - and has an area of approximately 8,700m².

The original population growth estimate for Districts 3 and 9 combined was 2,296 persons over 1993 - 1998. In September 1997, this was revised to 2,526, an increase of 230 persons. This additional increase is expected to occur solely in District 9. Under the standard of provision for local reserves adopted in C-1.3.2, this additional population will require an additional 1,541m² of embellished local reserve open space. As a result, only a proportion of the cost of this proposed reserve will be attributed to development over the remaining life of this Plan.

C1.4.2 Apportionment

As indicated above, the additional population growth now projected to occur in District 9 is 230 persons, requiring an additional 1541m² of embellished local reserve open space. The proposed reserve - Edgeworth David House - has an area of 8700m². The cost of acquiring and embellishing the new reserve attributable to new development is calculated as follows:

Proportion attributable = $\frac{\text{(AP 93 - 98) x LR}}{\text{Area of Edgeworth David Reserve}}$ $= \frac{230 \times 6.7}{8700}$ $= \frac{1541}{8700}$ = 17.71%

C1.4.3 Calculation of Contribution Rate

The new contribution rate will apply to all residential development after mid-December 1997. This will include development occuring before the original population growth projection is reached. The cost attributable to the short-term additional population will therefore be spread over a larger population. This larger population is that

population resulting from development approved between mid-December 1997 and mid-July 1998. This is approximately 7 months or 11.66% of the Plan's five year period which, based on the new District 3 and 9 population growth projection of 2526 persons, is 295 persons.

The contribution rate is calculated as follows:

Contribution Rate = $\frac{. \text{ Cost x PAP}}{. \text{POP } 12/97 - 7/98}$

= \$901,500 x 17.71% 295

= \$541.21

Where -

Cost is the estimated cost of acquiring the Edgeworth David House property (\$800,000) and embellishing it for use as a local reserve (\$101,500), as estimated in September 1997;

PAP is the proportion attributable to the additional population during the current period, as calculated above; and

POP 12/97 - 7/98 is the population increase due to development between mid-December 1997 and mid-July 1998.

C-2. COMMUNITY FACILITIES AND SERVICES

C-2.1 Cherrybrook

This section of the Plan is confined to District 8 known as the "Cherrybrook Urban Release Area". This district comprises the suburb of Cherrybrook and part of adjacent suburbs including Castle Hill and Dural. The district has been defined and described in detail in the "Cherrybrook Precinct Plan" (Hornsby Shire Council, May 1992).

C-2.1.1 Anticipated Growth and Development

Projected Population Increase

At the 1991 ABS Census, the population of the Cherrybrook URA was recorded as being 18,654 persons. Of these, 15,727 resided in the suburb of Cherrybrook, with 2,275 in Castle Hill and 652 in the Dural part of the precinct. The bulk of the residential development and population growth which has occurred in the precinct in recent years has occurred within the suburb of Cherrybrook, the population there having increased from 6,300 persons at the 1986 Census (ie 150%).

In 1991 and 1992 approval was granted by Council for a further 585 residential lots and 255 medium density dwellings. It is anticipated that this development would increase the population of the precinct by 2,583 persons, based on a dwelling occupancy rate of 3.5 persons per dwelling in sub-divisions and 2.5 persons per dwelling in medium density stock (occupancy rates provided by Council officers). Thus the total population of the urban release area is estimated at approximately 21,237 persons.

Development and population projections provided by Council indicate that the population of the Cherrybrook URA is anticipated to increase by 1,237 persons as a result of medium density development and 2,675 persons as a result of subdivision, a total of 4,912 persons over the five year period 1993-98. Most of this development will occur within the Castle Hill and Dural parts of the URA.

Thus by 1998, the population of Cherrybrook URA is expected to be approximately 26,149 persons, assuming static population growth within existing developed areas. By this stage, major development and hence population influx are expected to be largely completed.

The population increase likely to be generated by new residential development within the precinct over the next five years will thus represent approximately 18.8% of the total population of the precinct in 1998.

Population Profile

The population profile of the Cherrybrook Urban Release Area (URA) based upon the 1986 Census, has been described in the Community Issues section of the Cherrybrook Precinct Plan. At that time, the population was "characteristic of new release areas", with a high percentage of the population in the 0-9 years age group, reflecting a population with a predominance of young families.

The age profile of the Cherrybrook population at the 1991 Census is presented below.

Age	URA 1986	URA 1991	Cherrybrook 1991	New Release CD 1991	Shire 1991
0-4 5-9 10-19 20-49 50-59 60+	17.3 14.2 38.8 6.5 23.2	8.5 9.9 16.1 41.7 16.9 16.9	9.4 10.8 17.4 45.5 9.5 9.5	14.4 15.1 14.1 47.9 5.0 5.0	6.9 7.7 16.5 43.6 15.5 15.5

Table 9: Cherrybrook Age of Population by Percentage

The inclusion of Castle Hill in the URA, containing a number of retirement village complexes including the "Mowll Memorial Village", skews the age profile to show a very high proportion of the population in the 60+ age group. The concentration of this older population is not representative of the population moving into the residential areas within Cherrybrook. Moreover, the needs of this population for most types of community facilities for which Council has responsibility is quite limited, as these villages tend to incorporate many of their own community facilities and services.

For this reason, the age profile of the population just within the suburb of Cherrybrook has also been presented, to better provide an indication of the age structure of the release area.

Comparison of these figures, for 1986 and 1991, and the age profile for the Shire as a whole, indicates a strengthening of the predominant characteristics of the area. There is a higher than average proportion of pre-school and young school-age children, and to a lesser extent, of adolescents. Associated with this is a very high proportion of young adults. When the Castle Hill population is discounted, there is a much lower than average proportion of middle aged and older people.

The Cherrybrook profile includes the older established parts of the suburb, which have now been settled for a number of years and could be expected to have a somewhat older profile than at initial settlement. To provide the best indication of the age structure of the population currently moving into Cherrybrook, and hence the most likely profile of the projected population, the population of 1 Collector District (CD 250509) has been examined. This was, at the time of the 1991 Census, the most recently settled collector district.

These figures show that the incoming population has even higher proportions of young children and young adults, and lower proportions of adolescents, middle aged and older people, than for both Cherrybrook and the Shire as a whole.

Examination of the Census material thus indicates that the predominant population moving into the Cherrybrook area has been families with young children. Community workers report that the majority are owner-occupiers, and second or third home buyers. A high proportion of women with young children are in the workforce (65.2% aged 20-34 where in the workforce at the 1986 Census).

It is anticipated that the population which will move into new residential development in the Cherrybrook URA over the next five years will have age and socio-economic characteristics very similar to that which has moved into the area during the last five years. Certainly there is nothing in the cost, size or type of the housing anticipated which would suggest otherwise.

The incoming population can therefore be expected to have the following initial characteristics:

- * a predominance of families with young children;
- * small numbers of older people;
- * small numbers of single person and group household;
- * be second or third home buyers, with high mortgages and little disposal income;
- * consequently, a high proportion of working mothers with preschool children;
- * be pre-occupied with child-rearing and household issues;
- * have a high proportion of car ownership and the car as the predominant travel mode for the journey to work;
- * limited mobility for significant groups, e.g. youth and nonworking parents of single car households;
- * large proportions of children moving through the age cohorts over time, giving rise to demands for services and activities for older children and youth.

* Council Policy for Community Facilities

Council has an established record in the provision of facilities for community purposes, including neighbourhood centres, community halls, senior citizens centres, youth centres and a range of children's services. These have been provided throughout the Shire on the basis of need, the availability of funds and the distribution of services provided by other levels of government and the non-government and private sectors. Some of the facilities are managed directly by Council and others indirectly through Council supported community organisations.

Council is committed to the provision of community services and facilities to meet the needs of its growing population. This is evidenced by the facilities, listed below, which it has already provided in Cherrybrook. For a number of years, Council has been collecting Section 94 contributions for the provision of community facilities in Cherrybrook. Funds have been applied or are committed towards the following facilities:

- Land for long day care centre;
- * Community centre;
- * Contribution towards multi-purpose sports centre;
- * Greenway park amenities block;
- Upgrading hall for pre-school use.

Council presently has unexpended approximately \$239,000 in contributions collected through Section 94 for community facilities in Cherrybrook. It is understood that these funds will be spent on a youth facility and other projects under the pre-1993 Section 94 Plan to meet the needs of the existing Cherrybrook population.

Council's development of facilities for community purposes must also have regard to their requirements for recurrent funding, particularly staff positions to operate the facilities. To date, Council has only provided long day care centres where recurrent subsidies for their operation have been provided by State/Commonwealth programs. The likely provision of such subsidies for additional child care centres within Cherrybrook, and the Shire as a whole, is not known. Given this Council's commitment to proceed with the establishment of an additional centre in Cherrybrook without a guarantee of recurrent funding requires consideration.

Alternatively, Council may wish to lease such facilities to community based organisations to operate, as has been the case with the pre-school kindergarten in Cherrybrook.

Similarly, its commitment to the development of a multi-purpose neighbourhood centre and youth facilities (discussed below) which will both have recurrent funding implications, needs to be considered.

Existing Provision of Facilities

Community facilities provided by Council and non-government organisations within Cherrybrook are listed in Council inventories, directories and the Cherrybrook Planning Study. To date, Council has provided the following facilities within the Cherrybrook urban release area:

- * 1 long day child care centre (corner Greenoaks and Cedarwood Drive), providing 40 places for 0-5 year olds. This centre has a waiting list of approximately 200 children. It is administered by Council.
- * 1 community centre, managed by a Section 377 committee of Council. This centre provides meeting space for a variety of activities, including playgroups, leisure classes and community organisations. It is reported to be fully utilised by a wide variety of local groups and has no capacity to meet additional needs.
- * 1 pre-school kindergarten (Gumnut Road), owned but not operated by Council. The centre has 25 places for 3-5 year olds and operates from 8.30 a.m. to 3.30 p.m.
- * Council has provided a contribution of approximately \$311,000 towards the provision of a multi-purpose sports centre within the Cherrybrook Technology High School.
- * Council has developed a youth facility within the basement of the amenities block at the playing fields within Cherrybrook, to meet the needs of the existing youth population for meeting and activities space.
- * Council also has plans to develop a new regional library at Pennant Hills.

The capacity of existing community facilities to meet the needs generated by population growth arising from new development has been examined by Council officers. This capacity has been taken into account in developing the schedule of works in the Contributions Plan.

In addition, existing facilities are located within the now established parts of Cherrybrook and some distance from where new development will occur, to the north and west of Cherrybrook.

C-2.1.2 Nexus

The likely characteristics of the population arising from anticipated residential development within Cherrybrook over the next five years have been described above. The assessment of demand for community facilities associated with projected population growth to match with these characteristics may be made from comparison with:

* similar areas having populations with similar characteristics;

- * patterns of usage of facilities of the existing population of Cherrybrook, which has characteristics and hence anticipated needs, similar to those of the incoming population; and
- * studies of the expressed needs for facilities by the existing population, extrapolated to apply to the incoming population with similar characteristics.

The population profile of the additional population generated by projected development in Cherrybrook is typical of most new release areas developed as part of the NSW Urban Development Program, with a predominance of children and young families with little disposable income.

A large number of studies have been carried out to assess the needs for community facilities and services generated in such new release areas (for example "North St. Mary's Social Plan" by Penrith Council and "Maryland - Mini Social Plan" by the Newcastle City Council). Such studies have consistently shown that new release areas required a variety of local facilities to meet the social needs of their residents, including a range of children's services, family support services, social and cultural opportunities for adults and activities for adolescents.

Examination of the usage of existing facilities within Cherrybrook indicates a strong demand for long day care centres for pre-school children, and for meeting space of leisure and social activities for all age groups.

To determine the needs of the existing population, and project from them the needs of future populations, a number of surveys of the Cherrybrook population have recently been undertaken. These are detailed in the Cherrybrook Planning Study, and include the Cherrybrook Community Survey (1986), Hornsby Recreation Needs Study (1991) and a Needs Assessment Survey of Cherrybrook undertaken by the Hornsby Ku-ring-gai Hospital & Community Health Service in 1991.

The key issue which arose from these studies was the high priority that should be given to facilities for families and young children, with particular emphasis on recreational facilities and child care. The lack of facilities and activities and poor access to public transport were seen as the primary issue of concern to residents.

These sources of information are quite consistent of the types of community facilities likely to be required to meet the needs of the incoming population. Based on the anticipated characteristics of the projected population, outlined above, it could reasonably be anticipated that the following types of community services are likely to be required by the population generated by additional development:

- * services for young children of working parents (i.e. child care centres);
- * services for pre-school children and non-working parents (i.e. playgroups, occasional care, babysitting clubs);

- out-of-school care for school aged children;
- * meeting space and leisure activities for adolescents;
- * community development activities;
- * leisure and social opportunities for adults;
- meeting space for local groups and organisations;
- * support services for families (e.g. information and advice, specialist counselling services).

