

ATTACHMENT BOOKLET

ORDINARY COUNCIL MEETING
30 JUNE 2021

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LIVERPOOL CONTRIBUTIONS PLAN 2021 - EAST LEPPINGTON



Adopted: XXXX

Content Manager 181979.2021



Liverpool Contributions Plan 2021 - East Leppington

Liverpool Contributions Plan 2021 – East Leppington

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1 Summary of the Plan

1.1 Preamble

East Leppington is an urban release area in Sydney's South West Growth Centre that traverses land in Camden, Campbelltown, and Liverpool local government areas.

A range of new and augmented infrastructure needs to be planned, programmed, funded, and delivered in order to sustain this planned development.

The infrastructure will be delivered and coordinated by a number of parties including State Government public authorities, State owned corporations, Local Government and private developers.

Councils typically fund the provision of local infrastructure through a combination of developer contributions under the *Environmental Planning and Assessment Act 1979 (EP&A Act)*, general revenue (from rates and other charges), and grants from the State or Commonwealth government. Much of the capital cost of local infrastructure in new urban areas like East Leppington is funded by section 7.11 developer contributions as there is often a clear relationship between the need for new or upgraded infrastructure and population growth attributable to the new development.

As a result, the *Liverpool Contributions Plan 2021 – East Leppington* (the Plan) has been prepared to authorise the imposition of developer contributions on Residential and Non-residential development in East Leppington under Section 7.11 of the EP&A Act.

The Plan addresses the provision of those local infrastructure (public amenities and public services) to be delivered in East Leppington by or on behalf of Liverpool City Council (Council). The provision of local infrastructure in the Plan is estimated to cost approximately \$79,855,805 million and includes:

- Open space and recreation facilities such as informal / passive parks, sporting fields / active recreation and open space along riparian corridors;
- Traffic and transport management facilities, such as upgrades to existing roads, new roads and intersections; and
- Water cycle management facilities, such as detention basins stormwater channels and streetscape raingardens.

When this Plan was first established in 2014, a Ministerial Direction¹ put in place a cap of \$30,000 for each dwelling or lot required to pay a contribution. This Plan has now been assessed by IPART² and, consistent with the Ministerial nominee's associated advice, can now charge the full contribution rate outlined in Table 1.2-1.

This Plan was adopted by Council in xx xx 2021 and came into effect on xx xx 2021.

¹ The Environmental Planning and Assessment (Local Infrastructure Contributions) Direction 2012

² The Independent Pricing and Regulatory Tribunal is in charge of reviewing Contributions Plans that levy above \$30,000 for greenfield areas and \$20,000 for infill areas.

1.2 Summary of contribution rates and works schedule costs

Table 1.2-1 shows the total value of works and land to be funded by contributions anticipated under this Plan as well as the applicable contribution rates. Part 1.3 provides a sample calculation intended to illustrate how these values are used to calculate a developer contribution. All costs in this Plan are expressed in January 2021 dollar values.

Table 1.2-1 Monetary Contribution Rates (January 2021 quarter values)

ESSENTIAL INFRASTRUCTURE		NON-RESIDENTIAL DEVELOPMENT	RESIDENTIAL DEVELOPMENT	
Item	Item Cost apportioned to East Leppington	\$ per hectare of NDA	\$ per residential lot for a detached dwelling	\$ per attached dwelling, semi-attached dwellings and multi-dwelling housing
Open Space				
Land	\$10,339,325		\$10,087	\$7,714
Works	\$5,519,476		\$5,385	\$4,118
Subtotal	\$15,858,801		\$15,472	\$11,832
Traffic and Transport (Roads)				
Land	\$2,650,368	\$33,461	\$2,533	\$1,937
Works	\$9,430,599	\$119,061	\$9,015	\$6,894
Subtotal	\$12,080,967	\$152,522	\$11,548	\$8,831
Water Cycle Management (Drainage)		ALL DEVELOPMENT \$ per hectare of NDA		
Land	\$15,999,950	\$202,096		
Works	\$35,164,370	\$444,163		
Subtotal	\$51,164,320	\$646,259		
Plan Administration				
Allowance	\$751,717	\$9,495		
Subtotal	\$751,717	\$9,495		
TOTAL	\$79,855,805			

All other residential development

The total contribution cost has been apportioned based on the development detailed in the above table. However, other residential development, including seniors living, secondary dwellings and shop top housing will also generate demand on local infrastructure.

As such, all other residential development will be calculated at a per person x average occupancy rate (see Table 3.3-3)

1.3 Sample calculation

Residential Development Scenario

The residential contribution equals the sum of the following 4 contribution categories:

1. The open space contribution per dwelling, plus
2. The transport contribution per dwelling, plus
3. The water cycle management infrastructure contribution per hectare of NDA, plus
4. The plan administration contribution per hectare of NDA.

Contributions for open space, community facilities and transport infrastructure are levied based on the number of people expected to reside in the new dwelling, while contributions for stormwater infrastructure and plan administration are levied by the area (NDA) of the development.

This approach best aligns the contribution payable by a development to its estimated share of the demand for the different kinds of infrastructure in the Plan.

Below is an example of how to calculate the contribution payable by development.

Consider a scenario where a developer has 0.3 hectares (NDA) and applies to develop 5 low density dwelling houses on this land.

The total contribution under this Plan

$$\begin{aligned}
 &= (\text{Open space contribution in \$ per residential lot for a detached dwelling} \times \# \text{ of lots}) + \\
 &\quad (\text{Roads contribution in \$ per residential lot for a detached dwelling} \times \# \text{ of lots}) + \\
 &\quad (\text{Drainage contribution in \$ per hectare of NDA}) + \\
 &\quad (\text{Plan administration contribution in \$ per hectare of NDA}) \\
 &= (15,472 \times 5) + (11,548 \times 5) + (646,259 \times 0.3) + (9,495 \times 0.3) \\
 &= \$331,826
 \end{aligned}$$

This equals a contribution of \$66,365 per dwelling, on average, for this development.

Commercial Development Scenario

The non-residential contribution equals the sum of the following 3 contribution categories:

1. The transport contribution per NDA, plus
2. The water cycle management infrastructure contribution per NDA, plus
3. The plan administration contribution per NDA.

Below is an example of how to calculate the contribution payable by development.

Consider a scenario where a developer applies to develop a 0.5 hectare (NDA) site for business/commercial purposes.

The total contribution under this Plan

$$\begin{aligned}
 &= (\text{Roads contribution in \$ per hectare of NDA}) + \\
 &\quad (\text{Drainage contribution in \$ per hectare of NDA}) + \\
 &\quad (\text{Plan administration contribution in \$ per hectare of NDA}) \\
 &= (\$152,522 \times 0.5) + (\$646,259 \times 0.5) + (9,495 \times 0.5) \\
 &= \$404,138
 \end{aligned}$$

1.4 Plan Overview

Section 7.11 of the EP&A Act allows a consent authority responsible for determining a development application to grant consent to the proposed development subject to a condition requiring the payment of a monetary contribution, or the dedication of land free of cost, or a combination of them, towards the provision of public amenities and public services to meet the development.

Where the consent authority is a council or an accredited certifier, such a contribution may be imposed on a development only if it is of a kind allowed by and determined in accordance with a contributions plan, such as this Plan.

This Plan has been prepared to authorise the imposition of Section 7.11 developer contributions on development expected to occur in the East Leppington Liverpool Part Precinct. This is the portion of East Leppington situated in the Liverpool LGA and is referred to as the 'Precinct' in this Plan.

This Plan has been prepared:

- in accordance with the EP&A Act and Environmental Planning and Assessment Regulation 2000 (EP&A Regulation); and
- having regard to the latest Practice Notes issued by the NSW Department of Planning, Industry and Environment (DPIE).

1.5 Structure of the Plan

The Plan is structured in the following parts:

Part 1 (this part) contains an introduction and a summary schedule.

Part 2 contains provisions that describe the contributions framework, essential Plan details, and how section 7.11 contributions in the Precinct will be imposed, settled and managed.

Part 3 documents the expected development in the Precinct and the likely demand for infrastructure arising from that development.

Part 4 discusses infrastructure costs and delivery, and for each infrastructure category, describes the relationship between development and infrastructure. This Part also contains contributions formulas, location maps and work schedules describing the proposed infrastructure addressed by the Plan.

References and Appendices.

As a guide, Table 1.5-1 lists the minimum requirements³ for section 7.11 contributions plans alongside its location in this document.

Table 1.5-1 Minimum requirements for a 7.11 Plan and their location in this document

EP&A Regulation requirements	Location in this document
(a) The purpose of the plan	2.3
(b) The land to which the plan applies	2.2
(c) The relationship between the expected types of development in the area to which the plan applies and the demand for additional public amenities and services to meet that development	Part 3
(d) The formulas to be used for determining the section 7.11 contributions required for different categories of public amenities and services	4.2.3 4.3.3 4.4.5

³ As set out in Division 1C Clause 27 of the EP&A Regulation.

	4.5.2
(e) The section 7.11 contribution rates for different types of development, as specified in a schedule to the plan	1.2
(g) The council's policy concerning the timing of the payment of monetary section 7.11 contributions, and the imposition of section 7.11 conditions that allow deferred or periodic payment	2.9.1
(h) A map showing the specific public amenities and services proposed to be provided by the council, supported by a works schedule that contains an estimate of their cost and staging (whether by reference to dates or thresholds)	Part 4
(i) If the plan authorises monetary section 7.11 contributions paid for different purposes to be pooled and applied progressively for those purposes, the priorities for the expenditure of the contributions, particularised by reference to the works schedule.	2.13 Part 4

2 Administration and operation of the Plan

2.1 Name of the Plan

This Plan is called the Liverpool Contributions Plan 2021 - East Leppington Precinct (the Plan).

2.2 Land to which the Plan Applies

This Plan applies generally to all of the land situated within the East Leppington Precinct that is also within the Liverpool local government area (LGA), referred to as the 'Precinct' in this document.

This Plan applies to all of the land identified in Figure 2.2-1.

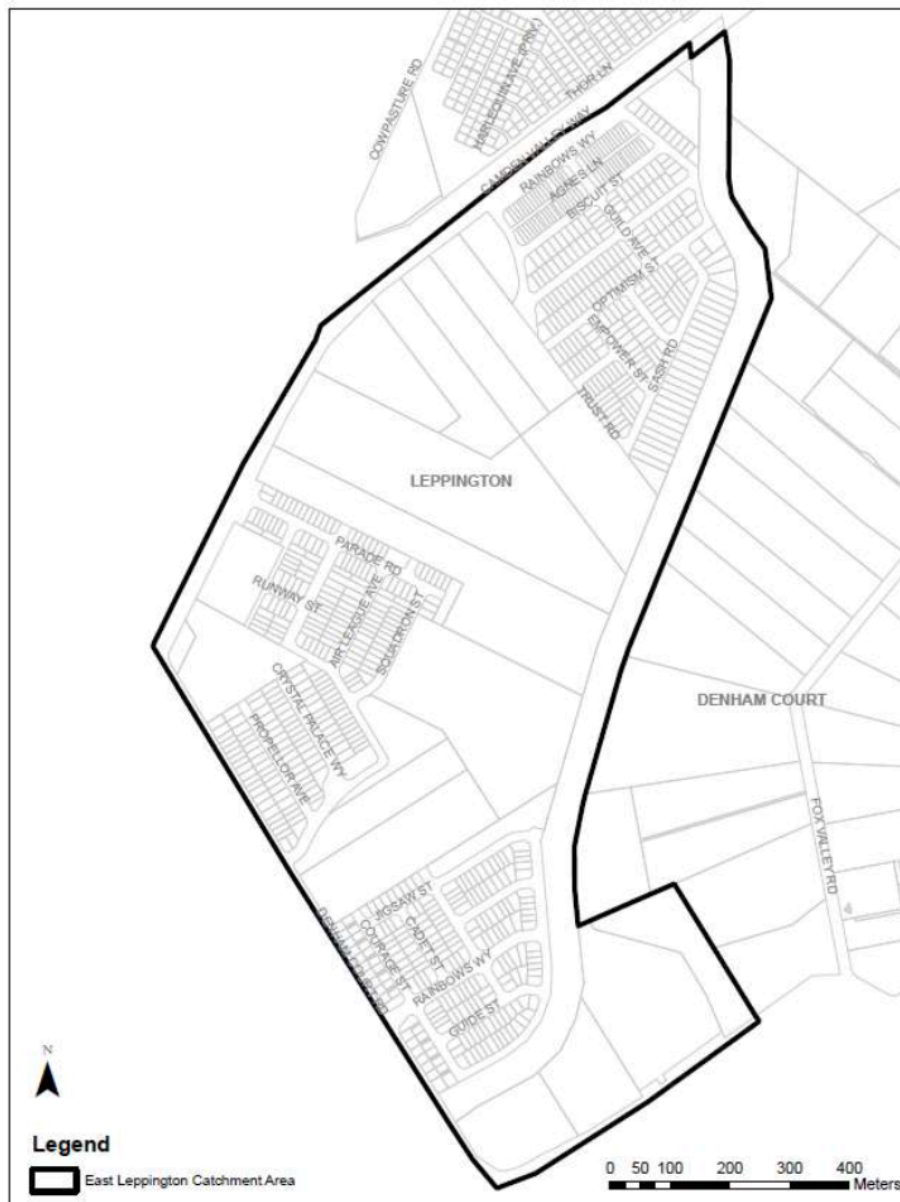


Figure 2.2-1 Application map of the Liverpool Contributions Plan 2021 - East Leppington

2.3 Purpose of the Plan

The purposes of the Plan are to:

- Provide an administrative framework under which specific public amenities and services strategies to serve the Precinct may be implemented and coordinated.
- Ensure that adequate public amenities and services are provided for as part of any new development in the Precinct.
- To authorise the Council or accredited certifiers to impose conditions under section 7.11 of the EP&A Act when granting consent to development on land to which this Plan applies.
- Provide a comprehensive strategy for the assessment, collection, expenditure accounting and review of development contributions relating to the Precinct on an equitable basis.
- Ensure that the existing community is not burdened by the provision of public amenities and services required as a result of future development in the Precinct.
- Enable the Council to be both publicly and financially accountable in its assessment and administration of the Plan.

2.4 Adoption of the Plan

This Plan was adopted by Council on xx xx 2021 and came into effect on xx xx 2021.

The Plan applies to development applications determined after the date on which the Plan came into effect.

2.5 Definitions used in this Plan

Except where indicated in this clause, the definitions of terms used in this Plan are the definitions included in the EP&A Act, EP&A Regulation and the Standard Instrument – Principal Local Environmental Plan and are adopted by this Plan.

In this clause, 'existing' means at the date on which this Plan came into effect.

In this Plan, the following words and phrases have been given the meanings provided in Appendix A: Glossary.

2.6 Relationship to other Plans

Prior to *Liverpool Contributions Plan 2021 – East Leppington* coming into effect, the land to which this Plan applies was subject to the *Liverpool Contributions Plan 2014 – East Leppington*. This Plan repeals the *Liverpool Contributions Plan 2014 – East Leppington* and applies to development applications determined after the date on which the Plan came into effect.

Table 2.6-1 Plans previously applicable to the land identified in Figure 2.2-1

	Plan name	Note
1	Liverpool Contributions Plan 2009 section 2.9	The Precinct was previously a part of section 2.9 of the Liverpool Contributions Plan 2009. This section was replaced by the Liverpool Contributions Plan 2014 – East Leppington when it took effect on 3 June 2015.
2	Liverpool Contributions Plan 2014 - East Leppington	This Plan took effect on 3 June 2015 and was amended in June 2020 to implement: <ul style="list-style-type: none"> • Council's 11 December 2019 resolution regarding instalment payment for secondary dwellings and

	<p>clarified relationship between Complying Development Certificates (CDCs) and developer contributions</p> <ul style="list-style-type: none"> • Council's 29 April 2020 resolution on payment timing in response to COVID-19. <p>This Plan was replaced by the Liverpool Contributions Plan 2021 - East Leppington when it took effect on xx xx 2021.</p>
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The land to which this Plan applies is not otherwise subject to any contributions plans made under Subdivision 3 of Division 6 of Part 4 of the EP&A Act.

This Plan does not limit or otherwise affect any requirements for the payment of Special Infrastructure Contributions pursuant to Subdivision 4 of Division 6 of Part 4 of the EP&A Act.

2.7 Authority to require contributions

2.7.1 Monetary contributions

This Plan authorises the Council, when granting consent to an application to carry out development to which this Plan applies, to impose a condition under Section 7.11 of the EP&A Act requiring the payment of a monetary contribution to the Council towards:

- the provision of public amenities and public services as specified in the Works Schedule to meet the demands of the development; and/or
- the recoupment of the cost of public amenities and public services previously provided in advance of development within the area.

This Plan requires the Council or an accredited certifier, when determining an application for a complying development certificate relating to development to which this Plan applies, to impose a condition under section 7.11 of the EP&A Act requiring the payment of a monetary contribution towards:

- the provision of public amenities and public services as specified in the Works Schedule to meet the demands of the development; and / or
- the recoupment of the cost of public amenities and public services previously provided in advance of development within the area.

2.7.2 Land contributions

This Plan authorises the Council, by imposition of a condition of development consent, to require in connection with any development on land to which this Plan applies (and in addition to any monetary contribution that may be sought) the dedication free of cost to the Council of any part of the development site that is land that is to be acquired under this Plan.

The extent of land that may be required in the consent shall not exceed the amount of land the value of which does not exceed the monetary contribution otherwise authorised by this Plan.

The monetary development contribution otherwise authorised by this Plan shall be reduced by an amount corresponding to the value of the land required to be dedicated.

Where the value of the land exceeds the monetary development contribution otherwise authorised, the developer may offer to enter into a voluntary planning agreement dealing with an appropriate settle-up in exchange for the dedication of the remainder.

Further information on land contributions is included in clauses 2.9.5 and 2.11 of this Plan.

2.7.3 Obligations of accredited certifiers

In relation to an application made to an accredited certifier for a complying development certificate:

- the accredited certifier must, if a complying development certificate is issued, impose a condition requiring a development contribution, if such a contribution is authorised by this Plan; and
- any such contribution may only be a monetary contribution required under this Plan; and
- the amount of the monetary contribution that the accredited certifier must so impose is the amount determined in accordance with this Plan in respect of the development.

It is the responsibility of the principal certifying authority to accurately calculate and apply the local infrastructure contribution charges to complying development certificates. Deferred payments of contributions required by a condition of a complying development certificate will not be accepted.

2.7.4 Variation to contributions authorised by this Plan and contributions for unanticipated development

Council retains the right to reduce the development contribution otherwise calculated in accordance with the provisions of this Plan.

A developer's request for variation to a contribution calculated in accordance with this Plan must be supported by written justification included with the development application. Such request will be considered as part of the assessment of the application.

There may be circumstances when development is proposed that was not anticipated when this Plan was made and that is not specifically identified to be levied under this Plan, but which would if carried out result in the provision of, or increase the demand for, the public amenities and services included in this Plan. In these circumstances, Council will calculate a reasonable contribution proportionate to the demand for amenities and services generated by the unanticipated development and impose that contribution on the consent for that development.

Notwithstanding the above, an Accredited Certifier other than the Council must not:

- vary, waive or modify a development contribution calculated in accordance with this Plan, or
- impose any contribution other than a monetary contribution specifically authorised by this Plan

2.8 Types of development to be levied

Except as provided for by this clause, this Plan applies to:

- Residential Accommodation development, insofar as the Plan authorises the imposition of a requirement for a development contribution for the types of public amenities and public services described in clauses 4.2 to 4.5 of this Plan; and
- All other development, insofar as the Plan authorises the imposition of a requirement for a development contribution for the types of public amenities and public services described in clauses 4.3 to 4.5 of this Plan.

This Plan does not apply to development:

- for the sole purpose of affordable housing;
- for the sole purpose of the adaptive reuse of an item of environmental heritage;
- for the purposes of public infrastructure provided by or on behalf of State Government or the Council;

- for the purposes of public amenities or public services under this Plan or another contributions plan prepared under section 7.13 of the EP&A Act;
- for works to be carried out by Sydney Water, Endeavour Energy or equivalent water, sewer or energy provider; or
- that in the opinion of Council does not increase the demand for the categories of public amenities or public services addressed by this Plan.

2.9 Payment of Contributions

2.9.1 Timing of Payment

Unless specified by changes to the Act, Regulation or Planning Circular, Council requires contributions to be satisfied in full, as follows:

a. Development applications involving subdivision only

Monetary contributions are required to be paid prior to the release of the subdivision certificate whether by Council or an accredited certifier (in the case of strata subdivision). Any dedication of land to Council, in lieu of a monetary contribution, shall be shown on the plan of subdivision.

b. Development applications involving building work only

Monetary contributions are required to be paid to Council prior to the issuing of the construction certificate, whether by Council or an accredited certifier. Dedication of land to Council, in lieu of monetary contribution, shall be shown on a plan of subdivision, to be registered prior to the issue of an occupation certificate.

c. Development applications involving subdivision and building work (for example, dual occupancy and integrated housing)

Monetary contributions are required to be paid to Council prior to the release of the construction certificate or subdivision certificate, whichever occurs first, whether by Council or an accredited certifier. Any dedication of land to Council, in lieu of monetary contribution, shall be shown on a plan of subdivision, to be registered prior to issue of an occupation certificate.

d. Development applications where no building works are proposed

Monetary contributions are required to be paid to Council prior to occupation / commencement of the development. Any dedication of land to Council, in lieu of monetary contribution, shall be shown on a plan of subdivision to be registered prior to issue of an occupation certificate.

Note: Council implemented a Covid-19 response measure that allowed the deferral of 50% of the contributions required for development that did not involve CDCs or subdivision. This measure applied for any development applications lodged or approved between 16 April 2020 and 31 December 2020. An application lodged or determined between those dates is still eligible for the deferral.

2.9.2 Obligations of Accredited Certifiers

It is the responsibility of an accredited certifier issuing a post consent certificate (including construction certificate, subdivision works certificate and occupation certificate) to certify that the relevant contributions have been paid to Council prior to the issue of the certificate. The accredited certifier must ensure that the applicant provides a receipt (or receipts) confirming that relevant contributions have been paid and copies of such receipts must be included with copies of the certified plans provided to the Council in accordance with clause 142(2) of the EP&A Regulation. Failure to follow this procedure may render such a certificate invalid and expose the certifier to legal action.

The only exceptions to the requirement are where Works in Kind, material public benefit, dedication of land and/or deferred payment arrangement has been agreed by the Council. In such cases the Council will issue a letter confirming that an alternative payment method has been agreed with the applicant.

2.9.3 Deferred Payments

Council will allow payment of contributions to be deferred in the following cases only:

- where the applicant has the intention and ability to dedicate land or provide a material public benefit in part or to full satisfaction of a condition imposed by development consent, and that offer of land or material public benefit is acceptable to the Council; or
- in other circumstances, to be outlined in writing by the applicant and determined formally by Council on the merits of the case.

In the circumstances where deferred payments are accepted, the debtor must lodge with Council an unconditional bank guarantee for the amount to be deferred. Bank guarantees will be accepted on the following conditions:

- The guarantee must carry specific wording outlining the purpose for which those contributions were due, for example, "drainage contributions for Stage 3".
- The guarantee will be for the contribution amount plus the estimated amount of compound interest foregone by Council for the anticipated period of deferral (Refer to formula in clause 2.9.4 below).
- Council may call up the guarantee at any time without reference to the applicant, however, the guarantee will generally be called up only when cash payment has not been received, and land is not dedicated or material public benefit not provided by the end of the period of deferral.
- The period of deferral must be for a limited time only as agreed where land is to be dedicated or a material public benefit is to be provided. The period of deferral may be extended subject to providing a further bank guarantee for the extended period in accordance with the above terms.

Council will discharge the bank guarantee when payment is made in full by cash payment, land transfer or by completion of Works in Kind.

2.9.4 Formula for Bank Guarantee Amounts

The following formula to be applied to all bank guarantees for contributions is:

Guarantee Amount = $P + P (CI \times Y)$, where:

P = Contribution due;

CI = Compound interest rate comprising of Council's estimate over the period plus 3 percent (allowance for fluctuations); and

Y = Period of deferral (years).

2.9.5 Methods of settling contribution requirements

Contributions may be made by one or a combination of the methods described below.

Monetary contribution

A monetary contribution is the most common method of settling contribution requirements. However, Council may consider the transfer of land to Council or providing Works in Kind, but only where the offered land and or works are included in this Plan's Works Schedule (Part 4 of this Plan).

Transfer of land

An applicant may transfer land to Council in part or in full satisfaction of a contribution requirement. The land may be for open space, community facilities, drainage or roads and must be land, which is included in this Plan's Works Schedule (Part 4 of this Plan). The value of the land will be determined by an independent valuer appointed by Council.

Where land which is the subject of a development application contains land identified for acquisition under this Plan, Council may as a condition of consent require that land to be dedicated free of charge to Council. Monetary contributions will be adjusted accordingly to reflect the value of the land to be dedicated in lieu of payment of cash.

Works in Kind

Applicants are encouraged to provide Works in Kind in part or full satisfaction of a contribution. The works must be included in this Plan's Works Schedule (Part 4 of this Plan). The value of contingency for individual works will be paid where it can be proven to Council's satisfaction that unforeseen circumstances have given rise to additional costs.

Prior to proceeding with the works, applicants will be required to provide details of the works to be undertaken (including a development application), financial guarantees, bank guarantees and administration. A Works in Kind Agreement must be in place prior to commencing the works in accordance with the Council's Developer Contributions Works in Kind Policy.

Applicants may provide land or works included in Part 4 of this Plan in excess of that required for the development. The value of the works will be determined in accordance with Council's Works in Kind Procedure, available from Council's administration office.

2.9.6 Goods and Services Tax

No Goods and Services Tax (GST) is applicable to the payment of contributions made under section 7.11 of the EP&A Act. This exemption applies to both cash contributions and land or works in lieu of contributions.

2.10 Contributions demand credits for existing development

No credit will be given in the calculation of contributions for infrastructure attributable to development that existed at the time this Plan was prepared.

2.11 Adjustment to Contribution Rates and Contribution Amounts

2.11.1 Overview

The purpose of this clause is to ensure that the monetary contribution rates imposed at the time of development consent reflect the current costs of provision of the facilities included in this Plan.

To convert the cost of facilities included in the Plan to a current cost, the monetary contribution rates shown in Part 1 of this Plan are to be adjusted in accordance with the provisions set out below:

- at the time of imposing a condition on a development consent requiring payment of the monetary contribution; and again
- at the time that the monetary contribution is to be paid pursuant to the condition imposed on that same development consent.

The adjusted contribution rates will also be published quarterly on the Council's website www.liverpool.nsw.gov.au.

This process is distinct and separate from clause 2.12, which deals with future reviews of this Plan. Future reviews will not affect any consent granted in accordance with this Plan and such reviews are required to be publicly exhibited.

2.11.2 Adjustment methods

The Consumer Price Index (CPI) is the most commonly used index for adjusting contribution rates. However, it is not a suitable index for adjusting contributions relating to land that is yet to be acquired as land prices do not correlate with movements in the prices of goods and services, especially in urban release areas. As a result, Council will prepare and regularly publish a customised Land Value Index (LVI), generally consistent with in the contributions management arrangements it applies to other land release areas within the Liverpool LGA.

In accordance with the provisions of clause 32(3) of the EP&A Act Regulation, Council, without the necessity of preparing a new or amending contributions plan, will adjust the monetary development contribution rates set out in this Plan to reflect quarterly changes to both:

- the CPI (for all Works Schedule items identified in this Plan apart from the items comprising land yet to be acquired); and
- the customised LVI (for Works Schedule items identified in this Plan involving land yet to be acquired).

2.11.3 Works Schedule items other than land

The monetary contributions rates for Works Schedule items as set out in Part 4 of this Plan will be adjusted to reflect quarterly variations in the Consumer Price Index (All Groups - Sydney) from the date that the Plan came into effect.

Contribution at time of development consent

$$C_2 = \frac{C_1 \times CPI_2}{CPI_1}$$

Contribution at time of payment

$$C_3 = \frac{C_2 \times CPI_3}{CPI_2}$$

Where:

- C_1 = Contribution of rate for works as shown in this Plan
- C_2 = Contribution rate for works as included or to be included in the conditions imposed on the development consent
- C_3 = Contribution rate for works at the time that the contribution is to be paid

CPI_1 = Consumer Price Index (All Groups - Sydney) result at the time that the Plan was prepared - i.e. June 2021

CPI_2 = Consumer Price Index (All Groups - Sydney) result for the quarter immediately prior to the date of granting the relevant development consent

CPI_3 = Consumer Price Index (All Groups - Sydney) result for the quarter immediately prior to the date that the contribution is to be paid

2.11.4 Land

The monetary contributions rates for Works Schedule items that relate to land as set out in Part 4 of this Plan will be adjusted in accordance to reflect quarterly variations in the Land Value Index (published on the Liverpool City Council website) from the date that the Plan came into effect.

The adjustments shall be made at the time of granting development consent so as to determine the appropriate contribution to be included on any relevant consent. A further adjustment will be made at the time of payment to reflect any further changes between the date of consent and payment of contribution.

Contribution at time of development consent

$$C_2 = \frac{C_1 \times LVI_2}{LVI_1}$$

Contribution at time of payment

$$C_3 = \frac{C_2 \times LVI_3}{LVI_2}$$

Where:

- C_1 = Land component of contributions as shown in this Plan
- C_2 = Land component of contributions subject of the conditions imposed on the development consent
- C_3 = Land component of contributions at the time that the contribution is to be paid
- LVI_1 = Land Value Index at the time that the Plan was prepared - i.e. [insert number(s)]
- LVI_2 = Land Value Index at the time of granting the relevant development consent
- LVI_3 = The latest Land Value Index at time that the contribution is to be paid

2.11.5 Calculation of land Value Index

The Land Value Index is a measure to reflect the changes in land values during the life of the Plan from the date of the adoption of the Plan.

The land costs included in the Works Schedule in Part 4 of this Plan are based on estimates provided in the report prepared by AEC Group Ltd. and titled Land Valuations for the East Leppington Precinct.

2.12 Review of Plan and contributions rates

Council will review this Plan on a regular basis.

The review process will canvass, as a minimum, the following issues (where data is available):

- development activity in terms of latest information on net additional dwellings and populations;
- likely total development activity to be experienced during the remainder of the Precinct's development;
- progress in the delivery of public amenities and services identified in Part 6 of this Plan;

- modification of facility concepts, changes in anticipated facility costs, facility timing and land values;
- annual contributions received and expenditure information; and
- any other factors likely to affect the delivery of works identified in this Plan.

Pursuant to clause 32(3) of the EP&A Regulation, Council may make only minor adjustments or amendments to the Plan without prior public exhibition and adoption by Council. Minor adjustments could include minor typographical corrections and amendments to rates resulting from changes in the indexes adopted by this Plan.

Amendments beyond those authorised under clause 32 of the EP&A Regulation require the preparation of a new draft plan which in turn must meet the requirements of the EP&A Act and EP&A Regulation (including public exhibition of the draft plan for a period of at least 28 days). The nature of the proposed amendments and reasons for same would be clearly outlined as part of the exhibition.

Amendments requiring public exhibition would include adjustments to contribution rates taking account of more recent information and, where relevant, the following:

- actual costs of completed works;
- reviewed costs of yet to be completed works and land acquisition;
- adjustment in projected project management and contingency costs associated with works; and
- plan management and administration costs.

Plan reviews of the type described above will not affect any development contributions obligation required under any consent that is granted under this Plan.

2.13 Pooling of Funds

Council's ability to forward fund services and amenities identified in this Plan is very limited. Consequently, their provision is largely contingent upon the availability of contributions funds.

To provide a strategy for the orderly delivery of the public services and amenities, this Plan authorises monetary contributions paid for different purposes in accordance with the conditions of various development consents authorised by this Plan and any other contributions plan approved by the Council to be pooled and applied progressively for those purposes. The priorities for the expenditure of pooled monetary contributions under this Plan are the priorities for works as set out in the Works Schedule in Part 4.

In any case of the Council deciding whether to pool and progressively apply contributions funds, the Council will have to first be satisfied that such action will not unreasonably prejudice the carrying into effect, within a reasonable time, of the purposes for which the money was originally paid.

2.14 Delivery of the Infrastructure

Aside from providing infrastructure identified in this Plan using contributions collected, Council encourages its provision as works-in-kind in conjunction with the civil works undertaken as part of land subdivision.

A range of local infrastructure not addressed by this Plan will also be required to be undertaken directly by the developer as conditions of consent under section 4.17(1)(f) of the EP&A Act. These include the delivery of streets to the half-road, and 'non-trunk' reticulation works such as lot-scale OSD basins, rainwater tanks, construction of kerb, gutter and piping

in local roads, installation of drainage pits and grates, and pipe connections to the trunk drainage network.

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3 Demand for Public Amenities and Public Services

3.1 Infrastructure demand arising from expected development

The extent of public amenities and services required for the future development of an area is usually based on standards or benchmarks rates (e.g. per capita provision).

The incoming population is directly related to the expected number and type of residential dwellings and extent of non-residential development floor space in an area.

A list of infrastructure requirements to meet that development has been quantified in the infrastructure studies referred to in Table 3.2-2, derived by the application of the provision standards to the estimate of expected dwellings and population (Table 3.3-3, Table 3.3-4).

This connection between expected dwellings and population, infrastructure standards, and the resultant infrastructure items and costs directly informs the contribution requirements in this Plan.

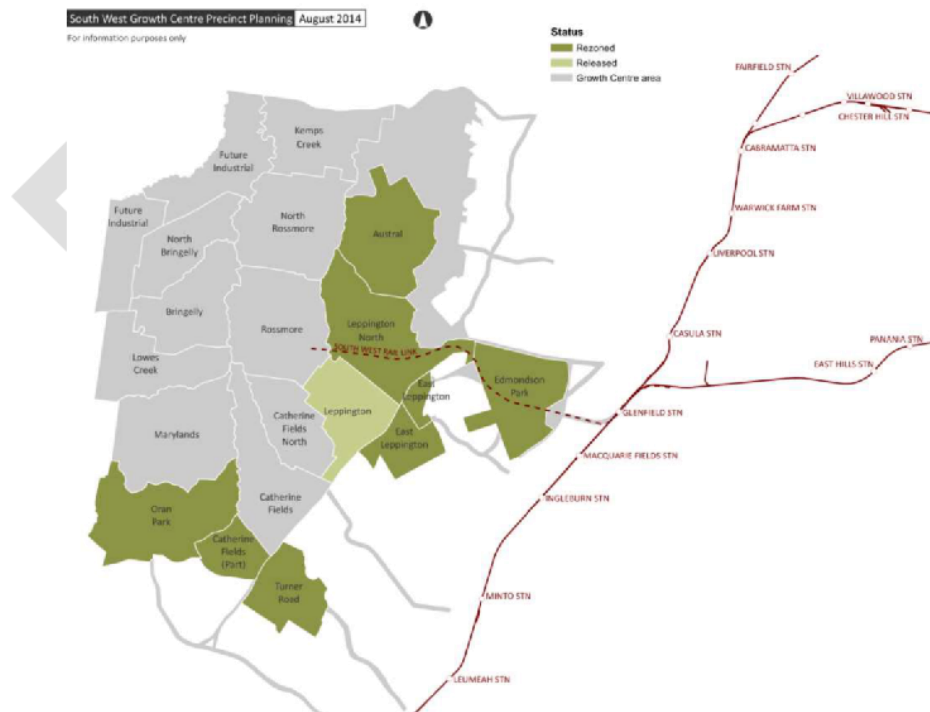
3.2 Development and infrastructure planning context

3.2.1 Growth Centres Structure Planning

The NSW State Government has undertaken planning for the development of land in the South West Growth Centre, of which East Leppington forms part.

To facilitate planning and orderly development of the South West Growth Centre, this area has been divided into seventeen precincts. The locations of the early release precincts, including East Leppington, are shown in Figure 3.2-1.

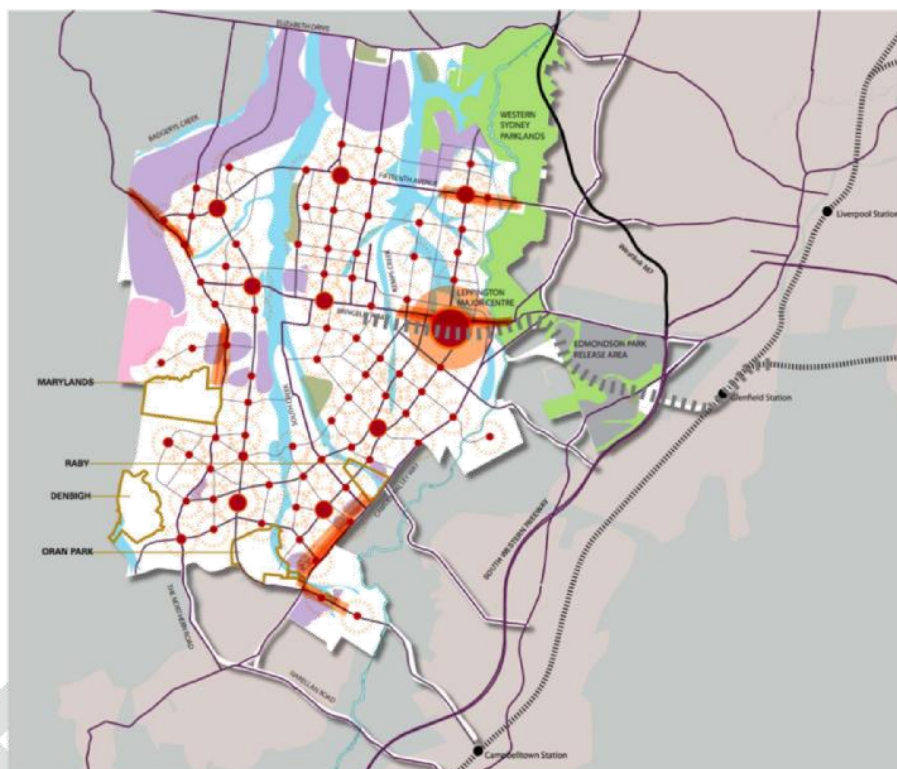
Figure 3.2-1 South West Growth Centre precincts



Source: East Leppington: Final Precinct Planning Report, 2012, Department of Planning, Industry and Environment

A structure plan has been prepared for the Growth Centre, a copy of which is included as Figure 3.2-2. Apart from the development of local neighbourhood centres, the structure plan proposes ten (10) new town or village centres. The largest of these is the planned Major Town Centre at Leppington that will be located in the Leppington North Precinct in the adjoining Camden LGA. Other infrastructure investment is underway to support the future Leppington Major Centre, including a new rail line from Glenfield via Edmondson Park.

Figure 3.2-2 South West Growth Centre Structure Plan



Source: South West Growth Centre Structure Plan Edition 3, prepared by Department of Planning

The East Leppington Precinct was released for precinct planning purposes by the Minister for Planning in November 2011. Table 3.2-1 provides context for East Leppington Precinct and the portion subject to this Plan in terms of the planned dwellings and population.

Table 3.2-1 Estimated dwelling and population

District	Area (ha)	Additional dwellings	Projected population
South West Growth Centre (17 Precincts)	17,000	110,000	300,000
East Leppington Precinct	463	4,386	14,497
East Leppington Precinct (Liverpool)*	106	1,128	3,485

*The Contributions Plan adopts the values of 1,128 and 3,485 for total additional dwellings and projected population, respectively. See Table 3.3-4 for more detail.

Source: Growth Centres Commission (Structure Plan Explanatory Note); Indicative Layout Plan, Department of Planning, Industry and Environment

3.2.2 East Leppington Precinct Planning

The East Leppington Precinct falls within three different local government areas, namely, Camden, Campbelltown and Liverpool with more than 50% of the development being contained in Campbelltown Council's local government area. This Plan deals with that part of the East Leppington Precinct which falls within the Liverpool LGA and for which Liverpool City Council will serve as the consent authority. Liverpool City Council will also be the manager of the new local public infrastructure that will be required to be delivered in its jurisdiction.

A [package of information](#) on anticipated development and required infrastructure has been prepared for Liverpool City Council's portion of East Leppington. The relevant information includes:

- Indicative Layout Plan (ILP) for the Liverpool part of the Precinct (Figure 3.3-1). This will guide the planning and assessment of the Precinct.
- Amendment to State Environmental Planning Policy (Sydney Region Growth Centres) 2006 to facilitate the formal rezoning of the land to enable urban development.
- Development Control Plan for the Liverpool Growth Centre Precincts (including Liverpool Growth Centre Precincts DCP Schedule 3 East Leppington).
- This contributions plan prepared by Liverpool City Council.
- Infrastructure Delivery Plan (IDP). The IDP collates information from existing background studies for the East Leppington Precinct, and provides an overview for the staged delivery of infrastructure and services in the Precinct.

Research and studies have informed the preparation of the Precinct's public infrastructure needs and costs. Key information sources that have underpinned infrastructure planning and costing in this Plan in particular, are listed included in Table 3.2.

Table 3.2-2 Studies supporting infrastructure planning and costing

Public amenity or service	Studies informing infrastructure need and cost
Land acquisition for public amenities or services	AEC, Land Valuations for the East Leppington Precinct, December 2020.
Open space and recreation facilities	Elton Consulting, Social Infrastructure and Open Space Assessment East Leppington Precinct, prepared for NSW Department of Planning and Infrastructure, June 2013
Roads and transport works	Cardno, Traffic Assessment East Leppington, prepared for NSW Department of Planning and Infrastructure, June 2013 Cardno, Green Travel Strategy East Leppington, prepared for NSW Department of Planning and Infrastructure, June 2013
Stormwater drainage works	Cardno, Water Cycle Management Report East Leppington, prepared for NSW Department of Planning and Infrastructure, June 2013
Centres	SGS (Spiller, Gibbons and Swan), Employment and Retail Centres Study East Leppington, prepared for NSW Department of Planning and Infrastructure, March 2013

Substantial research has been applied to the derivation of the Plan's works schedule and the planning for the location of all facilities has been completed. The process used to quantify and cost the development infrastructure for the Precinct ensured a rigorous and independent verification procedure has been used to confirm the cost assumptions. This included preliminary infrastructure costing from Cardno which were then checked by an independent quantity surveyor and property valuer to set the final cost assumptions. These were then checked again by AECOM in preparing the detailed Section 7.11 calculations.

Following the life of the Plan, it is anticipated the Plan may be amended due to:

- Council preparing concept and detailed design for the facilities so that specification and costing of the facilities can be more accurately defined as implementation of this Plan proceeds.
- Where alternatives to the works schedule are proposed in conjunction with the development of areas and the alternatives are approved by the Council, the contribution applicable to a development application may be reviewed and the works schedule in this Plan may be updated.

As a result of Liverpool City Council:

- Completing detailed design studies, particularly on the delivery of water management infrastructure; and
 - Land valuation costs being updated to January 2021 quarter values,
- the Plan's costs have been updated and supersedes the preliminary costs reflected in 2014.

3.3 Expected development outcomes

3.3.1 Existing development

Current land use within the East Leppington Precinct comprises generally rural residential land and small lot agricultural activities including market gardens, grazing and poultry farms. Several businesses such as childcare centres and commercial greenhouses are currently in operation along Camden Valley Way.

Existing infrastructure and essential services within the East Leppington Precinct is consistent with the current predominantly rural land use. As such, there is limited existing infrastructure available in the Precinct to facilitate the proposed new urban development.

Considering the extent of additional infrastructure to be delivered to the East Leppington Precinct, there needs to be willingness and cooperation between agencies, landowners and developers for the development to proceed in an orderly and economic way. This will require a joint approach and communication and understanding of the issues which is further discussed in the IDP.

3.3.2 Net Developable Area

The capacity for land development is restricted by a number of factors, including:

- natural constraints such as riparian and flood prone lands;
- man-made constraints such as existing infrastructure, easements and other legal restrictions, and existing infrastructure such as gas and transmission lines.

In addition to the constraints, there are future constraints. For example, certain land is needed to be set aside or reserved for public purposes such as roads, government buildings, education and health facilities.

Taking these matters into consideration allows a calculation of the amount of 'economic' land that is available for development. This 'Net Developable Area' (or NDA) is the development that will generate the demand for the urban infrastructure such as roads and drains that are required to sustain it.

The East Leppington Precinct has an estimated total NDA of approximately 75.59 hectares. The 'Equivalent NDA' (that is, total NDA adjusted to reflect the lower residential development potential of Environment zoned lands and higher potential of some areas) is used to calculate contributions under this Plan. Equivalent NDA for the Precincts is approximately 79.17 hectares and makes allowance for higher and lesser densities.

The precinct's NDA and equivalent NDA are shown in Table 3.3-1.

Table 3.3-1 The Precinct's total NDA and equivalent NDA

Land Use	NDA (ha)	Equivalent NDA assuming 15dw/ha	Apportioned % of Equivalent NDA
Environmental Living (5 dwellings/ha)	9.48	3.16	
Very Low Density Residential (12.5 dw/ha)	3.28	2.73	
Very Low Density Residential (8.3dw/ha)	3.10	1.72	
Lower Density Residential (15 dw/ha)	40.38	40.38	
Medium Density Residential (25 dw/ha)*	17.75	29.58	
Sub Total Residential	74	77.57	97.98%
Neighbourhood Centre**	1.60	1.60	
Sub Total Non-Residential	1.60	1.60	2.02%
TOTAL	75.59	79.17	100%

*The Liverpool Contributions Plan 2014 – East Leppington incorrectly calculated the equivalent NDA for medium density residential as 19.97. It has been corrected and updated in this version of the Plan.

** The Liverpool Contributions Plan 2014 – East Leppington incorrectly provides 2.0 as the Neighbourhood Centre's equivalent NDA. This has been corrected and updated in this version of the Plan. Although equivalent NDA is used to reflect various densities across a range of residential land uses, the Neighbourhood Centre does not have any residential component, so the equivalent NDA conversion cannot apply.

3.3.3 Overview of expected development

The Indicative Layout Plan (ILP) in Figure 3.3-1 provides an overview of the Precinct's expected development. The outcomes set to be achieved by the ILP is outlined in

Table 3.3-2.

Figure 3.3-1 East Leppington Liverpool Part Precinct Indicative Layout Plan

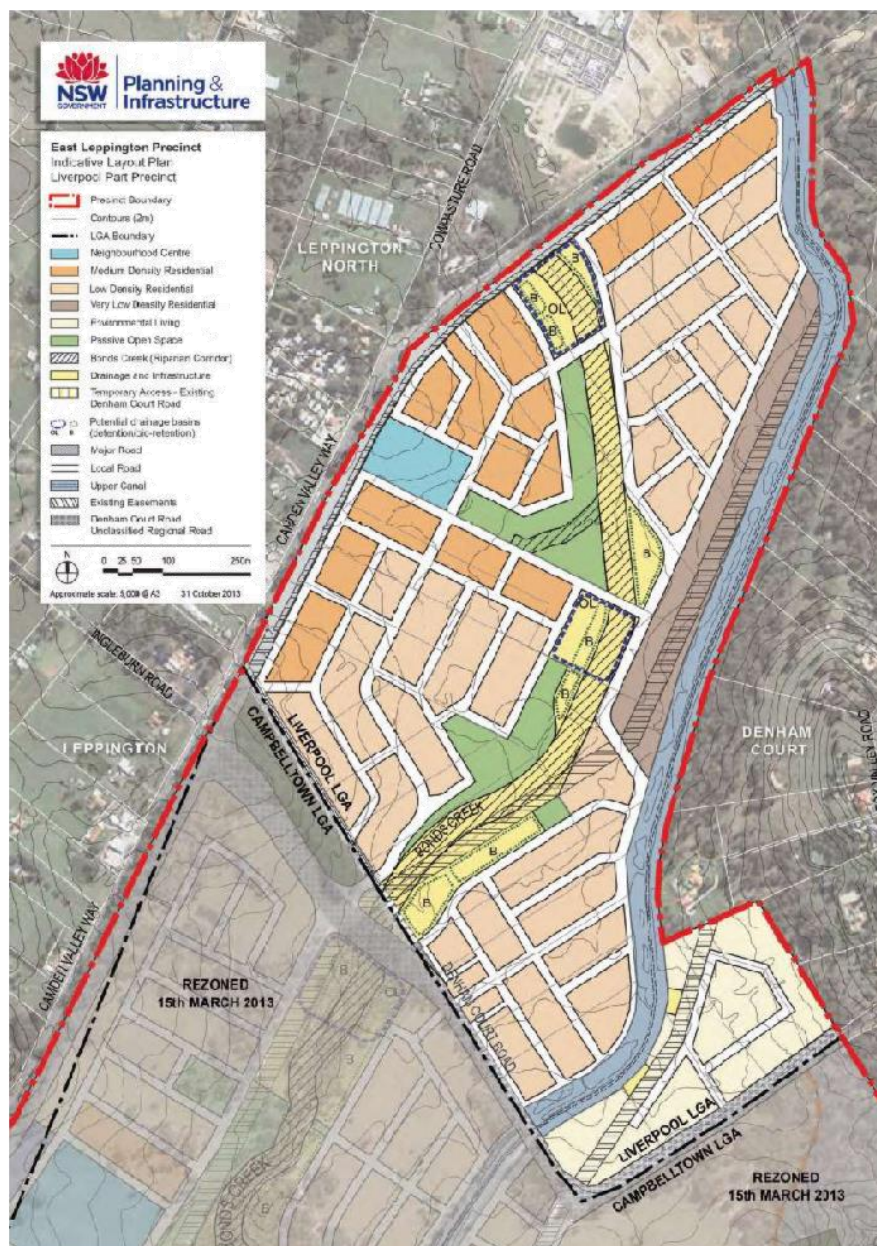


Table 3.3-2 Outcomes of the Precinct's Indicative Layout Plan

ILP Feature	Description
Residential areas	<ul style="list-style-type: none"> Capacity for 1,129 dwellings and 3,485 people. A mix of housing types ranging from town houses and terrace style houses to single dwellings on both large and small blocks.

	<ul style="list-style-type: none"> Minimum residential densities to encourage efficient use of land and infrastructure. Medium density residential areas concentrated around the Neighbourhood Centre, Camden Valley Way and open space areas. Very Low Density Residential and Environmental Living areas allowing houses on large lots to respond to existing constraints including topography and infrastructure easements or to provide a transition to adjoining rural residential development.
Activity Centres	<ul style="list-style-type: none"> A Neighbourhood Centre with the capacity for up to 2,500m² of retail floor space is located near the Camden Valley Way and Cowpasture Road intersection.
Road network	<ul style="list-style-type: none"> Upgrades to Camden Valley Way proposed by TfNSW due for completion by 2016. Denham Court Road will require widening based on the predicted traffic volumes. Realignment with Ingleburn Road is also underway. Alternative access points will be provided along Denham Court Road. The Access point along Camden Valley Way is consistent with the signalised intersection proposed by RMS as part of the Camden Valley Way upgrade. The local road network is generally in the form of a grid network and responds to the existing constraints and topography. There will be one vehicular crossing over the Upper Canal at the existing Denham Court Road crossing. There will be two vehicular crossings over the realigned Bonds Creek.
Open space and riparian corridor	<ul style="list-style-type: none"> 6 hectares of parks contiguous with the Bonds Creek corridor to meet the recreational needs of the Precinct.
Pedestrian and cycleway network	<ul style="list-style-type: none"> Pedestrian paths and cycle ways within the open space network are located along the riparian corridors. Pedestrian bridge crossings will be provided over Bonds Creek providing additional access. On road cycle lanes and off-road pedestrian/shared paths are provided on all roads.
Public transport	<ul style="list-style-type: none"> The road network provides opportunities for bus routes within walking distance of at least 90% of homes, to provide access to Leppington Major Centre, and to other regional destinations. Local road network is suitable for a bus route.
Protection of the environment	<ul style="list-style-type: none"> Riparian corridors along the existing part of Bonds Creek will be retained and/or progressively rehabilitated. The rest of the creek corridor will be reconstructed to emulate a former naturalised creek system. Where possible, the full extent of riparian corridors is incorporated into drainage and open space reserves and will be publicly owned. Where parts of the riparian corridors are not bought into public ownership, the Growth Centres SEPP has a Riparian Protection Area Map and provisions to ensure that riparian corridors are restored and managed in the future. Non-Certified Existing Native Vegetation is retained and protected to meet the requirements of the Biodiversity Certification

Heritage

- State-heritage listed Sydney Catchment Authority's Upper Canal is retained and protected.
- Detailed investigations are required for all heritage items and areas prior to development proceeding.

3.3.4 Dwelling occupancy rates and anticipated residential population

The amount and mix of expected residential development will inform an estimate of the population of an area. The need for social infrastructure is usually based on per capita benchmarks. Section 7.11 contributions are levied on a development-by-development basis and in order for the contribution to be reasonable, there needs to be an assumption of how many people are likely to live in the proposed development.

Elton's Social Infrastructure and Open Space Assessment undertook an analysis of average households sizes in nearby areas to establish occupancy rate assumptions for the projected population (Table 3.3-3).

Table 3.3-3 Dwelling occupancy rates assumed in this Plan

Dwelling type	Occupancy rate per dwelling
Low density residential (Detached dwelling, detached dual occupancy)	3.4
Medium density residential (Semi-detached, town house, terrace, attached dual occupancy)	2.6
Large lots	3.4
Residential flat building unit, apartment, Secondary Dwelling	1.8
Seniors living dwelling	1.5

The anticipated population in the Precinct is shown in Table 3.3-4. These figures have been determined on the basis of the assumed average occupancy rates for various types of residential development.

Table 3.3-4 Anticipated resident population

Dwelling type	Anticipated dwellings	Assumed dwelling occupancy rate	Anticipated Population
Low density residential	605	3.4	2,057
Medium density residential	438	2.6	1,139
Large Lots	85	3.4	289
Expected net additional dwellings / population	1,128*		3,485

*Table 5-2 of the [East Leppington Precinct Planning Report](#) gives 1,129 as a figure. However, this Contributions Plan adopts 1,128 as the total number of projected dwellings, as it is the total value, given the projected number of dwellings for each of the three dwelling types.

3.3.5 Anticipated non-residential floor space

Non-residential floor space in the Precinct is anticipated to be limited to the neighbourhood centre. This is wholly made up of retail space totalling 2,500 m².

4 Strategy plans

4.1 Infrastructure costs and delivery generally

4.1.1 Apportionment of the infrastructure costs to expected development

The quantum and costs of public services and amenities required as a result of the Precinct's expected development are informed by the precinct planning studies in Table 3.2-2. The relationship between the expected types of development and the demand for additional public facilities, as well as their apportionment across the Precinct are discussed by category in Part 0.

Developer contributions for the infrastructure identified in this Plan is determined by dividing the total cost of the infrastructure by the contribution catchment. This process ensures that fair apportionment of facility costs is calculated for development expected to occur under this Plan.

The contribution catchments for each infrastructure type are:

- in the case of open space and recreation, the expected additional resident population of the Precinct;
- in the case of water management, the total NDA of the Precinct;
- in the case of traffic and transport, the expected additional resident population of the Precinct for residential development and the total NDA of the Precinct for non-residential development; and
- in the case of plan administration, the total NDA of the Precinct.

The infrastructure included in this Plan has been sized to reflect the demand generated by the expected development under this Plan.

4.1.2 Proposed infrastructure staging

The staging and prioritisation of infrastructure in this Plan is as follows:

1) Trunk drainage

This refers to the main spine of drainage running alongside Bonds Creek, which is a major drainage channel in the Precinct and includes online detention basins.

2) Infrastructure related / adjacent to the trunk drainage infrastructure

These refer to bio-retention basins co-located with passive open space infrastructure along Bonds Creek which includes pedestrian and vehicular creek crossings. This also refers to local parks and shared paths and cycleways along the Precinct's main spine.

3) Intersections with major roads as determined by Transport for NSW (TfNSW)

These refer to intersections roadworks and traffic signals from the Precinct to major roads like Camden Valley Way and Denham Court Road.

4) Collector road network

This includes any traffic management infrastructure like roundabouts necessary for the establishment of the Precinct's collector road network. Additionally, shared paths and off-street cycleways running along the collector road network will also be delivered.

5) Local roads adjacent to development sites

Local streets adjacent to development are developed on a half-road basis as a condition of consent for development to be completed.

These are general in scope but are informed principles of orderly development within the Precinct. The staging and prioritisation of works is regularly reviewed by Council and responds to development trends and community needs.

4.1.3 Infrastructure maps and schedules

The infrastructure referred to in the Plan are identified in the maps in the following sections. This map can be viewed at a large scale and shows all the infrastructure items on the one map in relation to property boundaries and the proposed local streets using [Council's online mapping service](#). Appendix B: Contributions Plan Infrastructure Items also illustrates all the required infrastructure in one map.

The cost schedules in this section are based on these infrastructure provision maps and extracted from the following MS Excel spreadsheet:

[Liverpool CP 2021 East Leppington Infrastructure Schedule.xlsx](#)

The spreadsheet also contains details on the components of each infrastructure, as well as the assumptions informing the calculation of costs included in this Part. Refer to the source spreadsheet file for more information on works and land items included in this Plan.

4.2 Open Space and Recreation Infrastructure

4.2.1 Existing Open Space and Recreation Provision

The Precinct contains no existing community facilities, services or open space which might be used or adapted for use by the future population of East Leppington.

Some local level facilities and open space areas are located in adjacent areas. However, the Social Infrastructure and Open Space Assessment identifies several reasons why these will not meet the needs of the future East Leppington population. This means that future demand for local level facilities, services and open space will need to be addressed by new social infrastructure to be provided within the Precinct.

The need for district and regional level facilities, services and open space will be met by existing facilities and regional open space and by those proposed to be developed within the North Leppington Precinct. There will be no need to provide any district nor regional facilities or open space within the Precinct.

4.2.2 Open Space requirements and provision

The Social infrastructure and open Space Assessment details open space requirements for the Precinct. The ILP provides 5.91 hectares of open space at a rate of 1.69 hectares per 1,000 people.

The details of total open space provision for the Precinct by hierarchy and by type of open space is set out in Table 4.2-1 and mapped in Figure 4.2-1 (alongside the proposed water management infrastructure).

Table 4.2-1 Open Space Provision

Type of district and local open space	Hectares of open space to be provided
Informal / passive parks Shown in this Plan as "Open Space (Local Parks) – OSc"	1.7
Open space along riparian corridor Shown in this Plan as "Open Space (Passive) – OSa"	4.1
Total	5.9

East Leppington - Contribution Plan Items (Open Space)

Source: Geocortex, Liverpool City Council, 2021

Local Parks

Local parks should have a range of play spaces and opportunities and cater to older children and young people as well as the traditional playground for young children. This might also include a grassed area for ball games, with seats and shelter and may contain a practice wall, fitness equipment, and other elements.

These are 0.2 hectares to 0.5 hectares in size and are to be provided within 400-500m walking distance of 90% of dwellings.

Passive open space

In terms of informal/passive recreation, the ILP for East Leppington has identified significant land areas that will be set aside as riparian corridors, conservation areas and detention basins. These have potential to meet some of the passive recreation needs of the future population.

Before conservation areas, riparian corridors, buffers and detention basins can be accepted as areas of open space, it will need to be confirmed that they are usable and capable of providing quality recreation settings, and that it will be appropriate for them to contain embellishments such as barbecue and picnic facilities, seating, playgrounds, pathways etc.

4.2.3 Calculation of contributions for Open Space and Recreation Infrastructure

Contributions toward open space and recreation infrastructure will only be collected from residential development.

Monetary contributions are calculated on a per person or per resident basis, then factored up to a per lot or per dwelling amount.

The monetary contribution per person in a development containing residential dwellings or lots (whether or not that development also comprises non-residential floor space) is calculated as follows:

$$\text{Contribution per person (\$)} = \sum \frac{\$INF}{TP}$$

Where:

$\$INF$ = the estimated cost (or if the infrastructure is existing, the indexed, completed cost) of providing the Plan's open space and recreation infrastructure (refer 4.2.4 Open Space and Recreation Infrastructure cost schedules).

TP = the estimated resident population (in persons) that will generate demand for the infrastructure - that is, the expected net additional population of the Precinct (refer Table 3.3-4)

The contribution per person (\$) can then be used to calculate the monetary contribution for different residential development types as follows:

$$\text{Contribution per residential lot / unit (\$)} = \frac{\text{Contribution per person (\$)}}{\text{Estimated occupancy rate}}$$

The estimated occupancy rates have been provided in Table 3.3-3 and the contribution amount per residential lot / unit (\$) have been provided in Table 1.2-1.

4.2.4 Open Space and Recreation Infrastructure cost schedules**Land**

Item	Area (Ha)	Total Cost
Open Space (Local Parks)		
OSc1	0.3500	\$1,715,000
	0.8401	\$924,110
OSc2	0.5712	\$628,320
	1.7613	\$3,267,430
Open Space (Passive)		
OSa1	0.1193	\$357,900
	0.3774	\$452,880
OSa2	0.0061	\$18,300
	1.4631	\$1,609,410
OSa3	0.0567	\$113,400
	0.3827	\$459,240
OSa4	0.7094	\$1,347,860
	0.8374	\$1,004,880
OSa5	0.1348	\$525,720
	0.0621	\$74,520
	4.149	\$5,964,110
Subtotal	5.9103	\$9,231,540
Contingency	12%	\$1,107,785
Total		\$10,339,325

Works

Item	Area (Ha)	Cost	Design Costs	Demolition Allowance	Total Cost
Open Space (Local Parks)					
OSc1	1.1901	\$929,158	\$116,145		\$1,045,303
OSc2	0.5712	\$570,767	\$63,419		\$634,186
Total	1.7613	\$1,499,925	\$179,564		\$1,679,489
Open Space (Passive)					
OSa1	0.4966	\$370,292	\$41,144		\$411,436
OSa2	1.4692	\$1,095,520	\$121,724		\$1,217,244
OSa3	0.4394	\$317,642	\$36,405		\$354,047
OSa4	1.5468	\$1,153,382	\$128,154		\$1,281,536
OSa5	0.1969	\$163,133	\$32,626		\$195,759
Total	4.1489	\$3,099,969	\$360,053		\$3,460,022
Total	5.9102	\$4,599,894	\$539,617		\$5,139,511

Construction Contingency 7%	\$359,766
Plan of Management	\$20,199
Total	\$5,519,476

4.3 Water Cycle Management Infrastructure

4.3.1 Existing Water Courses and Water Management

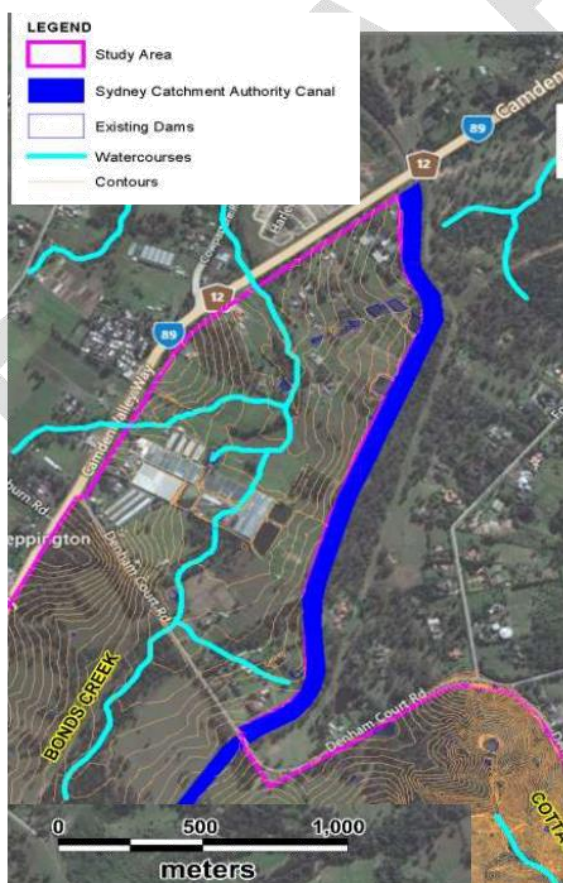
The main land use within the Precinct is currently agriculture. There are some dams spread across the study area in drainage depressions.

There are two main Creeks within the study area. Cottage Creek located along the eastern boundary and Bonds Creek flowing from southwest to northeast centrally through the Precinct.

A Sydney Catchment Authority (SCA) canal flows from southwest to northeast in direction along the east of the Liverpool part of East Leppington Precinct.

Topographical information indicates surface water in the east of the Precinct is conveyed to Cottage Creek, with the remaining being conveyed to Bonds Creek. A number of existing culverts convey overland flow beneath the SCA canal. The proposed study area is shown in Figure 4.3-1 and indicates the main watercourses within the catchment.

Figure 4.3-1 Existing Water Courses and Water Management



Source: Cardno, 2012, East Leppington Water Cycle Management Report

4.3.2 Proposed water cycle management infrastructure

A Water Sensitive Urban Design (WSUD) approach has been developed to manage stormwater runoff in the East Leppington Precinct. The Water Cycle Management Report establishes the framework for the management of stormwater quantity and quality related to the expected urban development of the Precinct.

The strategy informs where water management controls are to be located in the ILP and document requirements for the preparation of a site-specific Development Control Plan (DCP).

Retarding basins are required in order to maintain the existing flood behaviour downstream of the Precinct.

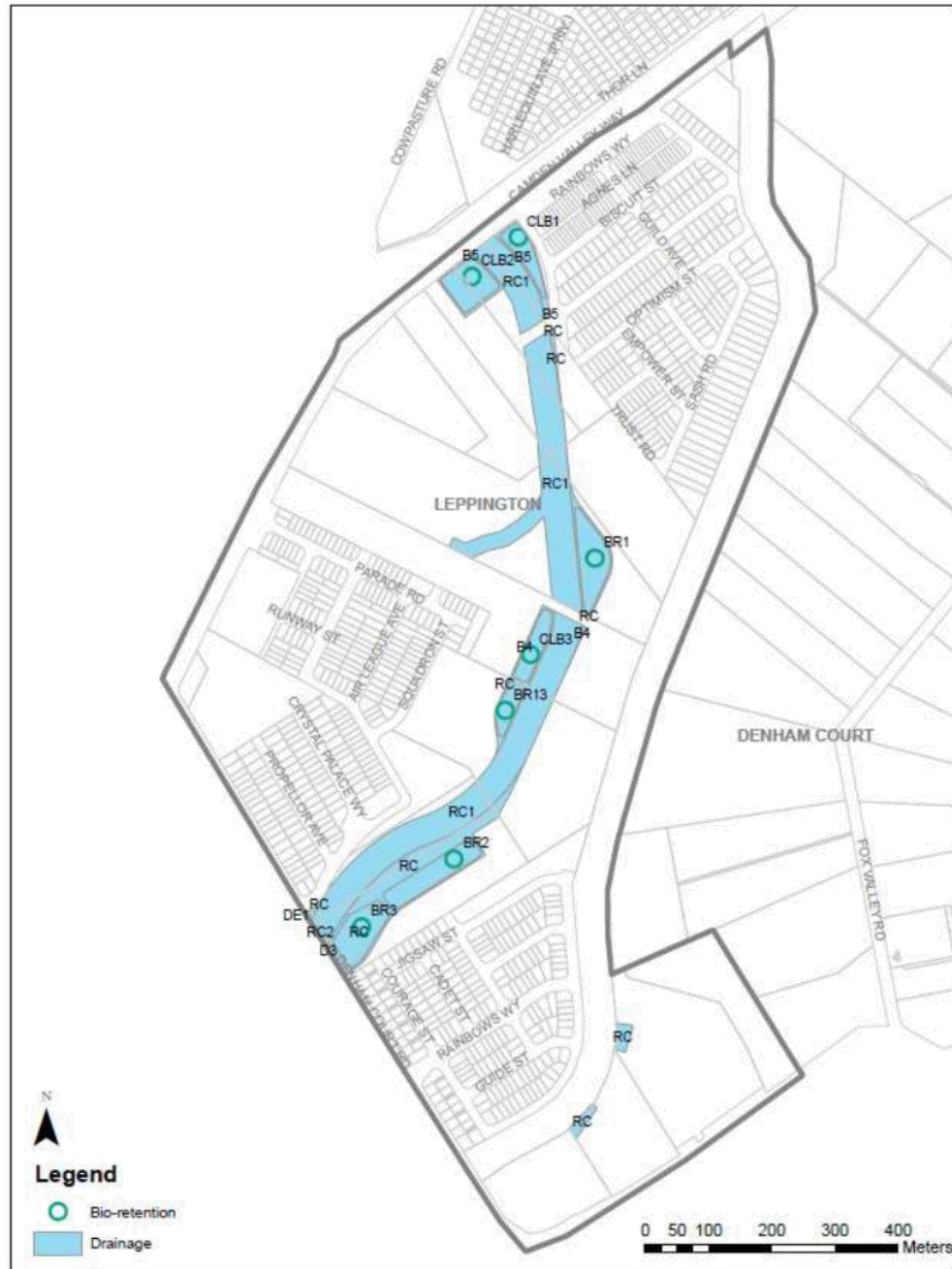
A portion of the Study Area within the Liverpool LGA may not be developed at the same time as those areas upstream of Denham Court Road. Retarding Basin B3 has been designed in order to attenuate peak flows during the 100 year ARI event to below pre-development levels and achieve negligible changes to flooding downstream of Denham Court Road.

Under ultimate developed conditions, a constructed naturalised channel along with two on-line basins are proposed within the Liverpool LGA and extends from Denham Court Road to Camden Valley Way. The flooding assessment indicates general decreases in flood depth would be expected with a significant reduction in flood extents contained within the proposed channel in comparison to existing conditions.

The Water Cycle Management report has demonstrated that flood behaviour and water quality can be appropriately managed within the East Leppington Precinct and can be accommodated within the proposed ILP.

The locations of proposed trunk infrastructure that comprises stormwater channels and basins for the East Leppington Precinct (Liverpool LGA) are shown in Figure 4.3-2.

Figure 4.3-2 Proposed Provision of Water Cycle Management Infrastructure



East Leppington - Contribution Plan Items (Drainage)

Source: Geocortex, Liverpool City Council, 2021

4.3.3 Calculation of contributions for Water Cycle Management Infrastructure

Contributions toward water management infrastructure will be collected from both residential and non-residential development.

Monetary contributions are determined on a per hectare basis of NDA.

The monetary contribution per hectare of NDA is calculated as follows:

$$\text{Contribution per hectare of NDA (\$)} = \sum \frac{\$INF}{eNDA}$$

Where:

$\$INF$ = the estimated cost (or if the infrastructure is existing, the indexed, completed cost) of providing the Plan's water management infrastructure (refer 4.3.4 Water Management Infrastructure cost schedules).

$eNDA$ = the total equivalent NDA that will generate demand for water management infrastructure (in hectares). Refer to Table 3.3-1.

The contribution rate per hectare of NDA towards water management infrastructure has been provided in Table 1.2-1.

To determine the total contribution for water management infrastructure, multiply the contribution rate per hectare by the amount of NDA (in hectares) on the site of the proposed development.

4.3.4 Water Management Infrastructure cost schedules

Land

Item	Area Ha	Total Cost
Bio-retention basins		
BR1	0.5554	\$2,166,060
BR13	0.2	\$280,000
BR2	0.5547	\$610,170
BR3	0.509	\$559,900
Total	1.8191	\$3,616,130
Bio-retention basins (co-located)		
CLB1	0.269	\$322,800
CLB2	0.4545	\$1,908,900
CLB3	0.2915	\$349,800
Total	1.015	\$2,581,500
Drainage Infrastructure		
D3	0.0554	\$66,480
DE1	0.0135	\$52,650
Total	0.0689	\$119,130
Drainage lands		
RC1	6.1434	\$5,529,060
RC2	0.0478	\$66,920
RC	1.3531	\$1,759,030

Total	7.5443	\$7,355,010
Online Detention Basins		
B4	0.1088	\$130,560
B5	0.2197	\$483,340
Total	0.3285	\$613,900
Subtotal	10.7758	\$14,285,670
Contingency	12%	\$1,714,280.40
Total		\$15,999,950

Works

Item	Area Ha	Total Cost
Bio-retention basins		
BR1	0.5554	\$2,085,674
BR13	0.2	\$2,922,261
BR2	0.5547	\$1,770,506
BR3	0.509	\$1,770,506
Total	1.8191	\$8,548,947
Bio-retention basins (co-located)		
CLB1	0.269	\$4,240,038
CLB2	0.4545	\$2,469,592
CLB3	0.2915	\$2,882,092
Total	1.015	\$9,591,722
Drainage Infrastructure		
D3	0.0554	\$65,888
DE1	0.0135	\$16,111
Total	0.0689	\$81,999
Drainage lands		
RC1	6.1434	\$7,306,405
RC2	0.0478	\$56,839
RC	1.3531	\$1,609,216
Total	7.5443	\$8,972,460
Online Detention Basins		
B4	0.1088	\$2,045,505
B5	0.2197	\$2,045,505
Total	0.3285	\$4,091,010
Subtotal	10.7758	\$31,286,138
Construction Contingency	7%	\$2,190,030
Fill Disposal Allowance		\$1,688,202
Total Cost		\$35,164,370

4.4 Traffic and Transport Infrastructure

4.4.1 Existing Traffic and Transport Provision

There are only minimal existing public transport services and walking/cycling facilities in the area, but this is set to be transformed with the completion of the South West Rail Link. The limited existing (or absent) provision for walking and cycling will also not be appropriate to future demands.

4.4.2 Traffic and Transport requirements and provision

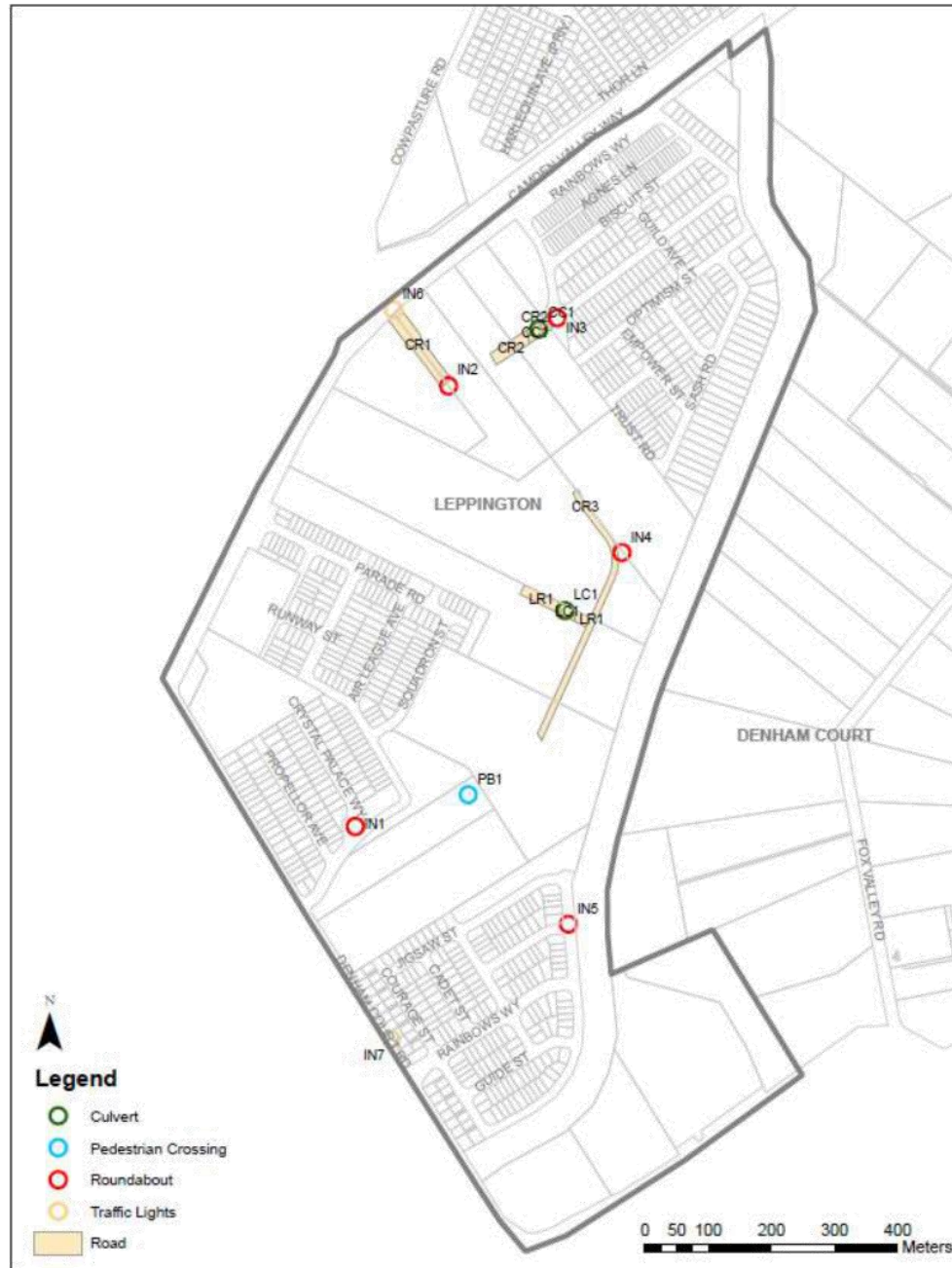
Occupants of expected development in the Precinct require a transport network comprising:

- facilities for private vehicles, including roads and intersections;
- facilities for public transport, including rail and bus facilities focused on the planned Leppington railway station in the North Leppington Precinct; and
- facilities for walking and cycling.

The Transport and Traffic Report outlines the land acquisitions and works items required in providing East Leppington's transport network. An accompanying Green Travel Strategy has also been developed to ensure sustainable transport options are prioritised and public transport; walking and cycling facilities are provided and promoted.

Figure 4.4-1 sets out the Transport and Traffic infrastructure items required.

Figure 4.4-1 Proposed provision of Transport and Traffic Infrastructure



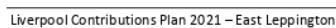
East Leppington - Contribution Plan Items (Traffic)

Source: Geocortex, Liverpool City Council, 2021

As seen in Figure 4.4-1, the following road infrastructure are to be provided:

- Collector roads
- Intersection controls such as roundabouts for local streets and collector roads
- Traffic signals to Camden Valley Way and Denham Court Road
- Vehicular creek crossings (bridges) as a result of Bonds Creek running through the Precinct
- Bus shelters based on the proposed internal bus route and stops (Note: The proposed bus routes are indicative only and do not secure the operation of bus services on these roads.)

Figure 4.4-2 Precinct Road Hierarchy



4.4.4 Pedestrian and cycleway network

As seen in Figure 4.4-1, the following pedestrian and cycleway infrastructure are to be provided:

- Pedestrian bridge crossings across Bonds Creek
- Off road cycleways and pedestrian paths along Bonds Creek and the Precinct's open space and drainage network
- Off road shareways adjacent the Precinct's two main collector roads

This is in accordance with the pedestrian and cycleway network indicated in the Liverpool Growth Centre Precincts Development Control Plan (DCP) in Figure 4.4-3.

Figure 4.4-3 Pedestrian and Cycleway Network



4.4.5 Calculation of contributions for Traffic and Transport infrastructure

Contributions toward traffic and transport infrastructure will be collected from both residential and non-residential development.

This Plan determines contributions for traffic and transport infrastructure by first apportioning the costs between residential and non-residential development based on the proportion of equivalent NDA of each development type. This apportioned percentage is provided in Table 3.3-1.

It then levies:

- Residential development on a per person basis, factored up to a per dwelling amount; and
- Non-residential development on a per hectare of NDA basis.

The per resident (and thus, per dwelling) approach for residential development best reflects the demand for traffic and transport infrastructure by the additional population. The approach of determining contributions for non-residential development using the NDA is considered reasonable because the land use mix and employment numbers attributable to the different non-residential land uses expected in the Precinct have been assessed only at a strategic network level at the time of preparing this Plan.

Formula for residential development

The monetary contribution per person in a development containing residential dwellings or lots (whether or not that development also comprises non-residential floor space) is calculated as follows:

$$\text{Contribution per person (\$)} = \sum \frac{\$INF}{TP}$$

Where:

$\$INF$ = the apportioned share to residential development (97.98%) of the estimated cost (or if the infrastructure is existing, the indexed, completed cost) of providing the Plan's traffic and transport infrastructure (4.4.6 Transport and Traffic Infrastructure cost schedules).

TP = the estimated resident population (in persons) that will generate demand for the infrastructure - that is, the expected net additional population of the Precinct (Table 3.3-1)

The contribution per person (\$) can then be used to calculate the monetary contribution for different residential development types as follows:

$$\text{Contribution per residential lot / unit (\$)} = \frac{\text{Contribution per person (\$)}}{\text{Estimated occupancy rate}}$$

The estimated occupancy rates have been provided in Table 3.3-3 and the contribution amount per residential lot / unit (\$) have been provided in Table 1.2-1.

To determine the total residential contribution for traffic and transport infrastructure, multiply the contribution per residential lot / unit by the number of proposed dwellings on the site of the proposed development.

Formula for non-residential development

The monetary contribution per hectare of NDA is calculated as follows:

$$\text{Contribution per hectare of NDA (\$)} = \sum \frac{\$INF}{eNDA}$$

Where:

$\$INF$ = the apportioned share to non-residential development (2.02%) of the estimated cost (or if the infrastructure is existing, the indexed, completed cost) of providing the Plan's traffic and transport (4.4.6 Transport and Traffic Infrastructure cost schedules).

eNDA = the total non-residential equivalent NDA that will generate demand for infrastructure (in hectares). Refer to Table 3.3-1.

The contribution rate per hectare of NDA towards transport and traffic infrastructure has been provided in Table 1.2-1.

To determine the total non-residential contribution for transport and traffic infrastructure, multiply the contribution rate per hectare by the amount of NDA (in hectares) on the site of the proposed development.

Note: The determination of reasonable contribution rates for transport facilities in development contributions plans is often based on the number of vehicle trips generated by development. Apportionment to the different classes of development (that is, residential, commercial, employment, etc.) of the costs of facilities that are determined on a per trip basis is then derived by calculating the degree to which the traffic generated by each land use class will use the different road links and intersections included in the contributions plan.

However, at the time of preparing this Plan, there has been limited knowledge of likely trip origins and destinations by different development classes available to inform this method of apportionment.

4.4.6 Transport and Traffic Infrastructure cost schedules

Land

Item No	Item	Area Ha	Total Cost
Collector Roads			
CR1	New road from CVW (full road)	0.3	\$1,440,000
CR2	New road (full road)	0.15	\$180,000
CR3	Collector Road (half road)	0.365	\$438,000
Local Roads			
LR1	New road (full road)	0.152	\$182,400
CC1	Collector Road - Creek Crossing	0.05	\$70,000
LC1	Local Road - Creek Crossing	0.04	\$56,000
Subtotal			\$2,366,400
Land Acquisition Contingency		12%	\$283,968
Total			\$2,650,368

Works

Item No	Item	Length (m)	Total Cost
CR1	New road from CVW (full road)	150	\$618,022
CR2	New road (full road)	75	\$309,011
CR3	Collector Road (half road)	365	\$850,122
LR1	New road (full road)	95	\$329,096
Roads Total			\$2,106,251
CC1	Collector Road - Creek Crossing	25	\$1,667,140
LC1	Local Road - Creek Crossing	25	\$1,667,140
Bridges Total			\$3,334,280
IN1, IN2, IN3, IN4, IN5	Roundabouts		\$656,982
IN6, IN7	Traffic Signals		\$625,177

	Link to Camden Valley Way		\$1,111,426
	Intersection Total		\$2,393,585
PB1	Pedestrian - Crossing	40	\$416,785
	Pedestrian Total		\$416,785
	Bus Shelters		\$88,447
	Bus Shelters Total		\$88,447
	Recommended Off Road Cycleway	190	\$63,018
	Recommended Off Road Shared Path	1,240	\$411,278
	Cycleway Total	4,806*	\$474,296
	Subtotal	7,610	\$8,813,644
	Construction Contingency	7%	\$616,955
	Total		\$9,430,599

*This total value includes the cycleways running alongside Collector roads

4.5 Plan Administration Costs

4.5.1 What are Plan administration costs?

Councils incur significant costs in the preparation and administration of contributions plans.