The facilities required to accommodate such services include:

- purpose-built long day child care centre;
- * youth facilities;
- * multi-purpose community facilities, such as neighbourhood centres and community halls, which can be used to accommodate a variety of activities and services according to local needs and the changing demographic structure of the population over time;
- * library facilities.

In view of the public transport limitations within the area and limited availability of private transport for some groups (.e.g. adolescents, adults of one car families), it is imperative that facilities be located to maximise accessibility to users.

C-2.1.3 Development of Works Program

To meet the anticipated needs of the projected population arising from new development in Cherrybrook over the next five years, the following works program for community facilities is proposed:

- * One 60 place long day child care centre;
- * One neighbourhood family centre;
- One youth activities facility;
- * District library at Pennant Hills.(assessed later as a Regional Facility)

The provision of the first three of these facilities would not be warranted, but for the additional residential development projected to occur within Cherrybrook over the next five years. As pointed out previously, existing facilities have no capacity to meet the needs of an increased population, and these additional facilities will be required if the social needs of the incoming population are to be addressed.

At the same time, however, it is recognised that in some cases, the incoming population will not be sufficient to warrant whole new facilities in itself, given the standards of service provision applying in the remainder of the urban release area and in the Shire as a whole. It is necessary to estimate the likely catchment area for the proposed facilities and extent to which they will be utilised by the projected incoming population and existing population, and to apportion the costs of each facility accordingly. These issues are discussed below in relation to each of the facilities in the proposed works program:

Child Care Centre

The Department of Community Services has developed a number of standards to assist in the estimation of need for child care places. In the absence of detailed data about the likely number of children aged 0-4 years with working mothers moving into the release area who require long day care, the simple DOCS standard of 1 child care place for every 10 children aged 0-4 years has been adopted to guide the assessment of need in Cherrybrook.

Based on the profile of the population moving into the release area (CD 250509) outlined above, it is estimated that 14% of the incoming population will be children aged 0-4 years, i.e. 687 children. The application of the standard would therefore suggest that approximately 68 places will be required. Proposed new development would therefore justify the provision of a 60 place centre, or alternatively, 1.5 standard 40 place centres.

Such provision would maintain the current standard of child care provision within the Cherrybrook/Dural area, whereby 5 centres (3 private and 2 Council owned) with a total of 155 places currently provide for a population of approximately 1,800 children 0-4 years old (ratio 1 place : 11.6 children).

It should be noted that the formula standard is considered quite conservative, given that current provision of licensed child care places in B Riding (which includes Cherrybrook) is 1 place: 5.7 children, and in the Shire as a whole is 1 place: 5.2 children.

Neighbourhood Information Centre

There are no accepted standards for the provision of general community facilities such as neighbourhood centres. Standards which have been developed range from 1 facility per 5,000 people, to 1 per 20,000 depending on the needs of the population and size and nature of the facility proposed.

At present within Cherrybrook, there is one such facility, catering for a population of approximately 20,000 people. This facility is located a considerable distance from the proposed new subdivisions. While a second facility is clearly required if the demands on the incoming population are to be addressed, the proposed centre would be capable of serving a catchment population greater than the projected population increase of about 5,000 over the next five years.

In terms of current Council plans for this facility, it is proposed that a small shopfront centre of approximately 300 sq.m be constructed within or adjacent to a new shopping centre close to new subdivisions. This facility would provide community information and a venue for local activities and community meetings. It would have a population catchment of up to 10,000 residents.

It is therefore proposed that the cost of this facility be apportioned between the incoming population and part of the existing population on a 50:50 basis. Part of the funds for that proportion used by the existing population might come from Section 94 contributions for community facilities in Cherrybrook already collected, but not yet committed by Council.

* Youth Centre

As for the neighbourhood centre, the increase in population will not justify a full facility in itself. It is proposed to develop a small facility adjacent to the new subdivisions, with size, costing, rationale and apportionment similar to those of the proposed neighbourhood information centre.

C-2.1.4 Calculation of Contribution Rate

The contribution rate has been derived using the following formula:

Contribution Rate = Total cost of facilities apportioned - 5yr period

Total projected no. of new residents - 5yr period

Child care centre = $\frac{\$872,300^{***}}{4,912}$

= \$177.59

Neighbourhood = $\frac{$205,300^{***} \times 50\%}{4,912}$

= \$20.90

Youth facility = $\frac{$205,300^{***} \times 50\%}{4,912}$

= \$20.90

*** Construction costs indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 - June 1996 (113.2/110.3), or by 2.62919%, and rounded to nearest \$100.

C-2.2 Remaining Districts - Other Community Facilities

This section of the Plan applies to community facilities proposed or provided in the past and to be partly funded on a proportional basis from new development. Contributions will be levied on a District basis for those for those facilities provided within each indivaidual District. It is noted that projected additional populations in each district during the term of this Plan

are taken from an estimated 1993 District population calculated from the annual compound growth rate of the Shire between the 1986 and 1991 Censuses.

C-2.2.1 Nexus

Community facilities provided by Council and non-government organisations are listed in Council inventories and directories. The broad range of community facilities provided by Council, supply a service to the general community.

Where existing facilities are at capacity and are to be augmented or supplemented with additional facilities, the additional population to benefit for these facilities are to contribute to the provision of these facilities on a proportional basis.

C-2.2.2 Works Program

* Shire Wide

Council's experience in the operation of long day care centres is that their usage is primarily on a regional basis, that is, each centre has a potential Shire wide catchment, particularly if strategically located. Having regard to this, the need for additional long day care facilities for future population will be assessed on a Shire wide basis, excluding District 8 (Cherrybrook Release Area) which is a newly developing urban area to be assessed on an individual need basis.

The number of 0-4 aged children in the Hornsby Shire at the 1991 Census totals 7,185, excluding District 8. Updating this figure to 1993 (based on the annual compound growth rate of the Shire between the 1986 and 1991 Censuses) the result is a total figure of 7,427 children.

It is estimated that new development during the term of this Plan will generate an additional 7,239 persons in the Shire, excluding District 8. This would translate to an additional 477 children aged 0-4, having regard to the proportion of the population aged 0-4 at the 1991 Census (excluding District 8).

Adopting the DOCS standard of 1 child care place for every 10 children aged 0-4 years, a total of 48 additional spaces in long day care facilities would be required to meet demand generated by new development.

The above justifies the provision of an additional long day care centre in the Shire during the 1993-1998 period. Construction and establishment costs of \$374,800 ### will be funded fully from new development across the Shire. Land acquisition costs have not been included, as Council has resolved to provide this facility on open space land in the Epping area. However, an exact location has yet to be determined. If an acceptable location within existing open space cannot be found, the Plan will be amended to include land acquisition costs.

District Two

A multi-purpose community centre is to be provided in Pennant Hills by rationalising existing facilities in the area. (Refer to "Pennant Hills Commercial Centre Study", Hornsby Council, 1993).

This centre is to be provided by augmenting the existing Pennant Hills Community Centre, corner Yarrara Road and Ramsay Road, Pennant Hills. This project will cost Council \$2,243,100*** after taking into consideration funds generated from land sales from facilities to be relocated and excluding the cost of the library and associated car parking. This portion of the community centre is detailed in the following section of this report. This additional cost is to be proportionally levied (2.9%) from future development in District Two.

* District Four

A community centre was provided at Pierre Close, Mt. Colah, in 1991, funded from Council General Funds. Recoupment is proposed on a proportional basis from the new development in the district. The facility has cost Council \$650,000 of which the additional population in the district during the term of this Plan will be required to contribute 6.5% of the cost.

* District Five

A study for Council has been prepared which has established the need for a community hall at Wideview Public School, Berowra. Council has committed \$82,100*** expenditure to this facility to be provided during the term of this plan. The additional population in the district during the term of this plan will be required to contribute 15.3% of the cost.

The Berowra - Cowan Planning Study also identified the upgrading of existing Community Hall (at Crowley Street) as being justified by the projected, approximate ,remaining 10% population increase from 1995. The cost of this upgrade is estimated at \$160,000. Development contributions will provide 10% (\$16,000).

* District Six

Council has committed funds for the establishment of a new community centre at Galston within the 1993-1998 term of this Plan, to serve the existing and future population of this area. The additional population in this district during the term of this Plan will be required to contribute 2.8% of the total \$1,231,600*** estimated cost of this facility.

*** 1993 construction cost estimates indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 - June 1996 (113.2/110.3), or by 2.62919%, and rounded to nearest \$100.

The original cost of \$350,000 for a 46 place centre has been proportionally increased to \$365,200 for a 48 place centre, necessitated by an increase in projected population growth, outside Cherrybrook, from 7,009 to 7,239. This figure was then indexed as above.

C-2.2.3 Calculation of Contribution Rate

The contribution rate has been derived using the following formula:

Contribution Rate = Total cost of facilities apportioned - 5 yr period

Total projected no. of new residents - 5 yr

period

This formula, when applied to the Works Program outlined in Part A of this Plan, yields contribution rates as follows:

Shire Wide - Child care facility (Epping)

contribution rate = $\frac{$374,800}{}$

7,239 (Shire increase less Cherrybrook)

= \$51.77 per person

District Two - Community facility

contribution rate = $\frac{$2,243,100 \times 2.9\%}{737}$

= \$88.26 per person

District Four - Community Centre (recoupment)

contribution rate = $\frac{$650,000 \times 6.5\%}{914}$

= \$46.23 per person

District Five - Community Halls

contribution rate = $\frac{\$82,100 \times 15.3\%}{1,297}$ + $\frac{\$160,000 \times 10.0\%}{848}$

= \$28.55 per person

District Six - Community Centre

contribution rate = $\frac{$1,231,600 \times 2.8\%}{274}$

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= \$125.86 per person

C-2.3.1 Anticipated Growth and Development

C-2.3 Library Facilities - Shire-Wide

The provision of library facilities in the Hornsby Shire potentially serves all residents of the Shire. Accordingly, an increase in the residential population of the Shire will generate an additional need for library facilities.

At present the Shire is served by a number of small local libraries providing limited facilities to small population catchments, and the Hornsby Central Library providing the major central library facility for the Shire. Council's library facilities strategy for the period 1993 - 1998 proposes the augmentation of the Hornsby Central Library to provide an upgraded major facility for the whole of the Shire, and the development of an additional regional library at Pennant Hills to partially satisfy the existing demand for library facilities within a section of the Shire. Having regard to the location of these two major library facilities and the level of services and facilities to be provided at each of the libraries, the following user catchments have been determined.

Hornsby Central Library Pennant Hills Regional Library All districts District 1

District 2
District 8

The levying of contributions for the provision of these facilities will be undertaken on the proportional basis as outlined below.

The libraries within the Shire have a total 72,127 people enrolled who have borrowed within the last two years. This is equivalent to a library membership of 56% of the total Shire population at the 1991 Census.

Over the next five years, it is anticipated that an additional 6,676 persons will require usage of the Hornsby Central library, based on the percentage of current usage of the projected population. Similarly, it is projected that an additional 3,768 persons from Districts 1, 2 and 8 will require usage of the proposed Pennant Hills Regional Library.

The State Library of NSW provides planning and design guidelines for the minimum requirements of public libraries based on population (refer to "Planning and Design of Public Library Buildings", State Library of NSW, 1990). These guidelines have been adopted for the planning of future library facilities throughout the Hornsby Shire.

Based on the design standards minimum for library services for Hornsby, the rate of provision of libraries is 26sqm per 1,000 members and on this basis the additional population generated by new development over the next 5 years will require the provision of an additional 310 square metres within the Hornsby Central Library facility and 98 square metres within the proposed Pennant Hills Regional Library. In addition to library buildings and extensions, library books are to be provided.

C-2.3.2 Works Program

The cost of the redevelopment of the Central Library is estimated at \$7,037,650. Of this, \$647,750 (9.20%) is attributable to new development. Similarly, the cost of Pennant Hills Library is estimated at \$1,850,000, of which \$200,900 is attributable to new development.

C-2.3.3 Calculation of Contribution Rate

The contribution rate may be calculated as follows:

Central Library - all districts

Contribution

Cost attributable to new development
Projected no. of new residents for 5 yr period

= \$<u>647,500</u> 12.151

= \$53.29 per person

Pennant Hills Central Library - Districts 1, 2 and 8

The contributions rate has been derived using the following formula:

Contribution

= <u>Cost attributable to new development</u> . projected no. of new residents for 5yr period

= <u>\$200,900</u> 6,728

\$29.86 per person

In 1993, the cost of the proposed augmentation of the Hornsby Central Library and the construction of the new Pennant Hills Regional Library was based on the proportion of the additional floorspace (in accordance with the guidelines of the NSW State Library) required by the increased residential population from new development. The buildings costs for library works contained in Rawlinsons Construction Handbook was been used, adopting a median figure of \$2,000 per square metre. This cost has been indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 - June 1996 (113.2/110.3), or by 2.62919%, and rounded to nearest \$10 (\$2,050). While the additional floor space required is based on projected number of additional library users, the cost of the facility is equally proportional over the projected additional population over the next five years, as all are potentially users of the facility.

Books

To be useful the libraries require the provision of books. There are currently 224,00 books in Shire libraries. This equates to an average of 1.7 books per library user is required. The average cost of books is \$30.23*** per book (Council sources). To maintain this level of provision, contributions are levied as follows:

Contribution = Cost of books per person over the next 5 yrs

 $= 30.23×1.7

= \$51.39 per person

*** 1993 Cost per book of \$27.30 has been indexed upwards, using the actual movements in the Consumer Price Index for June 1993 to June 1995 (1993 - 1994: 1.7%; 1994-1995: 4.5%) and BIS Shrapnel forecast of the CPI for June 1995 - June 1996 (4.2%).

C-3. CIVIC IMPROVEMENTS - HORNSBY TOWN CENTRE

C-3.1 Area of Application

The Hornsby Town Centre includes the land which is zoned Business F (Town Centre), Business G (Town Centre Support) or Special Uses A (community Purposes), and generally located in and around the Hornsby railway station and commercial district.

Development in and around the Town Centre will place demands on the services and facilities provided within the Town Centre. Although certain facilities may be located in the Town Centre, developer contributions for some of these facilities may be drawn from planning districts generally.

C-3.2 Anticipated Growth and Development

It was originally estimated that development in the Town Centre over the 10-year period 1993 - 2003 would be in the order of an additional 35,000 square metres of retail floor space (gross leasable) and about 24,000 square metres of office floor space (gross floor area). This projected floorspace was expected to generate a total additional workforce of 1880 people. It was also projected that over that 10 years, a further 1,300 residential units will be erected in and around the Town Centre. Based on an average dwelling occupancy of 1.95 persons per household at the 1991 census, the projected resident population of the Town Centre over 1993 - 1998 was considered likely to increase by a further 1,268 people.

By mid-1997, it was apparent that development in Hornsby Town Centre over the 5-year period 1993 - 1998 alone would exceed this level. A development application, submitted in December 1996, to redevelop the Westfields and Northgate sites alone involves some 62,000m² of commercial and retail floor space, with some 2590 additional employees. Residential unit development in the area has also far exceeded expectations.

As of September 1997, the following development projections for the Hornsby Town Centre have been adopted:

New non-residential floor space 1993 - 1998: 75,500 m²

Additional employment 1993 -98:

Westfields development 2,590 employees other development 430 employees

New residential development 1993 -1998:

Additional population - 2,313 persons

C-3.3 Nexus

Future residents, workers and visitors (including shoppers) to the Hornsby Town Centre will create a demand for a range of public facilities. These include the following:

C-3.3.1 Public Works

Florence Street Mall as a focus of community activity, an urban recreation and meeting place.

The attraction and continued growth of the Town Centre has generated additional pedestrian and vehicular traffic. Even with the construction of the Freeway and diversion of through traffic around the Town Centre, the capacity of footpaths and roads in certain areas has approached levels where pedestrian safety, amenity and driving efficiency has deteriorated.

The Florence Street Mall between George and Albert Streets provides an urban space for the workers, residents, shoppers and other visitors to the Town Centre. The mall provides improved amenity for the Town Centre and a space for community activity. The Town Centre has regional status and the existing public spaces (mainly footpaths) are unable to provide the urban facilities and pedestrian infrastructure required to service this function.

The Mall represents one of the major capital investments of the Council and has been provided as a public amenity for future development. Given the costs associated with such infrastructure and the longer term benefit to the community, it is reasonable for the cost to be recouped over a 10 year period. Costs associated with the maintenance and management of the Mall would be met from sources other than developer contributions.

Hunter Street Mall Extensions

The present Florence Street Mall has an area of approximately 3800m². This pedestrian area has previously been attributed to development over a 10-year period and some 6,700m² of non-residential floor space (or 213 employees) provided prior to 1993. Average provision of pedestrian mall area per Town Centre resident or worker is calculated as follows:

Pedestrian mall area (per person)	=	Total area of Florence Street Mall PEMP + ARES + AEMP
	=	3800 <u>.</u> 213 + 2526 + 1880
	=	0.82 m ² per person.

Where PEMP is employment growth before 1993, ARES is additional residents 1993 - 1998 and AEMP is additional employees 1993 - 1998. The higher than expected level of development over the current 5-year period will now result in some 917 additional residents and workers in Hornsby Town Centre. This necessitates the provision of additional pedestrian mall area. It is proposed to extend the existing mall northand southwards in Hunter Street to provide this additional area. The proposed extensions have an area of approximately 2850 m². This will provide sufficient additional mall area to cater for the above 917 persons and for an additional 2388 residents and 479 workers due to development currently projected to occur over the 1998 - 2003 period.

Town Centre Street Landscape Improvement Program

The Town Centre urban design/landscaping program is an extension of the current program which is focused on the Florence Street Mall.

The program will enhance the quality of the town centre for pedestrians, members of the local workforce, customers and others who visit and use the services of the centre. It is intended to reinforce links between the Florence Street Mall and other parts of the Town Centre, particularly the area bounded by Bridge Street, Coronation Street and the Pacific Highway (west of the railway line) and Florence Street Mall.

The objective of urban improvement will be achieved through the development of greenspace linkages involving detailed street planting, upgraded street furniture and thematic footpaving to improve the visual quality of the precinct, provide appropriate embellishment and emphasise linkages with existing open space and parks within the precinct.

With respect to Florence Street Mall, the demand for upgraded or additional public facilities is due to the continuing development of the centre as a sub-regional centre for commercial/retail activity and a focus for medium and higher residential development activity. Such development will continue to place pressure on existing facilities. The Town Centre urban improvement program will enhance the centre's viability.

Traffic Management

This includes the preparation of local area traffic management plans and traffic management facilities required to protect residential areas from intrusion of non-residential traffic, traffic signals, roundabout, channelisation, bridges and road reconstruction.

Projected development within the Town Centre over the 5-year period will generate additional traffic. Based on generation rates of the Roads and Traffic Authority ("Policies Guidelines and Procedures for Traffic Generating Developments"), development in the Town Centre under the original development projections for the 5-year period was expected to generate an additional 10,850 trips daily and an additional 1,375 vehicle trips to the evening peak. The higher level of development identified in mid-1997 will generate even greater levels of additional traffic. At present there are no deficiencies in existing traffic system nor is there capacity to cater for the anticipated growth. The public facilities required to service the additional traffic generated by new development may be fully funded through Section 94.

In response to the demands of additional traffic and to cater for further development, it is necessary to provide pedestrian spaces and improve vehicular access and movement into and within the Town Centre. In addition, care must be exercised to ensure that as a result of future development, traffic is not displaced into surrounding residential areas.

Several major traffic management facilities are required to improve access to the Town Centre including:

- * the reconstruction of the railway bridge between Romsey Street and Thomas Street:
- * the provision of an additional lane to George Street south of Burdett Street; and

* the reconstruction of Thomas Street.

The existing railway bridge caters for the needs of the existing Town Centre. This component will be replaced by the proposed new access arrangements in addition to the provision of additional capacity to cater for projected needs from new development. As outlined previously, the existing road network servicing the Town Centre has no deficiencies or capacity to cater for new development, therefore the cost of the reconstruction of the Romsey Street railway bridge will be levied across all new development.

The augmentation of George Street and Thomas Street to increase capacity is related directly to new development and accordingly 100% of these costs may be funded from development contributions.

C-3.3.2 Community Facilities

Provision of child care services to cater for the needs of the additional workforce and visitors to the Town Centre.

It is anticipated that the characteristics of the likely residential population of future developments in and around the Town Centre will be similar to residents of existing medium density developments adjoining the Hornsby Town Centre, at least until 1998. As the existing population is characterised by couples with grown children, there is unlikely to be any significant need for additional child care facilities required by further residential development. Should it become apparent as a result of new development, that there is a greater number of children requiring child care spaces, the Council may seek to amend this contributions plan or to negotiate with the developer to provide the facility as part of the development.

As Hornsby further develops as a work place, there is likely to be a need for child care associated with the retail and commercial development particularly long day care and work based child care. At present the Council provides an occasional care centre in Northgate which has a maximum capacity of 28 places at any time. This centre is operating at approximately 70% capacity and therefore, there is no demonstrated need for additional occasional child care.

Within the Shire, there are 31 approved long day care centres and kindergartens, 4 of which are 40 place long day care centres and only one of which is located in the Hornsby Town Centre. Changes in workforce characteristics and a greater proportion of working mothers has increased the demand for long day care services. This is apparent in Hornsby with a Shire wide waiting list for over 1,100 places.

There is clearly a demonstrated demand for long day care places and no capacity within existing facilities to cater for further demand generated by new development in the Town Centre. Therefore, future non-residential development will require additional child care facilities which are not currently available in the Town Centre.

The minimum demand for long day care facilities has been established by the following formula:

Demand for child places = $\frac{W \times D}{S}$

Where

W is the estimated increased workforce over the 5-year period.

D is the percentage of the Australian female workforce with a dependant between 0 and 4 years of age. (This broadly based figure is considered reasonable for the regional attraction of a centre such as Hornsby and where a proportion of the workforce resides outside the Shire).

S is the DOCS minimum standard level of service for long day care centre being one place for every 2.5 children aged between 0 and 4 years.

Demand for places = $\frac{3020 \text{ workers x 6.9\%}}{2.5}$ in Hornsby for 2.5 next 10 years = 83 places

Given the spare capacity at the occasional care centre, it is proposed that the centre be provided as a 70 place long day care be provided.

At this stage no land has been acquired for this purpose and therefore the contribution would include the cost of land acquisition as well as the capital cost of the facility. Should suitable land be dedicated to the Council or if a centre is proposed as part of another development, the contribution rate may be recalculated to delete the land component.

C-3.4 Calculation of Contribution Rate

The contribution rate may be calculated as follows:

Florence Street Mall (recoupment)

Prior to the December 1997 amendment to this Plan, contribution rates for non-residential and residential development were calculated as follows:

Contribution (per square metre)

= (Cost of public facility-previous contributions) x Development Factor **
Projected non-residential floor space over 10 years

= (\$2,627,000 - \$120,000) x 0.42 59,000sqm

= \$17.85 per square metre

Contribution (per person)

= Cost of public facility* period-previous contributions x Development Factor**

Projected no. people over 10 years

 $= \frac{(\$2,627,000 - \$120,000) \times 0.58}{2536}$

= \$573.37 per person

On the basis of these rates, development up to the now-superceded development projections (a further 53,000m² of non-residential floor space and a further 65 residents) would have contributed a further \$983,319 towards recouping the cost of Florence Street mall. This remaining cost will now be recouped from the newly projected level of development over the remainder of the life of the Plan (ie mid-December 1997 - mid-July 1998). The new contribution rates are calculated as follows:

Residential Development -

Contribution rate = Cost attributable to remaining development (per person) = EMP_{REM} + RES_{REM}

= <u>. \$983,319 .</u> 2829 + 295

= \$314.76 per person

Non-Residential Development -

Contribution rate (per m^2) = per person rate / FS_{emp}

= \$314.76 / 31.383

= \$10.03 per m²

Where

EMP_{REM} is the number of additional Hornsby Town Centre employees due to the development of a further 62,500 m² of floor space projected to be consented to over the period mid-December 1997 to mid-July 1998;

 $\mathsf{RES}_\mathsf{REM}$ is the number of additional District 9 residents due to residential development projected to be consented to over the same period; and

 $\mbox{FS}_{\mbox{\scriptsize emp}}$ is the average floor area per employee over all non-residential development.

Hunter Street Mall Extensions

On the basis of similar provision of pedestrian mall space per Hornsby Town Centre employee or resident, Council will now levy contributions towards the cost of extensions to the existing mall into Hunter Street. This cost will be shared between development over the remaining life of this Plan and development during the 1998 - 2003 period. The cost of construction for these extensions is considerably greater than for the original mall. This is due to inflation since 1991 and the significant costs related to the gradient of Hunter Street north.

Nominal contribution rate =
$$\frac{\text{Cost}}{\text{EMP + RES + AP}}$$

= $\frac{\$4,500,000 \#}{479 + 2388 + 917}$
= $\$1,189.22$

Where

EMP is the number of additional Hornsby Town Centre employees projected due to the development of a further 15,000m² of floor space over the 1998 - 2003 period:

RES is the number of additional District 9 residents due to residential development over the 1998 - 2003 period; and

AP is the number of additional residents and employees in Hornsby Town Centre / District 3, above that originally projected, during the 1993 - 1998 period.