Council staff are deployed to:

- prepare and review contributions plans;
- account for contributions receipts and expenditure; and
- co-ordinate the implementation of contributions plans and works, including involvement in negotiating Works in Kind and material public benefit agreements.

Consultant studies are also commissioned by Council from time to time in order to determine the value of land to be acquired, the design and cost of works, as well as to review the development and demand assumptions of the contributions plan. Council is also required to engage the services of legal professionals from time to time to assist it in the administration of this Plan.

As these costs arise directly as a result of the development in the Plan area, it is reasonable that the costs associated with preparing and administering this Plan be recouped through contributions from development.

Costs associated with the ongoing administration and management of the Plan will be levied on all applications that are required to pay a development contribution.

Costs included in this Plan for these purposes are based on the recommended rate by IPART, being 1.5% of the total cost of works.

4.5.2 Calculation of contributions for plan administration costs

Contributions toward plan administration costs will be collected from both residential and non-residential development.

Monetary contributions are determined on a per hectare of NDA basis.

The monetary contribution per hectare of NDA is calculated as follows:

$$\text{Contribution per hectare of NDA (\$)} = \sum \frac{\$Admin}{eNDA}$$

Where:

\$Admin = 1.5% of capital works costs in accordance with IPART's benchmark (refer Part 1.2 Summary of contribution rates and works schedule costs – Works Schedule)

eNDA = the total equivalent NDA to which this Plan applies (in hectares). Refer to Table 3.3-1.

The contribution rate per hectare of NDA towards plan administration has been provided in Table 1.2-1.

To determine the total contribution for plan administration, multiply the contribution rate per hectare by the amount of NDA (in hectares) on the site of the proposed development.

DRAFT

5 Background Information

AEC, 2020, Land Valuations for the East Leppington Precinct (reflecting January 2021 quarter values)

AEC, 2021, Proposed 2021 East Leppington Contribution Plan - Report

AECOM, 2013, East Leppington Precinct - Infrastructure Delivery Plan

CARDNO, May 2013, Water Cycle Management Report, East Leppington

CARDNO, May 2013, Traffic Assessment, East Leppington

ELTON CONSULTING, 2013 Social Infrastructure and Open Space Assessment - East Leppington Precinct

DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT, 2012, Draft East Leppington Precinct Planning Report

DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT, 2012, East Leppington Precinct Southwest Growth Centre Land Zoning Map

DEPARTMENT OF PLANNING, INDUSTRY AND ENVIRONMENT, December 2013, East Leppington Precinct Plan – Liverpool Part – Post Exhibition Planning Report

SPILLER GIBBONS SWAN, 2012, East Leppington Employment & Retail Study Final Report

Appendix A: Glossary

Bank Guarantee means an irrevocable and unconditional undertaking without any expiry or end date in favour of the Council to pay an amount or amounts of money to the Council on demand issued by an Australian bank, non-bank financial institution, or insurance company subject to prudential supervision by the Australian Prudential Regulatory Authority and has a credit rating of 'A' or above (as assessed by Standard and Poor's) or 'A2' or above (as assessed by Moody's Investors Service) or 'A' or above (as assessed by Fitch Ratings)

Attributable cost means the estimated cost for each item in the works schedules set out in Part 4 of this Plan, which may differ from the final actual cost of the item. It will be the value used in determining the amount of any offset of monetary contributions as a result of any works-in-kind proposal.

Council means Liverpool City Council

CPI means the *Consumer Price Index (All Groups - Sydney)* published by the Australia Statistician.

EP&A Act means the Environmental Planning and Assessment Act 1979.

EP&A Regulation means the Environmental Planning and Assessment Regulation 2000.

Equivalent Net Developable Area (Equivalent NDA or eNDA) is an adjustment of Net Developable Area values to reflect the lower residential development potential of higher and lesser densities.

ILP means East Leppington Indicative Layout Plan.

LGA means local government area.

Net Developable Area (NDA) means the area of land to which a development application relates and includes the area of any land that the development consent authorises, or requires, to be used as a road, or reserved or dedicated as a public road but excludes:

- existing roads to be used as part of the proposed road network;
- existing educational establishments (as defined in the *Standard Instrument - Principal LEP*);
- any part of the land that is below the level of a 1:100 ARI flood event, if that part of the land is unsuitable for development by virtue of it being at or below that level;
- any land that the development consent authorises, or requires, to be reserved, dedicated or otherwise set aside as, or for the purpose of, any of the following:
 - (a) a government school (within the meaning of the Education Act 1990);
 - (b) a tertiary institution, including a university or TAFE establishment, that provides formal education and is constituted by or under an Act.
 - (c) an emergency services facility;
 - (d) a health services facility owned and operated by a public authority;
 - (e) a golf course;
 - (f) a passenger transport facility;

- (g) a public reserve or a drainage reserve (within the meaning of the Local Government Act 1993);
- (h) a public transport corridor (other than a road corridor);
- (i) a public utility undertaking;
- (j) roads or other public amenities or public services, in connection with which development contributions have been imposed under section 7.11 or section 7.12 of the Act or may be imposed in accordance with a contributions plan approved under section 7.18 of the EP&A Act;
- (k) roads or other infrastructure in connection with which special infrastructure contributions have been, or may be, imposed in accordance with section 7.24 of the EP&A Act;

Planning agreement means a voluntary planning agreement referred to in section 7.4 of the EP&A Act.

Precinct or **Liverpool Precinct** refers to the East Leppington Liverpool Part Precinct and the area of land shown in Figure 2.2-1 of this Plan.

Residential Accommodation has the same meaning as in the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.

Social Infrastructure Assessment means the report - *Social Infrastructure and Open Space Assessment, East Leppington Precinct* prepared by Elton Consulting, June 2013.

Special Infrastructure Contribution means a contribution referred to in section 7.24 of the EP&A Act.

State Environmental Planning Policy (Sydney Region Growth Centres) 2006 means the State Environmental Planning Policy amended from time to time.

Works in kind means the undertaking of a work or provision of a facility by an applicant which is already nominated in the works schedule of a contributions plan as a means of either fully or partly satisfying a condition of consent requiring development contributions to be made.

Works schedule means the schedule of the specific public facilities for which contributions may be required as set out in Part 4 of this Plan.

East Leppington - Contribution Plan Items

Changes made to the Liverpool Contributions Plan 2021 – East Leppington

Section of the Contributions Plan	Changes made
Part 1	
1.1 Preamble	Minor changes to wording.
1.2 Summary	Changes to the format to ensure readability. Values updated to reflect review of the Plan.
1.3. Sample calculation	Section added to provide more guidance on how the contributions rates in 1.2 are to be used.
1.4. Plan Overview	Split section from Structure of the Plan.
1.5. Structure of the Plan	Split section from Plan Overview. Table of plan requirements updated to reflect the latest version of the Environmental Planning and Agreement Regulations.
Part 2	
2.1. Definitions used in this Plan	Moved to Appendix Glossary.
2.2. Name of the Plan	Updated.
2.3. Land to which Plan Applies	Plain boundary map from Geocortex used instead of Indicative Layout Plan.
2.4. Purpose of the Plan	No changes.
2.5. Adoption of the Plan	Updated.
2.6. Relationship to other plans	Updated. Table of previous versions added.
2.7. Authority to require contributions	Order switched.
2.8. Types of development to be levied	Minor wording updates and referencing to other sections of the Plan.
2.9. Payment of Contributions	Section on cap removed. Obligations of accredited certifiers updated to be more general.
2.10. Contributions demand credits for existing development	Wording updated to make clear that no credit for development in East Leppington.
2.11. Adjustment to Contribution Rates and Contribution Amounts	No changes.
2.12. Review of Plan and contributions rates	No changes.
2.13. Pooling of Funds	No changes.
2.14. Delivery of the Infrastructure	Moved to Part 2 from part 4.
Part 3	
3.1 Infrastructure demand arising from expected development	Retitled and made more focused.
3.2 Development and infrastructure planning context	Details in sub-sections below.
3.2.1 Growth Centres Structure Planning	Shortened. Table updated to provide clearer context.
3.2.2. Precinct Planning	References updated. Minor changes to wording.
(3.x Infrastructure Delivery Plan)	Removed. Not relevant to Contributions Plan.
3.3 Expected development outcomes	Details in sub-sections below.
3.3.1 Existing development	
3.3.2 Net Developable Area	New section. Contains a table for the total NDA and total equivalent NDA.

Section of the Contributions Plan	Changes made
	Corrections to the equivalent NDA for medium-density residential and non-residential.
3.3.3 Overview of expected development	Updated to be more concise. Contains ILP and key features. Deleted list of infrastructure to be provided in precinct outside of Liverpool's LGA.
(3.x Overview of expected development in East Leppington - whole precinct)	Removed as this had an NDA table that was irrelevant and misleading.
(3.x Demographic characteristics)	Removed. Not relevant to Contributions Plan.
3.3.4 Dwelling occupancy rates and anticipated residential population	Two sections merged. Irrelevant data removed. Total projected dwellings rounded down to 1,128.
(3.x Anticipated resident population)	Removed. Merged to 3.3.4.
3.3.5 Anticipated non-residential floor space	Table removed as there is only one figure of note.
(3.x Infrastructure demand arising from the expected development)	Removed, but some content retained in 3.2.2.
Part 4	
4.1 Infrastructure costs and delivery generally	Details in sub-sections below.
4.1.1 Apportionment of the infrastructure costs to expected development	Minor changes to wording.
(4.x Delivery of the infrastructure)	Moved to Part 2.
(4.x Proposed Development Staging)	Removed. Not relevant to Contributions Plan.
4.1.2. Proposed Infrastructure Staging	New section. Provides the prioritisation of infrastructure to be built in the Plan.
(4.x Existing Infrastructure and Interim Servicing Strategy)	Removed. Not relevant to Contributions Plan.
(4.x Ultimate Infrastructure Strategy)	Removed. Not relevant to Contributions Plan.
4.1.3 Infrastructure maps and schedules	New section. Removes the need for Part 5 and integrates maps and schedules into Part 4.
4.2 Open Space and Recreation Infrastructure	Details in sub-sections below.
4.2.1 Existing Open Space and Recreation Provision	Minor changes to wording.
4.2.2 Open Space requirements and provision	Shortened, some bits not that relevant to the Contributions Plan. Only included open space types that are actually provided in the precinct / Liverpool LGA.
4.2.3 Calculation of contributions for Open Space and Recreation Infrastructure	Minor changes to wording. Equations and references updated to be clearer.
4.2.4 Open Space and Recreation Infrastructure cost schedules	Moved from Part 5
4.3 Water Cycle Management Infrastructure	Details in sub-sections below.
4.3.1 Existing Water Courses and Water Management	No changes.
4.3.2 Proposed water cycle management infrastructure	Minor changes to wording.
(4.x Delivery of water cycle management infrastructure)	Removed and placed in Part 2.
4.3.3 Calculation of contributions for Water Cycle Management Infrastructure	Minor changes to wording. Equations and references updated to be clearer.

Section of the Contributions Plan	Changes made
4.3.4 Water Management Infrastructure cost schedules	Moved from Part 5
4.4. Traffic and Transport Infrastructure	Details in sub-sections below.
4.4.1 Existing Traffic and Transport Provision	New section added for consistency with other sections.
4.4.2 Traffic and Transport requirements and provision	New section added for consistency with other sections.
4.4.3 Roads and Public Transport	Replaced former section, wording and maps (Proposed Road and Intersection Hierarchy).
4.4.4. Pedestrian and cycleway network	Replaced former section, wording and maps (Public Transport).
(4.x Total Works Items Required)	Removed (redundant).
(4.4.4. Works Items Required)	Removed (redundant).
4.4.5 Calculation of contributions for Traffic and Transport infrastructure	Minor changes to wording. Equations and references updated to be clearer.
4.4.6 Transport and Traffic Infrastructure cost schedules	Moved from Part 5
4.5 Plan Administration Costs	New section.
4.5.1 What are Plan administration costs?	New section to better clarify what Plan administration costs are.
4.5.2 Calculation of contributions for plan administration costs	New section to show how Plan admin costs are charged in a Plan.
Part 5	
Part 5	Removed. Cost schedules moved to Part 4. Replaced with list of background information.
Appendices	
Appendix A: Glossary	Moved from Part 2. Added equivalent NDA, clarified what "Precinct" is being referred to.
Appendix B: Contributions Plan Infrastructure Items	New section. Shows all infrastructure to be provided on one map.

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTION PLAN - REPORT

LIVERPOOL CITY COUNCIL
MAY 2021

aecgrouppltd.com



PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



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Project Manager: James Popovic
Email: james.popovic@aecgrouppltd.com
Telephone: 02 9283 8400
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PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



EXECUTIVE SUMMARY

BACKGROUND

Liverpool City Council is currently undertaking a review of the Liverpool Contributions Plan 2014 - East Leppington Precinct and preparing an updated to the Liverpool Contributions Plan 2021 - East Leppington Precinct (referred to as the Plan). An update of the original Plan prepared in 2014 is considered necessary in order to account for the increased costs (for both land acquisitions and infrastructure works) attributable to the East Leppington Precinct.

AEC Group Pty Ltd (AEC) have been engaged by Liverpool City Council (Council) to assist them with updating the Plan by way of undertaking a current land costs assessment in addition to modelling the proposed contribution rates for the updated Plan.

The purpose of this report is to inform Liverpool City Council as to the proposed changes to developer contribution levies in the Plan. The original Plan was adopted on the 26 May 2015 and was most recently amended on 10 June 2020¹.

KEY FINDINGS

A brief summary of our key findings in relation to the costs associated with the East Leppington Contributions Plan follows:

- Total cost of the Plan increased by 22.77% between the original Contributions Plan's costs indexed to March Quarter 2021 and as currently proposed.
- Total Infrastructure works costs (water management, recreation and transport/roads) have shown a percentage increase of 75.02% between the original Contributions Plan's costs indexed to March Quarter 2021 and as currently proposed. This increase in cost is largely attributed to the works program now entering the design phase particularly in terms of water management (which has shown the largest proportionate cost increase of 200.01% between the original Contributions Plan and as currently proposed).
- Recently assessed land acquisition costs (in total) have decreased by 21.39% as compared with the March Quarter 2021 figures (indexed from original land costs adopted for Contribution Plan) as flood mapping which was updated circa August 2020 indicates additional land earmarked for acquisition is now flood prone and hence adjusted land rates have been applied.
- Plan administration costs are equivalent to 1.50% of the proposed infrastructure works costs. Whilst the percentage rate is anticipated to remain fixed (at 1.50%), the plan administration cost has increased in line with the increase in proposed infrastructure works costs.

¹ This amendment did not modify the Plan's infrastructure costs nor its contributions rates.

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



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PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



1. INTRODUCTION

1.1 BACKGROUND

East Leppington is an emerging suburb located approximately 50km by road south-west of Sydney Central Business District (CBD) and 15km by road west of Liverpool CBD. It has reasonably good public bus and rail transportation links with a number of major arterial roads situated within close proximity. Residents are attracted to the suburb due to its relatively peaceful amenity, affordability and proximity to major centres including Liverpool and Campbelltown. Camden Valley Way connects Leppington with Camden and Liverpool as well as the M7 Motorway (Westlink), which connects to Sydney CBD and other parts of greater Sydney.

Leppington Railway Station (situated approximately 2km by road from the East Leppington Precinct) on the South West Rail Link (construction began in mid-2010 and opened 8 February 2015) provides regular services to Sydney CBD via Strathfield.

Leppington forms part of the Sydney South West Priority Growth Area (SWPGA) which was approved in 2004. The SWPGA comprises 18 precincts, eight of which have been released and/or rezoned for urban development. The vast majority of precincts within the SWGC were located within the boundaries of the Camden Local Government Area (LGA). The Leppington Precinct was released for planning circa November 2011 with Stage 1 of the Leppington Precinct rezoned to enable urban development in November 2015 (to coincide with completion of the South West Rail Link to Leppington).

The Leppington North Precinct was rezoned in March 2013, including East Leppington and Austral Precincts. This precinct comprises approximately 17,000 hectares and straddles the LGA's of Liverpool, Camden and Campbelltown.

When the Liverpool Contributions Plan 2014 – East Leppington Precinct was originally prepared, a development contributions cap of \$20,000 per residential lot (for a single residential dwelling) was in place. Since then, the cap has been increasing (refer to Table 1.1) and currently, Councils are able to collect contributions uncapped, provided the Plan has been reviewed by IPART.

Table 1.1: Historic Caps on Contribution Rates

Cap Per Residential Lot (for a Single Residential Dwelling)	Date of Effect
\$20,000	The cap when the Plan was initially adopted (26 May 2015)
\$30,000	28 August 2012
\$35,000	1 January 2018
\$40,000	1 July 2018
No cap	1 July 2020 Provided contributions are in-line with an IPART-reviewed Plan.

Source: DPIE (2021)

'Greenfield' or 'englobo' land typically lacks the level of services infrastructure (i.e. water, sewer and electricity) in more developed and established regions. Consequently, in order for Council to provide essential infrastructure for new and emerging precincts such as East Leppington, development charges (or 'contributions') generally need to be sufficient to fund all the proposed costs delivering such enabling urban infrastructure.

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



2. SUMMARY OF CHANGES

2.1 COST VARIANCES

A summary of the proposed cost variances is highlighted in Table 2.1 below.

Table 2.1: Total Cost Variance between Original Contributions Plan (2014), 2020 Contributions Plan (March 2021 quarter) and 2021 Contributions Plan Proposed New Costs

Essential Infrastructure				
Reference	A	B	C	B-C
	2014 Contributions Plan (Original cost)	2020 Contributions Plan (indexed to March 2021 Quarter)	2021 Contributions Plan (Updated Proposed Costs)	% Variance
Water Management				
Land Acquisition Cost	\$8,866,385	\$20,808,387	\$15,999,950	-23.11%
Infrastructure Works	\$11,720,920	\$12,870,450	\$35,164,370	173.22%
Subtotal	\$20,587,305	\$33,678,837	\$51,164,320	51.92%
Recreation				
Land Acquisition Cost	\$5,590,060	\$13,004,175	\$10,339,325	-20.49%
Infrastructure Works	\$5,314,097	\$5,784,075	\$5,519,476	-4.57%
Subtotal	\$10,904,157	\$18,788,250	\$15,858,801	-15.59%
Transport & Traffic				
Land Acquisition Cost	\$1,063,104	\$2,472,300	\$2,650,368	7.20%
Infrastructure Works	\$7,824,257	\$9,681,125	\$9,430,599	-2.59%
Subtotal	\$8,887,361	\$12,153,425	\$12,080,967	-0.60%
Plan Administration				
Allowance	\$372,889	\$424,377	\$751,717	77.13%
Subtotal	\$372,889	\$424,377	\$751,717	77.13%
TOTAL	\$40,751,712	\$65,044,889	\$79,855,805	22.77%

Source: Liverpool Contributions Plan 2014 – East Leppington Precinct, AEC (* slight discrepancies may result from rounding of figures)

We note the variance in land acquisition costs between the March 2021 Quarter and those as currently proposed. The March 2021 Quarter figures have been derived by applying an escalation factor of 2.36 across the originally assessed land rates from the 2014 Contribution Plan. Whilst we consider the adopted escalation factor to be broadly in line with increases achieved for land values over this period, not all values across different zoning classifications (and for land classified as constrained) have moved in uniformity. Further, we also note that flood mapping had been updated in circa August 2020 which indicates that land reserved for acquisition not previously classified as flood prone, is now classified as flood prone.

Overall, the item costs that have increased the most were the works / land acquisition cost categories (reflecting an increase of approximately 22.77% in total). The increase in cost was primarily due to the infrastructure works now requiring significantly more design works to be undertaken, resulting in the need to increase contribution rates for the East Leppington Precinct.

2.2 PROPOSED 2021 CONTRIBUTION RATES

A summary of the proposed updated Contribution Rates is outlined in Table 2.2.

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



Table 2.2: Proposed Updated Contribution Rate per Dwelling Lot (2021)

ESSENTIAL INFRASTRUCTURE		NON-RESIDENTIAL DEVELOPMENT	RESIDENTIAL DEVELOPMENT	
Item	Item Cost apportioned to East Leppington	\$ per hectare of equivalent NDA	\$ per residential lot for a dwelling house	\$ per attached dwelling, semi-attached dwellings and multi-dwelling housing
Open Space				
Land	\$10,339,325		\$10,087	\$7,714
Works	\$5,519,476		\$5,385	\$4,118
Subtotal	\$15,858,801		\$15,472	\$11,832
Roads				
Land	\$2,650,368	\$33,461	\$2,533	\$1,937
Works	\$9,430,599	\$119,061	\$9,015	\$6,894
Subtotal	\$12,080,967	\$152,522	\$11,548	\$8,831
Drainage		ALL DEVELOPMENT \$ per hectare of equivalent NDA		
Land	\$15,999,950	\$202,096		
Works	\$35,164,370	\$444,163		
Subtotal	\$51,164,320	\$646,259		
Plan Administration				
Allowance	\$751,717	\$9,495		
Subtotal	\$751,717	\$9,495		
TOTAL	\$79,855,805			

Source: AEC, Liverpool City Council

As at inception of the plan, the original 'base' contribution cost per single residential lot (suitable for a single dwelling house) was \$19,392. Further to this base contribution rate, an additional charge is levied to buyers/developers of land based on a \$ per hectare of equivalent net developable area (NDA). Table 2.3 compares this value with the current contribution amount (as of March 2021) and the contribution amount in the proposed Plan. Sample calculations using the original 2014 rates and the current March 2021 rates can be found in the Appendix.

The reason contributions are calculated on the basis of a 'fixed base' cost plus a 'variable' rate per square metre of NDA is essentially for fairness. This approach more accurately accounts for the difference in Lot sizes (i.e. a subdivision into 400m² as compared with larger Lots of say 650m²). This approach ensures developers within the East Leppington Precinct pay an equitable contribution rate proportionate to the size of the Lots being developed.

We note when the original Contributions Plan was prepared, calculations for equivalent NDA were inaccurately applied to:

- The Medium Density Residential Land Use of 19.97 (ha) whereas it should be 29.58 (ha).
- The Neighbourhood Centre Land Use of 2.00 (ha) whereas it should be 1.60 (ha).

These discrepancies reflect a difference in equivalent NDA of approximately 13.16% across the total Precinct (from 69.96 to 79.17 hectares) which has been reflected in our calculations above. Table 3.3.2 in the Plan shows the NDA and equivalent NDA adjustments.

2.2.1 Example Calculations

Residential Development Scenario

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



The residential contribution (for essential infrastructure) equals the sum of the following 4 contribution categories:

- The open space contribution per dwelling, plus
- The transport contribution per dwelling, plus
- The stormwater infrastructure contribution per hectare of NDA, plus
- The plan preparation and administration contribution per hectare of NDA.

Contributions for open space, community facilities and transport infrastructure are levied based on the number of people expected to reside in the new dwelling, while contributions for stormwater infrastructure and plan administration are levied by the area (NDA) of the development.

This approach best aligns the contribution payable by a development to its estimated share of the demand for the different kinds of infrastructure in the Plan.

Below is an example of how to calculate the contribution payable by development.

Consider a scenario where a developer has 0.3 hectares (NDA) and applies to develop 5 low density dwelling houses on this land.

The total contribution under this Plan

$$\begin{aligned}
 &= \text{Open space contribution in \$ per residential lot for a detached dwelling} \times \text{\# of lots} + \\
 &\quad (\text{Roads contribution in \$ per residential lot for a detached dwelling} \times \text{\# of lots}) + \\
 &\quad (\text{Drainage contribution in \$ per hectare of NDA}) + \\
 &\quad (\text{Plan administration contribution in \$ per hectare of NDA}) \\
 &= (15,472 \times 5) + (11,548 \times 5) + (646,259 \times 0.3) + (9,495 \times 0.3) \\
 &= \$331,826
 \end{aligned}$$

This equals a contribution of \$66,365 per dwelling, on average, for this development.

Commercial Development Scenario

The non-residential contribution equals the sum of the following 3 contribution categories:

- The transport contribution per NDA, plus
- The stormwater infrastructure contribution per NDA, plus
- The plan preparation and administration contribution per NDA.

Below is an example of how to calculate the contribution payable by development.

Consider a scenario where a developer applies to develop a 0.5 hectare (NDA) site for business/commercial purposes.

The total contribution under this Plan

$$\begin{aligned}
 &= (\text{Roads contribution in \$ per hectare of NDA}) + \\
 &\quad (\text{Drainage contribution in \$ per hectare of NDA}) + \\
 &\quad (\text{Plan administration contribution in \$ per hectare of NDA}) \\
 &= (\$152,522 \times 0.5) + (\$646,259 \times 0.5) + (9,495 \times 0.5) \\
 &= \$404,138
 \end{aligned}$$

Based on the previous calculation a comparison between the various iterations / years of the East Leppington Contribution Rates for a hypothetical residential subdivision of 5 Lots across 3,000m² (0.3 ha) follows in Table 2.3.

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN

**Table 2.3: Total Rate Per Lot for a Dwelling House for Various Years**

Item	Original Contributions Plan (2014)	March Quarter (2021) Contribution Rates	Proposed New Contribution Rates (2021)
Base Amount	\$19,392	\$30,187	\$27,020
NDA Rate	\$43.48/m ²	\$49.02/m ²	\$65.58/m ²
Total Contribution Payable	\$37,049	\$52,246	\$66,365

* March Quarter 2021 based on hypothetical Lot size of 450m²

Source: Liverpool Contributions Plan 2014 – East Leppington Precinct, AEC

3. DATA

3.1 LAND ACQUISITION COST ANALYSIS

When the original Contributions Plan was gazetted, adopted land values (for inclusion into the 2014 Plan) at the time were \$135/m² for unconstrained englobo land (including broad services in place) with assumed low density residential development potential whilst land considered to be constrained (i.e. flood impacted), a broad range of rates between \$6.50 - \$37.50/m² was applied.

The assessed land rates adopted within the original Contributions Plan are summarised in Table 3.1.

Table 3.1: CBRE Original Assessed Land Values (at September 2012)

CBRE Adopted Land Rates	
Zoning	\$/Rate per m ² of Site Area
Open Space (limited constraint which would have been utilised as low density residential)	\$135/m ²
Rural (flood affected with some redevelopment potential)	2-5 Ha: \$37.5/m ² 5-10 Ha: \$12/m ² >10 Ha: \$6.5/m ²
Potentially General Residential (not flood affected however with other existing constraints)	2-5 Ha: \$37.5/m ² 5-10 Ha: \$12/m ² >10 Ha: \$6.5/m ²
Rural (flood affected with limited redevelopment potential)	\$135/m ²

Source: CBRE (September 2012)

When the original Contributions Plan was prepared, adopted land values (as prepared by CBRE) for low density residential land were approximately \$135/m² (noting under the assessment scenario outlined within the CBRE report, englobo land was broadly defined to be a site with an area greater than 1 hectare with broad services available, and is not subdivided further). **We further note, by the time the Plan was gazetted, land costs were escalated, i.e. land costs for low density residential land were increased to \$165/m² which formed the base rate for the Contributions Plan (with most costs escalated at a factor of 2.36 to March Quarter 2021).** Based on the most recent land assessments undertaken, a rate for similar zoned land has been adopted at \$390/m². To reflect the difference in land rates that have been adopted for the most recent review of the Contributions Plan, we highlight the following values in Table 3.2.

Table 3.2: Adopted Land Values (at 31 December 2020)

Adopted Values by Zoning	
Zoning	\$/Rate per m ² of Site Area
B1 - Neighbourhood Centre	\$550/m ²
R2 - Low Density Residential	\$390/m ²
R3 - Medium Density Residential	\$490 - \$700/m ² (higher rate applied to smaller sites)
RE1 - Public Recreation (constrained land)	\$110 - \$130/m ²
SP2 - Infrastructure (constrained land)	\$120/m ²
E4 - Environmental Living	\$190/m ²

Source: AEC

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN

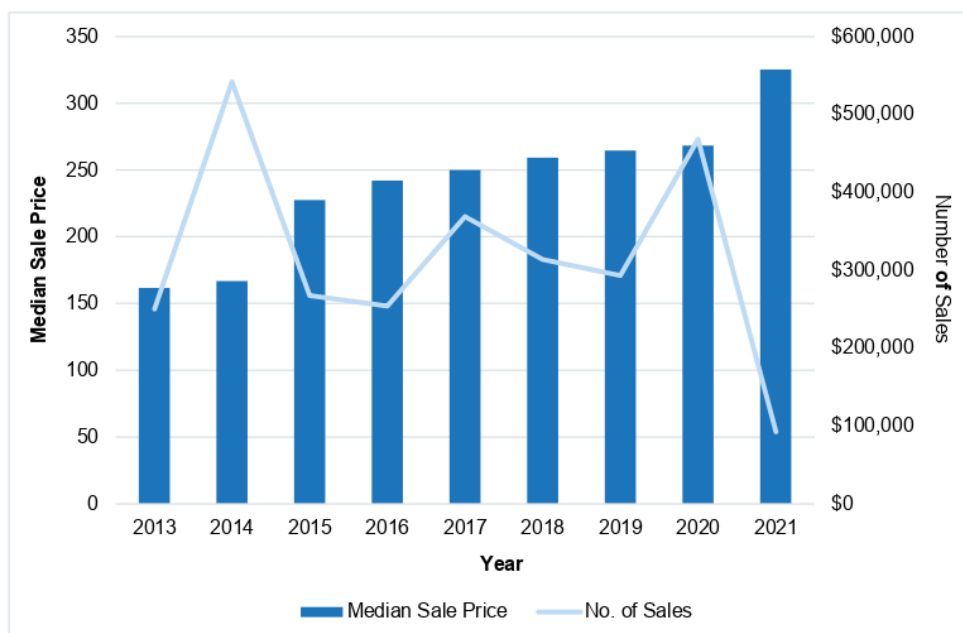


As evidenced from the previous table, the cost of land to be acquired by Council (which totals approximately 177,431m² per the Plan) has increased materially and in order for Council to provide the essential infrastructure (in particular for water/flood management) needed for East Leppington, an increase in contribution rates would need to be applied. We have been advised by Council when the original Contributions Plan was prepared, there were limited detailed design studies in relation to drainage networks / infrastructure / reticulation works etc.

3.2 HISTORIC HOUSE PRICES IN LEPPINGTON PRECINCT

In recent years, land values in Sydney (coupled with East Leppington and surrounding regions) have grown strongly exceeding generic indexation assumptions and given the growth of the south-western Sydney market with the addition of improved levels of public transportation (Leppington T5, T2 rail line) and with construction of the Western Sydney International (Nancy Bird Walton) Airport and Western Sydney Aerotropolis having commenced, this has spurred accelerated house/land values in the region. As an example, a summary of established house prices within the Leppington Precinct between 2013-2021 has been outlined in Figure 3.1, noting an increase in the median sale price from \$277,000 to \$557,500 reflecting an increase of 101% over an 8-year period.

Figure 3.1: Historic Leppington Precinct Median House Sale Prices



Source: Pricerfinder (2021), AEC

3.3 WATER MANAGEMENT INFRASTRUCTURE COSTS

Limited design studies were undertaken at the time the Plan was prepared (in 2014), particularly for the water management (flooding and land overflows) for the precinct (Note: Bonds Creek traverses directly through East Leppington resulting in large sections of land within the Precinct being classified as flood prone). As Leppington and East Leppington are gradually developed from englobo to primarily low-density residential uses, substantially more detailed design works are required in order to properly manage any potential flooding in the Precinct. Consequently, infrastructure costs for water management are increased by 200% over the costs outlined within the original Plan.

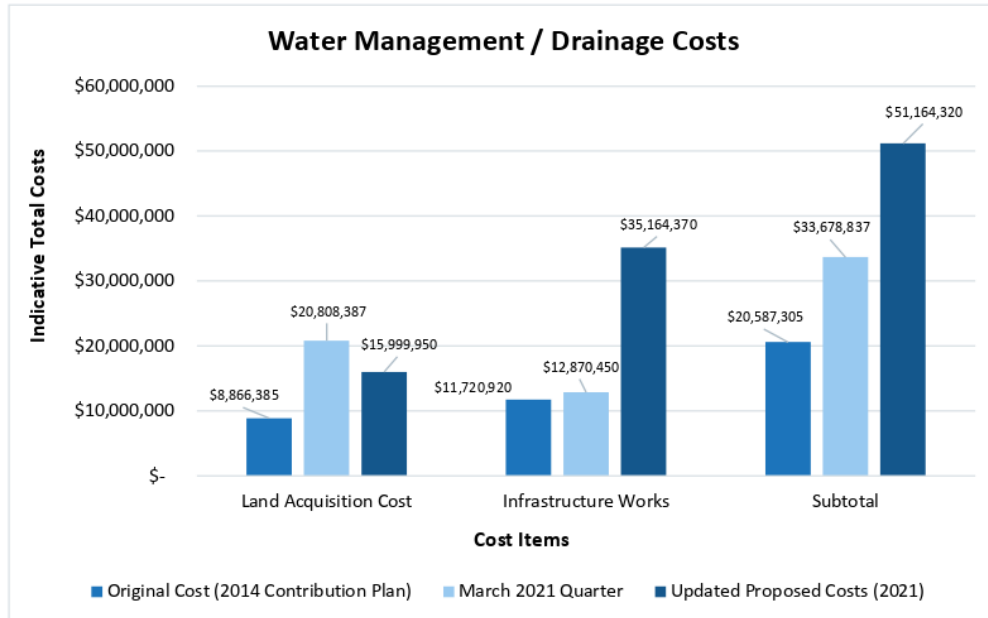
A summary of the total costs provisioned for water management/drainage in accordance with the original Liverpool Contributions Plan 2014, March Quarter (2021) and those currently proposed for 2021, is shown in Figure 3.2. The

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



variance for Water Management/Drainage (between 2014 and proposed 2021 costs) represents the most significant change in cost of approximately 148.31% (on a subtotal basis including land and infrastructure costs).

Figure 3.2: Water Management/Drainage – Total Item Cost Apportionments (Historic and Proposed) for East Leppington (Inc Contingency)



Source: Liverpool Contributions Plan 2014 – East Leppington Precinct, AEC

We note the discrepancy between the March 2021 Quarter and currently assessed land acquisition costs which largely results from updated flood mapping prepared circa August 2020 indicating additional lands within the reserved for acquisition areas are now classified as flood prone whereas previously they were not.

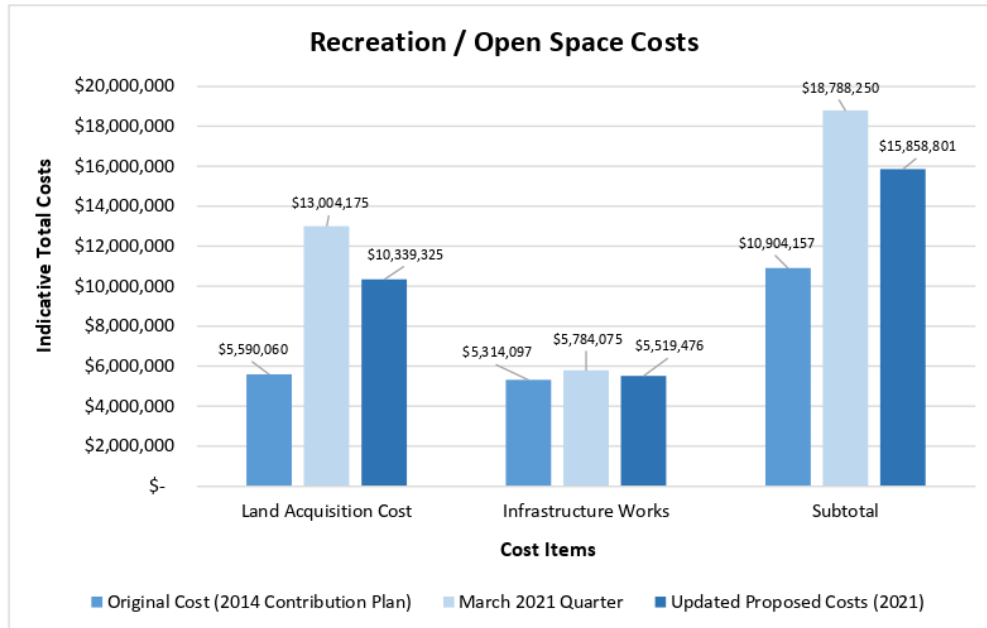
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3.4 RECREATION AND OPEN SPACE INFRASTRUCTURE COSTS

A summary of the proposed cost variances for recreation/open space in accordance with the original Liverpool Contributions Plan 2014, March Quarter (2021) and those currently proposed for 2021 is shown in Figure 3.3.

Figure 3.3: Recreation/Open Space – Total Item Cost Apportionment for East Leppington (Inc Contingency)



Source: Liverpool Contributions Plan 2014 – East Leppington Precinct, AEC

We note the discrepancy between the March 2021 Quarter and currently assessed land acquisition costs which largely results from updated flood mapping prepared circa August 2020 indicating additional lands within the reserved for acquisition areas are now classified as flood prone whereas previously they were not.

Where infrastructure costs have fallen over the same period this may be due to updated costs having been prepared which has resulted in a lower amount as compared with the indexed rate reflected in the March 2021 Quarter.

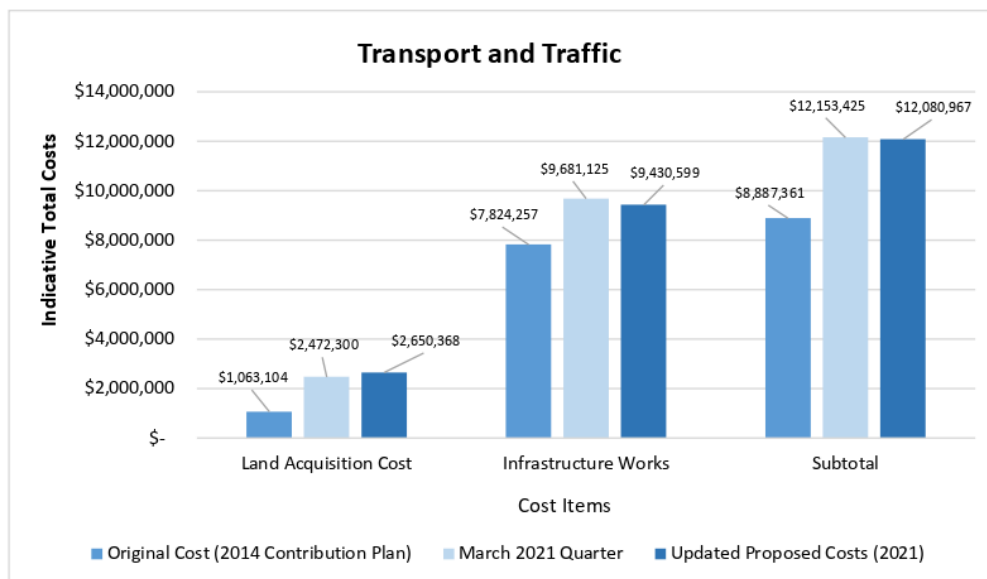
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3.5 WORKS COSTS – TRAFFIC AND TRANSPORT INFRASTRUCTURE COSTS

A summary of the proposed cost variances for transport and traffic in accordance with the original Liverpool Contributions Plan 2014, March Quarter (2021) and those currently proposed for 2021, is shown in Figure 3.4. It is anticipated that construction works for transport infrastructure will be covered by Works in Kind agreements between Council and developers.

Figure 3.4: Transport and Traffic – Total Item Cost Apportionment Proposed for 2021 for East Leppington (Inc Contingency)



Source: Liverpool Contributions Plan 2014 – East Leppington Precinct, AEC

3.6 PLAN ADMINISTRATION

Since the inception of the Plan, as consultants have undertaken further flood level analysis and prepared more detailed designs, the original assessed water management costs are now deemed inadequate. The additional analysis and design reviews have been allowed for as an increase in administration costs has been necessitated. Contribution rates for administration will be based on 1.5% of the total capital cost of the Plan and will be subject to indexation.

Plan administration costs are equivalent to 1.5% of proposed works costs. Whilst the percentage rate is anticipated to remain fixed, proposed costs fluctuate over time and therefore justify any proposed plan administration increases.

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



4. APPENDICES

Table 4.1: Liverpool Contributions Plan 2014 - East Leppington Precinct

ESSENTIAL INFRASTRUCTURE		RESIDENTIAL DEVELOPMENT			ALL DEVELOPMENT
Item	Item Cost apportioned to East Leppington	\$ per additional person	\$ per residential lot for a dwelling house	\$ per attached dwelling, semi-attached dwellings and multi-dwelling housing	\$ per hectare of equivalent NDA
Open Space					
Land	\$5,590,060	\$1,581	\$5,376	\$4,111	
Works	\$5,314,097	\$1,503	\$5,110	\$3,908	
Subtotal	\$10,904,157	\$3,084	\$10,486	\$8,019	
Roads					
Land	\$1,063,104	\$301	\$1,022	\$782	\$16,172
Works	\$7,824,257	\$2,213	\$7,524	\$5,754	\$119,021
Subtotal	\$8,887,361	\$2,514	\$8,547	\$6,536	\$135,192
Drainage					
Land	\$8,866,385				\$126,740
Works	\$11,720,920				\$167,544
Subtotal	\$20,587,305				\$294,283
Plan Administration					
Allowance	\$372,889	\$105	\$359		\$5,330
Subtotal	\$372,889	\$105	\$359	\$0	\$5,330
TOTAL	\$40,751,712	\$5,703	\$19,392	\$14,555	\$434,806

*Residential development also pays Drainage (calculated on an NDA basis).

** NDA rates for Roads and Plan Administration apply to non-residential development only

Source: Liverpool City Council (2021)

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



An example of how contributions would be payable under the original Plan follows:

Residential Development Scenario

The residential contribution (for essential infrastructure) equals the sum of the 4 contribution categories:

- The open space contribution per dwelling, plus
- The roads contribution per dwelling, plus
- The plan administration contribution per dwelling, plus
- The stormwater infrastructure contribution per hectare of NDA.