The cost attributable to the additional residents and employees will be paid by all development occuring over the period mid-December 1997 to mid-July 1998. The actual contribution rates for such development are calculated as follows:

Residential Development -

Contribution rate (per person)	=	$\frac{. AP \ x \ NCR .}{EMP_{REM} + RES_{REM}}$
	=	917 x \$1,189.22 2829 + 295
	=	<u>\$1,090,514.70</u> 3124
	=	\$349.08 per person

Non-Residential Development -

Contribution rate (per m²) = per person rate / FS_{emp} = \$349.08 / 31.383= \$11.12per m²

Where

AP is the number of additional residents and employees in Hornsby Town Centre / District 3, above that originally projected, during the 1993 - 1998 period;

NCR is the nominal contribution rate, per person, calculated above;

EMP_{REM} is the number of additional Hornsby Town Centre employees due to the development of a further 62,500 m² of floor space projected to be consented to over the period mid-December 1997 to mid-July 1998;

 $\mathsf{RES}_\mathsf{REM}$ is the number of additional District 9 residents due to residential development projected to be consented to over the same period; and

 $\mathsf{FS}_{\mathsf{emp}}$ is the average floor area per employee over all non-residential development.

Town Centre Street Landscaping Improvement Program

The contribution rate for District 9 is calculated on the basis of the proportion of the total program cost that is attributable to new development. The total program cost is in the order of \$3 million. The proportion of the cost to be met by new development has been increased to reflect the higher level of development expected over the life of the Plan (as determined in September 1997). Contributions rates are calculated as follows:

Non-Residential Development -

Contribution (per m²)

= cost attributed to new development x development factor **
projected non-residential floor space over 5 years

= \$669,400 x 0.5663 @ 75,500

= \$5.02 per m²

Residential Development -

Contribution (per person)

= Cost attributed to new development x development factor projected number of people over 5 years

= \$669,400 x 0.4337 @ 2313

= \$125.52 per person

Traffic Management Facilities

Major Access Facility

The major access facility is the reconstruction of the bridge over railway line and its approaches at Thomas and Romsey Streets. The estimated cost is \$1,312,000 (1997 cost estimate).

Contribution rates are calculated as follows:

Non-Residential Development -

Contribution = $(per m^2)$

Cost of public facility # x Development Factor **
Projected non-residential floor space over 5 years

= (\$1,312,000 x 0.5663) 75,500sgm

= \$9.84 per m²

Residential Development -

Contribution = Cost of public facility # x Development Factor **
(per person) Projected no. residential population over 5 years

= (\$1,312,000 x 0.4337) 2313

= \$246.01 per person

Other Traffic Management Devices

Includes:

- preparation of local area traffic management plan and implementation to protect residents from traffic intrusion (\$327,400*);
- traffic signals at the intersections of Edgeworth David Avenue and Thomas Street (\$143,700*) and Albert Street and Edgeworth David (\$143,700#);
- replacement of the roundabout at the intersection of Sherbrook Road and Burdett Street with traffic signals (\$153,700#);
- construction of roundabout at intersection of Burdett Street and Muriel Street (\$105,000);
- conversion of centre lane in Edgeworth David Avenue at intersection with Myra Street to shared lane (\$34,900);
- rearrangement of traffic lanes and revised signal phasing at the intersection of Sherbrook Road and Edgeworth David Avenue (\$10,000 #);
- a traffic island at Romsey Street at Edgeworth David Avenue (\$6,200);
- an additional northbound traffic lane to George Street (\$750,000 #);
- replacement of and reconstruction of Thomas Street (\$146,800*) to provide access to the Town Centre.

Contributions rates are calculated as follows:

Non-Residential Development -

 $\begin{array}{ll} \text{Contribution} & = \underline{\quad \text{Cost of public facility x Development Factor *}} \\ \text{(per m}^2\text{)} & & \text{Projected non-residential floor space over the next 5 years} \\ \end{array}$

= \$1,821,400 x 0.5663 75,500

 $= 13.66 per m^2

Residential Development -

Contribution = Cost of public facility x Development Factor*
(per person) Projected no. persons over the next 5 years

= \$1,821,400 x 0.4337 2,313

= \$341.52 per person

Long Day Care Facility

The provision of a 70 place long day care centre is proposed, funded over 10 years.

The contributions rates are calculated as follows:

Non-Residential Development -

Contribution (per m²) =
$$\frac{\text{(Cost of public facility + land cost)}}{\text{Total commercial and retail floor space over 5 years}}$$

$$= \frac{\text{($$543,000 *** + $$$$$$$$440,000)}}{75,500\text{sqm}}$$

$$= $$14.34 \text{ per m}^2$$$

@ Original cost attributable to new development in 1993 was \$528,000. This has been increased (in September 1997) to reflect higher than projected growth - 5333 employees and residents over 5 years compared with the original estimate of 4416 over 10. The adjusted base cost is therefore \$637,640. This adjusted base cost was then also indexed by ABS Nondwelling Construction Cost Deflator for June 1993 - March 1997 (115.8/110.3), or by 4.9864%, and rounded to nearest \$100.

- # 1997 cost estimate.
- * Original 1993 cost estimate indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 March 1997 (115.8/110.3), or by 4.9864%, and rounded to nearest \$100.
- ** The "Development Factor" is the proportion of commercial/retail development to the overall amount of development in the Town Centre (ie including residential development). On the basis of population generation, the Town Centre will generate approximately an additional 3,020 workers in retail and office space and approximately a further 2,313 residents over the 5 years. The ratio of workers to residents is therefore 56.63%: 43.37%.
- *** Original 1993 cost estimate of \$350,000 for a 40 place centre was increased to \$612,500 for a 70 place centre. This amount was then indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 March 1997 (115.8/110.3), or by 4.9864%, and rounded to nearest \$100.

C-3.5 Application of Contribution Rate for Non-Residential Development

The above contribution rates for non-residential development have been calculated on the basis of an average floor area per employee of $31.383~\text{m}^2$. Council reserves the right to apply the higher, per person rates, where it can be demonstrated that the proposed commercial or residential development will involve a greater number of employees than would be indicated by the above figure for floor area per employee.

C-4. STORMWATER DRAINAGE - HORNSBY TOWN CENTRE

C-4.1 Anticipated Growth and Development

Studies undertaken on behalf of the Council (refer "Hornsby Town Centre Drainage Strategy", October, 1989, prepared by Bewsher Consulting) indicate that the existing drainage system for the Hornsby Town Centre has inadequate capacity to cater for future development. The existing system has a typical capacity of between 30-50% of the Council's design standard for commercial areas for the 50 year average recurrence interval (ARI) flow.

The analysis and approach adopted by the Council's consultants was to achieve the design standard. Through modelling of the existing system, the deficiencies were identified and alternative measures to increase capacity investigated. The approach does not relate necessarily to any particular development scenario. Rather, it is based on satisfying a desired minimum standard of stormwater drainage throughout the entire Town Centre.

C-4.2 Nexus

Future development, where the drainage regime of the site will be altered by site works or an increase in the impervious surface area, will have an impact on the drainage pattern of the catchment. The drainage characteristics are influenced by many factors including slope, topography, soil type/erodability, vegetation cover and the nature of existing development upstream of the catchment.

The Council's adopted Urban Stormwater Management Code, June 1991, establishes the goals, objectives, principles and policies for the management of the stormwater arising from development throughout the Shire. This document establishes the broad parameters under which the Council will provide, maintain and manage stormwater drainage facilities. In particular, the goals and objectives establish the desired standards to be achieved throughout the entire Shire.

For new development, the Code states that the Council shall have regard to the likely affect of development on the volume and rate of stormwater runoff from the property and the capacity of the drainage system to cater for the additional runoff.

In response, the Council shall consider what conditions (of development consent) should be imposed to deal with drainage matters including the carrying out of drainage works (which may not necessarily be limited to the site subject of the proposed development), the provision and future maintenance of a stormwater detention system on the subject land and/or the payment of a contribution towards the cost of drainage works to be carried out by the Council. In undertaking its assessment, the Council also needs to be cognisant of the additional volume and rate of discharge from other properties in the catchment.

The specific works required to give effect to the Code have not as yet been documented. Of these, only a proportion will relate to new development with the remainder being required to cater for existing development. The basis of the current policy is that for new developments, detention and water quality control basins would be incorporated within the development to mitigate adverse impacts on the downstream drainage systems.

While the impact of redevelopment of individual sites on downstream drainage systems is unlikely to be significant, the cumulative effect of redevelopment of large areas within a catchment would adversely effect downstream drainage capacity and runoff water quality. In many areas this may lead to an exacerbation of existing flooding problems and possible further deterioration in receiving water quality. On this basis, it is reasonable to require a contribution in these areas once the extent of anticipated development and required drainage facilities has been identified.

Within the Hornsby Town Centre, future development will lead to an increase in the stormwater runoff. Therefore, it will be necessary to augment the existing trunk drainage system in order to reduce the risk to person and property, reduce erosion and to minimise the risk of pollution in receiving waters.

For catchments which have flooding problems in existing conditions, improvements need to be formulated to overcome these existing problems. The cost of additional improvements required for future development may be sought from Section 94 contributions.

C-4.3 Calculation of Contribution Rate

The ultimate development for the Town Centre may be comprised of various land use scenarios. The projected development scenario (which is currently under review) outlined in the "Hornsby CBD Long Term Traffic Strategy" prepared by TEC, December 1991, provides for an additional floor space of 210,000 sq.m of commercial development. The actual land use mix is likely to change in response to market forces as has been witnessed by the recent interest in residential development within the Town Centre.

For the purposes of calculating the development contribution for drainage works, it has been assumed that the design standard adopted by the Council is required to satisfy the stormwater drainage requirements of the ultimate development of the Town Centre. However, it is acknowledged that different development scenarios will impact the drainage requirements and therefore the contribution rate.

On the basis of the projected development, existing development represents approximately 62% of the ultimate development scenario. The costs associated with achieving the Council's design standard total \$6,979,000***. Therefore, \$2,652,000 (i.e. \$6,979,000 x 38%) may be sought through Section 94 contributions from new development.

This proportion of the total cost may then be apportioned over the anticipated development as follows:

Contribution (per square metre)

= . Cost of public facility # . Projected floor space ##

= . \$2,712,800 . 210,000 square metres

= \$12.92 per square metre

The cost of the drainage works is based on the ultimate development of the Town Centre. Of this, only the proportion of the total infrastructure likely to be developed over the next 5 years, as identified by the Council, has been included in this calculation.

The projected floor space is based on a commercial development scenario of the Town Centre and has been estimated as being a further 210,000 sq.m. This figure and the ultimate development scenario is currently under review.

 *** 1993 costs indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 - March 1997 (115.8/110.3), or by 4.9864%, and rounded to nearest \$100.

C-5 STORMWATER QUALITY REMEDIATION

Recent studies have identified that significant levels of sediments, nutrients and bacteria (of sewage and diffuse urban origin) are originating from the urban areas of the Shire, adversely affecting water quality in the Shire's major watercourses (Australian Water Technologies 1993, HSC 1996). Over the next five years, a Catchment Remediation Rate will generate approximately \$3,000,000 for water quality improvement works. This is a 2% special purpose rate levy under the Local Governement Act, 1993. These funds will be used for the retrospective installation of devices to remediate the existing pollution problems in the four major water bodies within the Shire, namely Berowra and Cowan Creeks and the Lane Cove and Hawkersbury Rivers.

Future development in the Shire will result in a greater need for nutrient and sediment control. Council currently requires developers / landowners engaging in subdivision of non-urban land for residential use to install water quality improvement devices on-site. This is in order to at least partially remediate the quality of stormwater originating on-site. In some cases, the installation of such devices on-site is either impossible or undesireable to the developer / landowner. It is proposed that where it is acceptable to Council, such devices may be installed off-site, on community land and developers / landowners will make a contribution towards Council's remediation program in lieu of on-site provision.

It should be noted that these on-site devices do not necessarily improve stormwater quality to levels equivalent to those prior to development. Nor do such devices necessarily remediate stormwater quality such that Council's water quality targets are met. Also, continuing redevelopment of existing urban land will adversely affect water quality. Given these factors, future development will continue to degrade water quality in the Shire's major water bodies. Council may therefore, in the future, further amend this Contributions Plan to include provision for levying all development for the provision of additional stormwater remediation capacity to achieve its water quality targets.

C5.1 Application

Council will accept development contributions, in lieu of on-site provision of stormwater quality remediation devices, wholly at its discretion and only where:

- development involves conversion of land from non-urban to urban (residential, commercial, industrial and the like) use;
- such devices would ordinarily be required to be constructed as a condition of consent under Section 91 of the Environmental Planning & Assessment Act, 1979;
- Council's targets for water quality will not be compromised by off-site provision;
- it is physically possible to construct similar devices on Council land on the same watercourse or in the same general water catchment;
- a better planning solution is arrived at; and
- Council is not financially disadvantaged by the provision of such devices on land under its control, including by way of any costs related to the structural repair and maintainance of the devices (above any cost Council is ordinarily liable for).