Contributions for open space, community facilities and transport infrastructure are levied based on the number of people expected to reside in the new dwelling, while contributions for stormwater infrastructure and plan administration are levied by the area (NDA) of the development.

This approach best aligns the contribution payable by a development to its estimated share of the demand for the different kinds of infrastructure in the Plan.

Below is an example of how to calculate the contribution payable by development.

Consider a scenario where a developer has 0.3 hectares (NDA) and applies to develop 5 low density dwelling houses on this land.

$$\begin{aligned} \text{The total contribution under this Plan} &= (10,486 \times 5) + (8,547 \times 5) + (359 \times 5) + (294,283 \times 0.3) \\ &= \$185,245 \end{aligned}$$

This equals a contribution of \$37,049 per dwelling, on average, for this development.

Commercial Development Scenario

The non-residential contribution equals the sum of the 3 contribution categories:

- The transport contribution per NDA, plus
- The stormwater infrastructure contribution per NDA, plus
- The plan preparation and administration contribution per NDA.

Below is an example of how to calculate the contribution payable by development.

Consider a scenario where a developer applies to develop a 0.5 hectare (NDA) site for business/commercial purposes.

$$\begin{aligned} \text{The total contribution under this Plan} &= (\$135,192 \times 0.5) + (\$294,283 \times 0.5) + (5,330 \times 0.5) \\ &= (\$434,806 \times 0.5) \\ &= \$217,403 \end{aligned}$$

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



Table 4.2: Current East Leppington Contribution Rates (March Quarter 2021)

Liverpool Contributions Plan 2018 East Leppington				
East Leppington				
Purpose	Lot for dwelling house	Attached dwelling, semi-attached dwellings and multi-dwelling housing	Dwelling in all other residential accommodation	Other development
	Per dwelling	Per dwelling	Per dwelling	
Recreation				
Land	\$12,687	\$9,702	\$9,702	
Works	\$5,643	\$4,316	\$4,316	
Transport				
Land	\$2,412	\$1,844	\$1,844	
Works	\$9,445	\$7,222	\$7,222	
Drainage				
	Per sqm	Per sqm	Per sqm	Per sqm
Land	\$29.91	\$29.91	\$29.91	\$29.91
Works	\$18.50	\$18.50	\$18.50	\$18.50
Other				
Administration	\$0.61	\$0.61	\$0.61	\$0.61

Source: Liverpool City Council (2021)

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



An example of how contributions would be payable under the **March Quarter 2021** basis follows:

For a newly proposed Lot extending to 450m². How do I calculate the Contribution Rates payable?

Answer: Firstly, you need to determine if the dwelling is to be attached or semi-attached or considered multi-unit housing i.e. a villa or townhouse. Under this scenario, it is assumed the Lot is for a detached residential dwelling. Contributions can therefore be paid on a per additional person basis (under low density residential this is 3.4 persons per dwelling in accordance with the Contribution Plan) or alternatively, on a per Lot basis, in this instance equating to \$30,187. In addition, there are additional contribution rates that also apply (\$ per hectare of equivalent net developable area or NDA) and a Plan Administration charge (depending on method used to calculate contribution). It has been determined there is 69.96 hectares of NDA within the East Leppington Precinct. To calculate contributions payable under this scenario follows:

Base Amount

\$30,187

Variable Amount

$\$490,200 / 10,000$ (to convert from a hectare rate to a per square metre rate) = $\$49.02/\text{m}^2$

Base Amount + Variable Amount

$\$30,187 + (\$49.02/\text{m}^2 \times 450\text{m}^2)$

$\$30,187 + \$22,059$

\$52,246

Total Contribution Payable

\$52,246

Therefore, the total Contribution amount payable equates to \$52,246 under this hypothetical scenario. Further noting that for a Lot extending to a different land area, the variable rate based on the NDA would need to be applied to that particular land area i.e. if the Lot was 600m² in area then the formula would be adjusted accordingly ($\$43.48/\text{m}^2 \times 600\text{m}^2$).

PROPOSED 2021 EAST LEPPINGTON CONTRIBUTIONS PLAN



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BRISBANE

Level 5, 131 Leichhardt Street
Spring Hill QLD 4000
Australia
T: +61 (0)7 3831 0577

TOWNSVILLE

233 Flinders Street East
Townsville QLD 4810
Australia
T: +61 (0)7 4771 5550

SYDNEY

Level 14, 25 Bligh Street
Sydney NSW 2000
Australia
T: +61 (0) 2 9283 8400

AFFILIATED OFFICES:**BANGKOK**

2024/129-130 Sukhumvit 50
Prakanong Klongtoey,
Bangkok, Thailand 10260
T: +66 2 107 0189

DARWIN

Level 1, 48-50 Smith Street
Darwin NT 0800
Australia
T: 1300 799 343

MELBOURNE

Level 13, 200 Queen Street
Melbourne VIC 3000
Australia
T: +61 (0)3 8648 6586

PERTH

Level 2, 500 Hay Street
Perth WA 6000
Australia
T: +61 (0) 8 6555 4940

SHANGHAI

Level 35, 1st Building,
700 Lique Road, Putuo District,
Shanghai, China 200333
T: +8618 516293312

aecgrouppltd.com

OUTCOME DRIVEN



Planning Proposal

1400-1480 Elizabeth Drive, Cecil Park

Draft Amendment 83 to Liverpool Local Environmental Plan 2008 to rezone and amend development standards for land located at 1400-1480 Elizabeth Drive, Cecil Park

14 September 2020

**LIVERPOOL
CITY
COUNCIL**



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Foreword

This report has been based on a Planning Proposal Report that was prepared by Urbis on behalf of Western Sydney Town Centre Pty Ltd (the Proponent) to initiate an amendment to the Liverpool Local Environmental Plan 2008 (LLEP 2008).

The planning proposal application was received by Liverpool City Council (LCC) on 22 March 2019. Advice was sought from the Liverpool Local Planning Panel (LPP) at its meeting on 25 May 2020. After considering the assessment report, the LPP provided their advice, that the proposal has both strategic and site-specific merit, and supported the planning proposal proceeding to a Gateway determination. The planning proposal was then considered at Council's Ordinary Meeting on 24 June 2020 where it received in principle support to be forwarded to the Department of Planning, Industry and Environment seeking a Gateway determination.

It should be noted that some additional changes have been made from the Urbis report. This is to reflect the land use changes of part of the site due to the proposed M12 motorway corridor and to amend the minimum lot size development standard from 10ha to 2,000m², to be consistent with minimum lot size control in other IN2 Light Industrial zones in Liverpool.

Introduction

A planning proposal was received from the landowner, Western Sydney Town Centre Pty Ltd, to rezone their site at 1400-1480 Elizabeth Drive, Cecil Park (Lot 1 to 9 DP 1054778). The planning proposal, prepared by Urbis on behalf of the landowner, sought to allow range of light industrial and retail land uses on the site bound by a maximum floor space. To achieve this objective, it was proposed to rezone the land from RU4 Primary Production Small Lots to IN2 Light Industrial and to introduce an additional permitted use for retail premises on the site, with a floor space restriction so that the maximum retail floor space should not exceed 30% of total floor area of all developments on the site. It was further proposed to amend the associated development standards of the site to facilitate the proposed development.

Following an assessment of the request, it was recommended that the planning proposal should include an additional amendment to rezone part of the site subject to the proposed M12 motorway as SP2 Infrastructure. The proposed site-specific provision under the LLEP to enable retail premises on the site was later omitted in the revised planning proposal by the applicant.

The planning proposal thus proposes to amend the Liverpool Local Environmental Plan (LLEP) 2008 in the following way -

- Rezone part of the land from RU4 – Primary Production Small Lots to IN2 – Light Industrial;
- Rezone part of the land from RU4 – Primary Production Small Lots to SP2 – Infrastructure;
- Establish a maximum permissible Floor Space Ratio of 1:1;
- Amend the minimum lot size development standard from 10ha to 2,000m².
- Amend the Land Reservation Acquisition Map for the site to facilitate acquisition of land for the M12 motorway corridor.

The subject site is located at the intersection of Elizabeth Drive and Mamre Road. The proposed M12 motorway route runs through the middle of the site. The site is easily accessible from arterial roads with connection to the motorway network available via Elizabeth Drive at the Wallgrove Road intersection. This has made the site accessible for industrial development without inducing heavy vehicular traffic in noise sensitive areas.

The location of the subject site close to major transport arterials, its geographical proximity to the major regional projects such as, the Western Sydney Airport and the Western Sydney Employment Area, has provided strategic justification for industrial uses on the site. Further, the demand for employment land emanating from Liverpool's established areas, as identified in Council's employment lands strategy, is believed to demonstrate strategic merit for the proposed industrial uses.

Background

The background of the planning proposal is summarised as follows –

- In October 2010, Western Sydney Town Centre (WSTC), the owner of the site, approached the Department of Planning Industry and Environment (DPIE) and Council with a proposal to develop

warehouse, distribution facilities and retail precinct on the site as a Major Project pursuant to (former) Part 3A of the *Environmental Planning and Assessment Act* (EP&A Act).

- In October 2010, Council advised WSTC that due to substantial exposure of the site to the commuter traffic along Elizabeth Drive, a B6 Enterprise Corridor zone might be appropriate subject to an economic analysis and assessment of vehicular access /egress. Undertaking further assessment was also advised to rezone the site to IN2 Light Industrial.
- In May 2011, WSTC submitted a report to Council and the DPIE providing information in support of the potential rezoning of the site to B6 Enterprise Corridor zone.
- In July 2011, Council advised WSTC that the potential rezoning of the site to B6 Enterprise Corridor had merit due to its frontage to Elizabeth Drive, a major east-west arterial road within the region and its connectivity with the urbanised areas of Liverpool and Fairfield. Council advised an amended proposal stipulating reduced B6 Enterprise Corridor zone with the potential to consider the remainder of the site for an IN2 Light Industrial zoning.
- In April 2014, the Australian Government confirmed that the site for the new Western Sydney Airport would be located at Badgerys Creek. A \$3.5 billion infrastructure plan was announced which included the construction of a new east- west motorway (the M12) between the M7 Motorway and the Northern Road connecting the new Western Sydney Airport.
- In June 2015, WSTC requested Council to support the rezoning of the site to B6 Enterprise Corridor as a part of partial precinct release under the Precinct Acceleration Protocol.
- In July 2015, the Community Update for the new M12 motorway was released, which indicated the future motorway potentially could be located over the site.
- In August 2015, WSTC was advised that the site would be part of the investigation area for the future M12 motorway, however the location of the exact corridor was still being investigated. In addition, DPIE advised that given the site's proximity to the proposed Western Sydney Airport, the proposed M12 motorway and the strategic planning work that was being undertaken at that time, it would be premature to consider the early release of the site.
- In October 2015, the designation of the Western Sydney Priority Growth Area was announced which included the subject site.
- On 23 August 2016, DPIE advised that it was unable to consider the proposal to release the site under the Precinct Acceleration Protocol.
- On 22 February 2018, the early design of the M12 motorway project was released which showed the proposed M12 motorway corridor through the site.
- In March 2018, the Greater Sydney Regional Plan and Western City District Plan were released, which identified the subject site as Urban Land Release.
- In August 2018, the draft Western Sydney Aerotropolis Land Use and Infrastructure Implementation Plan (WSA LUHIP) was on public exhibition from August to November 2018, which identified part of the subject site within the LUHIP area.

- On 14 February 2019, DPIE recommended WSTC to engage with Council in relation to the proposed rezoning of the site and advised the rezoning of the land could be achieved through an amendment to the *Liverpool Local Environmental Plan* (LLEP 2008).
- In March 2019, WSTC submitted the planning proposal to Council for the rezoning of the site from its current RU4 Primary Production Small Lots zone to IN2 Light Industrial zone with proposed floor space restrictions, through a site-specific provision to enable retail premises as an additional permitted use on the site.
- On 6 December 2019, the Western Sydney Aerotropolis Planning Package was on public exhibition. The draft Western Sydney Airport Plan excluded the site from the Aerotropolis planning area.
- In March 2020, WSTC submitted a revised planning proposal to rezone the land from RU4 Primary Production Small Lots to IN2 Light Industrial. The proposed site-specific provision under the LLEP to enable retail premises on the site was excluded in the revised planning proposal.
- In May 2020, following an assessment of the request, it was recommended by Council that the planning proposal should include an additional amendment to rezone part of the site subject to the proposed M12 motorway as SP2 Infrastructure. The proposed provision was included in the planning proposal.

Report Structure

This Planning proposal has been prepared in accordance with Section 3.33 of the EP&A Act with consideration of DPIE's (formerly DPE's) 'A Guide to Preparing Planning Proposals' (December 2018). Accordingly, the proposal is discussed in the following parts:

- Site Description
- Statutory Planning Framework
- Part 1 – A Statement of the Objectives and Intended Outcome
- Part 2 – Explanation of Provisions
- Part 3 – Justification
- Part 4 – Mapping
- Part 5 – Community Consultation
- Part 6 – Project timeline

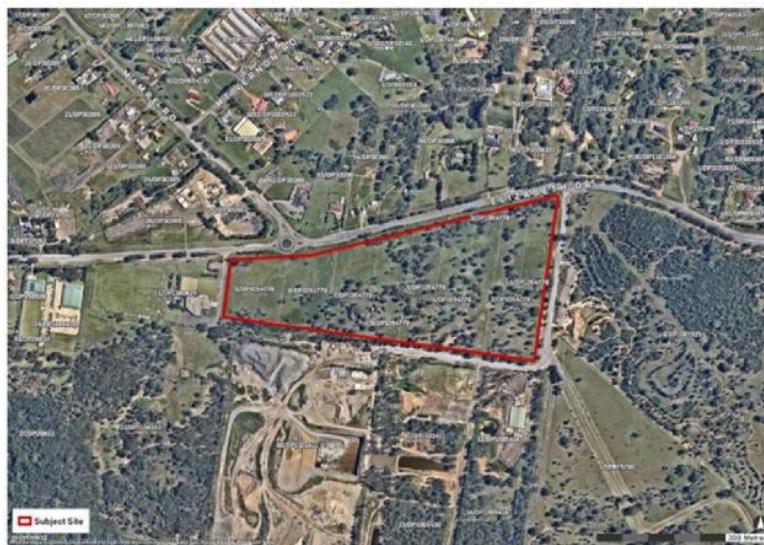
Site Description

The site is located at 1400-1480 Elizabeth Drive Cecil Park (refer to Figure 1). The site is comprised of nine lots which are legally described as Lots 1 to 9 in DP1054778. The lots with their respective land area are provided in Table 1.

Table 1 - Site Description

Lot no.	Area
Lot 1	2.427 ha
Lot 2	2.148 ha
Lot 3	2.097 ha
Lot 4	2.109 ha
Lot 5	2 ha
Lot 6	2 ha
Lot 7	2.037 ha
Lot 8	2.035 ha
Lot 9	2.028 ha
Total	18.881 ha

The total land area within the subject site is 188,881m². The site benefits from three road frontages, being a 777-metre frontage onto Elizabeth Drive to the North, a 737-metre frontage onto Range Road to the south and a 397.33-metre frontage to Range Road to the east. It is noted that along the southern boundary, Range Road is a paper road only for part of the frontage (refer to *Figure 1*).



Source: Google Earth

Figure 1: Aerial view of subject site (highlighted in red)

The site is located at the northern boundary of the Liverpool LGA, fronting Elizabeth Drive which represents the boundary between the Liverpool and Penrith LGAs. The Fairfield LGA encompasses land north of Elizabeth Drive and to the east of the intersection at Range Road.

The site is located 2.6km west from the junction of the M7 and Elizabeth Drive, 8km north from Leppington and 12 km north-west from Liverpool city centre. The Broader Western Sydney Employment Area (BWSEA) is located north of the site and the intersection of Elizabeth Drive and Mamre Road is located at the north-west corner of the site.

Existing land uses surrounding the site include the following –

- Kemps Creek Sporting and Bowling Club is located to the immediate west of the site and shares a boundary with the subject site.
- An extractive industry, landfill and waste recycling operation is located to the south.
- Western Sydney Parklands is located to the east of the site.
- The Sydney International Shooting Centre is located to the south-east of the site. The shooting centre is located within the Western Sydney Parklands.
- Land on the opposite side of Elizabeth Drive (to the north) is used for a mix of semi-rural agricultural uses and rural residential purposes and are located within Penrith and Fairfield LGAs. (Refer to *Figure 2*)

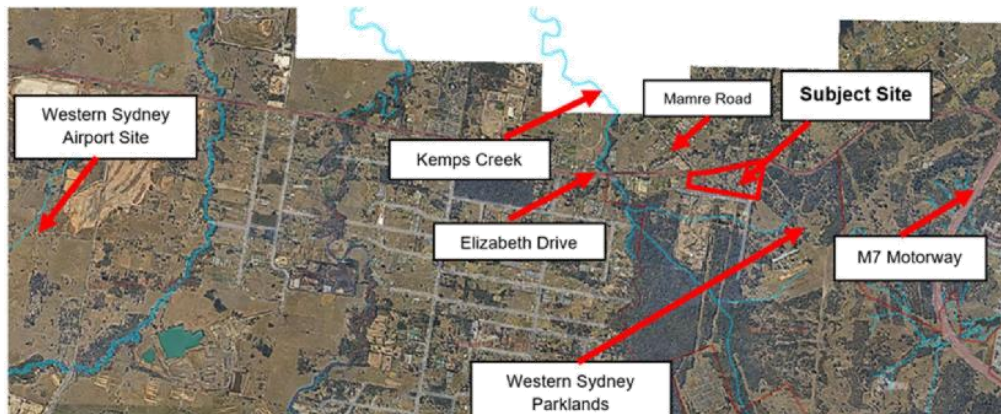


Figure 2: Locality map

The site is in an area which is undergoing rapid urban transformation. Key influences on the area include the construction of the new Western Sydney Airport (WSA) at Badgerys Creek, located approximately 5 km west of the site, and continued development of the BWSEA. There is also the associated upgrading of supporting infrastructure including roads, rail and utility services (refer to *Figure 3*).

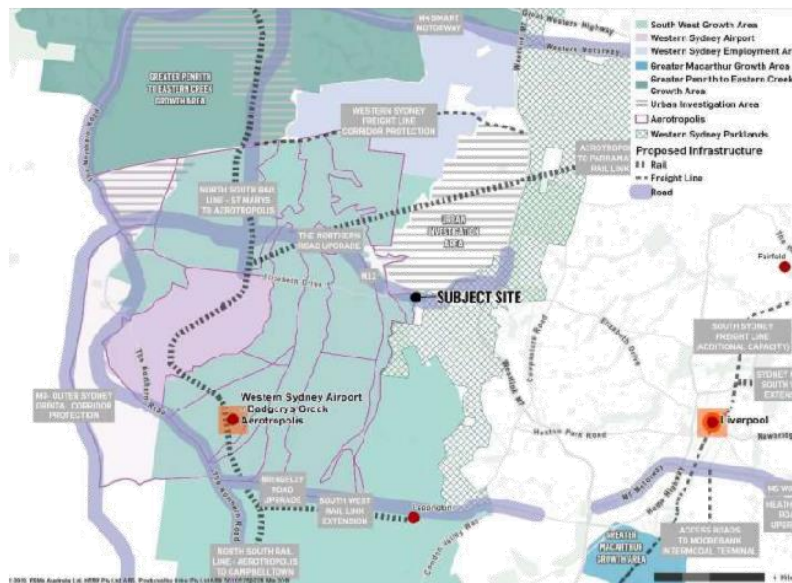


Figure 3: Major developments within the region (source: Planning Proposal report by Urbis, dated 21 February 2020, page 7)

The proposed M12 motorway corridor runs through the subject site dividing it into two parcels of land (refer to Figure 4).

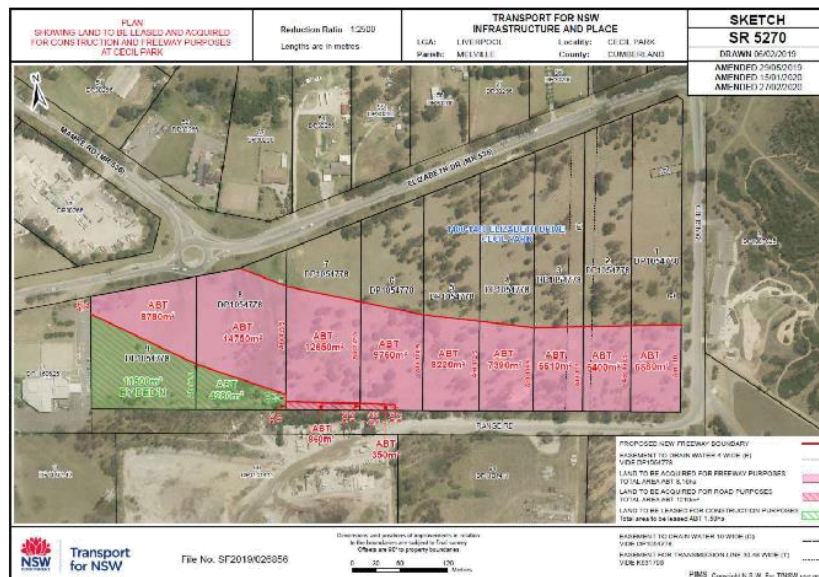


Figure 4: Proposed M12 site acquisition

Statutory Planning Framework

Liverpool Local Environmental Plan 2008

The subject site is zoned RU4 – Primary Production Small Lot in accordance with the zoning map of the LLEP 2008 (refer to Figure 5).

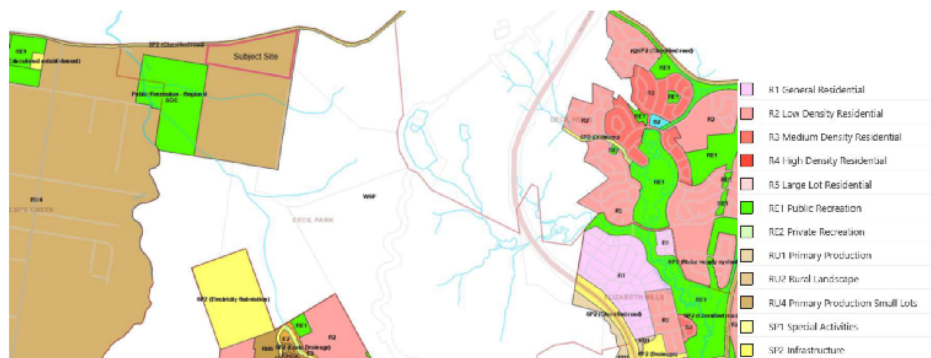


Figure 5: Existing land use zoning in the LLEP2008 (subject site highlighted)

The objectives of the RU4 - Primary Production Small Lots zone are:

- To enable sustainable primary industry and other compatible land uses.
- To encourage and promote diversity and employment opportunities in relation to primary industry enterprises, particularly those that require smaller lots or that are more intensive in nature.
- To minimise conflict between land uses within this zone and land uses within adjoining zones.

Permissible uses under the RU4 - Primary Production Small Lots zone are:

Agriculture; Animal boarding or training establishments; Aquaculture; Bed and breakfast accommodation; Building identification signs; Business identification signs; Cemeteries; Community facilities; Crematoria; Dual occupancies; Dwelling houses; Entertainment facilities; Environmental facilities; Environmental protection works; Farm buildings; Farm stay accommodation; Flood mitigation works; Helipads; Home businesses; Home industries; Landscaping material supplies; Places of public worship; Plant nurseries; Recreation areas; Recreation facilities (indoor); Recreation facilities (outdoor); Roads; Roadside stalls; Rural industries; Rural supplies; Rural workers' dwellings; Secondary dwellings; Veterinary hospitals; Water recreation structures.

The RU4 zone facilitates land uses related to primary and rural industries. The planning proposal is inconsistent with the RU4 zone with regards to the proposed light industrial uses of the site.

The objectives of the IN2 Light Industrial zone are:

- To provide a wide range of light industrial, warehouse and related land uses.
- To encourage employment opportunities and to support the viability of centres.
- To minimise any adverse effect of industry on other land uses.

- *To enable other land uses that provide facilities or services to meet the day to day needs of workers in the area.*
- *To support and protect industrial land for industrial uses.*
- *To allow other land uses that are compatible with industry and that can buffer heavy industrial zones while not detracting from centres of activity*

Permissible uses under the IN2 - Light Industrial zone are:

Animal boarding or training establishments; Boat building and repair facilities; Boat sheds; Building identification signs; Business identification signs; Car parks; Cemeteries; Centre-based child care facilities; Community facilities; Depots; Educational establishments; Emergency services facilities; Entertainment facilities; Environmental facilities; Environmental protection works; Flood mitigation works; Garden centres; Hardware and building supplies; Helipads; Heliports; Hotel or motel accommodation; Industrial retail outlets; Industrial training facilities; Information and education facilities; Kiosks; Light industries; Liquid fuel depots; Neighbourhood shops; Oyster aquaculture; Passenger transport facilities; Places of public worship; Pubs; Recreation areas; Recreation facilities (indoor); Recreation facilities (major); Recreation facilities (outdoor); Registered clubs; Respite day care centres; Restaurants or cafes; Roads; Service stations; Sex services premises; Storage premises; Take away food and drink premises; Tank-based aquaculture; Timber yards; Transport depots; Truck depots; Vehicle body repair workshops; Vehicle repair stations; Vehicle sales or hire premises; Veterinary hospitals; Warehouse or distribution centres; Water recreation structures.

The intended future development (warehouses etc.) for the site is consistent with the objective of the IN2 Light Industrial zone and it is aligned with the aim and objectives for this area in the Regional and District Plan.

The objectives of the SP2 Infrastructure zone are:

- *To provide for infrastructure and related uses.*
- *To prevent development that is not compatible with or that may detract from the provision of infrastructure.*
- *To reserve land for the provision of infrastructure.*

The construction of the proposed M12 corridor is reflected by the proposed SP2 Infrastructure zone.

Delegation of plan making functions

This planning proposal seeks to amend the Liverpool Local Environmental Plan 2008. As such, Council is seeking authority of plan making functions pursuant to Section 3.36 of the *Environmental Planning and Assessment Act 1979* ("EP&A Act").

Part 1 – Objectives and Intended Outcome

Objectives

The key objective of the Planning Proposal is to allow range of light industrial, warehouse and related land uses on the site with a maximum permissible floor space. An amendment to the current zoning and associated development standards is needed, to allow the industrial uses to be permitted on the site. Without the zoning amendment, the uses proposed for the site will remain prohibited. It is also required to recognise the future M12 motorway corridor through the site by reserving land for acquisition.

Intended Outcome

The intended outcomes of this planning proposal are:

- Enabling light industrial developments to occur on the site with a maximum permissible floor space; and
- Recognising the proposed M12 corridor through the site by reserving land for acquisition.

Part 2 – Explanation of provisions

The objectives of this planning proposal will be achieved through rezoning of the land identified in *Figure 1* and changes proposed to the associated development standards. Draft maps are provided in Part 4 of this report.

To facilitate the proposed changes, the following LLEP 2008 maps are to be amended:

Land Zoning Map

- 4900_COM_LZN_007_020_20150402

Floor Space Ratio Map

- 4900_COM_FSR_007_020_20140827

Minimum Lot Size Map

- 4900_COM_LSZ_007_020_20140827

Land Reservation Acquisition Map

- 4900_COM_LRA_007_020_20150402

Part 3 – Justification

Section A – Need for the planning proposal

3.1 *Is the planning proposal a result of an endorsed local strategic planning statement, strategic study or report?*

The planning proposal is not the direct result of a strategic study or report. The planning proposal aligns with state and regional strategic documents that set out goals seeking to protect, increase and enhance industrial and urban services land. Additionally, the proposal is aligned with Council strategies and studies. These documents include the following:

- Greater Sydney Regional Plan A Metropolis of Three Cities
- Western City District Plan
- Liverpool Community Strategic Plan (CSP) – Our Home, Liverpool 2027
- Liverpool Local Strategic Planning Statement (LSPS)

Further detail in respect of the alignment with these documents is set out in Section B (Relationship to strategic planning framework).

3.2 *Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?*

The subject land is currently zoned RU4 - Primary Production Small Lots. The primary purpose of the planning proposal is to allow light industrial uses on site with a maximum permissible floor space.

An amendment to the current zone is needed to allow the industrial uses to be permitted on the site. Without a zoning amendment, the uses proposed for the site will remain prohibited. It is also required to recognise the proposed M12 corridor through the site, in order to reserve land for future acquisition.

Section B – Relationship to strategic planning framework.

DPIE's Planning Circular (PS 16-004) notes that a key factor in determining whether a proposal should proceed to Gateway determination should be its strategic merit and site specific merit. It is considered that the planning proposal meets these tests as outlined in the following sections.

3.3 *Will the planning proposal give effect to the objectives and actions of the applicable regional, or district plan or strategy (including any exhibited draft plans or strategies)?*

a. Strategic Merit

The planning proposal is considered to be consistent with relevant regional, sub-regional or district plan or strategies. The most relevant State and District plans that guide the land use direction for the site, are

- Greater Sydney Regional Plan – A Metropolis of Three Cities (GSRP)
- Western City District Plan (WCDP)

Greater Sydney Regional Plan – A Metropolis of Three Cities (GSRP)

The planning proposal is consistent with the GSRP, particularly *Objective 23: Industrial and urban services land is planned, retained and managed*. Objective 23 of the GSRP focuses on planning, retention and management of industrial and employment land and notes under the 'Plan and manage' approach that in land release areas, there is a need for additional industrial and urban services land in response to long term projected population and development growth. It is further noted that the plan and manage approach applies across the South West and Western Sydney Airport Growth Areas.

The rezoning of the land from RU4 to IN2 zone would help to facilitate industrial uses and contribute to improving the economic productivity within the district. The proposal is consistent with this objective in that the proposal will enable uses consistent with the proposed economic vision for the broader Western Sydney Aerotropolis Growth Area and create suitable employment opportunities.

Western City District Plan (WCDP)

Objective 23 of the GSRP is reiterated as Action 53 of the WCDP – Plan and manage industrial and urban services land in line with the principles for managing industrial and urban services land, in the identified local government areas. This is to be achieved by creating additional industrial and urban services land where required in land release areas to service the growing population. The planning proposal is consistent with the Action in that it is planning to rezone the site to light industrial and creating and managing additional industrial land within the release areas of the Liverpool LGA.

Planning priority W10 of the Western Sydney District Plan focuses on maximising freight and logistics opportunities, as well as planning and managing industrial and urban services land within Western Sydney. This area will be the major long-term industrial/employment land for Greater Sydney. The proposal is consistent with this priority as the site is suitably located close to the major transport networks, such as, Elizabeth Drive, the M7 and the future M12 Motorway, and allows for maximising freight and logistics opportunities, by creating suitable industrial and urban services land on the subject site.

Local Strategy

Assessment of the proposal with regards to Council's Community Strategic Plan (CSP) and Local Strategic Planning Statement (LSPS) is detailed in Section 3.4.

b. Site Specific Merit

In addition to meeting at least one of the strategic merit criteria, a Planning proposal is required to demonstrate site-specific merit against the following criteria in Table 2 below.

Table 2 - Site Specific Merit

Criteria	Planning Proposal Response
<i>Does the planning proposal have site specific merit with regard to: the natural environment (including known significant environmental values, resources or hazards)?</i>	<p>Yes. All environmental effects related to the planning proposal have been considered in the accompanying Biodiversity report in Appendix A prepared by Eco Logical. The report provides the assessment of the proposal on the natural environment including critical habitat, threatened species, ecological communities and their habitats.</p> <p>The site is biodiversity certified under the Order to confer biodiversity certification on the <i>State Environmental Planning Policy (Sydney Region Growth Centres) 2006</i>. The biodiversity impacts as a result of future development was assumed by the Biodiversity Certification</p>

Criteria	Planning Proposal Response
	<p>Order and is offset via the Growth Centre Biodiversity Offset Program. The impacts of this planning proposal will not trigger entry into any Biodiversity Offset Scheme in accordance with the <i>Biodiversity Conservation Act 2016</i> nor will it be considered a Controlled Action in accordance with <i>Environment Protection and Biodiversity Conservation Act 1999</i>, as the study area is wholly biodiversity certified.</p> <p>The site is also identified as containing bushfire prone lands. The impact of bushfire hazards that are expected to affect any future development on site has been assessed in the Bushfire report (Appendix B) prepared for the planning proposal. The report provided strategies to mitigate any bushfire risk for the site. There are no other natural environmental factors identified that would inhibit the rezoning of the site, or future development of the site in accordance with the rezoning.</p>
<i>The existing uses, approved uses and likely future uses of land in the vicinity of the land subject to a proposal?</i>	<p>Yes. The planning proposal has been informed by the Greater Sydney Regional Plan and the Western City District Plan having regard to the development directions included for Western Parkland City and Western City District. Furthermore, the future land uses of the site will be compatible with the future vision set for the WSA Aerotropolis in the WSA LUIP.</p> <p>The subject site is located in a strategic location close to the M7 motorway and approximately 8 kilometres from the centre of the future Western Sydney Aerotropolis. The site has the potential to be developed to complement the future land uses of the Aerotropolis and the Western Sydney Employment Area. This site would also take advantage of its proximity to the motorway network and existing industrial land demand emanating from the lack of suitable land for local services in the Liverpool region. The future M12 alignment through the site would make the land less suited to noise and amenity sensitive development if it were to urbanise. These factors indicate that an industrial zone reflects an appropriate use of the land.</p>
<i>The services and infrastructure that are or will be available to meet the demands arising from the proposal and any proposed financial arrangements for infrastructure provision?</i>	<p>Yes. The site is currently located in a predominantly rural setting. It will require additional infrastructure and services to facilitate the industrial uses.</p> <p>An assessment of the utilities and services at the site has been undertaken in the accompanying Servicing and Utility Report in Appendix C. This report identified the infrastructure need and provides direction for the provision of infrastructures to service the site.</p> <p>Accordingly, new infrastructure provisions are proposed to accommodate the demands from industrial development, which includes water, sewer and traffic management facilities.</p>

3.4 Will the planning proposal give effect to a council's endorsed local strategic planning statement, or another endorsed local strategy or strategic plan?

Our Home, Liverpool 2027

Council's Our Home, Liverpool 2027 is a Community Strategic Plan (CSP) and provides strategic directions that have been identified by the community and the measures that will allow Council to determine progress towards achieving them. The four key directions are: creating connection, strengthening and protecting our environment, generating opportunity and leading through collaboration. The proposal mostly aligns with the third direction (generating opportunity) which states:

Liverpool Council will -

- *Attract businesses for economic growth and employment opportunities*
- *Create an attractive environment for investment*

The proposal, by introducing industrial uses on the site, will promote opportunities for employment generating activities and investment in the Liverpool LGA.

The planning proposal is not inconsistent with the other three directions of the CSP, in that the proposal will create connection and will strengthen the local community by creating employment opportunities for the residents. This is further creating scope to collaborate with the utility and service agencies for the provision of infrastructure and services in order to facilitate a planned urban development of the area.

Biodiversity impacts on the site, as a result of future development, was assumed by the Biodiversity Certification Order and is offset via the Growth Centres Biodiversity Offset Program. The rezoning will not trigger entry into any Biodiversity Offset Scheme, in accordance with the Biodiversity Conservation Act 2016, nor will it be considered a Controlled Action, in accordance with the Environment Protection and Biodiversity Conservation Act 1999, as the study area is wholly biodiversity certified.

Liverpool Local Strategic Planning Statement (LSPS)

The Local Strategic Planning Statement (LSPS) is Council's long-term plan to shape Liverpool's future which will help guide the development of Liverpool's suburbs and balance the need for housing, jobs and services as well as parks, open spaces and the natural environment.

Local Planning Priority 12, under the Productivity goal of the LSPS, includes the planning priority: *'Industrial and employment lands meet Liverpool's future needs.'* As per the industrial land studies conducted by Council there will be a lack of zoned and serviced industrial land in the near future, requiring Council to investigate suitable areas in the LGA. New industrial land around the Western Sydney International Airport will contribute to meeting demand in the medium to long term for larger industrial uses; however, there is a projected shortage of land zoned for local service-related industrial uses closer to Liverpool from 2026.

Action 12.3 of the LSPS included the action - *'Investigate provision of new industrial land, including light industrial (IN2), between the airport and the CBD, including extension of industrial zoned land in Austral, to ensure ongoing supply (short to medium term).'* The planning proposal is consistent with the planning priority of the LSPS and its associated Action 12.3, as it is rezoning the subject site from the RU4 - Primary Production Small Lot zone to the IN2 - Light Industrial zone, thus creating additional industrial lands and facilitating supply of industrial and employment land. This will contribute towards meeting the current and future shortage of suitably zoned industrial lands within the LGA.

3.5 Is the planning proposal consistent with applicable State Environmental Planning Policies?

Several State Environmental Planning Policies apply to the land. The consistency of the planning proposal with pertinent SEPPs has been provided in *Table 3* below. SEPPs which the planning proposal will not materially impact nor undermine, where it is deemed that the planning proposal is consistent or not inconsistent with the SEPP objectives are omitted from *Table 3*.