C-5.2 Nexus

New development that involves the conversion of land from non-urban to urban use results in both short - and long-term increases in stormwater flows and stormwater-borne sediments and nutrients. Such increases in turn affect water quality in major watercourses in the Shire. Water quality load and concentration monitoring has been carried out by Council (1996) and AWT (1993). This monitoring clearly demonstrates that newly developed subcatchments within the Berowra Creek catchment (eg Pyes and Georges Creeks) carry significantly higher loads and concentrations of water pollution than similar established urban sub-catchments.

Council requires the provision of on-site stormwater quality remediation devices, where it is considered that the impact on water quality will be unacceptable on environmental grounds. Where on-site provision is either impossible or undesireable, Council has the discretion to accept a development contribution for such works on Council land, in lieu of on-site provision, where those works meet the demand generated by the subject development.

C-5.3 Calculation of Contribution Rate

Development contributions in lieu of on-site provision of stormwater quality remediation devices will be based upon the indicative costs of devices provided on land under Council control, as indicated below:

Device	Cost		
Class 1 Wetland (approximately >100 hectare catchment)	\$250,000		
Class 2 Wetland (approximately >50 hectare catchment)	\$150,000		
Mini-wetland (approximately <50 hectare catchment)	\$50,000		
Gross polluntant trap	\$35,000		
Sediment Trap 1	\$25,000		
Sediment Trap 2	\$50,000		
Class 1 Stream Rejuvenation	\$100,000		
(approximately 100 metre length)			
Class 2 Stream Rejuvenation	\$55,000		
(approximately 50 metre length)			

Table 10: Indicative Costs of Provision of Stormwater Quality Remediation Devices

It should be noted that these are only indicative costs and that actual costs will depend upon specific site conditions.

C-6. EXTRACTIVE INDUSTRIES (Shire-wide)

The transportation of extractive resources is primarily undertaken by road transport, creating significant demands on the upgrading of public infrastructure due to the need to upgrade and reconstruct existing public roads. This is necessary to provide both suitable public roads for the transportation of resource and the standard of road which will provide for safe and efficient usage by the general public.

The court has recognised the significant impact that road haulage vehicles associated with extractive industries have on the public road system, beyond the normal usage by the general public, and accordingly has accepted Section 94 is an appropriate mechanism for the levy of contributions for the upgrading and reconstruction of the public road system affected by such transport generated by extractive industries.

The Hornsby Shire has extensive areas of potential extractive industry development primarily within the rural areas of the northern extent of the Shire. In particular Sydney Regional Environmental Plan No. 9 (Extractive Industry) has identified a significant sand and clay/shale resource in the Maroota area, which is subject to a Plan of Management (prepared by Resource Planning Pty Ltd, June, 1991).

C-6.1 Area of Application

The Section 94 contributions for extractive industries will apply Shire wide. The Section 94 contributions will be required of new developments or existing developments requiring further development approvals for expansions or continuation of existing operations. Such extractive industries proposals will be confined to those areas within which this development will be permissible with the Council's consent under the current zoning controls or as existing uses, but the extent of roadworks will be dependent upon the travel route of haulage vehicles.

C-6.2 Nexus

While each truck movement associated with extractive industries will contribute to the volume of traffic within the public road system actual damage to the road surface and the need to upgrade roads is substantially and directly associated with laden trucks. Accordingly, there has been accepted practice to levy Section 94 contributions based directly upon the number and weight of laden truck movements. Therefore a direct relationship to the demand for an upgraded road system can be related directly to the volume of material leaving an extractive industry site. This will be the basis upon which Section 94 contribution levies will be imposed.

C-6.3 Works Program

The "Plan of Management for Extractive Resources at Maroota, NSW" (Resource Planning, June 1991, page 25) identifies that in the order of \$12 million would be required to upgrade both Old Northern Road and Wisemans Ferry Road to withstand adequate extractive industry traffic from the Maroota operation.

Additionally this report outlines that the revenue being received at that time from extractive industry contributions (ie in the order of \$100,000 per year) combined with funding from fuel tax would be adequate to service a loan that financed upgrading of the road system, but would not be of sufficient magnitude by itself to upgrade the road to a satisfactory standard in the foreseeable future.

Extractive industries are "designated development" for the purposes of the EP & A Act and therefore require the preparation of a environmental impact statement (EIS) to accompany a development application. Such a development application and EIS will need to identify and evaluate the road travel route of haulage vehicles, the existing standard of the routes of the proposed public roads on the travel routes, and the necessary extent of road upgrading. Accordingly, this would provide a means by which Council, and at times in association with the Road and Traffic Authority (RTA) and adjoining Council's, can establish a works program for the upgrading of the effected public road system.

C-6.4 Calculation of Contribution Rate

Section 94 Contributions will be required to be paid on a monthly basis to Council based on a fee for each tonne of extractive resource leaving the extractive industry site by road transport. This levy will be calculated as follows:

Monthly contributions required = tonnes of resource removed from site per month by road transport x rate per tonne.

Council has determined that a rate per tonne to be \$0.51*** is applicable to the Maroota area. This rate is based upon the findings of the Land & Environment Court in the case Dongés & Associates v Baulkham Hills Shire Council, in May 1989, which concerned a site in the Maroota area.

Extractive industries in other areas would be subject to individual assessment in line with the comments above.

*** 1993 rate indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 - June 1996 (113.2/110.3) or 2.62919% and rounded to the nearest \$100.

C-7. WASTE MANAGEMENT FACILITIES

Collection and disposal of waste material is a basic function of Local Government. Changes to State Government policy over the last few years has resulted in an increasing responsibility to Local Government in the provision of facilities for the disposal of collected waste materials. Further, due to the reducing availability of waste disposal/landfill sites local government has been increasingly required to provide recycling facilities as a means to waste minimisation.

Hornsby Council has been active in developing a waste disposal and minimisation strategy for the Shire.

On the 5th June, 1991, following its analysis of the options contained within a waste management review as prepared by Councils Development and Environment Division, Council adopted a waste management strategy which embodied the establishment of a waste transfer/recycling facility at Beaumont Road, Mount Kuring-gai. Council's subsequently engaged Consultants, Nexus Environmental Planning, to prepare an environmental study investigating the rezoning and development of the Beaumont Road site. This site has been acquired and is currently in the process of development to establish a waste transfer/recycling facility for use on a Shire wide basis. A waste management feasibility, study by Meinhardt and Nexus is currently being finalised, which this also identifies the need for an interim facility at Arcadia/Glenorie.

C-7.1 Area of Application

The proposed Beaumont Road waste transfer/recycling facility will be utilised on a Shire wide basis, and therefore contributions will be levied across all districts.

The current proposal is to utilise the proposed transfer/recycling facility for the collection of domestic waste only. Accordingly, on this basis, contributions will be levied on a proportional basis from the additional population within the Shire during the term of this Plan (1993 to 1998).

C-7.2 Nexus

The environmental study undertaken for the Beaumont Road transfer station/recycling centre revealed that the proposed facility will be of benefit to the residents of the Shire at large. The proposed facilities identified as one which is currently in need by Council, but will also benefit the future population of the shire. Council currently handles the waste generation of between 130,000 to 150,000 tonnes per annum in the shire. The proposed Beaumont Road facility will meet close to 50% of the needs of the shire, and Council is currently considering the construction of a second waste transfer/recycling facility which will also be proportionately funded by Section 94 contributions.

It is noted that there is significant economic benefits of recycling non putrescible waste including paper, glass and plastic bottles in terms of conserving resources and in keeping with Council's aim of reducing the waste stream by 40%. Accordingly, in addition to the clear nexus between residential dwellings and the generation of waste, there is economic and environmental benefits to the community associated with the proposed facility.

C-7.3 Works Program

The proposed Beaumont Road facility will be constructed within the next 5 year work program (1993-1998) and will entail the following costs:

- * Land Acquisition \$451,000
- Preparation of environmental Study \$23,800
- * Design and construction and associated costs \$4,967,300***
- * Other study costs and development include:
 - Waste Management Feasibility Study \$25,450
 - Arcadia/Glenorie interim recycling facility \$100,000
- * Total \$5,567,550

*** Cost indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 - June 1996 (113.2/110.3), or by 2.62919%, and rounded to nearest \$100.

C-7.4 Calculation of Contribution Rate

The contribution rate may be calculated as follows:

Contribution = <u>Total cost x proportion attributable to pop. of new dev.</u>
Additional population (1993-1998)

 $= \frac{\$5,567,550 \times 0.0920}{12,151}$

= \$42.17 per person.

C-8. BUSHFIRE PROTECTION

The Hornsby Shire has vast areas of bushland which are subject to potential bushfire hazards. Bushland areas are widely distributed throughout the shire adjoining the outer fringes of the urban areas and within remnant bushland areas central to the urban areas. Council has an existing bushfire service comprising both full time staff and volunteers. The full time staff provide assessment of development applications, administrative duties, maintenance of vehicles, and maintenance and upgrading of bushfire trails. Additionally, Council undertakes various works on a needs basis to provide for the necessary fire protection associated with the development of areas within the shire. Proposed works within the next 5 year work program (1993-1998) involve the following two facilities:

- 1. Pontoon facilities at Brooklyn associated with the Brooklyn fire station;
- 2. Training facilities for the shire bushfire personnel;
- 3. Fire spotting tower at Millicent Trig Cowan;
- 4. Upgrading of fire trails

C-8.1 Area of Application

The specific works proposed within the term of this plan will benefit the following planning districts.

- 1. Pontoon facilities at Brooklyn District 7;
- 2. Training facilities for bushfire personnel All districts;
- 3. Fire spotting tower all districts;
- 4. Fire trails all districts.

C-8.2 Nexus

The need to provide additional bushfire control facilities is directly related to the increase in population of an area and the need to provide for an expanded range and level of facilities to ensure adequate bushfire protection of such development. The proposed facilities will provide service to both the existing and additional population associated with future development, and accordingly Section 94 contributions will be levied on the proportional basis for new development.

The construction of a new fire spotting tower is required to accurately plot fires overall within the Shire when used in conjunction with the existing fire spotting tower at Galston. This facility will facilitate the early detection of fires throughout the Shire in order to assist in protecting existing and future development.

Upgrading of fire trails by constructing concrete drains and crossings is required throughout the Shire. This upgrading allows for safe entry of fire crews, the minimisation of the environmental impact of the trails and the long term reduction of maintenance costs.

The demand for the use of training facilities for volunteers increased significantly with a 60% increase in 1994 of local residents volunteering for the bushfire brigade. Such an increase placed enormous pressure on existing facilities, including training facilities. Accordingly, these services and resources would not be able to meet any future demand placed on them by any future growth in population. The future population of the Shire over a five year period is expected to increase by 9.20%.

Amended: 31st May, 1995.

C-8.3 Works Program

Council's works program has identified the following costs associated with the proposed additional facilities.

- 1. Pontoon facilities at Brooklyn \$30,800***
- 2. Training facilities for bushfire personnel \$564,500***
- 3. Fire Spotting Tower \$5,100***
- 4. Fire Trails \$153,900***

These facilities are proposed to be undertaken during the five year works program. In particular, the training facilities project will be undertaken by the end of the 1997 calendar year.

*** 1993 construction cost estimates indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 - June 1996 (113.2/110.3), or by 2.62919%, and rounded to nearest \$100.

C-8.4 Calculation of Contribution Rate

The contribution rate may be calculated as follows.

District 7

Contribution = <u>Total cost of facility x proportion of additional population</u>
Additional population (1993-1998)

= \$30,800 x 0.50 412

= \$37.38 per person

Shire wide (all districts)

Contribution = <u>Total cost of facilities x proportion of additional population</u> additional population (1993-1998)

= (\$564,500 + \$5,100 + \$153,900) x 0.0920 12,151

= \$5.48 per person

C-9. DURAL SERVICE CENTRE

C-9.1 Area of Application

The Dural Service Centre comprises the land zoned Business E (Service Centre) along New Line Road and Old Northern Roads at Dural.

In 1991, the Dural Service Centre Management Plan examined and revised the planning controls that apply to the Centre.

C-9.2 Anticipated Growth and Development

The Dural Service Centre Management Plan (Hornsby Shire Council, 1990) estimated that 150,000m² of floor space would be developed during the 10 year period from 1991 to 2000, at an average of 15,000m² per year. Consequently, it is estimated that 75,000m² of floor space would be developed over the next 5 year period. (1993-1998).

C-9.3 Nexus

The Dural Service Centre Management Plan (Hornsby Shire Council, 1990) identified the need to provide facilities for the future workforce and visitors to the Centre. These facilities identified were bus shelters, landscaping, signage and water monitoring within the Centre.