Table 3 – Consistency with State Environmental Planning Policies

State Environmental Planning Policy	Comment / Consistency
SEPP (Infrastructure) 2007	The SEPP provides for certain proposals, known as Traffic Generating Development, to be referred to NSW Roads and Maritime Services, currently Transport for New South Wales (TfNSW), for concurrence. The traffic report prepared by McLaren Traffic Engineering accompanying the planning proposal (Appendix D) states – “If the planning proposal were approved, the subsequent development application for the master plan would qualify as a development with relevant size and/or capacity under clause 104 of the SEPP (Infrastructure) 2007. Additionally, the development fronts a State Classified Main Road (Elizabeth Drive) and proposes direct access to this road. Accordingly, a formal referral to the Roads and Maritime Services (RMS) is necessary. Therefore, if the proposal be supported by a Gateway determination, a referral would be required at that stage.
SEPP (Mining, Petroleum Production and Extractive Industries) 2007	<p>The land is mapped as ‘future residential growth area’ under the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007. Accordingly, the site has been identified as a future urban area.</p> <p>The industrial land use zone will not preclude activities permitted as per the SEPP.</p>
SEPP (Sydney Region Growth Centres) 2006	<p>The site is located within the land application map of the South West Growth Centres. Despite being located within the Growth Centres, the site is still subject to the controls of the Liverpool Local Environmental Plan 2008 (LLEP). This is because Appendix 8 – Liverpool Growth Centre Precinct Plan of the SEPP does not currently apply to the subject site.</p> <p>The planning proposal is consistent with the aim of the SEPP which is to co-ordinate the release</p>

	of land for residential, employment and other urban development in the South West Growth Centre. The proposed industrial zone and associated development on the site will support to achieve this aim of the policy.
<i>SEPP No. 33 Hazardous and Offensive Development</i>	The land uses immediately surrounding the site are predominantly rural industrial, extractive industry, landfill and waste recycling operations. Land on the opposite side of Elizabeth Drive (to the north) is used for a mix of semi-rural agricultural uses and rural residential purposes. The proposal to rezoning of the site from RU4 Primary Production Small Lots to the IN2 Light Industrial zone will not preclude the application of the SEPP. Hazardous and offensive development is generally confined to the IN3 zone within the Liverpool LEP 2008.
<i>SEPP (Koala Habitat Protection)</i>	The site is located within a Local Government Area (LGA) to which the Koala Habitat Protection SEPP applies. The planning proposal will not change any requirements for a Koala Management Plan. In the event that Council has not provided an LGA wide strategy, a plan may be required upon lodgement of a future DA.
<i>SEPP No. 55 Remediation of Land</i>	<p>A Stage 1 Contamination Assessment was carried out as part of the studies undertaken for the site- refer to Appendix E. The report concludes that widespread contamination within the site is not present, however it notes some isolated areas of environmental concerns (AECs). The AECs include:</p> <ul style="list-style-type: none"> • Potential for some previous pesticide use • Soil impacted by former storage of vehicles and other unknown materials • Fill materials of unknown origin. <p>These AECs can be further addressed, and mitigation measures implemented for any future development, as part of a Stage 2 assessment undertaken at the DA stage, in accordance with the provisions of clause 7 of the SEPP.</p>

3.6 Is the planning proposal consistent with applicable Ministerial Directions (Section 9.1 directions)?

Table 4 - Ministerial Directions Compliance

Ministerial Direction	Consistency	Justification
1. Employment and Resources		
1.1 Business and industrial Zones	Consistent	<p>The site is presently zoned RU4 Primary Production Small Lots under the LLEP2008. The planning proposal seeks to rezone the land to the IN2 Light Industrial zone.</p> <p>The proposal is consistent with the objectives of this direction in that the rezoning will encourage employment growth for Liverpool LGA in a suitable location for industrial development with major transport linkages and minimal impacts on sensitive receptors.</p> <p>This will further contribute towards the planned productivity growth in the Western City District and the Western Parkland City as envisaged in the Greater Sydney Regional Plan.</p>
1.2 Rural Zone	Not inconsistent	<p>The planning proposal is not inconsistent with the direction. The site is currently zoned RU4 Primary Production Small Lots under the LLEP 2008 and the IN2 Light Industrial zone is sought.</p> <p>The site is located within the South West Growth Centre land application map under the State Environmental Planning Policy (Sydney Region Growth Centres) 2006. One of the aims of the policy is to co-ordinate the release of land for residential, employment and other urban development in the South West Growth Centre.</p>
1.3 Mining, Petroleum Production and Extractive Industries	Not inconsistent	<p>The planning proposal is not inconsistent with the direction. The land is mapped as a 'future residential growth area' under the State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007. Accordingly, the site has been identified for future urban development.</p> <p>The SEPP will continue to operate despite any uses that may or may not be permitted by the IN2 zone.</p>

2. Environment and Heritage		
2.1 Environment Protection Zone	Not inconsistent	<p>The proposal is not inconsistent with this direction. The land is not currently zoned for environmental conservation purposes. Critically endangered Cumberland Plain Woodland and threatened fauna species, including the Cumberland Plain Land Snail, were identified within the site, under the Biodiversity report prepared by Eco Logical Australia (refer to Appendix A) in support of the planning proposal. Such impacts to native species were considered at the strategic level, via the biodiversity certification order conferred on areas subject to the Growth Centres SEPP. The results of future urban development were assumed by the Biodiversity Certification Order and are offset via the Growth Centres Biodiversity Offset Program. The rezoning will not trigger entry into any Biodiversity Offset Scheme, in accordance with the Biodiversity Conservation Act 2016, nor will it be considered a Controlled Action, in accordance with the Environment Protection and Biodiversity Conservation Act 1999, as the study area is wholly biodiversity certified.</p>
2.3 Heritage Conservation	Consistent	<p>The planning proposal is not inconsistent with the direction. The site is not located within any Heritage Conservation Area as per the LLEP 2008. The site is predominately used for grazing and no items of heritage significance were identified on site. A detailed heritage study to identify any indigenous heritage significance on site can be conducted at the DA stage.</p>
2.6 Remediation of Contaminated Land	Not inconsistent	<p>The planning proposal is not inconsistent with the direction. A Stage 1 Contamination Assessment was carried out as part of the studies undertaken for the site- refer to Appendix E. The report concludes that widespread contamination within the site is not present, however it notes some isolated areas of environmental concerns (AECs). The AECs include:</p> <ul style="list-style-type: none"> • Potential for some previous pesticide use; • Soil impacted by former storage of vehicles and other unknown materials; • Fill materials of unknown origin. <p>These AECs can be further addressed, and mitigation measures implemented for any future development, as part of a Stage 2 assessment undertaken at the DA stage.</p>

3. Housing, Infrastructure and Urban Development		
3.4 Integrated Land Use and Transport	Not inconsistent	<p>The proposal is not inconsistent with this direction as the rezoning will facilitate predominately light industrial uses on site, which will provide more opportunities to support local jobs and services in the area.</p> <p>It is noted that the development of WSA Aerotropolis will include new public transport facilities such as rail and bus service networks within the area. As a result, the future employees of the site may benefit from increased public transport services offered in the broader region should they pass near the site. At present, there is limited public transport available to service the site.</p> <p>The location of the site close to the highway network, including the M7 motorway, Elizabeth Drive and the future M12 motorway supports the rezoning of the land to IN2 light industrial uses, by allowing the efficient movement of freight and logistics from the site to the greater freight network.</p>
3.5 Development Near Regulated Airports and Defence Airfields	Consistent	<p>The development on site will not be adversely affected by the noise and operation of the airport as it is located out of the ANEC/ANEF contours for the Western Sydney Airport and also out of the Obstacle Limitation Surface (OLS) chart for the future airport.</p> <p>The proposal is consistent with the objectives of the direction as rezoning of the site to the IN2 Light Industrial zone will allow development such as warehouses, which will not have any detrimental impacts to the efficient and safe operation of the airport by creating fumes or smoke and undesirable night time light emissions.</p>
3.6 Shooting Ranges	Consistent	<p>The subject site is located adjacent to the Sydney International Shooting Centre, which is located within the Western Sydney Parklands.</p> <p>The planning proposal is consistent with the direction, as light industrial uses are not noise sensitive land uses and will not be adversely affected by the operation of the shooting range.</p>
4. Hazards and Risk		
4.4 Planning for Bushfire Protection	Not inconsistent	The site is mapped as containing Bushfire Prone Land under Council's bushfire prone land

		<p>mapping. A Bushfire Impact Assessment report has been prepared by Eco Logical Australia (refer to Appendix B) to assess the impact of bushfire on the planning proposal. The report included strategies to address the issue and to make the planning proposal consistent with the objectives of the direction.</p> <p>Bushfire hazard has been assessed on the subject site and hazards can be managed via an Asset Protection Zone (APZ) within the subject site. On the basis of this assessment, indicative APZ requirements have been mapped across the area proposed to be rezoned. A number of strategies, compliant with the requirements of NSW Rural Fire Service <i>Planning for Bushfire Protection</i> 2018, have been provided.</p>
5. Regional Planning		
5.10 Implementation of Regional Plan	Consistent	The regional strategy in effect is the Western City District Plan. Consistency with this plan is demonstrated in Section 3.3 of this report.
6. Local Plan Making		
6.1 Approval and Referral Requirements	Consistent	The planning proposal does not contain provisions requiring additional concurrence, consultation or referral to a Minister or public authority.
6.2 Reserving Land for Public Purposes	Consistent	The future M12 motorway corridor runs through the middle of the subject site. The planning proposal has proposed to rezone the future M12 corridor as SP2 Infrastructure and the Land Reservation Acquisition Map is proposed to facilitate the acquisition of this land for this purpose.
7. Metropolitan Planning		
7.1 Implementation of A Plan for Growing Sydney	Consistent	Consistency with Greater Sydney Region Plan - A Metropolis of Three Cities is demonstrated in Section 3.3 of this report.
7.8 Implementation of Western Sydney Aerotropolis Interim Land Use and Infrastructure Implementation Plan	Consistent	The site is being excluded from the second stage of the Interim Land Use and Infrastructure Implementation Plan i.e. the draft Western Sydney Aerotropolis Plan. It is also located out of the ANEC/ANEF contours for the Western Sydney Airport and also out of the Obstacle Limitation Surface (OLS) chart.

Section C – Environmental, social, and economic impact

3.7 *Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?*

An assessment of the proposal and its impact on critical habitats, threatened species or ecological communities located on the site, or its immediate surrounding, has been considered in the Biodiversity Report prepared by Eco Logical Australia and accompanying in **Appendix A** of this report.

The site is biodiversity certified under the Order to confer biodiversity certification on the State Environmental Planning Policy (Sydney Region Growth Centres) 2006. The biodiversity impact as a result of future development was assumed by the Biodiversity Certification Order and is offset via the Growth Centre Biodiversity Offset Program.

The planning proposal will not trigger entry into any Biodiversity Offset Scheme in accordance with the Biodiversity Conservation Act 2016, nor will it be considered a Controlled Action in accordance with Environment Protection and Biodiversity Conservation Act 1999, as the study area is wholly biodiversity certified.

3.8 *Are there any other likely environmental effects as a result of the planning proposal and how are they proposed to be managed?*

The site is identified as containing bushfire prone land under Council's bushfire prone land mapping. A Bushfire Impact Assessment report has been prepared by Eco Logical Australia (refer to **Appendix B**) to assess the impact of bushfire on the planning proposal, and strategies have been proposed to address the issue.

Bushfire hazard has been assessed across the subject site and found to be acceptable based on the ability to provide an APZ within the subject site. On the basis of this assessment, an indicative APZ has been mapped across the site. A number of strategies, consistent with the requirements of NSW Rural Fire Service *Planning for Bushfire Protection 2018* have been provided.

There are noise sensitive developments in the vicinity of the proposed site, including several rural residential developments on the northern side of Elizabeth Drive. A noise impact study investigating the noise impacts on the residential uses can be prepared for each DA to ameliorate noise impacts on sensitive receivers.

3.9 *Has the planning proposal adequately addressed any social and economic effects?*

The planning proposal is expected to result in positive social and economic impacts by enabling the land to sustain industrial employment.

The land uses permitted under the proposed zone will create job opportunities and will positively contribute to the economy of the local area. The proposal will complement the future land uses of the Aerotropolis and the Western Sydney Employment Area. This site would also take advantage of its proximity to the existing motorway network and existing industrial land demand emanating from local services in Liverpool LGA. An Economic Impact Assessment report has been prepared for the planning proposal and included in **Appendix F**.

Social Impact Comments (**Appendix G**) have been prepared to review the possible social impacts of the proposal in the area. This has identified no detrimental impact to the local community from the proposal. Further, the resulting job opportunities will provide positive economic effects for the local community.

Section D – State and Commonwealth interests

3.10 Is there adequate public infrastructure for the planning proposal?

The site is presently used for rural purposes and not serviced by all necessary urban utility infrastructure. As part of the proposal it is intended that utilities and infrastructure are to be augmented to accommodate the needs of the future development.

The site is currently serviced by limited bus services between Badgerys Creek and the Liverpool city centre. It is anticipated that these bus services will be improved, due to the development of Western Sydney Airport, and the Aerotropolis.

The site will take advantage of its strategic location close to the M7 motorway, Elizabeth Drive and the future M12 motorway corridor. This will provide connectivity to other road networks.

An assessment of the utilities and services at the site has been undertaken in the accompanying Servicing and Utility Report in **Appendix C**. This report identified the infrastructure need and provides directions for the provision of needed infrastructure to service the site. Accordingly, there will be adequate provision of public infrastructures to facilitate the proposed industrial uses.

3.11 What are the views of state and Commonwealth public authorities consulted in accordance with the Gateway determination?

As a part of the Gateway Determination, the relevant public authorities will be identified who are to be consulted in relation to the planning proposal. The referral advice provided by the public authorities will be considered, following consultation in the public exhibition period.

The following government agencies, or utility owners, have been identified as potentially interested parties for reasons given below:

- NSW Department of Primary Industries: Impact on agricultural and grazing land.
- Transport for New South Wales (TfNSW): The subject site is adjacent to Elizabeth Drive, which is a classified road. Part of the site is also identified as within the future M12 motorway corridor.
- NSW Rural Fire Service: The subject site contains bushfire prone lands.
- Sydney Water: the site is currently used for rural uses and will require water and sewer services to be developed and connected with reticulated water and sewer services.
- Endeavour Energy: An easement for a transmission line runs through the subject site;
- NSW Department of Planning, Industry and Environment (Environment, Energy and Science Group): The site is fully biodiversity certified. However, development will impact upon critically endangered flora and fauna.

Part 4 – Mapping

The existing and the proposed changes to the LLEP 2008 are shown in the maps below.

Land Use Zoning Maps



Figure 6: Existing land use zoning map for the subject site

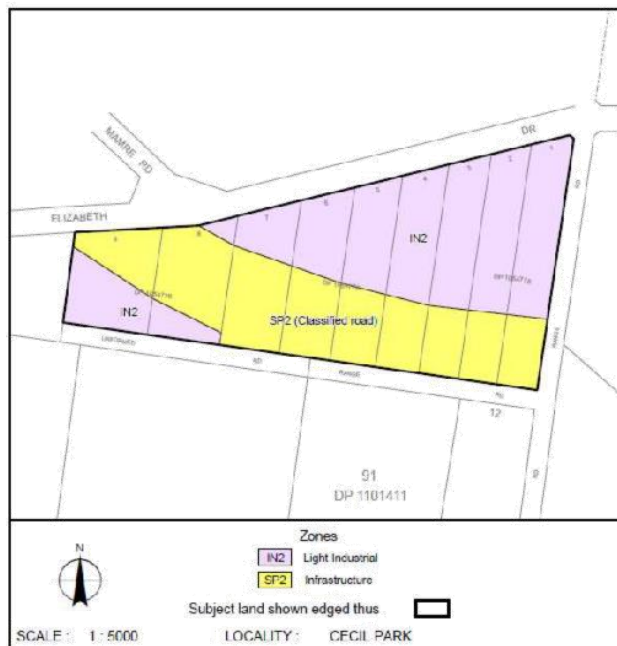


Figure 7: Proposed land use zoning map for the subject site

Floor Space Ratio Maps

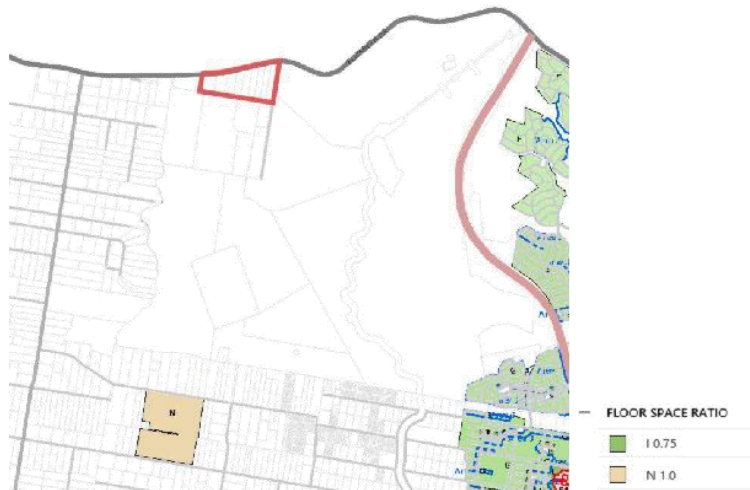


Figure 8: Existing floor space ratio map for the subject site

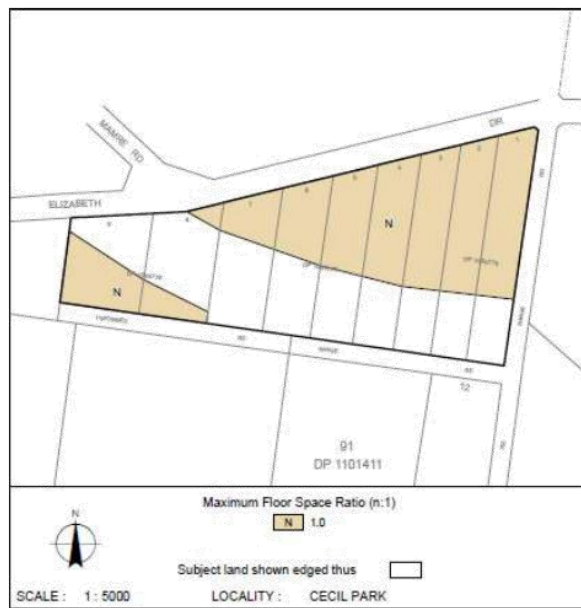


Figure 9: Proposed floor space ratio map for the subject site

Minimum Lot Size Maps



Figure 10: Existing minimum lot size map for the subject site

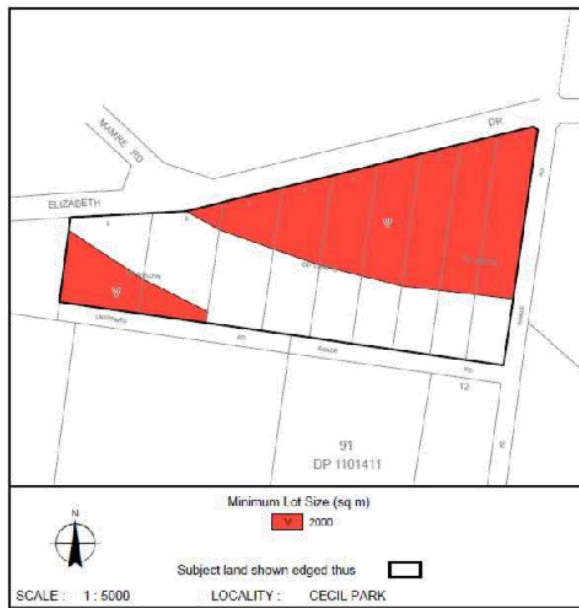


Figure 11: Proposed minimum lot size map for the subject site

Land Reservation Acquisition Map

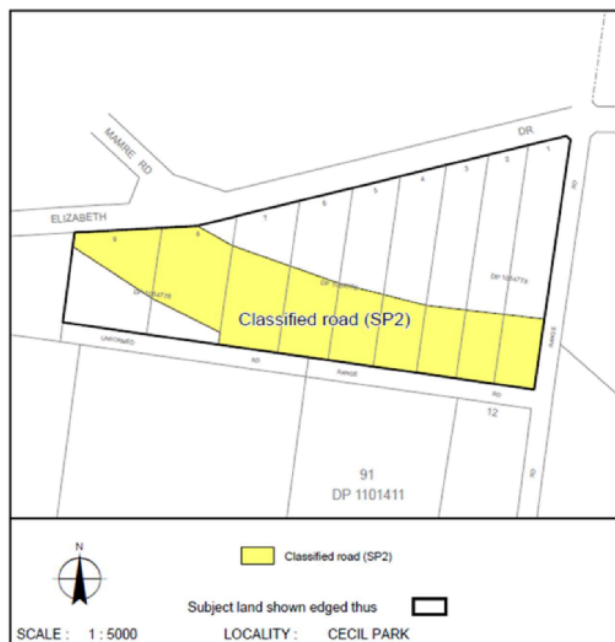


Figure 12: Proposed land reservation acquisition map for the subject site

Part 5 – Community Consultation

Schedule 1, Clause 4 of the EP&A Act requires the relevant planning authority to consult with the community in accordance with the Gateway determination. The planning proposal will be publicly exhibited for at least 28 days in accordance with DP&E's A Guide to Preparing Local Environmental Plans. The planning proposal exhibition will also be carried out in accordance with Council's Community Participation Plan.

At a minimum, the notification of the public exhibition of the Planning proposal is expected to involve:

- Notification on the Liverpool City Council website, and
- Written correspondence to owners and occupiers of adjoining properties.

Part 6 – Project Timeline

An anticipated project timeline is shown in **Error! Reference source not found.6.**

Table 5 – Anticipated Project Timeline

Timeframe	Action
May 2020	Presented at the Local Planning Panel meeting
June 2020	Presented to Liverpool City Council
July 2020	Submission of Planning Proposal to DPIE
October 2020	Gateway Determination issued
October 2021 – November 2021	State agency consultation
November 2021 – December 2021	Community consultation
December 2021- January 2021	Consideration of submissions and proposal post-exhibition
February 2021	Post-exhibition report to Council
March 2021	Legal drafting and making of the plan

Appendices

- A. Biodiversity Report
- B. Bushfire Impact Assessment Report
- C. Servicing and Utility Report
- D. Traffic Report
- E. Stage 1 Contamination Assessment Report
- F. Economic Impact Assessment
- G. Social Impact Comments



Planning,
Industry &
Environment

Gateway Determination

Planning proposal (Department Ref: PP_2020_LPOOL_002_00): to rezone the subject site at 1400-1480 Elizabeth Drive, Cecil Park from RU4 Primary Production Small Lots to IN2 Light Industrial and SP2 Infrastructure

I, the Director at the Department of Planning, Industry and Environment, as delegate of the Minister for Planning and Public Spaces, have determined under section 3.34(2) of the *Environmental Planning and Assessment Act 1979* (the Act) that an amendment to the Liverpool Local Environmental Plan (LEP) (2008) to rezone the subject site from RU4 Primary Production to IN2 Light Industrial and SP2 Infrastructure should proceed subject to the following conditions:

1. Prior to public exhibition, Council is to amend the planning proposal and supporting documentation as follows:
 - a. consult Transport for NSW to determine the extent of the land acquisition as part of the M12 project and update the mapping that identifies the relevant acquisition authority; and
 - b. consult Rural Fire Service in accordance with section 9.1 Direction 4.4 Planning for Bushfire Protection.

The updated planning proposal is to be submitted to the Department for approval prior to public exhibition.

2. Public exhibition is required under section 3.34(2)(c) and schedule 1 clause 4 of the Act as follows:
 - (a) the planning proposal must be made publicly available for a minimum of **28 days**; and
 - (b) the planning proposal authority must comply with the notice requirements for public exhibition of planning proposals and the specifications for material that must be made publicly available along with planning proposals as identified in section 6.5.2 of *A guide to preparing local environmental plans* (Department of Planning and Environment, 2018).
3. Consultation is required with the following public authorities/organisations under section 3.34(2)(d) of the Act and/or to comply with the requirements of relevant section 9.1 Directions:
 - Transport for New South Wales
 - Rural Fire Service
 - Sydney Water
 - Endeavour Energy
 - Environment, Energy and Science Group

Each public authority/organisation is to be provided with a copy of the planning proposal and any relevant supporting material and given at least 21 days to comment on the proposal.

4. A public hearing is not required to be held into the matter by any person or body under section 3.34(2)(e) of the Act. This does not discharge Council from any obligation it may otherwise have to conduct a public hearing (for example, in response to a submission or if reclassifying land).
5. The planning proposal authority is authorised as the local plan-making authority to exercise the functions under section 3.36(2) of the Act subject to the following:
 - (a) the planning proposal authority has satisfied all the conditions of the Gateway determination;
 - (b) the planning proposal is consistent with section 9.1 Directions or the Secretary has agreed that any inconsistencies are justified; and
 - (c) there are no outstanding written objections from public authorities.
6. The time frame for completing the LEP is to be **12 months** following the date of the Gateway determination.

Dated 31 day of August 2020.



Adrian Hohenzollern
Director, Western
Central River City & Western Parkland
City Department of Planning, Industry
and Environment

Delegate of the Minister for Planning
and Public Spaces

Date: 13/11/2020

Development Officer Masud Hasan
Liverpool City Council

Dear Masud,

[REDACTED] owns land along Elizabeth Drive in the suburb of Kemps Creek, known as [REDACTED]

[REDACTED] fully supports this Planning Proposal and congratulates Liverpool City Council on its initiative to promote growth in industry. The proximate area has somewhat stagnated since the release of the South West Growth Centre's SEPP back in 2006, and it is great to finally see some progress being made in achieving its full employment potential.

There is a significant under supply of small lot Torrens title industrial land in Western Sydney and this site is perfectly positioned to remedy this, given its position adjacent to the new M12, and the fact that it is centrally located in between the new Western Sydney International Airport, and the Liverpool, Fairfield, Penrith, and Parramatta LGA's.

As stated within the LCC Industrial and Employment Lands Strategy 2020, existing and growing demands within industry require the supply of a variety of industrial spaces to accommodate industrial development broadly. Precincts with great access to movement corridors are paramount to the relevance and growth of employment lands within the Liverpool LGA.



Transport
Roads & Maritime
Services

Roads and Maritime Reference: SYD19/00557

31 October 2019

Ms Kiersten Fishburn
Chief Executive Officer
Liverpool City Council
Locked Bag 7064
Liverpool BC NSW 1871

Attention: Masud Hasan

Dear Ms Fishburn

**MIXED USE PLANNING PROPOSAL
1400-1480 ELIZABETH DRIVE, CECIL PARK**

I refer to Liverpool City Council's correspondence of April 2019 inviting Roads and Maritime Services to comment on the subject planning proposal (pre-gateway) to:

- amend the zoning from RU4 Primary Production Small Lots to IN2 – Light Industrial;
- establish a maximum FSR of 1:1; and
- enable retail premises as an additional permitted use in the site, with floor space restrictions, through a site-specific provision in Schedule 1 of the LLEP.

Roads and Maritime appreciates the opportunity to provide comment on the subject planning proposal and apologise for the delay in providing a response. Roads and Maritime has reviewed the planning proposal and provides the following comments:

1. Roads and Maritime is currently developing a strategic design for the upgrade of Elizabeth Drive. On completion of the strategic level investigations, Roads and Maritime will undertake community consultation, which is expected to be undertaken within the current financial year.

Until the strategic level investigations have occurred, the impacts of the future upgrade of Elizabeth Drive on the subject site including the new left in /left out access (west of Range Road) to the proposed 'service centre' will not be fully understood. For example, this road widening may require significant batters.

It should be noted that the funding for the upgrade of Elizabeth Drive is not in the current works program. As you would appreciate, funding is limited and is allocated on a state wide priority basis.

2. The alignment of the M12 through the site appears to be accurate. However, this would need to be confirmed, prior to any gazettal of the planning proposal should the planning proposal be supported, and zoned SP2 Classified Road. It is understood that Roads and Maritime have provided a concept plan of the M12 (inclusive of corridor boundaries through the site) to the proponent, which can be viewed in the Environmental Impact Statement prepared for the M12, which is publicly accessible on the Department of Planning, Industry and Environment's website (<https://www.planningportal.nsw.gov.au/major-projects/project/10226>).

Roads and Maritime Services

27-31 Argyle Street, Parramatta NSW 2150 |
PO Box 973 Parramatta NSW 2150 |

www.rms.nsw.gov.au | 13 22 13

3. A car park, access road and fourth leg to the existing roundabout on Elizabeth Drive at Mamre Road are currently proposed within the M12 corridor. These structures are not supported as they cannot be physically accommodated due to support structures (i.e. batters and concrete piers) associated with the design and construction of the M12. No structures associated with the proposed development shall be located within the M12 corridor.

All access to proposed Site 2 would need to be via the Crown land to the south of the site, which is accessed off Range Road.

4. The proposed IN2 zoning permits a supermarket, such as Coles or Woolworths and bulky goods retail, which all generate a higher level of traffic generation than the land uses (i.e. showroom and industrial units) nominated in the submitted documentation in support of the planning proposal. Roads and Maritime is of the view that a more balanced traffic generation rate should be used that includes some high traffic generating development, such as bulky goods retail, supermarket etc and low traffic generating development such as light industrial units and warehousing.
5. The existing seagull island treatment on Elizabeth Drive at Range Road intersection is designed to accommodate a low volume of turning movements to/from Range Road. This type of intersection treatment is not designed to cater for significant turning movements that conflict with high volumes of through traffic, which has the potential to pose a road safety hazard.

Should the planning proposal be supported with a gateway determination and comments above be satisfactorily resolved, the proponent should undertake the following assessment requirements for the intersection of Elizabeth Drive and Range Road:

- Model (using SIDRA) the intersection under existing conditions using a more balanced traffic generation rate as outlined above and include 10 years of background traffic growth.
- An independent road safety audit to identify any deficiencies with the existing intersection design to accommodate higher volumes of turning movements associated with the development. This should include a scenario of all development traffic utilising this existing intersection on the basis that there may be significant batters along the Elizabeth Drive frontage of the site associated with future upgrade of this classified road. This road safety shall be undertaken in accordance with the NSW Guidelines for Road Safety Audit Practices.
- Based on the findings of the above exercises, an appropriate intersection treatment to Austroads specifications should be identified for this existing intersection that accommodates turning movements in a safe and efficient manner without compromising the operational performance of Elizabeth Drive.

Roads and Maritime advises that any intersection treatment identified would need to be constructed at no cost to Roads and Maritime and delivered by the developer via a Works Authorisation Deed post gazettal of the planning proposal and subsequent development consent.

Thank you again for the opportunity of providing advice on the subject proposal. If required, Roads and Maritime is willing to facilitate a meeting with Council and/or the proponent to discuss the comments above in further detail. If you wish to discuss this submission further, please contact [REDACTED] on [REDACTED] or [REDACTED]

Yours sincerely

[REDACTED]



NSW RURAL FIRE SERVICE

Liverpool City Council
Locked Bag 7064
LIVERPOOL BC NSW 1871

Your reference: RZ-3/2019
Our reference: SPI20200917000156

ATTENTION: Masud Hasan

Date: Tuesday 27 October 2020

Dear Sir/Madam,

Strategic Planning Instrument
LEP Amendment – Planning Proposal
Rezoning at 1400-1480 Elizabeth Drive Cecil Park

I refer to your correspondence dated 15/09/2020 inviting the NSW Rural Fire Service (NSW RFS) to comment on the above Strategic Planning document.

The NSW RFS has considered the information submitted and provides the following comments.

Based on a review of the documentation provided for the proposed rezoning and amending development standards for land located at 1400-1480 Elizabeth Drive Cecil Park (Lot 1 to 9 DP1054778), the NSW RFS raises no objection, subject to the following:

Any future subdivision/development of the proposed lots for industrial or commercial purposes will need to address the requirements of *Planning for Bush Fire Protection 2019*, specifically, Section 8.3.1 Buildings of Class 5 to 8 under the NCC including, but not limited to:

- Provision of asset protection zones (APZs) within the development area, including temporary APZs along the RMS M12 Acquisition Area, recommended in the bushfire report prepared by EcoLogical Australia (Ref: 19SYD_12737, 20 March 2019) until such time that the bush fire hazard is removed as part of development;
- Provision of asset protection zones (APZs) in accordance with Table A1.12.1 for future proposed special fire protection purpose (SFPP) development;
- Access, preferably perimeter roads, to be provided in accordance with Table 5.3b;
- Services to be provided in accordance with Table 7.4a; and
- Emergency and evacuation (and relocation) arrangements for occupants of the development.

For any queries regarding this correspondence, please contact [REDACTED] on [REDACTED].

Yours sincerely,

[REDACTED]
[REDACTED]

1

Postal address

NSW Rural Fire Service
Locked Bag 17
GRANVILLE NSW 2142

Street address

NSW Rural Fire Service
4 Murray Rose Ave
SYDNEY OLYMPIC PARK NSW 2127

T (02) 8741 5555
F (02) 8741 5550
www.rfs.nsw.gov.au

Planning and Environment Services



15 June 2020

Masud Hasan

Assessing Officer
Liverpool City Council
lcc@liverpool.nsw.gov.au

RE: Planning Proposal RZ-3/2019 at 1400-1480 Elizabeth Drive, Cecil Park

Thank you for notifying Sydney Water of the planning proposal listed above. We have reviewed the application based on the information supplied and provide the following comments for your information to assist in planning the servicing needs of the proposed development.

Water Servicing

- Trunk drinking water services are currently planned to be available by circa 2022.
- An extension would be required to service the northern area of the development to the trunk main in Elizabeth Drive, this might entail a PRV and/or a minor service extension. These extensions cannot occur until the trunk infrastructure is delivered by Sydney Water (target delivery 2022) and the road configuration on-site is decided.
- Sydney Water requests that the proponent lodges a Feasibility study with Sydney Water for the proposal.
- The proponent should contact a Water Servicing Coordinator to lodge this study on their behalf. Any potential upsizing of our local assets or limitations in our system will be defined within the Feasibility process.

Wastewater Servicing

- Wastewater servicing is currently unavailable to the site.
- Until the new Wianamatta South Creek Water Treatment Centre is constructed in 2025/2026, Sydney Water will be unable to provide wastewater services to the property.
- Interim servicing via pumping station to the Liverpool Sewerage Treatment Plant before 2026 is not available.
- Alternative temporary wastewater servicing options may be suitable for further investigation following the feasibility process.

Trade wastewater requirement

- If this proposal will generate trade wastewater, the developer must submit an application requesting permission to discharge trade wastewater to Sydney Water's wastewater system. Applicant must wait for approval and issue of a permit before any business activities can commence.
- The permit application can be made on Sydney Water's web page through Sydney Water Tap In. <http://www.sydneywater.com.au/tapin/index.htm>



This advice is not a formal approval of our servicing requirements. Detailed requirements, including any potential extensions or amplifications, will be provided once the development is referred to Sydney Water for a Section 73 application. More information about the Section 73 application process is available on our web page in the [Land Development Manual](#).

The development servicing advice provided by Sydney Water is based on the best available information at the time of referral (eg. planning proposal) but will vary over time with development and changes in the local systems. This is particularly important in systems with limited capacity (such as Priority Sewerage Program scheme areas) and it is best to approach Sydney Water for an updated capacity assessment (especially where an approval letter is more than 12 months old).

If you require any further information, please contact the [REDACTED] on [REDACTED]

Yours sincerely,

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



Planning,
Industry &
Environment

Our ref: DOC20/788678

Your ref: RZ- 3/2019

Mr Ian Stendara
Liverpool City Council
Locked Bag 7064
LIVERPOOL BC NSW 1871

Dear Mr Stendara

Subject: Public Authority Consultation - Section 3.34(2)(d) of the Environmental Planning and Assessment Act 1979 - Draft Liverpool Local Environmental Plan 2008 – Amendment No. 83 – planning proposal to rezone and amend development standards for land located at 1400-1480 Elizabeth Drive, Cecil Park

Thank you for your letter of 15 September 2020 requesting comments from the Environment, Energy and Science Group (EES) in the Department of Planning, Industry and Environment on the draft Liverpool Local Environmental Plan 2008 (LEP) Amendment 83.

EES has reviewed the planning proposal and provides its recommendations and comments at Attachment A.

Please note that from 1 July 2020, Aboriginal cultural heritage (ACH) regulation, including advice on planning proposals, is managed by the Heritage NSW. The new contact for the ACH regulation team is [REDACTED]

If you have any queries regarding this matter, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer on 02 8837 6017 or at janne.grose@environment.nsw.gov.au

Yours sincerely





Attachment A

EES comments on Public Authority Consultation - Section 3.34(2)(d) of the Environmental Planning and Assessment Act 1979 - Draft Liverpool Local Environmental Plan 2008 – Amendment No. 83 – planning proposal to rezone and amend development standards for land located at 1400-1480 Elizabeth Drive, Cecil Park

The Environment, Energy and Science Group (EES) has reviewed the following documents:

- Planning Proposal 1400-1480 Elizabeth Drive, Cecil Park (Liverpool City Council) – 14 September 2020
- Planning Proposal 1400-1480 Elizabeth Drive, Cecil Park (Liverpool City Council) – 21 February 2020
- Biodiversity Report – 20 March 2019
- Bushfire Report – 20 March 2019
- Urban Design Report – March 2019
- Liverpool Overland Flow Path Study for Rural Catchments – Austral and Kemps Creek (report prepared for Liverpool City Council by Jacobs) - Feb 2019
- DPIE Letter to Council Gateway determination
- Gateway Determination – 31 Aug 2020

and provides the following comments.

Reference is made to the EES previous submission on the Planning Proposal of 14 August 2020 (our reference DOC20/646755).

The planning proposal proposes to amend the Liverpool Local Environmental Plan (LLEP) 2008 in the following way:

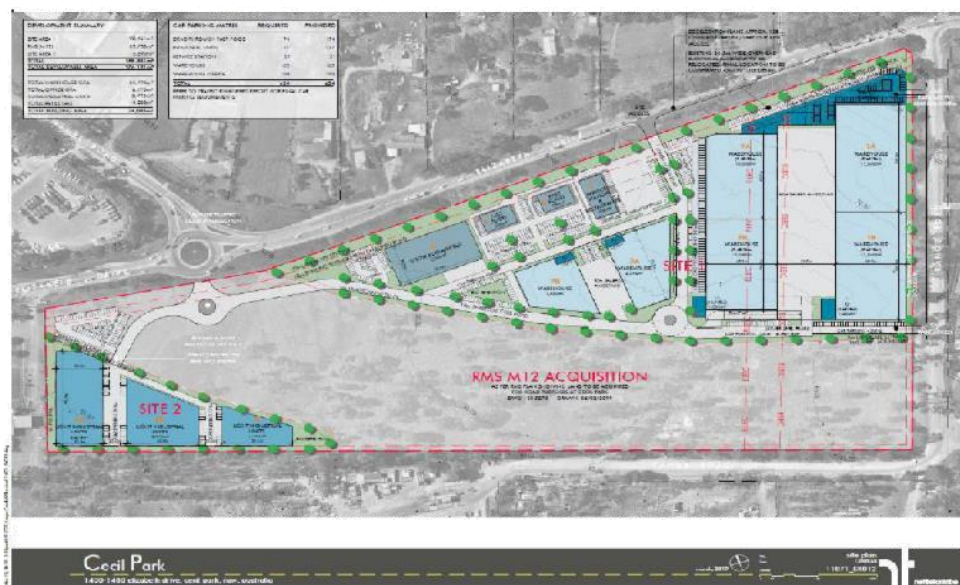
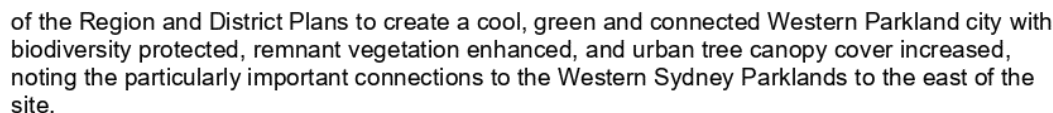
- rezone part of the land from RU4 – Primary Production Small Lots to IN2 – Light Industrial
- rezone part of the land from RU4 – Primary Production Small Lots to SP2 – Infrastructure
- establish a maximum permissible Floor Space Ratio of 1:1
- amend the minimum lot size development standard from 10ha to 2,000m²
- amend the Land Reservation Acquisition Map for the site to facilitate acquisition of land for the M12 motorway corridor.

Biodiversity

The Planning Proposal (dated 14 September 2020) notes the site is biodiversity certified under the Order to confer biodiversity certification on the State Environmental Planning Policy (Sydney Region Growth Centres) 2006.

‘Certified lands’ are those where development proposals require no further threatened species assessment. Biodiversity certification is not an automatic approval to clear native vegetation; it simply means that on certified lands, threatened species assessments are no longer required for development applications (DAs) or when undertaking local and regional infrastructure works. As the study area is wholly biodiversity certified, the impacts of this planning proposal will not trigger the Biodiversity Offset Scheme in accordance with the Biodiversity Conservation Act 2016 nor will it be considered a Controlled Action in accordance with Environment Protection and Biodiversity Conservation Act 1999 (Table 2, pages 14 -15).

While the subject site is certified Council can consider the retention of vegetation on the site where land is not required to be acquired for the M12 motorway. This would assist to achieve better site planning and design to create a greener place for occupants and mitigate the urban heat island effect. Retention of vegetation would also assist in meeting the vision and sustainability objectives



As the site occurs within an area covered by the Western City District Plan (WCDP) it is recommended the planning proposal/preliminary concept plan and future development of the site is consistent with Planning Priority W15 -increasing urban tree canopy cover and delivering Green Grid connections. Objective 30 of this planning priority is that urban tree canopy cover is increased. Planning Priority W15 outlines:

- The NSW Government has set a target to increase tree canopy cover across Greater Sydney to 40 per cent.
- Urban renewal and transformation projects will be critical to increase urban tree canopy cover. This can be complemented by other green cover, including rain gardens, green roofs and green walls.

- mitigate the urban heat island effect
- support cleaner air
- provide local habitat
- slow and store stormwater and improve water quality and filter pollution before it reaches the District's waterways.

4 Parramatta Square, Level 10, 12 Darcy Street, Parramatta NSW 2150 | Locked Bag 5022 Parramatta NSW 2124 | dpje.nsw.gov.au | 3



**Planning,
Industry &
Environment**

EES notes Figure 4 in the Urban Design Report which shows the conceptual building footprints within the site and Figure 2 in the Bushfire Report includes a preliminary concept plan. The Urban Design Report states key elements to the built form include landscaped setbacks to Elizabeth Drive (page 8) and that the objectives for setbacks from Elizabeth Drive and the proposed M12 Motorway are to “retain existing endemic species along the motorways” (page 9). The cover page to the Urban design report however shows a sparse number of trees are proposed along the roads and EES recommends the proposed 10m wide landscaped setbacks along Elizabeth Drive and the proposed setback along the M12 Motorway and the on-site landscaping retain a greater number of remnant trees.

Flood

The site is flood free based on the overland flow path study as listed above apart from a small portion on the western side of the site which would be subject to flooding under the 1% AEP Event and PMF Event. The expected depth of inundation under the 1% AEP Event is 0.05m-0.1m. This may not be posing any flooding risk considering the floor levels of future developments. Nevertheless, the proponent will need to consider the flood depth under the 1% AEP Event for setting up the floor levels at the flood affected area of the development site. The site would unlikely to be constrained for evacuation under major and rarer events (including the PMF Event) due to its proximity to major roads and a new road to be constructed on the southern edge of the development site which would be connected to the major roads. Furthermore, the duration of flooding under such events would be around two hours.

EES does not have any specific comments on the planning proposal subject to the consideration of the flood affected area and the flood depth under the 1% AEP to guide the future developments.

End of Submission



**Transport
for NSW**

TfNSW Reference: SYD19/00557

2 December 2020

Dr Eddie Jackson
Chief Executive Officer
Liverpool City Council
Locked Bag 7064
Liverpool BC NSW 1871

Attention: Masud Hasan

Dear Dr Jackson

MIXED USE PLANNING PROPOSAL: 1400-1480 ELIZABETH DRIVE, CECIL PARK

I refer to Liverpool City Council's correspondence of September 15, 2020 inviting Transport for NSW (TfNSW) to comment on the subject planning proposal to:

- amend the zoning from RU4 Primary Production Small Lots to IN2 Light Industrial and SP2 Infrastructure (Classified Road);
- establish a maximum FSR of 1:1; and
- amend the current 10ha minimum lot size to 2,000m² as per other IN2 zones in Liverpool.

It is noted that the documentation and plans placed on public exhibition post the Gateway Determination (31 August 2020), are similar to the pre-Gateway planning proposal that was referred to former Roads and Maritime Services for comment in April 2019. The exceptions are that the proposed site specific provisions for retail premises (via Schedule 1) are no longer included, and part of the site related to the M12 is now proposed to be rezoned as SP2 Infrastructure (Classified Road), with an amendment also the Land Reservation Acquisition Map.

TfNSW advises that no objection is raised to the above post gateway amendments to the planning proposal and reiterates the previous comments provided in the previous pre-Gateway submission of 31 October 2019 (**TAB A**). TfNSW also provides the following supplementary advice concerning the Elizabeth Drive and M12 projects:

- In relation to the SP2 (Classified Road) zoning and LRA map for the M12, TfNSW advises that the land reservation acquisition map reflects the current proposed acquisition for this motorway project. There shall be no permanent structures within the M12 corridor including underneath the viaduct.
- As Council would be aware, TfNSW released the strategic design for the Elizabeth Drive upgrade for community comment in March - April 2020. TfNSW have recently commenced the Concept Design and Environmental Assessment for this road project. TfNSW advises that the subject property is likely to be impacted due to the level differences and earthworks required, which is currently under investigation and not able to be quantified at present.

Transport for NSW

27-31 Argyle Street, Parramatta NSW 2150 | PO Box 973, Parramatta CBD NSW 2124
P 131782 | W transport.nsw.gov.au | ABN 18 804 239 602

Due to the likely level difference between the property and upgraded Elizabeth Drive, all access to/from the site should be restricted to Range Road via the proposed signalised intersection on Elizabeth Drive.

Thank you again for the opportunity of providing advice on the subject proposal. If it would assist, TfNSW can facilitate a meeting with Council and/or the proponent to discuss our comments. If you have any queries or wish to discuss this submission further, please don't hesitate to contact [REDACTED]

| Yours sincerely

[REDACTED]



06 May 2021

The General Manager
Liverpool Council
Shop R1, Ground Floor
33 Moore St
Liverpool NSW 2170

To: Mr Masud Hasan

Senior Strategic Planner

Re: Planning Proposal for 1400-1480 Elizabeth Dr, Cecil Park

Letter of Offer- Voluntary Planning Agreement ("VPA")

Dear Masud,

This letter constitutes an offer by Western Sydney Town Centre Pty Ltd ("the Owners") to enter into a VPA for the development of land located at 1400-1480 Elizabeth Dr, Cecil Park ("the Land"). It is envisaged that a final VPA will be negotiated at a later date subject to all the final terms and conditions.

The offer accompanies the Planning Proposal for the Land, submitted by the Owners which seek an amendment to the *Liverpool Local Environmental Plan 2008 (LLEP)*. Liverpool City Council is the determining authority for the Planning Proposal.

1. Summary of Planning Proposal

The Planning Proposal would facilitate, with subsequent development consent, the construction of the following (proposed development):

- An IN2 Light Industrial, retail and food development, approx. 75,000sqm GFA
- Adequate on site carparking
- An internal access road
- Landscape areas and setbacks to main roads

Western Sydney Town Centre Pty Ltd, GPO Box 5396, Sydney NSW 2001

The mandatory elements of the proposed VPA under Section 7.4 of the Environmental Planning and Assessment Act 1979 (EPA ACT) are set out below.

2. Description of the Land – Section 7.4(3)(a)

The VPA will apply to the Land and proposed development.

Located at 140-1480 Elizabeth Dr, Cecil Park, the Land is legally known as Lot 1-9 in Deposited Plan 1054778 and is under the ownership of Western Sydney Town Centre Pty Ltd ATF Western Sydney Town Centre Unit Trust. This entity would be the Developer under the VPA.

3. Description of the proposed change to the environmental planning instrument or the development to which the VPA applies- Section 7.3(3)(b)

The Planning Proposal seeks to amend the Land's zoning, FSR, height and minimum lot size controls under the LLEP 2008 to facilitate the future construction of the proposed development summarised above.

Specifically, the Planning Proposal seeks amendment of the following LLEP controls:

- **Zoning**
 - o - from RU4 to IN2 Light Industrial
 - o Part of the land from RU4 to SP2 Infrastructure
- **Floor Space Ratio** – maximum floor space ratio (FSR) to 1 : 1
- **Height of buildings** - increase the maximum height control to 24 m
- **Minimum Lot Size** - the minimum lot size control to 2,000 sqm from 10ha
- **Land Reservation Acquisition Map**- to be amended to facilitate acquisition of the M12 motorway corridor

The proposed development is subject to development consent and to be completed in accordance with the Planning Proposal prepared by Urbis and the accompanying reports and plans.

4. Nature and extent of the provision to be made by the developer, and the times and manner in which the provision is to be made – Section 7.3(3)(c)

The Owners propose that, if the Planning Proposal and a planning application for the Proposed Development are approved, the Owners will provide:

- Upgrade 233m of Range Rd from the proposed pedestrian crossings at the proposed signalised intersection of Range Rd and Elizabeth Drive (signalised intersection to be built by TfNSW) to the WSPT developed road section. Please see attached Range Rd plan.
- Carriageway width of approximately 12.8m and as a B-Double route.
- Industrial road with pavement design to industrial pavement standard.
- Other requirements of for industrial roads including, landscaping, kerb/guttering and footpath paving in accordance with to the Western Sydney Uniform Engineering Design Manual.
- Medium strip to the section of Range Rd up to the access road of the Land.
- Landscaping of the road reserve on the Western Side of Range Rd from Elizabeth Drive to the access road of the Land

Prior to the issue of an Occupation Certificate for the proposed development. It is intended that works will be undertaken within Council's road reserve concurrently to construction works being undertaken on the Land and will be completed prior to occupation of a building on the Land.

5. Exclusion of Section 7.11, 7.12 and 7.24 contributions – Section 7.4(3)(d)

The VPA will provide that Sections 7.11 and 7.12 of the EPA Act are to be excluded for Site1.

As the Land is not located within the NSW Department of Planning Infrastructure and Environment special contributions Aerotropolis area, Section 7.24 of the EPA Act will not apply to the proposed development.

6. Mechanisms for resolution of disputes – Section 7.4(3)(f)

A conventional dispute resolution provision will be included, providing for resolution of disputes by way of negotiation and/or mediation.

7. Enforcement of the VPA by a suitable means – Section 7.4(3)(g)

The VPA will provide for:

- Registration of the VPA on title to the Land, with an agreed mechanism for staged release of the VPA; and
- Provision of a bank guarantee (or bank guarantees) prior to commencement of works, with a value and mechanism for release to be determined having regard to the proposed construction programme for the works.

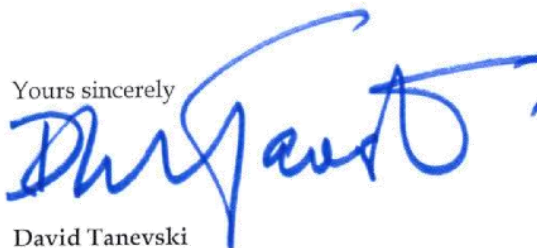
-

8. Next Steps

Western Sydney Town Centre Pty Ltd is grateful for the opportunity to work with the Council to achieve appropriate development outcomes for both the Land and the surrounding public domain.

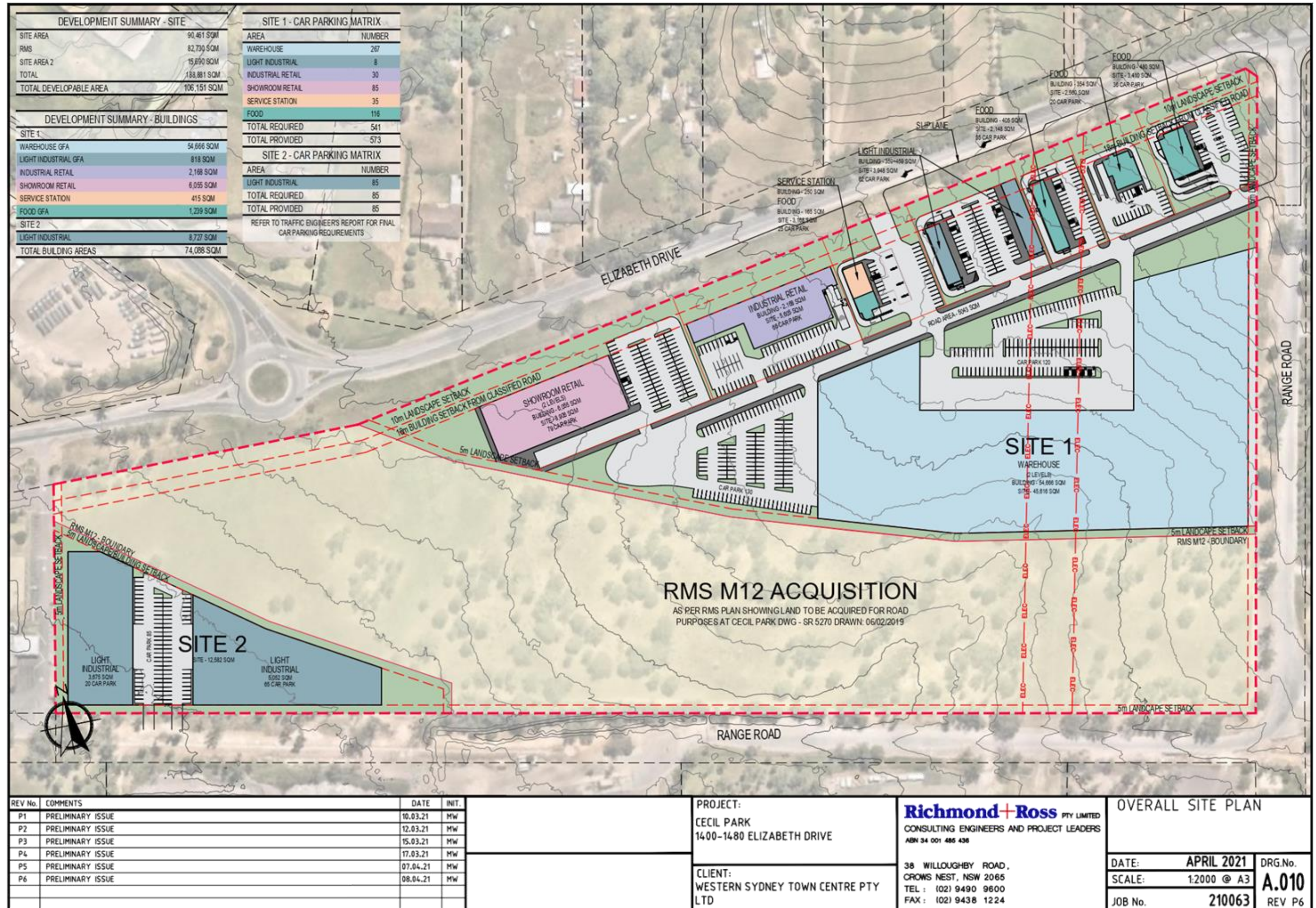
If you wish to discuss further, please contact Mr David Tanevski, Director of Western Sydney Town Centre Pty Ltd on 9238 3999 or by email david@kwc.com.au.

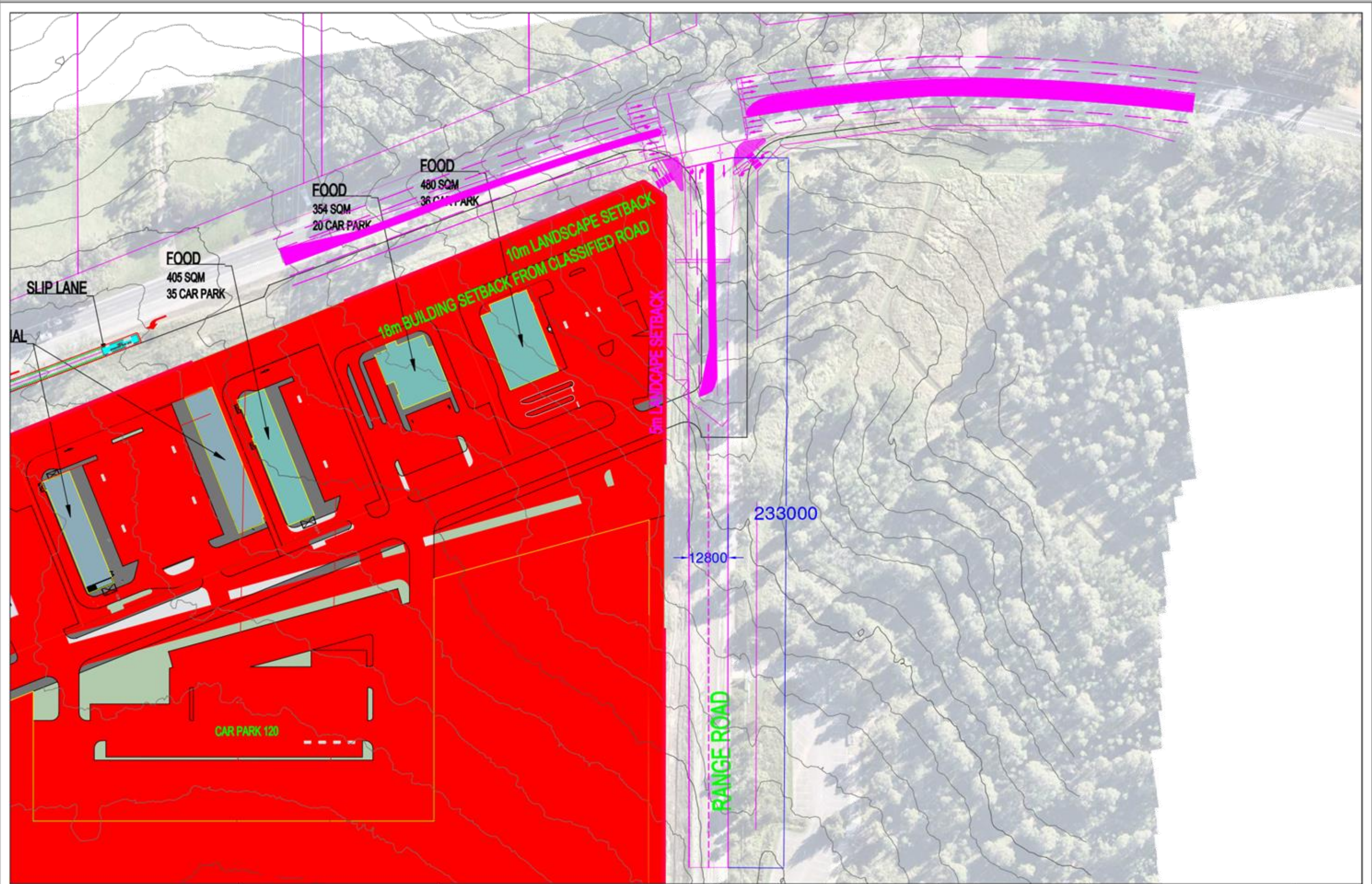
Yours sincerely



David Tanevski

Director, Western Sydney Town Centre Pty Ltd





MCLAREN TRAFFIC ENGINEERING
A division of RAMTRANS Australia Pty. Ltd.
Shop 7, 716-720 Old Princes Hwy, Sutherland NSW 2232
P : (02) 8355 2440
M : 0412 949 578
E : admin@mclarentraffic.com.au
www.mclarentraffic.com.au

CLIENT / Project:
Western Sydney Town Centre Pty Ltd
Project Address:
1450 Elizabeth Drive, Kemps Creek NSW 2178

Notes:
CONCEPT PLAN ONLY.
NOT FOR CONSTRUCTION.
Tested Using:
*AutoTURN 10
*ZWCAD 2019

Drawing Title:
MTE 2036 Elizabeth Drive /
Range Road Concept
Project No: 2020/0034
Drawing No: 2020-0034-02A

Revision	Date	Details
A	12/04/2021	Initial Concept





LIVERPOOL CONTRIBUTIONS PLAN 2009



Adopted: 14 December 2009

Amended: TBC

(incorporating amendment No.3)

Content Manager: 107975.2020



Liverpool Contributions Plan 2009

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1. Introduction

Liverpool continues to experience significant new urban development, which creates a need for additional public amenities and services. In order that the existing residents are not burdened with the cost of providing these public services and amenities it is necessary for new urban development to provide these at no cost to existing residents.

Section 7.11 of the *Environmental Planning and Assessment Act, 1979* (the Act) enables the Council to require new urban development to provide these public services and amenities at no cost to Council. In particular Section 7.12 enables the Council to require, as a condition of development consent, that land is dedicated or a cash contribution is made or both, for the provision of public services and amenities. Any such requirement must be in accordance with a contributions plan prepared by the Council.

The *Liverpool Contributions Plan 2009* provides information on the extent of anticipated new development, the extent of new public services and amenities needed to support the new development and the contributions that the new development must make to fund the public services and amenities.

Section 2 - Schedule of Contributions

This provides the monetary contribution rates for development in the various areas of the Liverpool LGA. There is a hierarchy of contributions levied under this plan. That is, a development may be levied for facilities that serve all of Liverpool (Citywide Facilities), a group of suburbs (District Facilities) and a particular suburb or release area (Local Facilities).

Section 3 - Administration

This provides background on S7.11 of the Act, details on how development will be levied contributions and when the contributions plan was adopted and subsequently amended.

Section 4 City Wide Planning Context, Development Trends and Nexus

This outlines how Council's vision for Liverpool, which is contained in Liverpool Directions, relates to the contributions plan. Further the section provides an outline on how this plan relates to *Liverpool Local Environment Plan 2008* and *Liverpool Development Control Plan 2008*. It also provides a guide on the scope of public services and amenities that are considered needed for residents in Liverpool. It also provides information on City Wide Development and Demographic Trends.

Sections 5 – 13

Sections 5 – 13 provide details on the actual facilities that contributions will fund, the nexus between development and facilities to be funded by contributions, the formulae for determining the contributions and a general comment on the timing of facilities. As *Liverpool Local Environmental Plan 2008* is amended to allow new urban areas to develop additional sections will be added.

The range of public services and amenities that are funded by developer contributions includes:

- **Community Facilities** - including multi-purpose community centres, libraries and cultural facilities.
- **Recreation Facilities** – including bushland reserves, outdoor passive facilities, Indoor and outdoor sporting facilities and bike paths.
- **Transport** – including various pedestrian, bike paths and traffic facilities, public transport facilities, frontage to public land uses and sub arterial roads.
- **Drainage** – including natural creek corridors, pipes, water treatment and detention basins.

2. Schedule of Contributions

Contributions are payable for development on land which is the subject of a Development Application in accordance with the following tables and subject to the provisions elsewhere in the contributions plan. In particular the contribution rates shown here are indexed in accordance with Section 3.7.6.

2.1 Established Areas

Table 2.1

Purpose	Lots > 450 sqm	Lots < 450 sqm	Multi dwelling housing			Aged / Disabled
			3 Bed +	2 Bed	1 Bed	
	Per Lot	Per Lot	Per Dwelling	Per Dwelling	Per Dwelling	Per person
Community Facilities						
City Library Extensions	\$167	\$161	\$161	\$120	\$62	\$45
Powerhouse	\$119	\$115	\$115	\$85	\$45	\$32
District	\$187	\$181	\$181	\$135	\$70	\$59
Recreation						
Whitlam Centre Extensions	\$245	\$238	\$238	\$176	\$92	\$77
District	\$695	\$673	\$673	\$499	\$260	\$217
Local	\$2,778	\$2,691	\$2,691	\$1,997	\$1,042	\$868
Other						
Administration	\$50	\$49	\$49	\$36	\$19	\$16
Total	\$4,241	\$4,108	\$4,108	\$3,048	\$1,590	\$1,313

The above rates are as at the September 2010 Quarter CPI.

The works index is 172.5.

The Established Areas includes the areas shown on the following map. It excludes the Liverpool City Centre, which is subject to *Liverpool Contributions Plan 2007 (Liverpool City Centre)*.

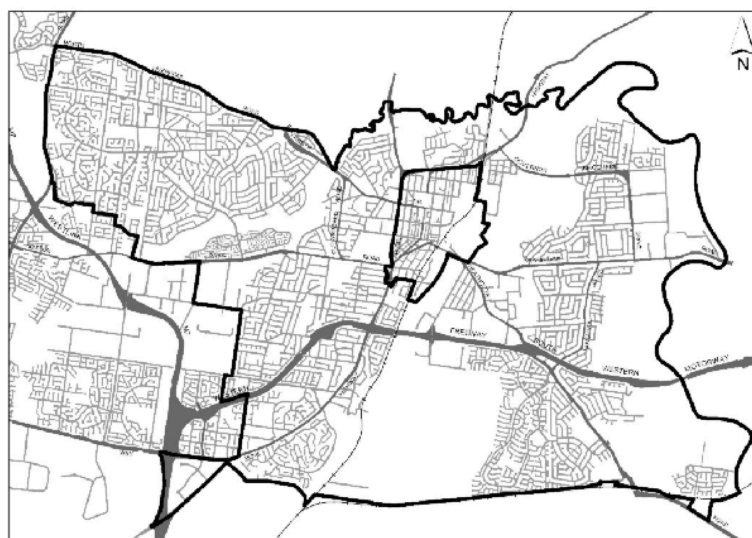


Figure 2.1 Established Areas Catchment Area

2.2 Pleasure Point East

Table 2.2

Purpose	Dwellings in River Heights Rd	Dwellings in River View Rd	Dwellings in Green St	Dwellings in Pleasure Point Rd
Community Facilities	Per dwelling	Per dwelling	Per dwelling	Per dwelling
City Library Extensions	\$167	\$167	\$167	\$167
Powerhouse	\$119	\$119	\$119	\$119
Recreation				
Whitlam Centre Extensions	\$245	\$245	\$245	\$245
Transport				
Local Streets	\$14,782	\$3,273	\$2,718	
Drainage				
Inter-allotment Drainage	\$2,623	\$2,623	\$2,623	\$2,623
Other				
Administration	\$64	\$64	\$64	\$64
Professional & Legal Fees	\$228	\$228	\$228	\$228
Plan Establishment Costs	\$392	\$392	\$392	\$392
Total	\$18,620	\$7,111	\$6,556	\$3,838

The above rates are as at the September 2010 Quarter CPI.

The works index is 172.5.

Pleasure Point East includes the areas shown on the following map.

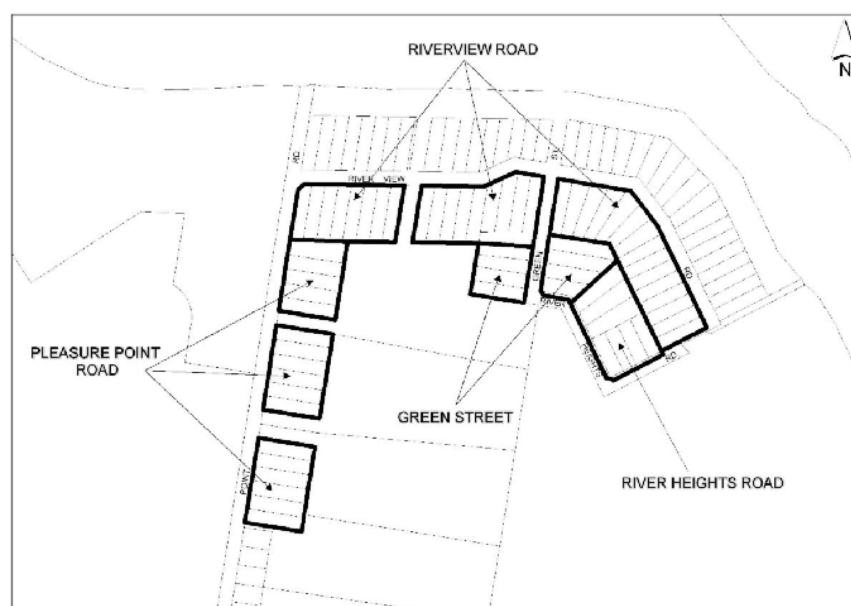


Figure 2.2 Pleasure Point East Catchment Area

2.3 Pleasure Point

Table 2.3

Purpose	Lots > 450 sqm	Lots < 450 sqm
	Per dwelling	Per dwelling
Community Facilities		
City Library Extensions	\$193	\$172
Powerhouse	\$137	\$122
District	\$187	\$95
Recreation		
Whitlam Centre Extensions	\$284	\$253
Local - Land	\$1,416	\$1,263
Local - Works	\$1,902	\$1,697
Transport		
Local - Land	\$10,586	\$9,480
Local - Works	\$4,906	\$4,394
Other		
Administration	\$280	\$250
Total	\$19,891	\$17,725

The above rates are as at the September 2010 Quarter CPI.

The works index is 172.5. The land index is 1.

Pleasure Point includes the areas shown on the following map.

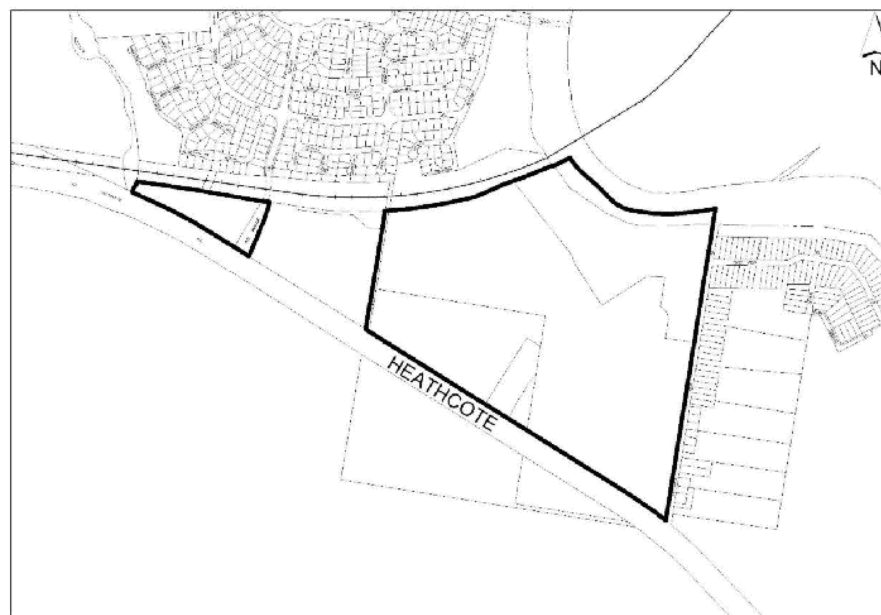


Figure 2.3 Pleasure Point Catchment Area

2.4 Hoxton Park, Carnes Hill and Prestons

Table 2.4

Purpose	Lots > 450 sqm	Lots < 450 sqm	Multi dwelling housing			Aged / Disabled
			3 Bed +	2 Bed	1 Bed	
	Per Lot	Per Lot	Per Dwelling	Per Dwelling	Per Dwelling	Per person
Community Facilities						
City Library Extensions	\$193	\$172	\$172	\$120	\$94	\$52
Powerhouse	\$137	\$122	\$122	\$85	\$67	\$37
District - Land	\$107	\$95	\$95	\$66	\$52	\$29
District - Works	\$1,105	\$986	\$986	\$687	\$538	\$299
Local - Works	\$652	\$582	\$582	\$405	\$317	\$176
Recreation	Per Lot	Per Lot	Per Dwelling	Per Dwelling	Per Dwelling	Per person
Whitlam Centre Extensions	\$284	\$253	\$253	\$176	\$138	\$77
District Recreation - Land	\$1,290	\$1,150	\$1,150	\$802	\$628	\$349
District Recreation - Works	\$1,043	\$930	\$930	\$648	\$507	\$282
Local Recreation - Land	\$8,110	\$7,233	\$7,233	\$5,041	\$3,945	\$2,192
Local Recreation - Works	\$4,434	\$3,954	\$3,954	\$2,756	\$2,157	\$1,198
Transport	Per Lot	Per Lot	Per Dwelling	Per Dwelling	Per Dwelling	Per person
District - Land	\$826	\$740	\$740	\$493	\$407	\$223
District - Works	\$2,199	\$1,969	\$1,969	\$1,313	\$1,083	\$594
Local (select sub catchment)						
East of Bernera Road - Land	\$1,868	\$1,673	\$1,673	\$1,115	\$920	\$505
East of Bernera Road - Works	\$2,057	\$1,842	\$1,842	\$1,228	\$1,013	\$556
West of Bernera Road - Land	\$1,867	\$1,672	\$1,672	\$1,114	\$919	\$505
West of Bernera Road - Works	\$1,433	\$1,284	\$1,284	\$856	\$706	\$387
East of Cowpasture Road - Land	\$2,106	\$1,886	\$1,886	\$1,258	\$1,038	\$569
East of Cowpasture Road - Works	\$1,187	\$1,063	\$1,063	\$709	\$585	\$321
West of Cowpasture Road - Land	\$2,625	\$2,350	\$2,350	\$1,567	\$1,293	\$709
West of Cowpasture Road - Works	\$2,605	\$2,333	\$2,333	\$1,555	\$1,283	\$704
Nineteenth Avenue - Land	\$3,117	\$2,792	\$2,792	\$1,861	\$1,535	\$843
Nineteenth Avenue - Works	\$2,635	\$2,360	\$2,360	\$1,573	\$1,298	\$712
Whitford Road South - Land	\$1,981	\$1,774	\$1,774	\$1,182	\$975	\$535
Whitford Road South - Works	\$1,426	\$1,277	\$1,277	\$851	\$702	\$385
Drainage	Per sqm	Per sqm	Per sqm	Per sqm	Per sqm	Per sqm
District - Land	\$4.32	\$4.98	\$4.98	\$4.98	\$4.98	\$4.98
District - Works	\$1.21	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40
Local (select sub catchment)						
Prestons Central - Land	\$2.59	\$2.99	\$2.99	\$2.99	\$2.99	\$2.99
Prestons Central - Works	\$4.23	\$4.88	\$4.88	\$4.88	\$4.88	\$4.88
Prestons West - Land	\$1.57	\$1.81	\$1.81	\$1.81	\$1.81	\$1.81
Prestons West - Works	\$4.08	\$4.71	\$4.71	\$4.71	\$4.71	\$4.71
West of Cabramatta Creek - Land	\$2.10	\$2.42	\$2.42	\$2.42	\$2.42	\$2.42
West of Cabramatta Creek - Works	\$3.94	\$4.55	\$4.55	\$4.55	\$4.55	\$4.55
Other	Per Lot	Per Lot	Per Dwelling	Per Dwelling	Per Dwelling	Per person
Streetscape - Land	\$252	\$225	\$225	\$157	\$123	\$68
Streetscape - Works	\$118	\$105	\$105	\$73	\$57	\$32
Administration	\$280	\$250	\$250	\$174	\$136	\$76
Professional and Legal Fees	\$251	\$224	\$224	\$156	\$122	\$68

Purpose	Schools	Business & Non Res
Drainage	Per sqm	Per sqm
District - Land	\$4.32	\$6.31
District - Works	\$1.21	\$1.77
Local (select sub catchment)		
Prestons Central - Land	\$2.59	\$3.79
Prestons Central - Works	\$4.23	\$6.18
Prestons West - Land	\$1.57	\$2.29
Prestons West - Works	\$4.08	\$5.96
West of Cabramatta Creek - Land	\$2.10	\$3.07
West of Cabramatta Creek - Works	\$3.94	\$5.76
Other		
Streetscape - Land	\$0.56	\$0.56
Streetscape - Works	\$0.26	\$0.26
Administration	\$0.26	\$0.26
Professional and Legal Fees	\$0.62	\$0.62

The above rates are as at the September 2010 Quarter CPI.

The works index is 172.5. The land index is 1.

Hoxton Park, Carnes Hill & Prestons includes the areas shown on the following map.

Refer to Section 9 for sub catchments within Hoxton Park, Carnes Hill & Prestons.

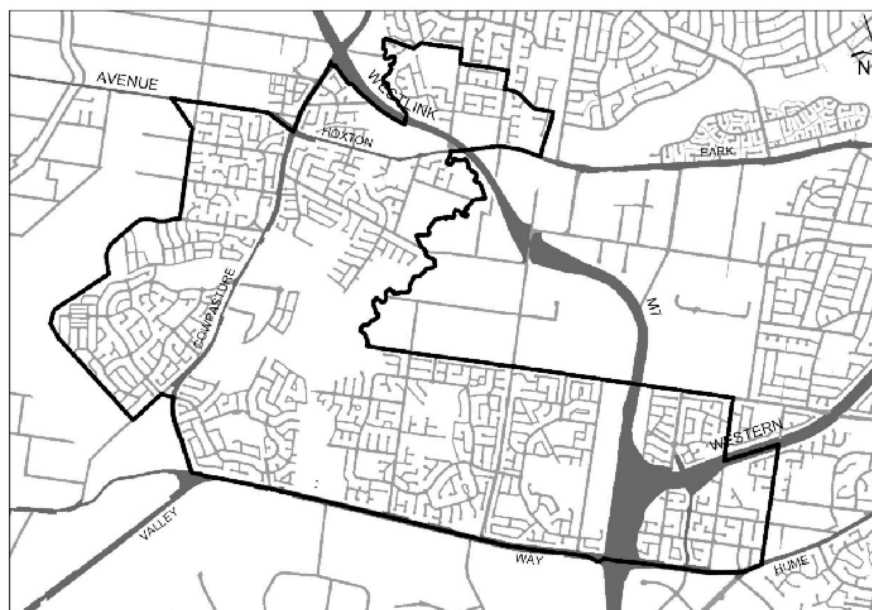


Figure 2.4 Hoxton Park, Carnes Hill & Prestons Catchment Area

2.5 Cecil Hills

Table 2.5

Purpose	Lots > 450 sqm	Lots < 450 sqm	Multi dwelling housing			Aged / Disabled
			3 Bed +	2 Bed	1 Bed	
	Per Lot	Per Lot	Per Dwelling	Per Dwelling	Per Dwelling	Per person
Community Facilities						
City Library Extensions	\$193	\$172	\$172	\$120	\$94	\$52
Powerhouse	\$137	\$122	\$122	\$85	\$67	\$37
District - Land	\$107	\$95	\$95	\$66	\$52	\$29
District - Works	\$1,105	\$986	\$986	\$687	\$538	\$299
Local - Works	\$704	\$628	\$628	\$438	\$343	\$190
Recreation						
Whitlam Centre Extensions	\$284	\$253	\$253	\$176	\$138	\$77
District - Land	\$1,290	\$1,150	\$1,150	\$802	\$628	\$349
District - Works	\$1,043	\$930	\$930	\$648	\$507	\$282
Local - Works	\$2,778	\$2,691	\$2,691	\$1,997	\$1,042	\$751
Drainage	Per sqm	Per sqm	Per sqm	Per sqm	Per sqm	Per sqm
District - Land	\$4.32	\$4.98	\$4.98	\$4.98	\$4.98	\$4.98
District - Works	\$1.21	\$1.40	\$1.40	\$1.40	\$1.40	\$1.40
Other	Per Lot	Per Lot	Per Dwelling	Per Dwelling	Per Dwelling	Per person
Administration	\$280	\$250	\$250	\$174	\$136	\$136

The above rates are as at the September 2010 Quarter CPI.

The works index is 172.5. The land index is 1.

Cecil Hills includes the areas shown on the following map.



Figure 2.5 Cecil Hills Catchment Area

2.6 Elizabeth Hills

Table 2.6

Purpose	Lots > 450 sqm	Lots < 450 sqm	Multi dwelling housing			Aged / Disabled
			3 Bed +	2 Bed	1 Bed	
	Per Lot	Per Lot	Per Dwelling	Per Dwelling	Per Dwelling	Per person
Community Facilities						
City Library Extensions	\$193	\$172	\$172	\$120	\$94	\$52
Powerhouse	\$137	\$122	\$122	\$85	\$67	\$37
District - Land	\$107	\$95	\$95	\$66	\$52	\$29
District - Works	\$1,105	\$986	\$986	\$687	\$538	\$299
Local - Works	\$704	\$628	\$628	\$438	\$343	\$190
Recreation						
Whitlam Centre Extensions	\$284	\$253	\$253	\$176	\$138	\$77
District - Land	\$1,290	\$1,150	\$1,150	\$802	\$628	\$349
District - Works	\$1,043	\$930	\$930	\$648	\$507	\$282
Other						
Administration	\$280	\$250	\$250	\$174	\$136	\$76
Total	\$5,143	\$4,587	\$4,587	\$3,197	\$2,502	\$1,390

The above rates are as at the September 2010 Quarter CPI.

The works index is 172.5. The land index is 1.

Elizabeth Hills includes the areas shown on the following map.



Figure 2.6 Elizabeth Hills Catchment Area

2.7 Prestons Industrial Area

Subdivision

Table 2.7a applies to land, which is the subject of a Development Application for the purpose of subdivision where the intention is to prepare the land for subsequent development and/or to on-sell the properties to industrial companies and/or future industrial land developers. This table does not apply to Development Applications, which involve the construction of buildings and/or the use of the land for any purpose in cases where the land has not been the subject of a previous approval involving developer contributions. In such cases, please refer to Table 2.7c.

Table 2.7a

Purpose	Per Sqm
Transport	
Local (select sub catchment)	
East of M7 - Works	\$0.96
West of M7 - Land	\$0.86
West of M7 - Works	\$0.73
West of M7 & Road A2 East of Bernera Road - Land	\$5.34
West of M7 & Road A2 East of Bernera Road - Works	\$2.94
West of M7 & Road B East of Bernera Road - Land	\$8.46
West of M7 & Road B East of Bernera Road - Land	\$4.50
West of M7 & Road C West of Kookaburra Road - Land	\$34.33
West of M7 & Road C West of Kookaburra Road - Works	\$19.75
West of M7 & Road D East of Kookaburra Road - Land	\$33.42
West of M7 & Road D East of Kookaburra Road - Works	\$15.78
Drainage	
Local (select sub catchment)	
East of M7 - Land	\$1.57
East of M7 - Works	\$6.35
West of M7 - Land	\$1.94
West of M7 - Works	\$6.33
North of M7 - Land	\$9.12

Buildings (where contribution has been paid for subdivision)

Table 2.7b is applicable to development applications for the construction of buildings and/or the use of land where developer contributions in accordance with Table 1 have been paid as a result of subdivision approved after this Plan came into force.

Table 2.7b

Purpose	Per Sqm
Transport	
District - Land	\$1.21
District - Works	\$3.22
Drainage	
District - Land	\$6.31
District - Works	\$1.77
Other	
Landscape - Buffer Land	\$0.91
Landscape - Buffer Works	\$0.08
Administration	\$0.27
Professional and Legal Fees	\$0.56

Buildings (where contribution for subdivision has not been paid)

Table 2.7c is applicable to development applications for the construction of buildings and/or the use of land where no previous developer contributions have been paid.

Table 2.7c

Purpose	Per Sqm
Transport	
District - Land	\$1.21
District - Works	\$3.22
Local (select sub catchment)	
East of M7 - Works	\$0.96
West of M7 - Land	\$0.86
West of M7 - Works	\$0.73
West of M7 & Road A2 East of Bernera Road - Land	\$5.34
West of M7 & Road A2 East of Bernera Road - Works	\$2.94
West of M7 & Road B East of Bernera Road - Land	\$8.46
West of M7 & Road B East of Bernera Road - Land	\$4.50
West of M7 & Road C West of Kookaburra Road - Land	\$34.33
West of M7 & Road C West of Kookaburra Road - Works	\$19.75
West of M7 & Road D East of Kookaburra Road - Land	\$33.42
West of M7 & Road D East of Kookaburra Road - Works	\$15.78
Drainage	
District - Land	\$6.31
District - Works	\$1.77
Local (select sub catchment)	
East of M7 - Land	\$1.57
East of M7 - Works	\$6.35
West of M7 - Land	\$1.94
West of M7 - Works	\$6.33
North of M7 - Land	\$9.12
Other	
Landscape - Buffer Land	\$0.91
Landscape - Buffer Works	\$0.08
Administration	\$0.27
Professional and Legal Fees	\$0.56

The above rates are as at the September 2010 Quarter CPI.

The works index is 172.5. The land index is 1.

Prestons Industrial Area includes the areas shown on the following map.

Refer to Section 10 for sub catchments within Prestons Industrial Area.

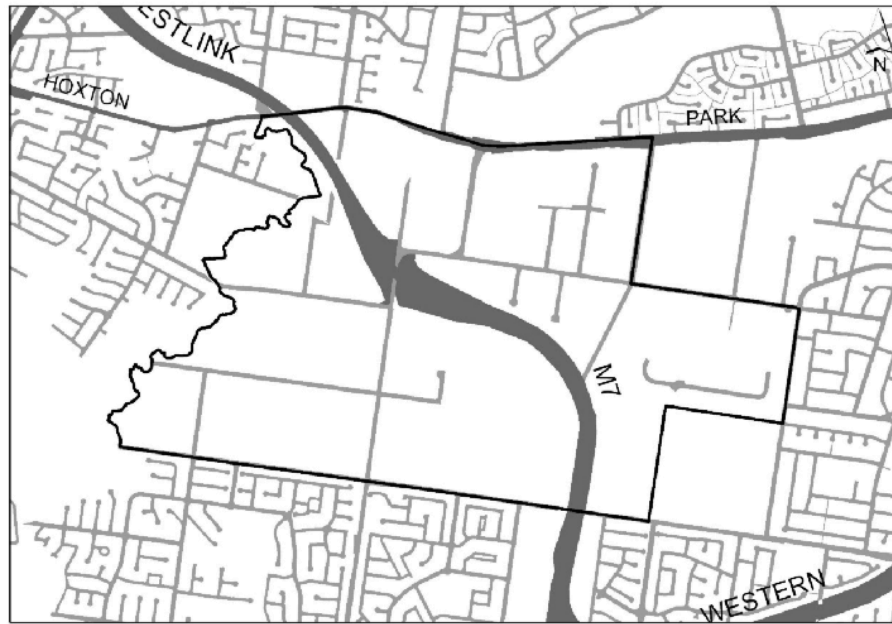


Figure 2.7 Prestons Industrial Area Catchment Area

2.8 Middleton Grange

Table 2.8

Purpose	Lots > 450 sqm	Lots < 450 sqm	Multi dwelling housing			Aged / Disabled
			3 Bed +	2 Bed	1 Bed	
	Per Lot	Per Lot	Per Dwelling	Per Dwelling	Per Dwelling	Per person
Community Facilities						
City Library Extensions	\$193	\$172	\$172	\$120	\$94	\$52
Powerhouse	\$137	\$122	\$122	\$85	\$67	\$37
District - Land	\$107	\$95	\$95	\$66	\$52	\$29
District - Works	\$1,105	\$986	\$986	\$687	\$538	\$299
Local - Land	\$48	\$43	\$43	\$30	\$23	\$13
Local - Works	\$704	\$628	\$628	\$438	\$343	\$190
Recreation						
Whitlam Centre Extensions	\$284	\$253	\$253	\$176	\$138	\$77
District - Land	\$1,290	\$1,150	\$1,150	\$802	\$628	\$349
District - Works	\$1,043	\$930	\$930	\$648	\$507	\$282
Local Recreation - Land	\$6,817	\$6,080	\$5,423	\$3,371	\$1,640	\$1,842
Local Recreation - Works	\$2,223	\$1,982	\$1,768	\$1,099	\$535	\$601
Transport						
District - Land	\$826	\$740	\$740	\$493	\$407	\$223
District - Works	\$2,199	\$1,969	\$1,969	\$1,313	\$1,083	\$594
Local - Land	\$1,311	\$1,174	\$1,174	\$783	\$646	\$354
Local - Works	\$3,751	\$3,359	\$3,359	\$2,239	\$1,847	\$1,014
Drainage (see below)						
Other						
Administration	\$254	\$254	\$254	\$254	\$254	\$69
Professional services	\$120	\$120	\$120	\$120	\$120	\$32
Implementation	\$1,204	\$1,204	\$1,204	\$1,204	\$1,204	\$325
Total	\$23,614	\$21,261	\$20,389	\$13,927	\$10,124	\$6,382

Drainage per dwelling	Land in 15 Dw / Ha	Land in 23 Dw / Ha	Land in 30 Dw / Ha	Aged Persons
	Per sqm	Per sqm	Per sqm	Per sqm
Drainage - Land	\$9.96	\$14.56	\$14.56	\$11.50
Drainage - Works	\$4.79	\$7.00	\$7.00	\$5.52

Purpose	Schools	Business & Non Res
Drainage	Per sqm	Per sqm
Local - Land	\$9.96	\$14.56
Local - Works	\$4.79	\$7.00
Other		
Administration	\$0.56	\$0.56
Professional services	\$0.27	\$0.27
Implementation	\$2.68	\$2.68

The above rates are as at the September 2010 Quarter CPI.