Although the majority of the workforce will travel by car, a proportion of the workforce will travel by bus. Associated with the Roads & Traffic Authority's reconstruction and re-alignment of New Line Road will be the provision of four bus bays immediately serving the Centre, two for northbound buses and two for southbound buses. The provision of shelters at these bays will be required by the workforce of the Centre to provide protection from wind and rain while waiting for the bus.

A proportion of the usage of the shelters can be attributed to residents in the rural area on the opposite side of New Line Road and the Service Centre. As the majority of the workforce that will travel to the Centre by bus will be from the south, there is a direct nexus between the demand for the two southbound bus shelters on the eastern side of New Line Road immediately adjacent to the Service Centre. The two northbound bus shelters will be utilised primarily by residents in the rural area or any future residential release area and the costs of these shelters should be borne by these users.

The average cost for the construction of a bus shelter is \$7,210. The cost of the provision of the two southbound shelters should be proportioned on the basis of development within the Centre.

The landscaping of individual sites will be the responsibility of individual developers. The landscaping of public areas and provision of identification signs for the Centre is a responsibility that should be shared between the various proponents of development within the Centre. To raise the profile and identify the Centre, a co-ordinated landscape theme and identification signs are to be provided along the road verges. It is proposed to provide an avenue of native trees, understorey planting and three identification signs along the alignment of New Line Road.

The landscaping works are proposed to consist of two stages, namely the planting of 170 trees to form an avenue and understorey planting. The avenue of trees is estimated to cost \$52,530 and the understorey planting \$81,600.

There are three car park identity signs proposed to be erected with lettering "Dural Service Centre". The cost of each sign is \$468.50, therefore the total cost is \$1,405.50.

The water monitoring program should be removed from the strategy as the monitoring is a recurrent expense and therefore a levy cannot be imposed.

C-9.4 Calculation of Contribution Rate

The above items were incorporated into a contribution program for the Dural Service Centre. Within the next 5 years it is proposed to undertake Stage 1 of the landscaping works (\$52,530), construct 2 bus shelters (\$14,420) and erect corporate identity signs (\$1,410). These costs are based on 1993 estimates, indexed by the ABS Non-dwelling Construction Cost Deflator for June 1993 - June 1996 (113.2/110.3), or by 2.62919%, and rounded to nearest \$10.

A total expenditure of \$68,360 is proposed. The contribution required can be calculated by dividing the total expenditure by the projected floor space, i.e.

Contribution = $\frac{$68,360}{75,000 \text{sgm}}$

= \$0.91 per square metre.

C-10. TRAFFIC MANAGEMENT - CHERRYBROOK

The provision of transport and, in particular road facilities, are an important facility provided by Local Government for developing areas. The Cherrybrook Release Area (District 8) is at present the only area within which Council is requiring Section 94 contributions for the upgrading and provision of additional roads and traffic management devices in order to provide reasonable standard of road service for the incoming population associated with new development.

As development within the Release Area continues and further traffic studies and investigation is carried out, additional works may be identified for inclusion in this Plan. This Plan will be amended as required to include such works.

C- 10.1 Area of Application

At present, this component of Council's contributions plan will apply only in respect to District 8 (Cherrybrook Release Area).

C-10.2 Anticipated Growth and Development

During the term of this plan Council has projected a population growth of 4,912 persons within the Cherrybrook Release Area comprising of a combination of both new subdivision allotments and medium density housing. The proposed roadworks and traffic management are proposed in areas of maximum potential for development and population growth, or are facilities and upgradings required in order to maintain the existing standard of efficiency and safety provided by the existing road systems in association with projected development and population growth. Indeed, the proposed roadworks and traffic management facilities are part of an ongoing program of Council, and past development in the Cherrybrook Release Area have provided a significant contributions to the provision of the road system as it currently stands.

C-10.3 Nexus

As outlined above, the future development within the Cherrybrook Release Area will create additional demands on the existing road network and will therefore reduce the level of service provided by the existing road network without proposed upgradings and traffic management facilities. Accordingly, Section 94 contributions will be levied in full for proposed roadworks and traffic management facilities from future development in the area during the term of this plan.

These works proposed have previously been outlined within the "Cherrybrook Development Contributions Program Section 94 - Environmental Planning and Assessment Act 1979" (Hornsby Shire Council, April 1991) and is consistent with the proposed layout of development contained within the Cherrybrook Precinct Development Control Plan (Hornsby Shire Council December, 1992).

C-10.4 Works Program

Program for roadworks and traffic management facilities required for the Cherrybrook Release Area during the 1993 - 1998 term of this plan, is provided as follows:

	Location	Length of Road	Anticipated Completion Date	Construction Cost (land cost) \$
	vid Rd W. inor cost)	road closure 600m (1/2 Road)	94	##361,000
2. Ro	bert Rd S.	160 (Full)	96	**288,000
	unty Rd & John Rd.	50m (1/2 road)	94	##37,600
	ajor constr)	,		##(48, ¹ 00)
	stings Rd E. ajor const)	800m (1/2 road)	96	#738,900
5. Ne Bo rec pro on dev (Ma	w Line Road & undary Road - coupment on a poportional basis based population from new velopment 1993-98 ajor construction efore 1993, ttal cost of \$2.4m)	2000m (Full)	-	**566,546
			Sub Total	\$2,040,146
traf Lin	affic Management - ffic signals at New e Road & James nty Dr.	Connecting Roadworks	94	##45,100 <u>##(71,200</u>)
	, =		Sub Total	\$116,300
pla	s Sheds are to be ced along main bus ites.		93-98 Sub Total	#51,300 \$51,300
	cal Area Traffic Inagement Works*		94-98 Sub Total	#205,300 \$205,300
It is	affic Analysis Study s necessary for Council udy of Cherrybrook as a			#51,300
			Total	\$2,464,346

^{*} There are a number of locations throughout the Cherrybrook Urban Release Area that will require local area traffic management measures (e.g. slow-ways, thresholds, pedestrian refuges).

^{**} Actualcost of completed works.

^{# 1993} costs indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 - June 1996 (113.2/110.3), or by 2.99184%, and rounded to nearest \$100.

^{## 1993} costs indexed by ABS Non-dwelling Construction Cost Deflator for June 1993 - June 1994 (110.6/110.3), or by 0.27198%, and rounded to nearest \$100.

C-10.5 Calculation of Contribution Rate

Contribution rate can be calculated as follows:

Contribution rate = Total cost of roadworks and traffic management facilities

Total number of additional population

= <u>\$2,464,346</u> 4,912

= \$501.70 per person.

C-11. ADMINISTRATION AND STUDIES (SHIRE-WIDE)

C-11.1 Initial Section 94 Review and Contributions Plan

C-11.1.1 Nexus

According to the DUAP's Manual, it is "accepted practice" to fund planning studies which establish a comprehensive approach to the administration of Section 94 through Section 94 (refer page 13 of the DUAP Manual). Such studies must be outside the normal daily work of the Council's Planning Department and only the capital costs of studies, which directly result in Section 94 Contributions Plan, may be funded in this way. Certain Councils already use Section 94 contributions to fund a Section 94 officer to administer its Section 94 plan in the same manner.

In order to establish the contribution rates under this plan, the Council has had to undertake a review of previous development contribution policies which operated over the whole Shire. The review was required in order to identify the types of public facilities for which a contribution may be made, the extent of the benefiting population, the costs of the required facilities, the proportion which may be "reasonably" levied as a Section 94 contribution, the actual contribution rates and the preparation of the implementation schedules.

These works and the costs incurred were outside the work normally undertaken by the Council's Planning Department and the Council has incurred additional costs in order to ensure that the plan was prepared. It is therefore reasonable to seek the recoupment of the capital cost of undertaking the review.

To cover the capital cost of this study and the additional Section 94 studies which need to be undertaken, it is reasonable for the Council to levy charges from developers under Section 94. The cost of future contribution plans or amendments, prepared in response to particular developments which were not contemplated at the time of preparation of this plan, should be recouped from the specific area at that time.

C-11.1.2 Calculation of the Contribution

The cost of the initial review to establish the Section 94 Contributions Plan structure was \$30,000. It is necessary for additional studies to be undertaken in 1993 to further refine the plan and to include additional strategies for other areas where a contribution may be taken. The cost of these further studies has been estimated at a further \$33,500****.

It is considered reasonable for the costs of the review to be recouped over the life of the plan, generally considered to be 5 years. While the plan will be ongoing and be reviewed annually, it is considered that it would need to be comprehensively reviewed after 5 years of operation. This approach is generally consistent with the suggested periods for the review of other statutory plans.

The cost of the contribution is calculated in accordance with the following formula:

Contribution = (Cost of Comprehensive Study + Cost of Additional Studies)
Population (resident & workforce) increase over next 5yrs

$$= \frac{\$30,000 + \$33,500}{14,231}$$

= \$4.46 per person

Assuming:

- * average dwelling occupancy across the Shire of 2.9 persons (as at 1991 Census);
- * an office worker occupies 20 sq.m of space; and
- * a retail worker occupies 50 sq.m of space,

the contribution equates to:

Residential development - \$14.33 per dwelling

Commercial development - \$0.25 per square metre

Retail development - \$0.10 per square metre

It is considered that given the relatively low rate for commercial and retail development (and the relatively small proportion attributable to the Hornsby Town Centre generally), that the cost of the studies relate only to residential development.

*** 1993 cost estimate of \$30,000 indexed by movements in the Local Government State Award between June 1993 and November 1996 (approximately 11.82%).

C-11.2 Drainage Strategy Study

Council's existing drainage construction program and strategy are currently insufficient to provide the information required to levy a Section 94 contribution. Therefore, without undertaking a new drainage study, Council cannot levy Section 94 contributions for drainage works throughout the Shire.

Further development in the Shire will have implications on the drainage characteristics of the catchment/locality and have financial implications for the Council in providing the public infrastructure works necessary to sustain that development. In order to obtain the information necessary to determine the required drainage works, it is necessary to review the existing drainage studies and to prepare a comprehensive drainage management plan. The cost of undertaking such a study may be levied from future developments.

Where a major development is likely to require specific drainage works to be undertaken, Council may require the developer to provide sufficient information to assist Council in the preparation of a Contributions Plan for that particular drainage catchment. As an interim measure and until a comprehensive study has been completed, Council may require developments to provide on site detention.

As with roads, and water and sewerage reticulation, internal drainage is the responsibility of the developer and will be required as part of the development consent.

C-11.2.1 Nexus

Future development in the Shire will impact the drainage pattern of the catchment and require the provision of new or augmented drainage infrastructure works to cater for increased runoff. As there is insufficient information currently available to provide such an assessment, the capital cost of undertaking a further drainage study to identify the costs required to provide "public" drainage infrastructure associated with new development is sought by way of a contribution.

The Council has identified the need to undertake a comprehensive drainage study to determine the impact and implication of future development in areas of the Shire. As required by the DUAP's manual, the study will result in a strategy under its Section 94 Contributions Plan. Until such time as this further study is complete, the Council will have regard to the characteristics and capacity of existing infrastructure for each catchment.

The study will relate to the existing and proposed urban areas of the Shire where further development is likely. The findings of the study will include the identification of infrastructure required to cater for increased runoff from the development.

C-11.2.2 Calculation of Contribution Rate

It is estimated that the cost of assessing the drainage requirements of new development throughout the Shire and to prepare a Drainage Strategy would be in the order of \$111,800***.

Council has previously sought to recoup the costs of these studies over 3 years. However, as the estimated cost of the follow up study has risen considerably, recoupment will now be over the full five year period.

Contribution rate = . Total Cost of the Drainage Study . Additional population over the next 3 years

= <u>\$111,800</u> 12,151

= \$9.20 per additional person

*** The original estimate for this study was \$60,000, to be recouped over 3 years. This is now considered to be a significant underestimate. On the basis of 5 years development, this estimate was proportionally increased to \$100,000. This was then indexed by movements in the Local Government State Award between June 1993 and November 1996 (approximately 11.82%).

C-11.3 Traffic Study

C-11.3.1 Nexus

Further development in and around the Hornsby Town Centre will generate additional traffic. The impact of this traffic on the local street system will be dependent on the type and intensity of development, the parking strategies adopted by the Council and the traffic management measures implemented by the Council.

Further information will be required to determine the precise nature and extent of future traffic. Given that the type of development within the Town Centre is likely to include a significant proportion of residential as well as commercial and retail floor space, previous assumptions need to be challenged and reassessed.

The Council has engaged consultants to prepare a model to enable traffic impact in and around the Town Centre to be assessed under various development scenarios. The model may be applied on a site by site basis or on a total Town Centre basis. The use of such a model is critical for the assessment of the implications of future development trends.

More particularly, the model will enable the Council to determine traffic capacity of the street system based on various development scenarios, the types of traffic management measures required and the timing of provision of such facilities. As the cost of this model is used to determine and assess the impact of future development and the public facilities required to support that development, the costs of the model may be recouped through the contributions plan.

The Council has identified the need to undertake a traffic study for the Town Centre and the impact of future development on it and the surrounding residential areas. The traffic model and the traffic studies are required to cater for traffic generated by future development in the Town Centre and to ensure that reasonable access is maintained, increased traffic does not impact the amenity of the area and in particular does not spread into the adjoining residential areas. In addition, a study leading to the adoption of a public transport strategy has also been identified as necessary to cater for the future development of the Centre.

C-11.3.2 Calculation of Contribution Rate

Contribution = (per square metre)

Cost of traffic studies - Previous contributions x Development Factor*

Projected non-residential floor space over the next 5 years

= \$111,800*** - \$40,000 x 0.5663 75,500

= \$0.54 per square metre

(per person)

Contribution = Cost of traffic studies - Previous contributions x Development Factor* Projected no. of additional residents over the

next 5 years

\$111,800*** - \$40,000 x 0.4337 2313

\$13.46 per person

"Development Factor" the proportion The is commercial/retail development to the overall amount of development in the Town Centre (ie including residential development). On the basis of population generation, the Town Centre will generate approximately an additional 3,020 workers in retail and office space and approximately a further 2,313 residents over the 5 years. The ratio of workers to residents is therefore 56.63%: 43.37%.

*** 1993 cost estimate of \$100,000 indexed by movements in the Local Government State Award between June 1993 and June 1996 (approximately 11.82%).

C-11.4 Land Degradation Study

One of the greatest environmental problems confronting the Shire at present, is land degradation associated with new development, resulting in erosion and sedimentation impacts on the environment. Council's existing works program and strategy are currently insufficient to provide the information required to levy a Section 94 contribution. Therefore, without undertaking a land degradation study. Council cannot levy Section 94 contributions for land degradation control works throughout the Shire.

Land degradation control works would include both a combination of rectification of past erosion and sedimentation problems or other related degradation impacts, as well as the establishment of necessary structures and measures to prevent further degradation of the environment. Accordingly, as the first stage to the assessment of the level of works required and the extent of the problem, a study would be necessary. Council is in the process of commissioning an initial overview study of the land degradation problem in the Shire, to be followed by a more detailed study concentrating on problem areas such as the Cherrybrook Release Area. The cost of undertaking such studies may be levied from future developments.

As with roads, water, sewage reticulation and internal drainage, internal sediment control works associated with particular developments is the responsibility of the developer to be provided on site and will be required as part of the development consent.

C-11.4.1 **Nexus**

Future development in the Shire will impact upon the extent of land degradation in the Shire, including erosion and sedimentation of waterways. As there is insufficient information currently available to provide such an assessment, the capital costs of undertaking

land degradation studies to identify the costs required to provide (public) works and infrastructure to rectify the problems associated with new development, will be sought by way of Section 94 contributions.

Council has identified the need to undertake an overview study to be followed by a more detailed study to concentrate on problem areas. As required by the DUAP's Manual, this study will result in a strategy under a Section 94 contributions plan. Until such time as this further study is complete, the Council will have regard to the characteristics and capacity of existing infrastructure for each area.

The study will relate to the existing and proposed urban areas of the Shire where further development is likely. The findings of the study will include the identification of infrastructure required to identify the works and infrastructure required to address the problems associated with land degradation resulting from new development.

C-11.4.2 Calculation of Contribution Rate

It is estimated that the cost of the initial overview study will be \$12,500, with the follow-up study now estimated to cost in the order of \$70,000***. Accordingly, total costs associated with these studies would be \$82,500.

Council has previously sought to recoup the costs of these studies over 3 years. However, as the estimated cost of the follow up study has risen considerably, recoupment will now be over the full five year period.

Contribution = <u>Total cost of land degradation control studies</u> Additional population over the next 5 years

 $= \frac{\$82,500}{12,151}$

= \$6.80 per person

It is noted that Council may update its contribution plan prior to the close of the 1993 -1998 term to include works and programs identified by these studies.

*** The original estimate for this study was \$37,500, to be recouped over 3 years. This is now considered to be a significant underestimate. On the basis of 5 years development, this estimate was proportionally increased to \$62,500. This was then indexed by movements in the Local Government State Award between June 1993 and June 1996 (approximately 11.82%).

C-11.5 Section 94 Officer

C-11.5.1 Nexus

As with the preparation of Section 94 studies, the employment of a Section 94 officer by Council is considered to be "accepted practice" by the Department of Planning. The effective coordination and administration of this plan will necessitate additional work being undertaken by the Council which is outside of work which has been programmed or which it has undertaken in

the past. No spare resources exist within the Council which may be directed to this role and therefore it has been determined that the employment of a Section 94 officer is essential for its effective monitoring, implementation and management.

The role of the officer would include:

- administer the contributions plan generally and ensure that the contributions are used to provide the public facilities for which they were intended;
- * monitor the receipt and expenditure of cash contributions in respective accounts and the recoupment of costs already spent;
- * monitor the dedication and development of land contributions;
- * recommend to Council the appropriate management and expenditure of funds in accordance with the adopted works program;
- * recommend to Council the appropriate interim use and ultimate development of dedicated land, the acquisition of appropriate land for the identified public purpose or the re-use of existing Council property for an alternate public purpose under the terms of the contributions plan;
- * prioritise and program the works schedule;
- * regularly review the works schedule in accordance with levels of contributions received and expended and seek Council's adoption of these;
- * regularly review the rates for contribution in accordance with construction costs, levels of demand, population/workforce changes and the review procedures included in the plan, seek Council's adoption of these and amend the plan accordingly;
- * determine the appropriate time for provision of public facilities having regard to the works schedule, the availability of funds, demand generated by development, the time funds have been held, expected additional funds and alternative funding sources:

- * monitor the implications arising from development including the demands created for additional facilities for which contributions are not currently sought, the needs of specific "one-off" developments, the costs of development and land acquisition, the extent and type of development and the effect of this on the works program;
- advise Council of appropriate management, expenditure and policy implications regarding development contributions including those arising from legal decisions and State Government policy making;
- * determine the extent of recurrent costs and assess the implications to Council to provide these;
- * consider and assess the appropriateness of requests from applicants to defer payment of contributions or to settle the contributions by way of a material public benefit;
- determine appropriate guarantees for deferred or periodic payments and ensure they are obtained;
- * assess whether a credit or re-assessment of the contribution may be appropriate and how that may be determined;
- * prepare and make available the necessary information required by the Regulations including the contributions register, input to the Council's annual report and the annual statement; and
- * Liase with Councillors on at least a six monthly basis to ensure that the Development Contributions Plan reflects ongoing changes in community expectations and to present financial reports on fund movements.

C-11.5.2 Calculation of Contribution Rate

Due to extent of duties required the role of the Section 94 officer would need to be a full time position.

The level of skills required would be equivalent to a contract planner at a cost to Council of approximately \$55.91 per hour (inclusive of on-costs and costs of management etc). It is assumed that 35 hours per week will be worked for 52 weeks per year.

As the administration of the plan is of benefit to the Shire, it is appropriate that the cost of the officer be levied over the whole Shire. Costs are also to be apportioned between residential development and comercial retail development within Hornsby Town Centre. This apportionment is upon the basis of the number of additional residents and employees due to development, assuming:

 projected population growth due to residential development of 12,151 over 5 years;

- * an office worker occupies 20 square metres of space; and
- * a retail worker occupies 50 square metres of space.

Residential Development:

Contribution = (Nominal hourly cost x hours per week)
(x Number of wks x Number of years x)
((incoming employee pop. / total incoming pop))
Residential population over the next 5 years

= \$35.75 per person

Hornsby Town Centre Development:

Contribution = (Nominal hourly cost x hours per week)
(x Number of wks x Number of years x)
((incoming employee pop. / total incoming pop))
Projected floorspace next 5 years

= \$1.43 per square metre

*** 1993 cost of \$50.00 indexed by movements in the Local Government State Award between June 1993 and June 1996 (approximately 11.82%).

C-11.6 Social Plan

Population characteristics in terms of population density, age structure, ethnicity, income levels, employment and religion vary both from one local government area to another and within each local government area. The characteristics of an area are studied to enable services to be provided which meet the demands and needs of the population.

C-11.6.1 Nexus

Further development within the Shire will result in additional residents who may change the existing characteristics or have different needs to the current population. Although, raw data is available to consider the characteristics, the resources to interpret the data have not been available. Consequently, Council has little information on the characteristics of its population and therefore its needs.

To allow Council to provide for the needs of the population the characteristics of the population should be defined. The appropriate mechanism to achieve this is through a Social Plan. The Social Plan will rely on information derived from the 1991 Australian Census and a Community Needs Survey. This Survey

has been conducted at a cost to Council of \$40,000. The Social Plan is currently being prepared, at a cost of \$24,000.

C-11.6.2 Calculation of Contribution Rate

It is estimated that the Social Plan will cost \$50,000 to prepare. Only a proportion of the cost of the study can be attributed to the future population.

Contribution = Cost of survey & study x proportion of population additional population in the next 5 years.

- = \$64,000 x (12,151/132,264) 12,151
- = \$0.48 per person

C-11.7 Open Space Plan

As noted in the Open Space and Recreation section of this report the residents of Hornsby Shire enjoy a variety of open space which includes local reserves, playing fields, district reserves and regional reserves including bushland areas.

C-11.7.1 Nexus

An Open Space Plan has reviewed Council's reserves and their use. Council completed the first stage of this Plan through the Recreational Needs Study in 1991. The remaining stages included a review of the existing open space areas and their use in order to determine how best to meet the needs of the existing and future population.

C-11.7.2 <u>Calculation of Contribution Rate</u>

The Open Space Plan cost \$55,900*** to prepare. Only a proportion of the cost of the study can be attributed to the future population.

Contribution = Cost of study x proportion of population Additional population in the next 5 years

> = \$55,900 x (12,151/132,264) 12,151

= \$0.42 per person

*** 1993 cost of \$50,000 indexed by movements in the Local Government State Award between June 1993 and June 1996 (approximately 11.82%).

C-11.8 North Thornleigh - Westleigh Traffic Study (District 2)

C-11.8.1 Nexus

Significant additional residential development is anticipated in District 2, particularly in the north Thornleigh - Westleigh area. It is projected that up to 1000 new dwellings may be built in this area,

involving the rezoning and reuse of various industrial and special use lands.

Such development will generate considerable additional traffic, having an adverse effect on the road network in District 2. A traffic study is to be carried out during 1997-98 to identify roadworks that will be required to facilitate this development. In particular, it will assess the need for works in the vicinity of Duffy Avenue and Sefton Roads, Thornleigh and the desireability of downgrading the Malsbury Road - Milson Parade - Sefton Road regional road route through District 2.

C-11.7.2 <u>Calculation of Contribution Rate</u>

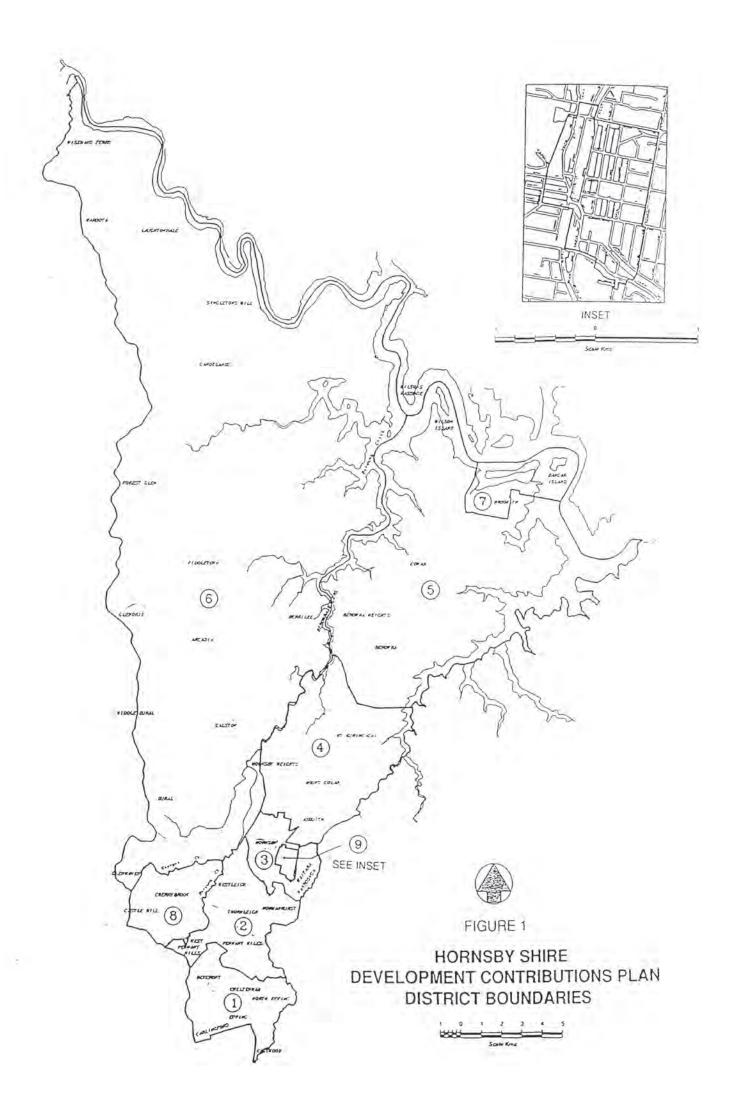
The traffic study has been estimated at costing \$31,900 to prepare. Only a proportion of the cost of the study is attributed to population growth and development during the remainder of the current five year period. The majority of the cost will be met by development over the next five-year period (1998 - 2003).