The works index is 172.5. The land index is 1.

Middleton Grange includes the areas shown on the following map.



Figure 2.8 Middleton Grange Catchment Area

2.9 Range Road Precinct

Table 2.9

Purpose	North segment	South segment
Transport and Administration	For contributing development (1 lot)	Per metre of frontage
Range Road - Works	\$1,824,000	\$2,040
Plan Administration	\$27,360	\$31.43
Total	\$1,851,360	\$2,071.43

The above rates are as at the March 2021 Quarter CPI.

Range Road includes the area shown on the following map.

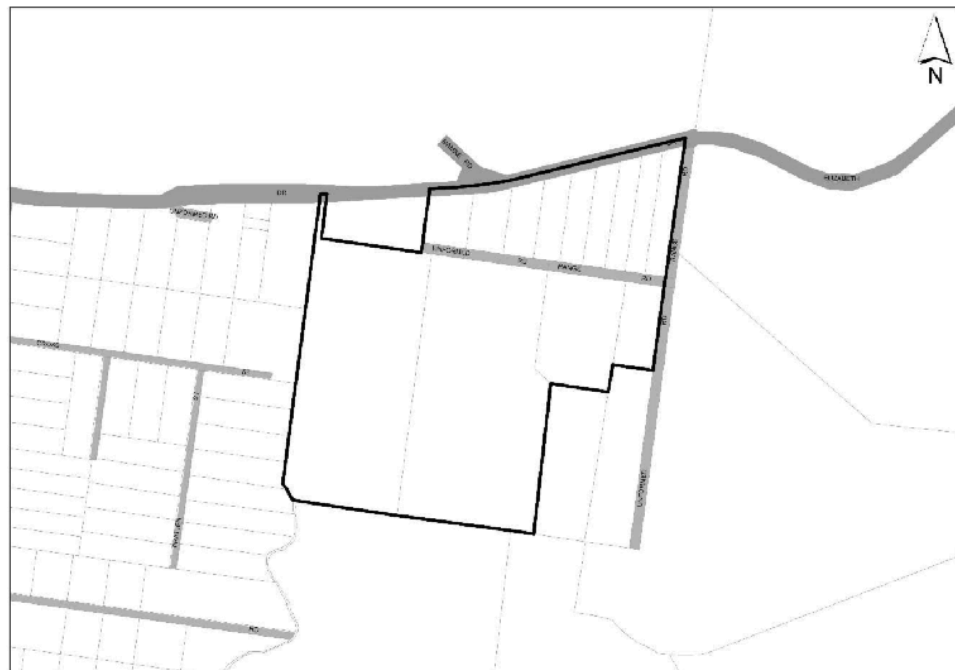


Figure 2.9 Range Road Precinct Catchment Area

2.10 Rural Areas

Table 2.10

Purpose	Additional lots	Dual Occupancy Dwellings		
		3 Bed +	2 Bed	1 Bed
		Per Dwelling	Per Dwelling	Per Dwelling
Community Facilities				
City Library Extensions	\$177	\$161	\$120	\$94
	\$126	\$115	\$85	\$67
Powerhouse				
Recreation				
	\$261	\$238	\$176	\$138
Whitlam Centre Extensions				
Other				
Administration	\$7	\$6	\$5	\$4
Total	\$570	\$520	\$386	\$302

The above rates are as at the September 2010 Quarter CPI.

The works index is 172.5. The land index is 1.

Rural Areas include the areas shown on the following map.

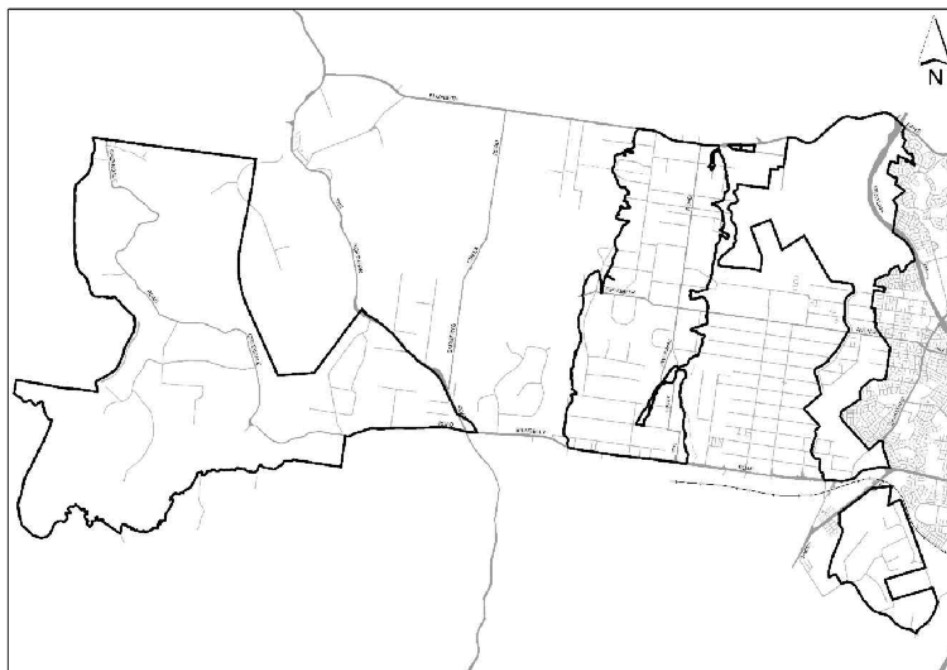


Figure 2.10 Rural Areas Catchment Area

2.11 Contributions to be levied

Contribution rates for development types other than conventional lots are calculated using the formulae contained within this plan. The conventional lot is the basis for most formulae. Contributions for development types other than conventional lots must be calculated individually based on the number of bedrooms, site area, number of residents etc. The actual amounts are not stated in this schedule, as each development is unique in terms of these factors.

Aged and Disabled Persons Housing Development

This plan seeks to levy contributions for Housing for Seniors or People with a Disability as defined under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004. The formulae for such contributions are contained within various sections of the plan.

Developer contributions are proposed to be levied for aged and disabled persons housing development on the following grounds:

- The standard nexus between the new population and the demand for additional services.
- Older and disabled people will be future users of the citywide community and recreation facilities identified in this plan. and
- Residents' requirements for citywide community and recreation facilities cannot be met from services provided on site.

The contribution formula for Housing for Seniors or People with a Disability shows that such facilities will be levied relative to the number of persons anticipated for the development.

2.12 Credits for existing development

When calculating contributions for a particular development, other than in an industrial zone, a contribution credit equivalent of one conventional lot is given for each lot, which exists prior to subdivision or development. The basis of this practice is that each existing lot has an existing dwelling (or the potential to construct it) and no opportunity exists to levy contributions retrospectively. This practice also applies when recently created residential lots are re-subdivided or developed in some other form.

Where an existing dwelling is located over two or more small lots, these will be considered as one conventional lot.

3. Administration

3.1 Name of Plan

This plan is called *Liverpool Contributions Plan 2009*.

This Contributions Plan has been prepared in accordance with the provisions of Section 7.11 of the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*.

The contributions plan consists of this document and a series of maps entitled *Liverpool Contributions Plan 2009 Infrastructure Map*. The maps match the maps contained in *Liverpool Local Environmental Plan 2008*.

3.2 Applies to

This Contributions Plan applies to all land in Liverpool except that those areas covered by:

- *Liverpool Contributions Plan 2018 (Liverpool City Centre)*
- *Liverpool Contributions Plan 2008 (Edmondson Park)*
- *Liverpool Contributions Plan 2014 – Austral and Leppington North Precincts*
- *Liverpool Contributions Plan 2014 – East Leppington*
- *Liverpool Contributions Plan 2018 – Established Areas*
- Land identified on the land application map under *State Environmental Planning Policy (Western Sydney Aerotropolis) 2020*.

3.3 Purpose of Plan

The purpose of the Contributions Plan is to:

- (a) Provide an administrative framework under which specific public facilities strategies may be implemented and coordinated,
- (b) Ensure that adequate public facilities are provided for as part of any new development,
- (c) Authorise the council to impose conditions under *S7.11 of the Environmental Planning and Assessment Act 1979* when granting consent to development on land to which this plan applies,
- (d) Provide a comprehensive strategy for the assessment, collection, expenditure, accounting and review of development contributions on an equitable basis,
- (e) Ensure that the existing community is not burdened by the provision of public amenities and public services required as a result of future development,
- (f) Enable the council to be both publicly and financially accountable in its assessment and administration of the contributions plan.

3.4 Adoption of Contributions Plan

Council adopted the plan on 14 December 2009. The plan originally came into force on 15 December 2010. The value of works and land is at the September 2010 Quarter. The CPI for this quarter was 172.5.

Amendments to Contributions Plan

Liverpool Contributions Plan 2009 has been amended as follows:

Liverpool Contributions Plan 2009 (15 December 2020 [inc Amendment 3](#))

<u>No</u>	<u>Adoption date</u>	<u>Amendment date</u>	<u>Description of Amendment</u>
1	10 June 2020	10 June 2020	Enacted Council resolutions of 29 April 2020 to clarify CDC and contributions; remove city wide facilities and update clause references to the Act and implement Covid-19 response.
2	27 October 2020	15 December 2020	Remove land to which State Environmental Planning Policy (Western Sydney Aerotropolis) 2020 from the Plan and minor housekeeping amendment to clarify relationship to other contributions plans.
3	TBC	TBC	Include new section for Range Road precinct to support changes to the zoning and development standards applying to the precinct..

Previous Contributions Plans

Liverpool Contributions Plan 2009 replaces Liverpool Contributions Plan 2001.

3.5 Relationship to other Plans

The land to which this contributions plan applies is also subject to the following plans:

- *Liverpool Local Environmental Plan 2008.*
- *Liverpool Development Control 2008.*

3.6 Types of Development to be levied

Council will levy all development in Liverpool, whether approved by a development consent or complying development certificate, which generates the need for additional amenities, facilities and services, which the Council provides. Development includes subdivision, new additional dwellings (except secondary dwellings) and non-residential development.

Development approved pursuant to *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* will be levied development contributions in accordance with the Contributions Plan. Self contained dwellings and in-fill self-care housing (as defined in the policy) will be levied.

3.7 Payment of Contributions

3.7.1 Levying of Contributions

Council will require, as a condition of development consent (on a development application or complying development certificate), the payment of a monetary contribution and/or the dedication of land for the provision of public facilities specified in this Contributions Plan, from development, which it considers will contribute to the need for those facilities. The Contributions Plan applies to applications determined after the plan comes into force.

Contributions for subdivisions will be calculated according to the number of dwellings proposed on the allotment (with the exclusion of drainage and stormwater, which will be based on site area). Should the ultimate number of dwellings proposed on that allotment increase, post sub-division development consent, then contributions for additional dwellings must be paid to Council.

Council requires contributions to be satisfied in full, as follows:

Development applications involving subdivision only

Monetary contributions are required to be paid prior to the release of the Subdivision Certificate whether by Council or a Private Certifier (in the case of strata subdivision). Any dedication of land to

Council, in lieu of a monetary contribution, shall be shown on the plan of subdivision.

Development applications involving building work only

Monetary contributions shall be paid to Council prior to the issuing of the Construction Certificate, whether by Council or a Private Certifier. Dedication of land to Council, such as road widening, in lieu of monetary contribution, shall be shown on a plan of subdivision, to be registered prior to the issue of an Occupation Certificate.

Development applications involving subdivision and building work (for example, dual occupancy and integrated housing)

Monetary contributions are required to be paid to Council prior to the release of the Construction Certificate or Subdivision Certificate, whichever occurs first, whether by Council or a Private Certifier. Any dedication of land to Council, in lieu of monetary contribution, shall be shown on a plan of subdivision, to be registered prior to issue of an Occupation Certificate.

Development Applications where no building works are proposed

Monetary contributions are required to be paid to Council prior to occupation / commencement of the development. Any dedication of land to Council, in lieu of monetary contribution, shall be shown on a plan of subdivision to be registered prior to issue of an Occupation Certificate.

Complying Development Certificates and Principal Certifying Authorities

In accordance with Cl 146 of the *EP&A Regulation 2000*, a certifying authority must not issue a construction certificate for building work or subdivision work under a development consent unless it has verified that each condition requiring the payment of levies has been satisfied.

In accordance with Cl 136L of the *EP&A Regulation 2000*, a certifying authority must not issue a complying development certificate for work unless it has included a condition requiring payment of contributions prior to commencement of work.

In particular, the certifier must ensure that the applicant provides a receipt(s) confirming that levies have been fully paid and copies of such receipts must be included with copies of the certified plans provided to the Council in accordance with Cl142(2) of the of the *EP&A Regulation 2000*. Failure to follow this procedure may render such a certificate invalid. The only exceptions to the requirement are where a works in kind, material public benefit, dedication of land or deferred payment arrangement has been agreed by the Council.

In such cases, Council will issue a letter confirming that an alternative payment method has been agreed with the applicant.

Landcom

Landcom is not required to submit final subdivision plans to Council for certification. Rather, subdivision plans are deposited directly with the Land Titles Office. Contributions (monetary, material public benefits and land transfer) shall be paid by Landcom to Council prior to the registration of subdivision plans. Any dedication of land to Council, in lieu of monetary contribution, shall be shown on the plan of subdivision.

Covid-19 Response

For Development Applications lodged or approved between 16 April 2020 and 31 December 2020 and for Section 4.55 modifications lodged in the same period which seek to modify the relevant contributions condition of a development consent for which any contributions have not yet been paid, 50% of the contribution can be paid prior to the issue of a construction certificate with the remaining 50% payable prior to the issue of the first occupation certificate. Any applications during this period that include subdivision must have all contributions paid prior to the issue of the Subdivision Certificate.

For such applications, Council will waive the requirement to have an unconditional bank guarantee in

place for the duration of the deferral.

3.7.2 Deferred Payments

Council will allow payment of contributions to be deferred in the following cases only:

- Where the applicant has the intention and ability to dedicate land or provide a material public benefit in part or to full satisfaction of a condition imposed by development consent, or
- In other circumstances, to be outlined in writing by the applicant and determined formally by Council on the merits of the case.

Deferred payments as outlined above are acceptable only where an unconditional bank guarantee is provided for the amount deferred. Bank guarantees will be accepted on the following conditions:

- The bank guarantee must carry specific wording, for example, "drainage contributions for Stage 3".
- The bank guarantee will be for the contribution amount plus the estimated amount of compound interest foregone by Council for the anticipated period of deferral. (Refer to formula in section 3.7.3).
- Council may call up the bank guarantee at any time without reference to the applicant, however, the guarantee will generally be called up only when cash payment has not been received, and land is not dedicated or material public benefit not provided by the end of the period of deferral.
- The period of deferral must be for a limited time only as agreed where land is to be dedicated or a material public benefit is to be provided. In merit cases, the period of deferral will be as approved by Council. The period of deferral may be extended subject to providing a renewed bank guarantee, which includes anticipated future interest.
- Council will discharge the bank guarantee when payment is made in full by cash payment, land transfer or by completion of works in kind.

For Development Applications lodged or approved between 16 April 2020 and 31 December 2020 and for Section 4.55 modifications lodged in the same period which seek to modify the relevant contributions condition of a development consent for which any contributions have not yet been paid, a bank guarantee for the deferred amount is not required.

3.7.3 Formula for Bank Guarantee Amounts

The following formula to be applied to all bank guarantees for contributions is:

Guarantee Amount = $P + P (C \times Y)$, where:

P = Contribution due.

CI = Compound interest rate comprised of Council's estimate over the period plus 3 percent (allowance for fluctuations).

Y = Period of deferral (years).

3.7.4 Method of Payment

Contributions shall only be made by way of monetary contribution and will only be accepted in cash or by bank cheque.

Works in Kind and Transfer of Land

Applicants are encouraged to provide works in kind and transfer land identified in the contributions plan in conjunction with the development of land. However the works and land will not be offset against contributions payable for individual applications.

Where works and / or land identified in the contributions plan are proposed to be provided in conjunction with the development Council will reimburse the developer for the cost of the works in accordance with Council's *Developer Contributions Works in Kind Policy*.

Where land, which is the subject of a development application contains land identified for acquisition under this Contributions Plan, Council may as a condition of consent require that land to be dedicated free of charge to Council. Monetary contributions will be adjusted accordingly to reflect the value of land to be dedicated in lieu of payment of cash.

3.7.5 Credit for Existing Development

When calculating contributions for a particular development, a contribution credit equivalent of one conventional allotment is given for each allotment, which exists prior to subdivision or development. The basis of this practice is that each existing lot has an existing dwelling (or potential to construct) and no opportunity exists to levy contributions retrospectively. This practice also applies when recently created residential lots are re-subdivided or developed to the same dwelling type. Where an existing dwelling is located over two or more lots, these will be considered as one conventional lot, for the purposes of calculating applicable contributions.

3.7.6 Adjustment to Contribution Rates

The monetary contribution rates shown in Section 2 - Schedule of Contributions, are to be adjusted in accordance with the provisions set out below at the time of imposing a condition on a development consent requiring payment of the monetary contribution and again at the time that the monetary contribution is to be paid pursuant to the condition imposed on the development consent.

The adjusted contribution rates will be shown on Council's Web Page and updated quarterly.

This is distinct from Section 3.8, which deals with future reviews of the contributions plan. Future reviews will not affect any consent granted in accordance with this contributions plan.

Works, Administration, Professional and Legal Fees

The works, administration, professional and legal fee components of the monetary contributions rates set out in this plan are adjusted in accordance with the formula below headed **"Contribution at time of development consent"** at the time of imposing a condition on a development consent requiring payment of the monetary contribution to reflect quarterly variations in the *Consumer Price Index (All Groups Index Number for Sydney)* since the quarter year period shown for each Area in Section 1 – Schedule of Contributions.

In addition to the above adjustment, the works, administration, professional and legal fees components of the monetary contributions set out in this plan are adjusted in accordance with the formula below headed **"Contribution at time of payment"** at the time that the monetary contribution is to be paid pursuant to the condition imposed on the development consent to reflect quarterly variations in the *Consumer Price Index (All Groups Index Number for Sydney)* since the date that the consent was granted.

In that regard a condition imposed upon a development consent requiring payment of a monetary contribution set out in this plan that includes a works, administration, professional or legal fees component, shall include a requirement for the amount of the relevant component in the condition to be adjusted at the time that the contribution is to be paid to reflect quarterly variations in the *Consumer Price Index (All Groups Index Number for Sydney)* since the date that the consent was granted in accordance with the formula below headed **"Contribution at time of payment"**.

Contribution at time of development consent

$$C_2 = \frac{C_1 \times C P I_2}{C P I_1}$$

Contribution at time of payment

$$C_3 = \frac{C_2 \times C P I_3}{C P I_2}$$

where:	C_1	=	Works, administration, professional and legal fees components of the contributions as shown in this contributions plan
	C_2	=	Works, administration, professional and legal fees components of the contributions subject of the conditions imposed on the development consent
	C_3	=	Works, administration, professional and legal fees components of the contributions at the time that the contribution is to be paid
	$C P I_1$	=	Latest "Consumer Price Index: All Groups Index Number" for Sydney available from the Australian Bureau of Statistics shown in <i>Liverpool Contributions Plan 2009</i> for the respective area in Section 1
	$C P I_2$	=	Latest "Consumer Price Index: All Groups Index Number" for Sydney available from the Australian Bureau of Statistics as at the time of granting the relevant development consent
	$C P I_3$	=	Latest "Consumer Price Index: All Groups Index Number" for Sydney available from the Australian Bureau of Statistics at time that the contribution is to be paid

Land

The land components of the monetary contributions rates set out in this plan are adjusted in accordance with the formula below headed **"Contribution at time of development consent"** at the time of imposing a condition on a development consent requiring payment of the monetary contribution to reflect quarterly variations in the **Average Estimated Land Acquisition Cost Per Square Metre** since the quarter year period shown for each Area in Section 1 – Schedule of Contributions.

In addition to the above adjustment, the land components of the monetary contributions set out in this plan are adjusted in accordance with the formula below headed **"Contribution at time of**

payment” at the time that the monetary contribution is to be paid pursuant to the condition imposed on the development consent to reflect quarterly variations in the **Average Estimated Land Acquisition Cost Per Square Metre** since the date that the consent was granted.

In that regard a condition imposed upon a development consent requiring payment of a monetary contribution set out in this plan that includes a land component, shall include a requirement for the amount of the land component in the condition to be adjusted at the time that the contribution is to be paid to reflect quarterly variations in the **Average Estimated Land Acquisition Cost Per Square Metre** since the date that the consent was granted in accordance with the formula below headed **“Contribution at time of payment”**.

In this clause **“Average Estimated Land Acquisition Cost Per Square Metre”** means the index figure prepared and published by or on behalf of the Council that represents the total costs that would have been incurred by the Council in respect of all land acquired by Council during the previous quarter year period divided by the number of square metres of such land and the phrase **“land”** where used herein means land that is in an englobo state being regular in shape, good average level land with an area of 2 ha with services available in the area for connection, subject to the payment of necessary developer contributions rates and not yet developed.

Contribution at time of development consent

$$C_2 = \frac{C_1 \times L_2}{L_1}$$

Contribution at time of payment

$$C_3 = \frac{C_2 \times L_3}{L_2}$$

where:	C_1 =	Land component of contributions as shown in this contributions plan
	C_2 =	Land component of contributions subject of the conditions imposed on the development consent
	C_3 =	Land component of contributions at the time that the contribution is to be paid
	L_1 =	The latest Average Estimated Land Acquisition Cost Per Square Metre shown in <i>Liverpool Contributions Plan 2009</i> for the respective area in Section 1
	L_2 =	The latest Average Estimated Land Acquisition Cost Per Square Metre published by the Council at the time of granting the relevant development consent
	L_3 =	The latest Average Estimated Land Acquisition Cost Per Square Metre published by the Council at time that the contribution is to be paid

3.7.7 Goods and Services Tax

No Goods and Services Tax (GST) is applicable to the payment of contributions made under *Section 7.11 of the Environmental Planning and Assessment Act 1979*. This exemption applies to both cash contributions and land or works in lieu of contributions.

3.8 Review of Plan and Contributions

Council will review the contributions plan on a regular basis. The review process will canvass, where data is available:

- Development activity in terms of latest information on net additional dwellings and populations.
- Likely total development activity to be experienced in the future.
- Progress in the delivery of public facilities and amenities identified in the schedules of facilities.

- Modification of facility concepts, changes in anticipated facility costs, facility timing and land values.
- Annual contributions received and expenditure information.
- Any other factors likely to affect the delivery of works identified in this contributions plan.
- Changes resulting from amendments to *Liverpool DCP 2008*.

Any significant reviews of this contributions plan must be undertaken in accordance with the *EP&A Act 1979* and *EP&A Regulation 2000* and placed on public exhibition for a period of 28 days. The nature of the proposed changes and reasons for these changes would be clearly outlined as part of the exhibition.

Contributions will be adjusted, taking account of more recent information and, where relevant, the following:

- Consumer Price Index.
- Annual changes in land values.
- Actual costs of completed works.
- Reviewed costs yet to be completed works and land acquisition.
- Adjustment in projected project management and contingency costs associated with works.
- Management and legal costs associated with land acquisition.

This section is distinct from Section 3.7.6 Adjustment to Contribution Rates, which deals with future adjustment of contributions granted in accordance with the contributions plan. Future reviews under Section 3.8 will not affect any consent granted under this contributions plan.

3.9 Pooling of Funds

Council will administer money obtained under this plan and make decisions on the funding and provision of the projects in accordance with the *EP&A Act* and *EP&A Regulation*.

The funds collected under this plan may be pooled for projects included in the works schedule in other contribution plans which council administers. The priority for expenditure of pooled funds will be determined based on endorsed Council Strategies.

Council's ability to forward fund infrastructure identified in this Plan is very limited because it is contingent upon the availability of contributions funds.

To provide a strategy for the orderly delivery of the public services and amenities, this Contributions Plan authorises monetary contributions paid for different purposes, under this Plan and any other contributions plan approved by the Council, to be pooled and applied progressively for those purposes.

In any case of the Council deciding whether to pool and progressively apply contributions funds, the Council will have to first be satisfied that such action will not unreasonably prejudice the carrying into effect, within a reasonable time, of the purposes for which the money was originally paid.

4. City Wide Planning Context, Development Trends and Nexus

4.1 Planning Context

4.1.1 Major Plans of Council

Liverpool Directions 2006 - 2016

Liverpool Directions 2006-2016 is the community view on the future for Liverpool City. It was developed as a result of Council's Creating Our Future Together Partnership Project.

About 1,700 residents, workers, students and visitors were directly involved in developing *Liverpool Directions*. *Liverpool Directions* is used by Council, government agencies and community organisations in planning for the future of the City. It has been incorporated into Council's Corporate Plan as community outcomes that drive Council strategies. Council is planning its specific work directly in response to the issues and aspirations identified in 'Liverpool Directions'.

Liverpool Directions provides a basis for a range of Council strategies including the funding of public infrastructure by development.

The community view of Liverpool today serves as the starting point for thinking about the future. It is derived from community surveys of residents and from information collected at Partnership Project workshops.

Liverpool has a mix of land uses and offers a variety of lifestyles, from rural or country style, to traditional low-density suburban areas, to a large metropolitan centre. It also has prominent and highly valued natural features. Liverpool's people value the City's natural areas, in particular waterways such as the Georges River, Nepean River and the Cabramatta Creek system and appreciate access to the natural environment.

Liverpool is an area of urban growth. Historically it has accommodated some of Sydney's population expansion and provided homes and facilities for young families. Because Liverpool is a community with many young families, our community values resources, spaces and initiatives that support families. Development, change and growth are evident in Liverpool. Liverpool's people value appropriate progress in line with the City's past, existing land use and characteristics of its people. They also value the City's suburban and semi-rural heritage where new development fits into the existing character of an area.

Growth has brought with it people from many birthplaces, backgrounds and cultures. Liverpool's people value such diversity and the opportunities this provides. People also value a cohesive, harmonious community with strong social networks and connections. Wanting to feel safer in public spaces is a strong sentiment.

Liverpool is a convenient location in which to live. It is accessible to the rest of Sydney with good transport connections. Road congestion is a problem and short term parking in the City Centre is not considered to be adequate by some. On the other hand Liverpool is well provided with shops and essential services. The variety of parks, open spaces, recreational areas, walking tracks, bike tracks, lakes and rivers in Liverpool offer many leisure opportunities but there are indications that these may not currently cater to all demands. Residential areas are family-friendly, peaceful and safe. These could be made cleaner and more attractive.

Liverpool's people are enriched by their respect for those who came before them in the waves of settlement in Liverpool, and appreciate the wisdom of Aboriginal people, descendants of early settlers, those from overseas birthplaces and older people. Also valued are places and buildings from Liverpool's history. Liverpool's people acknowledge the need to leave a sound legacy for the young. They are mindful of the way things are today and are willing to look to the future.

In thorough community consultations, local residents, students and workers nominated the following as the directions for Liverpool's future. Each theme is followed by a brief commentary on the role of Council in implementation in relation to the provision of developer-funded infrastructure.

The Regional City for South West Sydney

Elements of theme	Relevance to Contributions Plan
The Liverpool City Centre will offer a variety of places, which foster an active social and cultural life for all age groups.	Applies to <i>Liverpool Contributions Plan 2007 (Liverpool City Centre)</i> . Contributions will augment community facilities as well as fund the upgrading of existing parks around the City Centre to provide for a variety of places, which foster an active social and cultural life for all age groups.
Strong regional-level precincts and activities will emerge over time: a major medical centre and health precinct centred on Liverpool Hospital; a commercial centre employing more people in the business and financial services; an education precinct of tertiary and secondary education; tourist activities highlighting heritage buildings and precincts; more street-front retail rather than in shopping centres; and civic and other events utilising suitable indoor and outdoor public spaces.	Not applicable.
The City Centre will be highly convenient and accessible to all: safe, pedestrian friendly, well signposted, with good public transport, free-flowing roads and convenient parking.	Applies to <i>Liverpool Contributions Plan 2007 (Liverpool City Centre)</i> . Contributions will fund facilities such as car parks, bridge link across railway line and bus priority measures.
Access will be opened in the City Centre to the Georges River and the open space corridor extending all the way to the Casula Powerhouse Arts Centre.	Applies to <i>Liverpool Contributions Plan 2007 (Liverpool City Centre)</i> . Contributions will fund facilities such as bridge link across railway line and park land embellishment along the Georges River foreshore.
The southern part of the City Centre will experience increased economic activity and development.	Not applicable.
The City's transport services and assets will be designed around the needs of people.	Applies to <i>Liverpool Contributions Plan 2007 (Liverpool City Centre)</i> . Contributions will fund facilities such as car parks, bridge link across railway line and bus priority measures.
Better integrated and user-friendly public transport will attract more passengers.	Applies to <i>Liverpool Contributions Plan 2007 (Liverpool City Centre)</i> . Contributions will fund facilities such as bus priority measures.
Free-flowing roads and a convenient public transport system will be supported by funding from State and Federal Government resources.	Not applicable.

Council has a significant role to provide and maintain civil and open space infrastructure (roads, footpaths, drainage structures, parks). Council's planning roles in existing urban areas flow from its high-level Local Environment Plan and Development Control Plans, which guide the zoning of land uses and design of buildings.

Applies to *Liverpool Contributions Plan 2007 (Liverpool City Centre)*. Contributions will fund facilities such as parkland embellishment to contribute to improvement of the public domain.

Neighbourhoods and Villages

Elements of theme	Relevance to Contributions Plan
Liverpool's neighbourhoods and villages will be safe, clean, well landscaped and well lit.	Contributions will fund certain landscaping in public areas and parklands.
Liverpool will be a place where housing, community facilities and neighbourhoods meet the needs of young families.	Contributions will fund community facilities and their surroundings for the residents of the neighbourhoods.
Each of the many neighbourhoods and villages will become more self-sufficient and have adequate local services (such as shops, medical services, schools, parks).	Contributions will fund infrastructure such as parks and community facilities as well as cycleways, certain walkways and streets and bus shelters.
People of all ages, levels of interest and skill will be able to find activities and venues for their sporting, recreation, leisure and community interests.	Contributions will fund infrastructure such as a variety of recreation facilities, parklands and community facilities.
Infrastructure will be provided as new urban areas are settled.	Contributions will fund the infrastructure as new urban areas develop.
There will be many ways of getting around neighbourhoods and villages, including cycleways and walkways that people regularly use.	Contributions will fund infrastructure such as cycleways, certain walkways and streets and bus shelters.
Neighbourhoods and village centres will be part of an integrated transport system linked with major centres.	Contributions will fund infrastructure such as cycleways, certain walkways and streets and bus shelters to facilitate an integrated transport system.
The character and heritage of existing suburbs, villages and semi-rural areas will guide new development.	Infrastructure that is funded by contributions will be consistent with the existing character and heritage of existing suburbs and villages.
Commercial and residential high-rise will ideally be located in major centres near transport interchanges, complemented by open space and landscaped areas.	Contributions will fund public open space and landscaping in public areas.

Council has a significant role to provide and maintain civil and open space infrastructure (roads, footpaths, drainage structures, parks). Council's planning roles in existing urban areas flow from its high-level Local Environment Plan and Development Control Plans, which guide the zoning of land uses and design of buildings.

Contributions will fund upgrading of recreation and community facilities in the Established Areas.

The Land between Two Rivers where City and Country Meet

Elements of theme	Relevance to Contributions Plan
The City's natural areas, in particular waterways such as the Georges River, Nepean River and the Cabramatta Creek system, will be cleaner, healthier and more widely and responsibly enjoyed as places for recreation.	Contributions will fund work in certain creek systems that drain new urban development to ensure that the development does not have an adverse impact on the creek system and flooding.
Some of the rural character of Liverpool will be maintained as significant urban development takes place.	Contributions will fund certain works such as parklands and creek works which will contribute to maintaining the rural character of Liverpool.
Agricultural land, open space and protected bushland will be part of an inviting and attractive mix of land uses.	Contributions will fund certain works such as parklands, including some bushland and creek works which will contribute to an inviting and attractive mix of land uses.
Because natural systems don't fit administrative boundaries, Council has a role to maintain working relationships with government agencies and other parties in the management of natural areas and waterways. Council has a role to improve the appearance and health of waterways through rehabilitation projects, including partnerships with environmental groups and volunteers. As part of its planning role, Council can influence the protection of rural land uses.	Contributions will fund infrastructure in certain creek systems that drain new urban development to ensure that the development does not have an adverse impact on the creek system. The provision of this infrastructure will provide a basis for forming partnerships for further work.

A Place for People

Elements of theme	Relevance to Contributions Plan
Liverpool's people will continue to value the diversity of Liverpool.	Not applicable.
People will celebrate the rich variety of cultures forming a cosmopolitan and multicultural City through events based on the City's cultural diversity and creativity.	Contributions will fund infrastructure such as community and recreation facilities that will provide venues for conducted such events.

Liverpool will be an integrated community with strong social networks and connections that will be strengthened by working together, promoting harmony and celebrating the City's unity.

Liverpool's people will care for and support others in the City, particularly those who are disadvantaged. Practical help and support will come from community organisations and volunteering, as well as programs offered or funded by government.

Liverpool's history and the City's unique places will be used to better guide current action and plans for the future.

Enjoyment of culture and the arts as well as participation in artistic production will be catered for by cultural centres including the Casula Powerhouse Arts Centre, Liverpool Regional Museum and libraries, offering increased variety of exhibitions, performances and education.

State and Federal Government resources will support the rapidly growing and changing City.

People will know what's available in Liverpool and where to get support because the City's main attractions, local services and facilities will be promoted and signposted.

Council has a role in social planning. It is required by law to complete a social plan, which identifies actions needed from Council and other organisations toward achieving community outcomes.

In community development, Council has coordinating, advisory, advocacy and partnership roles. It works with government agencies in obtaining services and grants for Liverpool. It conducts activities, which promote community unity and harmony.

Contributions will fund infrastructure such as community and recreation facilities that will provide venues to facilitate development of an integrated community.

Contributions will fund infrastructure such as community and recreation facilities that will provide venues for community organisations to operate.

This may inform the design of future infrastructure that is funded by contributions.

Contributions will partly fund infrastructure such as Casula Powerhouse Arts Centre and the libraries.

Such resources may supplement infrastructure provided by contributions.

Some of the attractions and local services will in part be funded by contributions.

The social plan provides input to the provision of community and recreation facilities that may be funded by contributions.

Contributions will fund infrastructure such as community and recreation facilities that will provide venues for community and government organisations to operate.

Communities and Governments Working Together

Elements of theme	Relevance to Contributions Plan
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Council decision-making on Liverpool will be visible, open to participation and accompanied by practical steps enabling everyone's involvement.	The contributions plan was adopted following public consultation in accordance with the Environmental Planning and Assessment Act 1979.
The community will be encouraged to engage in Council initiatives and actions.	The provision of certain major infrastructure will involve input from the public.
Information will be available on Council services, actions and future proposals.	The provision of certain major infrastructure will involve input from the public.
One of Council's primary roles is to engage with the community at the local level through initiatives such as the Partnership Project, a range of consultative mechanisms and information on Council's activities. Council also uses neighbourhood forums, consultations and surveys to track its performance and make improvements.	The provision of certain major infrastructure will involve input from the public.
Council provides opportunities for participation in decision-making and civic activities.	The provision of certain major infrastructure will involve input from the public.

Sustainability

Elements of theme	Relevance to Contributions Plan
Community, business and governments will deliver specific programs, which make Liverpool more sustainable.	The concept of sustainability has influenced the scope and type of infrastructure that will be provided, including that funded by contributions.
Reduced waste, pollution and water usage will be the major noticeable results of future actions for sustainability.	Reduced waste, pollution and water usage have influenced the scope and type of infrastructure that will be provided, including that funded by contributions.
There will be local or easily accessed education and training for all ages, supported by well-equipped and convenient libraries.	Contributions will fund infrastructure such as libraries to facilitate such training.
Workers living in Liverpool will have increased access to local employment and job diversity.	Not applicable.
Liverpool will be a competitive city with good business opportunities.	Not applicable.

As part of its environmental leadership role, Council has developed programs to improve the sustainability of its own operations and services. It also promotes sustainable development through its policy-making, education and regulatory roles. Council has a role to establish and maintain sound working relationships with government agencies in their management of environmental pollution, water conservation and energy usage. Through its planning roles (zoning, infrastructure planning and urban design) Council encourages business and industrial development.

The concept of sustainability has influenced the scope and type of infrastructure that will be provided, including that funded by contributions.

Liverpool Local Environmental Plan 2008

Liverpool Local Environmental Plan 2008 was gazetted on 29 August 2008. It identifies the various land use zones and in particular the extent of land that is available for medium density and higher density development. Estimates of development trends take into account the development potential that the plan permits.

Liverpool Development Control Plan 2008

Liverpool Development Control Plan 2008 came into force on 29 August 2008. Each of the release areas has a chapter in the DCP regulating the subdivision pattern. These form the basis of the costing of facilities relevant to these areas in this plan. The relationship of the relevant chapter is specified in the next sub-section.

4.1.2 Development prior to the 1980's

Pre 1970's Development

Development in Liverpool during this time took place in the area around Miller and at Moorebank. There was also development at Casula and Lurnea.

Sydney Region Outline Plan

The *Sydney Region Outline Plan*, released in 1968 identified areas on the fringe of Sydney for urban development. The bulk of the land to the west of Liverpool identified in the plan now forms Hoxton Park Release Area, Stages 1 & 2. This was subsequently incorporated in the *Urban Development Program* (now *Metropolitan Development Program*) of the *Department of Planning*.

1970's Development

The bulk of urban fringe land development took place in Chipping Norton and Moorebank and to a lesser extent at Green Valley and Casula. There was also some urban redevelopment adjacent to Liverpool City Centre.

4.1.3 Development in the 1980's

Environmental Planning and Assessment Act, 1979

The *Environmental Planning and Assessment Act, 1979* came into force on 1 September 1980 replacing Part 12A of the *Local Government Act 1919* as the Act which administered land use planning in New South Wales. The Act provided Council's the power to levy development for contributions toward public facilities. It was not until 1992 that Council's were required to prepare contributions plans in order to levy development for contributions.

Hoxton Park Stage 1 Release Areas

Development in the 1980's commenced in the areas known as the Hoxton Park Stage 1 Release Area. These included:

- Green Valley Hinchinbrook Release Area (former *Liverpool Contributions Plan No 1*)
- Casula West Release Area (former *Liverpool Contributions Plan No 2*)
- Casula East Release Area (former *Liverpool Contributions Plan No 3*)

These areas were designated for urban development on 6th April 1982 by the then Minister of Environment and Planning. These areas are included in the *Metropolitan Development Program* for the Sydney Region.

Green Valley Hinchinbrook Release Area

- The area was rezoned under *Liverpool LEP 108* on 24 October 1984 and added to subsequently.
- The area was subject to *Liverpool DCP No 2*, which came into force on 9th January 1985 until it was incorporated into *Liverpool DCP 2008*.
- *Liverpool Contributions Plan No 1* was approved by Council on 12 October 1992 and came into force on 26 October 1992.
- *Liverpool Contributions Plan No 1* was amended Council on 11 April 1994.
- *Liverpool Contributions Plan No 1* was amended in August 1997 to exempt granny flats from the requirement to pay contributions.
- *The range of facilities in Plan No 1* was incorporated into *Liverpool Contributions Plan 2001*.
- Development in the area is almost complete.
- The area is now incorporated into the "Established Areas" under *Liverpool Contributions Plan 2009*.

Casula West Release Area

- The area was rezoned under *Liverpool LEP No 103* on 10th August 1984.
- The area was subject to *Liverpool DCP No 1*, which came into force on 9th January 1985 until it was incorporated into *Liverpool DCP 2008*.
- *Liverpool Contributions Plan No 2* adopted by Council on 9 November 1992 and came into force on 23 November 1992.
- *Liverpool Contributions Plan No 2* was amended in August 1997 to exempt granny flats from the requirement to pay contributions.
- The range of facilities in *Liverpool Contributions Plan No 2* was incorporated into *Liverpool Contributions Plan 2001*.
- Development in the area is almost complete.
- The area is now incorporated into the "Established Areas" under *Liverpool Contributions Plan 2009*.

Casula East Release Area

- The area was rezoned under *Liverpool LEP No 80* on 11th March 1983.
- The area was subject to *Liverpool DCP No 83/2*, which came into force on 26th January 1984 until it was incorporated into *Liverpool DCP 2008*.
- *Liverpool Contributions Plan No 3* adopted by Council on 23rd November 1992 and came into force on 7th December 1992.
- *Liverpool Contributions Plan No 3* was amended in August 1997 to exempt granny flats from the requirement to pay contributions.

- The range of facilities in *Liverpool Contributions Plan No 3* was incorporated into Liverpool Contributions Plan 2001.
- Development in the area is almost complete.
- The area is now incorporated into the "Established Areas" under *Liverpool Contributions Plan 2009*.

4.1.4 Development in the 1990's

Hoxton Park Stage 2 Release Areas Structure Plan

Council adopted a Structure Plan for the Hoxton Park Stage 2 Release Area in April 1989. The area is included in the Urban Development Program of the Department of Planning for the Sydney Region. The Structure Plan divided the release area into six (6) precincts. These precincts were primarily delineated on the basis of staged availability of utility services. Major roads and creeks also formed boundaries to the Precincts.