Contribution = <u>Cost of study</u>. Additional population

> <u>. \$31,900 .</u> 86* + 2515**

> > = \$12.26 per person

- * Anticipated population growth in District 2 between adoption of the December 1997 amendment and expiry of this Plan on July 16 1998 (11.67% of five-year growth of 737).
- ** Projected population growth in District 2 during the life of the 1998 2003 contributions plan (as at September 1997).



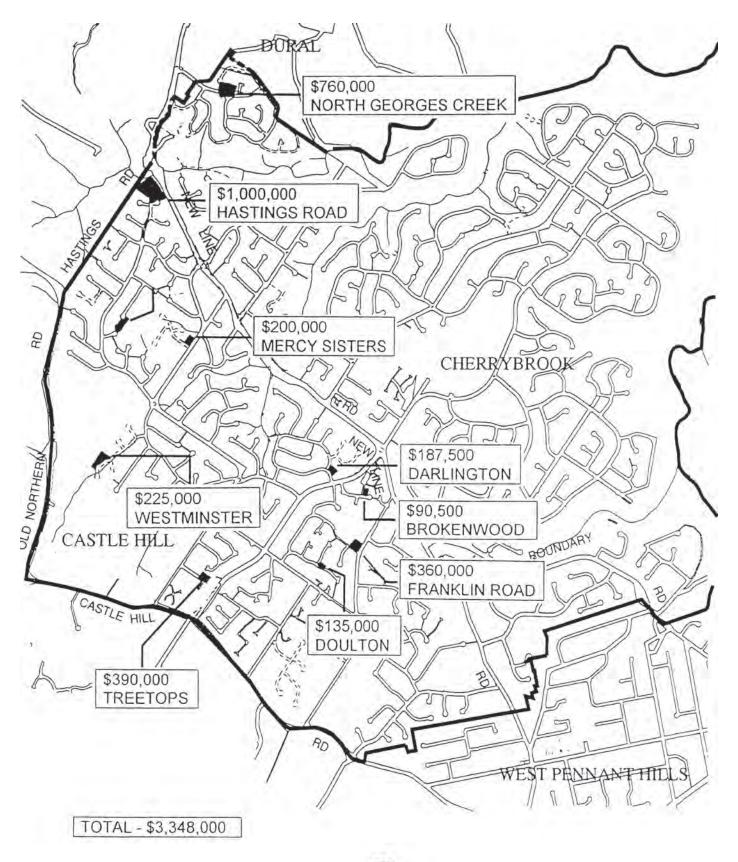
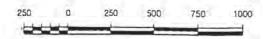
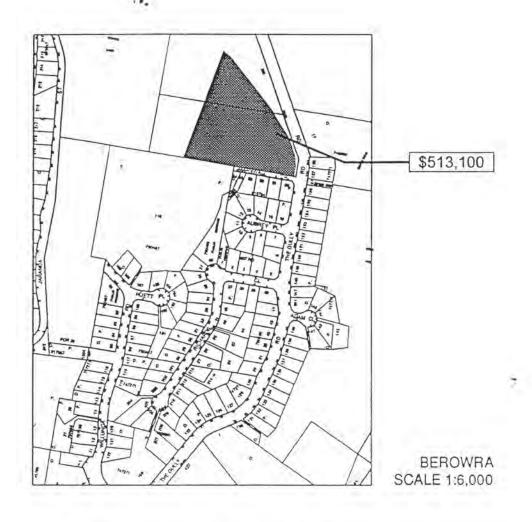




FIGURE 2

LAND ACQUISITION: CHERRYBROOK





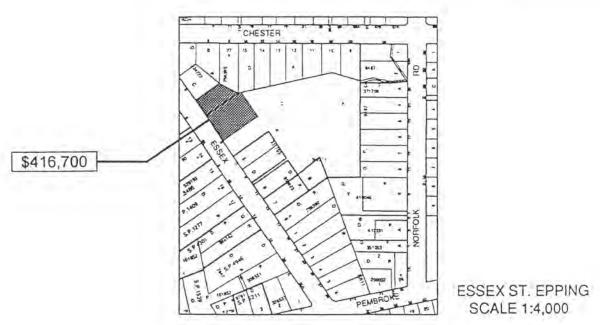




FIGURE 3

LAND ACQUISITION: BEROWRA AND EPPING

					APPDX97A.				
APPENDIX A	A: PROJECT	ED COSTS (OF FACILITIE	S PROVIDED	FROM SEC	TION 94 FUN	IDS		
Note 1: This tabl	le does not neces	sarily relect actu	al past expenditu	re nor does it indi	cate anticipated	income. The info	rmation provided is	3	
the latest	available regardi	ng past or anticip	ated costs of the	provision of facili	ties, for use in ca	alculating current	contribution rates.		
Note 2: figures in	n bold are actual	costs: figures un	derlined are 1997	budget figures o	r 1997 estimates	: figures initalics	are 1990 estimate	S	
			n); figures in bold						
					Ooto Willori Illolad	ic continuations is	orogono unougn		
			tals are in ordinar	, ,,					
Note 3: all figure	s are in 1996 Do	llars and indexed	figures do not re	flect actual expen	diture in past yea	ars.			
Note 4: As this F	Plan originally can	ne into force duri	ng financial year	1993-94, the first	expenditure was	programmed for	1994-95.		
* * No recoupme	ent is sought for o	nen space funds	expended prior to	commencemen	of this plan				
110 1000 up	l lo cougnition o	por opaco rando	oxportada prior ti		or and plant				
ODEN CDAC	E WORKS P	DO IECTO							
OPEN SPAC	E WURKS P	KUJECIS							
				_					
Project			previous**	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2003
			1996 \$	1996 \$	1996 \$	1996 \$	1996 \$	1996 \$	1996 \$
AUGMENTATIO	N								
Locan Parks Di	stricts 1-7 and 9	1							
	Essex Street (D'	1)		92,366					
	Hornsby Park (D	9)		92,366					
	Lessing St Park			,	113,000				
	Yarrabin Reserv					34,000			
	Montview Park (, ,				55,000			
	,	,							
	Brooklyn Park (E	,				125,000	00.000		
	Fearnley Park (D	,					92,366		
	Galston Reserve	(- /					92,366		
	New Farm Road	(D2)						92,366	
	Wideview (D5)							92,366	
-	Bambil (D5)	-						3,000	·
	Turner (D5)							7,000	
	Yeramba (D5)							2,000	
Cherrybrook Lo	. ,								
•	Hickory Place				98,200				
					·				
	Carmen Crescer	זנ			78,700				
	Doulton Drive					51,400			
	Robert Road					<u>110,000</u>			
	Tahlee Road					126,000			
	Brokenwood					92,366			
	Franklin Road					71,000			
	Erlestoke Part					434,000			
	Treetops					<u>10 11000</u>	92,366		
	Darlington Road						92,366		
							92,300	00.000	
	Sisters Of Mercy							92,366	
	Westminster Driv	ve						92,366	
	North Georges C	Creek						256,573	
District Parks									
	Water Street				132,000				
	Kenley Park				-	155,000			
	Hastings Road						920,630		
	Greenway Park						206,000		
Con a set a final ala	Greenway r ark						200,000		
Sportsfields									
	Berry Park					335,000			
	James Henty Re	serve				200,000	610,000		
	Dural Park						208,000	305,000	305,000
-	Berowra Sportsf	ield							687,616
	Pennant Hills Pa	ırk Hockey							67,093
Shire Wide Parl		•							
	Leisure Resourc	es		8,333	8,333	8,333	8,333	8,333	
	Fagan Park			30,798	30,798	30,798	30,798	30,798	
	Bushland			204,000	204,000	204,000	204,000	204,000	
		wolk		204,000	204,000	<u>204,000</u>	∠∪4,∪∪∪	<u> 204,000</u>	
	Brooklyn Boardv	valK							
ACQUISITION									
	Essex Street (D'	1)		416,700					
·	Doulton (D8)			135,000		·			-
	Brokenwood (D8	3)			90,500				
	Franklin Road (E	,			360,000				
	Treetops (D8)	,			390,000				
	North Georges (reek (D8)			760,000				
	•	, ,			, 00,000		200 000		
	Sisters of Mercy						200,000		
	Hastings Road ((אט)					1,000,000		
	Darlington (D8)							<u>187,500</u>	
	Westminster Driv	. ,						225,000	
·	Byles Creek Bus	hland					45,700	45,700	137,100
	Berowra Sportsf								513,146
	Edgeworth David								159,65
	_ 3g05iiii Davie								100,000
Annual Totals			0**	979,555	2,265,522	2,039,889	3,802,917	1,644,360	1,196,809
Aillual IOlaiS			U	a, a, a, a	۷,۷۵۵,۵۷۷	2,039,069	3,002,917	1,044,300	1,190,008
	ĺ								
					Total Expenditu				11,929,052

APPENDIX A: PROJ	ECTED CO	STS OF FAC	ILITIES PRO	OVIDED FRO	M SECTION	94 FUNDS		
Note 1: This table does n	ot neccessarily	v reflect actual i	nast expenditur	e nor does it inc	dicate anticinat	ed income TI	ne information n	rovided is
the latest availab	le regarding pa	ast or anticipate	d costs of the	provision of facil	ities, for use ir	calculating cu	rrent contribution	n rates.
Note 2: figures in BOLD a					or 1997 estima	ates; figures in	italics are 1993	estimates
indexed (see rele Note 3: all figures are in 1					ndituro in paet	voore		
Note 4: As this Plan origin							d for 1994-95.	
						p 9		
OTHER PROJECTS								
Project		previous***	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2003
Civic Improvements		1996 \$	1996 \$	1996 \$	1996 \$	1996 \$	1996 \$	1996 \$
Civic improvements								
Florence Mall (D9 & HTC)	1,253,500						
Hunter Mall (D9 & HTC)								1,090,500
Drainage (HTC)				93,134	93,134	93,134	93,134	
Landscaping (HTC)					315,000		1 110	279,430
Identity Signs (DSC)							1,410	
Community Facilities								
Hornsby Library						647,750		
Pennant Hills Library (D1	,2 & 8)					200,900		
Library Books			122,524	122,524	122,524	122,524	122,524	
Cherrybrook Childcare Ce	entre (D8)				461,800	410,500		
Shire Childcare								374,800
Cherrybrook Neighbourho	and Centre(D8	1)					102,650	
Cherrybrook Youth Centr		,				102,650	102,030	
Pennant Hills Community						65,050		
Mt Colah Community Cer		42,250						
Berowra Community Halls						12,561	<u>16,000</u>	
Galston Community Cent	re (D6)						34,485	
Waste Management								
Shire Waste Managemen	t		<u>100,550</u>	<u>100,550</u>	<u>100,550</u>	100,550	100,550	
Bushfire Services								
Brooklyn (D7)						15,400		
Shire						65,332		
Administration								
Section 94 Plan		60,000						
Drainage Study		00,000				60,000	<u>51,800</u>	
Land Degradation Study				12,500		37.500	32,500	
Open Space Plan				4,515				
Social Plan		6,321	101 750	101 750	101 750	101 750	50.070	
Section 94 Officer		50,878	101,756	101,756	101,756	101,756	50,878	
Traffic Management								
Roads		566,546	446,700	230,900	369,500	379,700		
Traffic Management			278,925	151,125	101,425	250,525	373,300	782,400
Traffic Studies		60,000			***	31,900	<u>51,300</u>	
Bus Shelters			7,300	7,300	14,600	14,600	21,900	
LATM Romsey St Bridge (D9 &	HTC)						205,300	1,312,000
								1,012,000
Annual Totals								
Projects above		2,039,495	1,057,755	824,304	1,680,289	2,712,332	1,257,731	3,839,130
Onon Space Proise:		O**	070 555	2 205 522	2 020 000	2 002 047	1 644 000	1 100 000
Open Space Project	5	0**	979,555	2,265,522	2,039,889	3,802,917	1,644,360	1,196,809
All Projects		2,039,495	2,037,310	3,089,826	3,720,178	6,515,249	2,902,091	5,035,939
*** Projects carried out pr	ior to 1994-95	for which Cour	cil seeks to rec	coup funds.	-	-		
Total Expenditure - A	All projects	in this Plan						25,340,089