Hoxton Park, Carnes Hill and Prestons Release Areas

- These release areas form parts of the Hoxton Park Stage 2 Release Areas Structure Plan.
- Hoxton Park was rezoned under *Liverpool LEP No 236* (Precinct 1) on 15 May 1992.
- Prestons was rezoned under *Liverpool LEP 238* (Precinct 5) on 15 May 1992.
- Carnes Hill was rezoned under *Liverpool LEP No 237* (Precinct 4) on 10 July 1992.
- Council approved a DCP for Precinct 1, 4 and 5 in December 1995 known as *Liverpool DCP No 31* until it was incorporated into *Liverpool DCP 2008*.
- *Liverpool Contributions Plan 6* was originally approved by Council on 23 November 1992 and came into force on 7 December 1992.
- *Liverpool Contributions Plan No 6* was subsequently amended in 1995 and 1997.
- *Liverpool Contributions Plan No 6* was amended on in August 1997 to exempt granny flats from the requirement to pay contributions.
- *Liverpool Contributions Plan No 6* was subsequently amended by Council on 11 October 1999 and came into force on 20 October 1999.
- This area contributes to district facilities, which serve the Hoxton Park Stage 2 Release Area.
- There is still some development remaining to take place.
- The range of facilities in *Liverpool Contributions Plan No 6* was incorporated into *Liverpool Contributions Plan 2001*.
- These facilities have largely been incorporated into *Liverpool Contributions Plan 2009*.

Cecil Hills Release Area

- The area forms part of the Hoxton Park Stage 2 Release Areas Structure Plan.
- The area was rezoned under *Liverpool LEP No 220*, on 12th April 1991.
- The area was subject to *Liverpool DCP No 23*, which came into force on 24th April 1991 until it was incorporated into *Liverpool DCP 2008*.
- *Liverpool Contributions Plan 4* adopted by Council on 23rd November 1992 and came into force on 7th December 1992.
- *Liverpool Contributions Plan 4* was amended in August 1997 to exempt granny flats from the requirement to pay contributions.
- This area contributed to district facilities, which serve the Hoxton Park Stage 2 Release Area and is still incorporated in estimates of development potential for such facilities.

- Development is generally complete.
- The range of local facilities in *Liverpool Contributions Plan 4* was incorporated into *Liverpool Contributions Plan 2001*.
- These were not been incorporated in this plan, as these are now complete.
- The range of facilities in Cecil Hills now largely only includes District and City Wide Facilities under *Liverpool Contributions Plan 2009*.

Prestons Industrial Release Area

- The area forms part of the Hoxton Park Stage 2 Release Areas Structure Plan.
- The area was rezoned on 12 October 1990.
- The area was subject to *Liverpool DCP No19 Prestons Industrial Release Area*, *Liverpool DCP No 6 Industrial Development* and *Liverpool DCP No3 Car Parking and Service Provision* until it was incorporated into *Liverpool DCP 2008*.
- *Liverpool Contributions Plan No 7* was originally approved by Council on 23 November 1992 and came into force on 7 December 1992.
- *Liverpool Contributions Plan No 7* was subsequently updated in 1995 and 1997.
- *Liverpool Contributions Plan No 7* was subsequently amended by Council on 11 October 1999 and came into force on 20 October 1999.
- This area contributes to District Facilities involving transport and drainage, which serve the Hoxton Park Stage 2 Release Area and is incorporated in estimates of development potential for such facilities.
- Development is still occurring.
- The range of facilities in *Liverpool Contributions Plan No 7* was incorporated into *Liverpool Contributions Plan 2001*.
- Some additional area was rezoned in 2007. This was incorporated into *Liverpool Contributions Plan 2001* in 2007.
- These facilities have largely been incorporated into *Liverpool Contributions Plan 2009*.

Wattle Grove Release Area

- The area was rezoned under *Liverpool LEP No 221* on 19 April 1991, which added the land to LEP NO 108.
- The area was subject to *Liverpool DCP No 24*, which came into force on 1st May 1991.
- Prior to the current planning controls, residential development was permitted under the previous Interim Development Order with the concurrence of the Director of Planning.
- *Liverpool Contributions Plan No 5* was approved by Council on 23rd November 1992 and came into force on 7 December 1992.
- *Liverpool Contributions Plan No 5* was amended in August 1997 to exempt granny flats from the requirement to pay contributions.
- Development is now complete.
- The range of facilities in *Liverpool Contributions Plan No 5* was not incorporated in *Liverpool Contributions Plan 2001*, as they were complete.
- The area was included into the "Established Areas" under *Liverpool Contributions Plan 2001*.
- The area is included in the "Established Areas" under *Liverpool Contributions Plan 2009*.

Pleasure Point East

- The area was subdivided in the 1920's but not built upon. The lots fronting the riverside reserve were developed with dwelling houses in the 1970's.
- The zoning of the other 65 lots was amended on 8 July 1994 to permit dwelling houses to be constructed following agreement with Sydney Water to provide water and sewerage services to the land.
- *Liverpool Contributions Plan No 12* was adopted by Council on 13 December 1999, and came into force on 23 December 1999.
- Development is still taking place in the area.
- The range of facilities in *Liverpool Contributions Plan No 12* was incorporated into *Liverpool Contributions Plan 2001*.
- These facilities have been incorporated into *Liverpool Contributions Plan 2009*.

Cross Roads Transport Terminal

- The area was rezoned under *Liverpool LEP No 182* on 4 November 1988.
- The area was subject to *Liverpool DCP No 5*, which came into force on 9 February 1989 and which aimed to permit the development of an integrated transport terminal on this site.
- This original proposal did not eventuate. The controls have been amended to allow the subdivision of the land so that the sites may be developed independently.
- *Liverpool Contributions Plan No 8* was approved by Council on 19th December 1994 and came into force on 25th January 1995.
- Development is now complete.
- The range of facilities in *Liverpool Contributions Plan No 5* was not incorporated in *Liverpool Contributions Plan 2001*, as the facilities were complete.

Liverpool City Centre

- This plan was originally approved by Council on 8 August 1994 and came into force on 10 August 1994.
- The plan was amended by Council on 10 July 2000 and came into force on 19 July 2000.
- The plan was subsequently incorporated in *Liverpool Contributions Plan No 10* on 9 May 2001.
- The range of facilities in *Liverpool Contributions Plan No 9* was incorporated into *Liverpool Contributions Plan 2001*.
- In conjunction with a new LEP for Liverpool City Centre in 2006 (subsequently incorporated into *Liverpool LEP 2008*) Council adopted a separate contributions plan known as *Liverpool Contributions Plan 2006 (Liverpool City Centre)*. Accordingly these facilities have been not been incorporated into *Liverpool Contributions Plan 2009*.

4.1.5 Development in the 2000's

Established Areas

- Prior to 1992 Council levied contributions on some development in the established areas. While most development in the 1990's was taking place in the release areas it has become apparent that redevelopment will continue to occur in the established areas and generate the need for augmenting facilities.
- *Liverpool Contributions Plan No 10* was adopted by Council on 24 April 2001, and came into force on 9 May 2001.

- Redevelopment is still taking place in the area.
- The range of facilities in *Liverpool Contributions Plan No 10* was incorporated into *Liverpool Contributions Plan 2001*.
- These facilities have largely been incorporated into *Liverpool Contributions Plan 2009*.

City Wide Facilities

- It has become apparent that development in both the established areas and release areas will be substantial and generate the need to augment certain major Council facilities that serve all of Liverpool.
- *Liverpool Contributions Plan No 11* was adopted by Council on 24 April 2001, and came into force on 9 May 2001.
- Development is still taking place in the release areas and redevelopment is still taking place in the established areas.
- The range of facilities in *Liverpool Contributions Plan No 11* was incorporated into *Liverpool Contributions Plan 2001*.
- These facilities have been incorporated into *Liverpool Contributions Plan 2009* subject to the deletion of various facilities.

Middleton Grange

- The area was rezoned under *Liverpool LEP 1997 (Amendment No 71)* on 18 June 2004.
- The area was subject to *Liverpool DCP No 48*, which came into force on 26 June 2002 until it was incorporated into *Liverpool DCP 2008*.
- The inclusion of the area into *Liverpool Contributions Plan 2001* was approved by Council on 11 June 2002 and came into force on 26 June 2002.
- Development is still taking place in the area.
- The range of facilities for this area has been incorporated in *Liverpool Contributions Plan 2009*, subject to amendment.

Moorebank former Boral Quarry

- The area was rezoned under *Liverpool LEP 1997 (Amendment No 75)* on 9 July 2004.
- The area was subject to *Liverpool DCP No 50*, which came into force on 22 September 2003 until it was incorporated into *Liverpool DCP 2008*.
- Development is still taking place in the area.
- The area is within the Established Areas Catchment and as such is subject to contributions in that catchment except as provided for in accordance with a Developer Deed for the site.

Edmondson Park

- The area was rezoned under *Liverpool LEP 1997 (Amendment No 114)* on 31 March 2006.
- The area is covered by *Liverpool Contributions Plan 2008 (Edmondson Park)* for Edmondson Park.
- Accordingly this area is not subject to this contributions plan.

Len Waters Estate (Former Hoxton Park Aerodrome)

- The area was rezoned under *Liverpool LEP 2008* on 29 August 2008.
- It forms part of the Hoxton Park Stage 2 Release Areas.
- Local facilities are to be provided via a Voluntary Planning Agreement.
- The residential component has now been included into Elizabeth Hills.
- Contributions will be payable for residential development for City Wide Facilities and for District for Community and Recreation Facilities.

Pleasure Point

- The area was rezoned under *Liverpool LEP 2008* on 29 August 2008.
- Development is expected to take place in the area shortly.
- The range of facilities for this area has been incorporated in *Liverpool Contributions Plan 2009*.

Elizabeth Hills

- This area has not yet been rezoned for residential development.
- It is anticipated that facilities not contained in this contributions plan will be provided by way of a Voluntary Planning Agreement.
- It forms part of the Hoxton Park Stage 2 Release Areas.
- Contributions will be payable for residential development for City Wide Facilities and for District for Community and Recreation Facilities.

4.2 City Wide Development and Demographic Trends

Allotment / Dwelling Estimates

Estimates of the rate of housing development for the coming 5 years in the established areas, rural areas and release areas have been prepared in consultation with the Department of Planning through the *Metropolitan Development Program*. An allowance has been made for replacement dwellings based on Council consent records. Figures beyond the 5-year period have been projected by Council.

The following table summarises the dwelling forecasts for the period from mid 2000 to mid 2021.

Table 4.1 Dwelling Estimates Mid 2001 - Mid 2021

Area	Dwellings at Mid 2001	Dwellings at Mid 2006	Estimated Dwellings at Mid 2011	Estimated Dwellings at Mid 2021
Established Areas (including Liverpool City Centre)	31,650	32,850	34,450	39,350
Rural Areas	3,580	3,450	3,450	3,450
Release Areas	15,670	19,800	21,300	32,000
Total	50,900	56,100	59,200	74,800

Population Estimates

The range of community, recreation, transport and streetscape facilities is based on the estimated additional population in Liverpool. The methodology for estimating the additional population that will reside in Liverpool at 2021 is as follows:

- Estimate existing population of Liverpool;
- Estimate existing number of dwellings in Liverpool;
- Estimate occupancy rate in Liverpool at mid 2021;
- Estimate dwellings in Liverpool at mid 2021;
- Deduce population in Liverpool at mid 2021;
- Estimate increase in population from present to mid 2021.

Occupancy rates have been estimated for 2021, having regard to occupancy rates in the 2001 Census and the projections of the *Department of Planning*. These have been used in conjunction with estimates of dwellings to estimate the population of Liverpool in 2021.

The estimated population of Liverpool at mid 2021 is as follows.

Table 4.2 Population Projections Mid 2001 – Mid 2021

Area	Population at Mid 2001	Population at Mid 2006	Estimated Population at Mid 2011	Estimated Population at Mid 2021
Established Areas (including Liverpool City Centre)	92,700	93,600	97,450	109,800
Rural Areas	11,700	11,250	11,500	11,500
Release Areas	54,500	66,000	88,700	107,000
Total	158,900	170,850	197,650	228,500

Occupancy rates

The occupancy rate estimate of 3.7 persons per lot has been adopted in the Hoxton Park Stage 2 Release Areas. This estimate is derived from the following indicators:

- Council's study "Hoxton Park Stage 2 Release Areas Retail Review" estimated that Stage 2 release areas would resemble closely the Edensor Park area in Fairfield LGA. At 1986 Census, that area had an average of 3.69 persons per household.
- Council's 1990 Release Area Social Plan estimated Hinchinbrook would have a density of 3.7 persons per lot. Within 5 years of development commencing, the population density in that area was 3.5 persons per lot (1991 Census Preliminary Data). The increase to 3.7 persons per lot was estimated to occur after 5 years and up to 15 years following the commencement of development.
- A review of the 2001 and 2006 census has confirmed this estimate of occupancy rate in these areas.
- For projection purposes and calculating anticipated population, lots of less than 450 sqm are taken as generally indicating most types of medium density housing. As for Hinchinbrook, a density of 3.3 persons per lot can be expected for these types of development overall.

The occupancy rates for established areas and rural areas these rates are based upon analysis of 1996 Census data as these areas are well established.

Table 4.3 Occupancy Rates

Dwelling Type or Lot Size	Occupancy Rate per lot or dwelling		
	Established Areas	Release Areas (except Edmondson Park)	Rural Areas
Residential Lots 450 sqm or larger	3.2	3.7	3.4
Residential Lots smaller than 450 sqm	3.1	3.3	
Semi-detached dwellings, Multi dwelling housing & residential flat buildings (where permitted)			
3 or more bedrooms	3.1	3.3	3.1
2 bedrooms	2.3	2.3	2.3
1 bedroom	1.8	1.8	1.8

4.3 Nexus

Community Facilities

New development, which leads to an increase in the number of residents, will also increase the demand for community facilities including multi-purpose community centres, libraries and cultural facilities.

Local and district level facilities are levied for the various sub catchments in the established and release areas.

Recreation Facilities

Open space is a source for outdoor recreation opportunities and provides natural and open areas within an urban environment, which is experiencing increasing residential growth. The community is demanding that Council provide adequate open space for a variety of reasons. The community needs open space as a buffer against urban developments, a resource for flora and fauna, to link and consolidate diminishing natural areas, as well as a place for sports, recreation, play and outdoor activities.

A Leisure Needs Analysis for the Liverpool Community undertaken for Council revealed the need for the following facilities. To some extent these reflect the needs of the existing residents. Nevertheless they provide some guide to the needs of existing and future residents.

- Multi screen cinema
- Swimming pools
- Libraries
- Bushland reserves
- Nature reserves
- Dancing
- Gyms and fitness training
- Martial arts
- Picnicking

Sporting organisations have expressed the need for the following items:

- Provision of drinking water
- Directional signage
- Provision of seating
- Provision of change rooms / toilets

In relation to passive recreation facilities residents expressed the need for the following items:

- Improving lighting in parks
- Establishing more trees
- Improving toilet cleanliness and availability, particularly where barbecues and other facilities are provided
- Increase barbecue facilities and further develop and maintain the parks where this occurs, thus encouraging the use of the areas for other recreational activities
- Develop and promote the use of available bushland for recreational use
- Extending bike paths (including through bushland) and explore possibilities of providing bike lanes on suburban streets
- Maximising the recreational possibilities of all waterways in the Liverpool area, particularly the Georges River

Open space and recreation facilities, which are needed for an area the size of Liverpool, vary from local parks to major sporting and entertainment venues. The local parks are informal play areas within walking distance of where residents live while the major sporting and entertainment venues cater for large numbers of people and have a substantial catchment area.

This suggests a hierarchy of open space and recreation facilities. Accordingly there is a hierarchy of contributions. All new residential development creates the need to augment facilities that serve a citywide population. In the established areas of Liverpool new residential development creates the need to augment existing local and district facilities. In the release areas there is a need to provide all the open space facilities, as there are no existing facilities.

Transport

The cost of provision of streets in conjunction with a subdivision is normally borne by the individual developer. However the cumulative affect of numerous subdivisions requires provision of higher order roads and, various traffic facilities and frontage to public land uses. The cost of this should not

fall on developers of individual land uses but rather be shared amongst all developers.

Drainage

Community standards require that stormwater be conveyed through urban areas in a manner that emphasises the cost-effective achievement of safety and, to a lesser extent, amenity.

This requirement leads to a development standard where drainage is managed on a catchment wide basis in a system of pipes, channels, culverts and basins. The responsibility to contribute, or nexus, is a combination of the characteristics of land development that:

- Increase stormwater runoff volumes and flow rates so that a system of pipes and channels and/or stormwater detention basins is required to offset these impacts downstream.
- Increase population levels in the vicinity of potentially hazardous, uncontrolled rural standard drainage systems so that improvements, particularly large pipes and channel systems, are required to minimise and clearly demark the area of hazard potential.

The development of new release areas generally leads to a significant change in the stormwater runoff characteristics of drainage catchments. This change partially results from an increase in the ratio of runoff volumes to rainfall volumes due to a reduction in previous areas to absorb rainfall into the ground. It also influenced by the reduction in catchment response times, where the impact of piping and channelising more efficiently conveys concentrated runoff to the catchment outlets. It may also be influenced by a reduction in flood plain storage of runoff volumes due to developments that incorporate landfill.

5. City Wide Facilities

5.1 Community Facilities

Nexus

Council has funded major works such as the Casula Powerhouse Arts Centre and Liverpool Central Library in anticipation of population growth within the local government area. These facilities are intended to serve the broader cultural needs of the entire Liverpool community irrespective of geographic location and as such adopt a citywide status.

Accordingly it is reasonable to require a contribution for citywide facilities from all future residential development within the local government area inclusive of release areas, established residential areas and rural areas.

The cost of the city wide facilities is only partially recovered from new development as the demand from existing development and outside users is borne by Council. This is reflected in the contribution formulae.

Liverpool Central Library

Background

Liverpool City Council provides library services to the Liverpool community through its central library in the City Centre and branch library network at Miller, Moorebank, Casula and Green Valley.

The central library is the focus of the library service and provides a greater range of services/facilities than the branch libraries. Services provided from the central library not available at branch libraries include major lending collections; extensive reference and specialised information services; specialised programs for elderly, disabled and housebound residents; community language and English as a second language (ESL) materials and activities.

The higher tier services provided at the central library cater for the broader needs of the entire population of the Liverpool LGA and accordingly it is considered a citywide facility. These services cannot be provided at local branch libraries for economic and practical reasons. New development, which leads to an increase in the number of residents, will also increase the demand for central library facilities and services to be levied for under this contribution plan.

The State Library's recommended standard for a resident population of 100,000 is that there is a major central library facility. The State Library recommendation for floor space is a minimum of 2,100 sqm of net floor space for a population of 100,000 persons. (*The Planning and Design of Public Library Buildings - Sydney State Library of NSW, 1990*).

The lack of an adequate central library was identified in the study "*Leisure Requirements for the Residents of Liverpool*" - March 1994. Council subsequently undertook to upgrade and extend the central library to cater for the needs of the anticipated total future population. This upgrade altered the status of the library from a "district" to "citywide" facility. This plan seeks to recoup part of the costs to Council of upgrading the central library in anticipation of future population growth.

Cost of Facilities

The cost of the central library upgrade was \$12,985,815 (inclusive of interest), including:

- increase in floor area from 1,200 to 5,600sqm
- introduction of public access to Internet, personal computers and sound equipment
- enlarged reference area, seating and study areas and workrooms
- provision of areas for specialised services, e.g. multicultural and Aboriginal resources
- provision of a lift and disabled access

- provision of additional public toilets
- increase in storage area, and shelving to allow for future expansion of collections
- provision of public art component
- provision of six community meeting rooms, two with kitchen access

The following table provides a summary of the costs of central library and community meeting room works. The estimated costs of these two components of the facility have been separately identified to allow for the relevant apportionment of the cost of the central library to users from outside the Local Government area. A review of the proportion of outside users in 2008 showed that 9% of users were from outside Liverpool LGA. The community meeting rooms are provided for the benefit of existing and proposed residents of Liverpool LGA, therefore the estimated full cost of this component of the facility is included in the contribution calculation.

Table 5.1 Central Library Works Schedule

Item	Cost
1993-1997	
Central library upgrade including consultants fees, building contractors, materials, furniture & fittings, artists fees and interest on loan funds	\$12,174,202
Less 9% for users living outside of Liverpool LGA	(\$1,095,678)
Community meeting rooms including consultants fees, building contractors, materials, furniture & fittings, artists fees and interest on loan funds	\$811,613
Total	\$11,890,137

Note: Whilst actual figures are not available on the costs of meeting rooms in relation to the library upgrade, a proportional estimate has been made based on the relative floor area of the community rooms to the total area of the library building (350sqm / 5,600sqm).

Contributing Area: All of Liverpool LGA except Edmondson Park and Liverpool City Centre.

Casula Powerhouse Arts Centre

Background

The Liverpool community profile is characterised by diversity of cultures with a high proportion of local residents from non-English speaking backgrounds. The 2001 census data indicates that 38.1% of the population of Liverpool were born outside Australia and 43.7% of the population speak a language other than English at home.

In 1992 Council committed to the redevelopment of the Casula Powerhouse into an Arts Centre of local and regional significance. The purpose of the redevelopment was to provide a contemporary community-focused cultural and recreational facility. The Casula Powerhouse is available to all residents of the Liverpool LGA having between 75,000 and 100,000 visitors per year. Further improvements to the centre will be required progressively to cater for additional population growth.

A four stage re-development and plan was developed by Tonkin Zulaikha Architects for the Casula Powerhouse Arts Centre:

Stage 1 Construction - completed October 1994

- Multi-purpose exhibition spaces in Turbine Hall, Boiler house and Foyer.
- Shell of theatre/function centre.
- Art studios.
- Electrical and fire services.

Stage 2 Construction - completed October 1994

Complete work to Boiler house with permanent tenant and retail facilities for:

- Reverse Garbage (non-profit co-operative, which collects and sells unused industrial off cuts used by many community groups).
- Dance/Theatre studio.
- Powerhouse Design Studio.
- Centre Administration and tenant offices.

Stage 3 Construction - completed May 1997

- External works including car parks, roadway and landscaping.
- Signage.
- Auxiliary works.

Stage 4 Construction – completed 2008

- 250 seat theatre for performing arts (less grant funding).
- Riverbank development involving re-establishing access to the Georges River and developing links to Leacocks Regional Park, the Georges River Cultural Leisure Corridor and Casula Railway Station, including an outdoor amphitheatre.

Cost of Facilities

Analysis of visitor records indicates that 80% of visitors to the Powerhouse are from within the Liverpool LGA and 20% are from outside areas. The contribution calculation addresses the proportional cost of the centre attributable to the LGA population.

Table 5.2 Casula Powerhouse Works Schedule

Item	Cost
Theatre Space	\$3,100,000
Recreational Landscape Development	\$480,000
Collection Storage Facilities	\$400,000
Education Workshop Areas	\$500,000
Administrative Areas	\$330,000
Lift	\$250,000
Office Space for Cultural Organisations	\$525,000
Gallery Spaces	\$380,000
Production Area	\$400,000
Air Conditioning	\$305,000
Sub Total	\$6,670,000
Less grant funding	(\$1,700,000)
Sub Total	\$4,970,000
20% Discount for proportion of non Liverpool users	(\$994,000)
Total	\$3,976,000

Contributing Area: All of Liverpool LGA except Edmondson Park and Liverpool City Centre.

5.2 Recreation Facilities

Nexus

New residential development, which leads to an increase in the number of residents, will also increase the demand for citywide public open space and recreation facilities. The existing recreation facilities do not have adequate capacity to accommodate the increased demand, which will arise with the growth of Liverpool.

Council plans to augment existing recreation facilities to more adequately serve the citywide needs. Contributions will be used to provide additional capacity in response to the increase in demand arising from new development. Contributions will not reduce any existing shortfalls in the amount of provision. Shortfalls are to be addressed through other means (e.g. general revenue, grants and so on).

City Wide facilities are major open space and recreational opportunities intended to service the needs of all residents within the Liverpool Local Government Area irrespective of geographic location. City Wide open space/recreational facilities provide a higher tier of recreational opportunity than local or district facilities.

Whitlam Centre Extensions

Background

The Whitlam Centre is a major indoor recreational facility incorporating a heated pool, gymnasium and multi purpose hall. The centre provides a broad range of recreational opportunities specifically incorporating facilities not generally available at, or of a higher standard / capacity than, local and district recreation centres.

In anticipation of future population growth Liverpool City Council undertook major extensions to the Whitlam Centre in 1994 to 1996. The works undertaken sought to increase the capacity of the centre from a district to citywide facility. The diversity and standard of recreational opportunities of the Whitlam Centre are generally superior to those provided at a local or district level and accordingly the facility service a greater catchment. In effect, the completed extensions to the Whitlam Centre will provide a higher tier of recreation opportunities to all residents of Liverpool (both existing and future).

The cost of works to Council (and therefore the community) to 1996 was spent to cater for the existing population and in anticipation of future development, thereby ensuring that required facilities were "on the ground" to satisfy the requirements of future population growth. The contribution levied under this plan seeks to recoup part of the expenditure of Council making allowance for existing and future population likely to be served by the facility excluding non Liverpool patronage and Stage II release areas.

Table 4.3 Whitlam Centre Works Schedule

Item	Cost
Cost (inclusive of interest) of 1994 - 96 extensions comprising a 50 m outdoor heated pool, 25 m indoor heated pool, family leisure indoor heated pool, pool plant (heating, circulation, etc), fitness facility, aerobics room, kiosk, office complex and reception area	\$9,700,907
Less grant funding	-\$1,481,942
Total	\$8,218,965

Contributing Area: All of Liverpool LGA except Edmondson Park and Liverpool City Centre.

5.3 Contribution Formulae

Residential Development

The following formulae are used to calculate the contribution for City Wide Facilities.

$$\text{Contribution Rate} = \frac{C \times O R \times N}{228,500}$$

(per dwelling / lot)

where **C** = Cost of capital works of each facility

O R = Estimated occupancy rate for the development type and location

N = Number of additional lots / dwellings

228,500 = Estimated population of Liverpool LGA at 2021

For Occupancy Rate refer to Table 4.3

Note that this formula makes allowance for existing population. New development will only contribute its proportion of demand for facilities. It will not make up for any funding attributable to existing residential development. Contributions will not recover the full cost of the City Wide Facilities.

5.4 Staging of Facilities

Council has constructed these facilities and will now recoup the funds expended.

6. Established Areas

Important note: for development lodged after 12 December 2018, refer to Liverpool Contribution Plan 2018 – Established Area.

7. Pleasure Point

7.1 Development Trends

The Pleasure Point area was rezoned to allow residential development in conjunction with *Liverpool LEP 2008*. The LEP provides controls on minimum lot sizes and thus is the basis for the estimated development potential for the area.

Catchment Area

There is a single catchment for all local facilities in Pleasure Point. The catchment is shown on Figure 7.1.

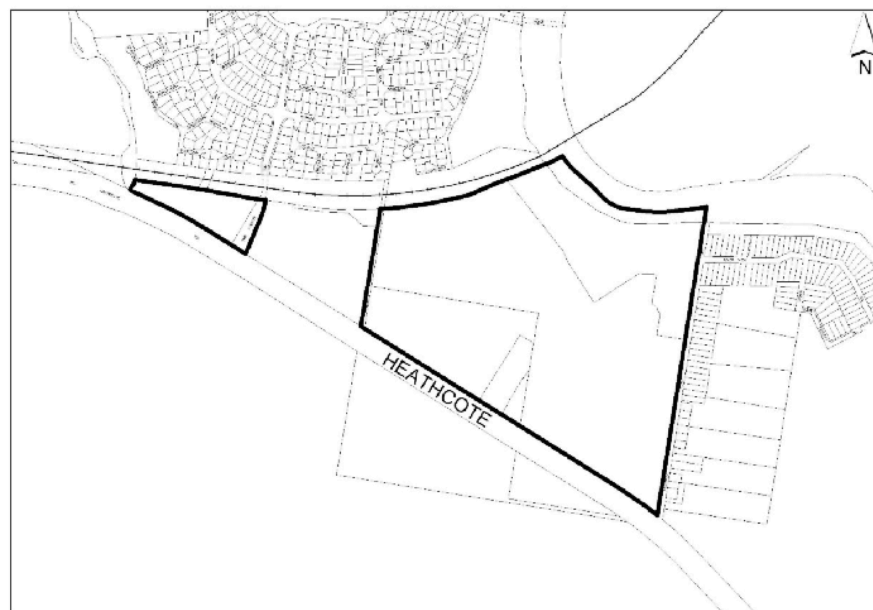


Figure 7.1 Catchment Area

7.2 Community Facilities

It is considered that the area is not of sufficient size to warrant a new community centre. Accordingly it is considered reasonable to include this area in the Established Areas Eastern Catchment as the additional population will increase the usage of community facilities in the nearby areas.

7.3 Recreation Facilities

The extent of open space in Pleasure Point would on a population basis be less than in other release areas of Liverpool. However the location of passive open space along the Georges River and Williams Creek foreshore has the most potential for best use by residents of the area. Further these areas connect to the open space network in the surrounding area.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

Contributing Development

440 dwellings/lots (no of dwellings or equivalent that are expected to contribute to local recreation facilities)

The area from which contributions would be received is shown on Figure 7.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 20 for the location of each item in Table 7.1.

It is envisaged that the land identified for open space will be dedicated to Council in conjunction with the development of the land in lieu of payment of a monetary contribution.

Works and Land Acquisition Schedule

The range of Works for local recreation facilities is shown in Table 7.1.

The cost of facilities is based a review of costs in 2008 by *Rider Hunt*.

Table 7.1 Works and Land Acquisition Schedule

No.	Items	Land Unit Cost \$/sqm	Works Unit Cost \$/ha or item	Area ha	Total Land \$	Total Works \$
OS1	Williams Creek Foreshore	\$25.51	\$175,065	0.4820	\$122,958	\$84,381
OS2	Georges River Foreshore	\$25.51	\$312,830	1.9600	\$499,996	\$613,148
Sub Totals						
Project Management 10%						
Contingency 10%						
Totals				2.4420	\$622,954	\$837,035

7.4 Transport Facilities

Scope of facilities

The facilities costed are based on a masterplan for this area identified in *Liverpool DCP 2008*.

Apportionment

No apportionment is allowed for as there were no existing local transport facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

Contributing Development

440 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local community facilities)

The area from which contributions would be received is shown on Figure 7.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 20 for the location of each item in Table 7.2.

Works and Land Acquisition Schedule

The range of Works for local transport facilities is shown in Table 7.2.

The cost of facilities is based a review of costs in 2008 by *Rider Hunt*.

Table 7.2 Works and Land Acquisition Schedule

No.	Items	Length / No of items m	Pavement width m	Land width m	Land Unit Cost \$/ sqm	Works Unit Cost inc K&G \$/ m	Total Land \$	Total Works \$
R1	Roundabout - Pleasure Point Rd & Link Rd					\$157,678		\$157,678
R2	Collector Street Link - E3 zone to Pleasure Point Rd	300	4.8	4.8	\$210	\$494	\$302,400	\$148,344
R3	Collector Street Link - West of E3 zone	520	4.8	4.8	\$210	\$494	\$524,160	\$257,129
R4	Collector Street Link across E3 zone	30	20		\$210	\$1,027		\$615,951
B1	Collector Street Link Culvert	90		20	\$210	\$1,265	\$378,000	\$113,840
APZ1	Asset Protection Road	456	5.7	21	\$210	\$572	\$2,010,960	\$261,050
APZ2	Asset Protection Road	118	5.7	21	\$210	\$572	\$520,380	\$67,552
APZ3	Asset Protection Road	180	5.7	21	\$210	\$572	\$793,800	\$103,046
R5	Local Access Street adjacent to Georges River Foreshore	50	1.7	2.2	\$210	\$245	\$23,100	\$12,225
R6	Pedestrian Access Georges River Foreshore	50	2.5	10	\$210	\$100	\$105,000	\$5,000
	Bus shelter	4				\$14,270		\$57,080
Sub Total								
	Project Management 10%							\$179,889
	Contingency 10%							\$179,889
Totals							\$4,657,800	\$2,158,674

7.5 Contribution Formulae

Recreation Facilities

Conventional Lot Residential Subdivision, Small Lot Subdivision, Semi-detached dwellings and Multi dwelling housing

Contribution by cash

$$\text{Contribution Rate} = \frac{C}{N} \times \frac{OR}{3.7}$$

(per dwelling / lot)

where C = Cost of capital works or land identified for the catchment area
N = Number of equivalent lots / dwellings in the catchment area
OR = Estimated occupancy rate for lot size or dwelling type

Contribution by land dedication

$$\text{Area of land to be dedicated} = \frac{A}{N} \times \frac{OR}{3.7}$$

(per dwelling / lot)

where A = Total area to be acquired in the catchment area
N = Number of equivalent lots / dwellings in the catchment area
OR = Estimated occupancy rate for lot size or dwelling type

For Occupancy Rate refer to Table 4.3

Aged and Disabled Persons Housing

$$\text{Contribution for total development} = \frac{\text{Conventional Lot Contribution} \times R}{3.7}$$

where 3.7 = Estimated occupancy rate for a conventional lot
R = Number of residents

Transport facilities

Conventional Lot Residential Subdivision, Small Lot Subdivision, Semi-detached dwellings and Multi dwelling housing

Contribution by cash

$$\text{Contribution Rate} = \frac{C}{N} \times \frac{V}{6.7}$$

(per dwelling / lot)

where C = Cost of capital works and land identified for the catchment area
N = Number of equivalent lots in the catchment area
V = Vehicle trips per day for lot size or dwelling type

Contribution by land dedication

$$\text{Area of land to be dedicated} = \frac{A}{N} \times \frac{V}{6.7}$$

(per dwelling / lot / non residential development)

where A = Total area to be acquired in the catchment area
N = Number of equivalent lots in the catchment area
V = Vehicle trips per day for lot size or dwelling type (refer to Table 6.4)

Table 6.4 Vehicle Trips per day per dwelling

Dwelling Type or Lot Size	Vehicle Trips per day
Residential Subdivision Lots 450 sqm or larger	6.7
Residential Subdivision Lots smaller than 450 sqm	6.0
Semi-detached dwellings, Multi dwelling housing & Residential Flat Buildings (where permitted)	
3 or more bedrooms	6.0
2 bedrooms	4.0
1 bedroom	3.3
Aged and Disabled Persons Housing (total development)	Total vehicle trips per day

Administration Fees

All Development

The cost of administering contributions plans over the coming years has been estimated at 1.2% of the value of contributions.

7.6 Staging of Facilities

It is expected that facilities will be provided by the developer, including dedication of land, in conjunction with the development. The timing of this will depend on the timing of the development.

It is envisaged that infrastructure will be provided in conjunction with the development of the land, as the land is in only two lots.

8. Pleasure Point East

8.1 Development Trends

There are 65 existing lots, which can be developed. No subdivision potential is expected.

8.2 Transport Facilities

Council appreciates the need to carefully balance the management of traffic in order to achieve a safer local road system with appropriate residential amenity within this rural context and to provide for the efficient transfer of people, goods and services.

In adopting this strategy some cost savings on the construction of the local residential streets is advocated in the plan. These benefits are improved safety and amenity in residential areas as well as savings in local development construction costs.

The existing local street network is built to a rural standard and can accommodate the traffic volumes associated with the existing dwellings situated on the northern side of Riverview Road. The development of the subject 65 allotments will generate traffic volumes beyond the rural road threshold. The development potential necessitates the upgrading of Pleasure Point Road, Riverview Road and Green Street.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

There are three catchments for local transport facilities in Pleasure Point East. For each catchment area, information is provided on:

- Contributing Development (number of dwellings or equivalent that are expected to contribute to recreation facilities)
- Works and Land Acquisition Schedule
- The area from which contributions would be received is shown on Figure 8.1.

River Heights Road

Contributing Development: 7 dwellings

Table 8.1

Item	Cost
Establishment	\$3,475
Roadway Construction	\$100,000
Total	\$103,475

River View Road

Contributing Development: 32 dwellings

Table 8.2

Item	Cost
Establishment	\$3,475
Kerb & Pavement	\$84,095
Footway	\$17,167
Total	\$104,737

Green Street

Contributing Development: 9 dwellings

Table 8.3

Item	Cost
Pavement at Intersection	\$24,464



Figure 8.1

8.3 Drainage

Almost all allotments within the plan area require some form of inter-allotment drainage for the removal of concentrated stormwater from the individual sites. The DCP allows for the creation of easements where necessary but does not specify the location or width of these easements. It will be a condition of consent that such easements are dedicated across the property affected. The actual construction of the inter-allotment drains will be covered by this plan.

The cost of drainage works to service the area is \$133,823.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

There is one catchment for local drainage facilities in Pleasure Point East. For the catchment area information is provided on:

- Contributing Development (number of dwellings or equivalent that are expected to contribute to recreation facilities)
- Works and Land Acquisition Schedule
- The area from which contributions would be received is shown on Figure 8.2.

Contributing Development: 65 dwellings

Table 8.4

Item	Cost
Easements	\$938
Inter - Allotment lines	\$170,491
Total	\$171,430



Figure 8.2

8.4 Administration Costs

There are significant costs associated with administering funds of this magnitude. Both the plan preparation / review and implementation aspects of developer contributions are administered staff within Council. A core team of employees are engaged to provide support in co-ordinating such a process, as well as prepare status reports, review and relevant data, liaise with Council staff and external agencies.

In accordance with the directive of the Department of Planning, the administration costs are comprised of those expenses relative only to those personnel directly responsible for the formulation and / or administration of a Contributions Plan. The cost per lot per year has been averaged across all of the Contribution Plan areas.

8.5 Professional Fees

The cost of independent land valuations and legal documents are clearly part of the costs of administering this plan. In relation to land acquisition, Council will be required to acquire land for roads and incur the associated conveyancing costs.

It is recognised that the costs associated with land acquisition could be added to the cost of individual facilities; however the cost of professional fees attributable to any one facility is completely unpredictable. It is therefore more appropriate that a pool of contribution funds is available to meet these costs as they arise. The contribution rate will be reviewed in light of income and expenditure when this plan is reviewed in accordance with section 2.8.

The contribution rate is the same regardless of the size of the lot or form of development. In arriving at this rate the following factors were taken into account:

- The cost of independent valuations is anticipated to vary from \$500 - \$2,000 depending on individual sites and whether the valuation is general or specific;
- Valuations will be required at least annually for reviewing this contribution plan and more frequently depending on movements in the property market;
- Stamp duty and estimated costs of vendor's solicitor in land acquisition.

8.6 Plan Establishment

The preparation of a contributions plan requires the development of options for the scope of works and the corresponding contributions. The formulation of the contribution plan has required extensive discussion on a range of facilities from full urban infrastructure to rural standards. Preliminary designs for many of these options and costing have also been required.

This contributions plan and all future plans developed will be required to fund the establishment costs of the plan itself. The costs of establishing each plan will vary dependent upon the magnitude of development potential. The establishment costs of this plan have been estimated at \$20,000 in total a portion of which has already been spent by Council.

Contributing Development: 65 dwellings

Table 8.5

Item	Cost
Administration	\$64
Professional & Legal Fees	\$228
Plan Establishment Costs	\$392
Total	\$684

8.7 Contribution Formulae

Drainage, Land Acquisition, Professional Fees and Plan Establishment

$$\text{Contribution Rate = } \frac{C}{65} \text{ (per dwelling)}$$

where C = Cost of fees, capital works or land identified for the catchment area
65 = Number of existing lots

Road works

$$\text{Contribution Rate = } \frac{C}{N} \text{ (per dwelling)}$$

where C = Cost of capital works or land identified for the particular street
N = Number of existing lots in the street catchment

Administration

The cost of administering contributions plans over the coming years has been estimated at 1.2% of the value of contributions.

8.8 Staging

The works will be provided by Council following the receipt of contributions.

9. Hoxton Park Stage 2 Release Areas District Facilities

(Includes Cecil Hills, Hoxton Park, Carnes Hill, Prestons, Middleton Grange, Elizabeth Hills and Prestons Industrial)

9.1 Background

Facilities in the Hoxton Park Stage 2 Residential Release Area are provided on a district wide basis and local basis. This is because they involve facilities, which by their nature have a larger catchment and are provided more efficiently on a district scale. It should be noted that the Hoxton Park Stage 2 District catchment area previously included Edmondson Park. It was excluded following discussions with the Department of Planning.

9.2 Community Facilities

Nexus

The Liverpool Stage 2 Release Area Human Services Strategy Study provides the basis for the nexus for the community facilities. The study was completed in November 1992, and endorsed by Council in December 1992 as the strategy for human services planning in Stage 2 release areas. This study is the primary technical tool, which underpins the provision of community facilities.

Since 1992 Council has annually held a number of community consultations under the Western Sydney Area Assistance Scheme (WSAAS). These consultations have reinforced the issues highlighted in the original study with regard to community needs in new release areas. The range of facilities for which contributions are levied include the following.

District community centre

District community centres are important as they provide a base for a number of needed community services. These include community development, neighbourhood centres, family support agencies, outreach programs, geriatric services, etc.

District centres can accommodate larger meetings and functions, as well as an additional range of activities. District centres act as important civic buildings, helping to define a sense of community and a sense of social space in an emerging urban area. The district centres also have larger spaces, which can generate a substantial hire income to subsidise the centre's ongoing costs or the costs of smaller community facilities.

Branch libraries

The State Library of NSW publication *The planning and design of public library buildings* (1990) provides guidelines for calculating branch library floor space. The plan adopts the guideline of 42 sqm per 1,000 residents. A branch library is proposed for Stage 2 release areas. Large branches are preferable, as more resources are concentrated in one location, with lower recurrent costs.

Scope of facilities

A review of the range of local community facilities was undertaken in 2008. It was decided that only a district multipurpose community centre and Library would be provided.

Apportionment

No apportionment is allowed for as there were no existing district community facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

Contributing Development

15,840 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to district community facilities)

The area from which contributions would be received is shown on Figure 9.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 8 for the location of each item in Table 9.1.

Works and Land Acquisition Schedule

The range of Works for local community facilities is shown in Table 9.1.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by *Rider Hunt*.

Table 9.1 Works and Land Acquisition Schedule

Ref	Item	Floor space sqm	Land Area sqm	Land Unit Cost \$/ sqm	Total Land Cost \$	Total Works Cost \$
DC	Multi purpose Community Centre (2,000 sqm)	1,200				\$5,237,988
DC	Library	2,300				\$11,655,961
DC	Youth Space					\$500,000
	Land acquisition		12,000	\$140	\$1,680,000	
	Total				\$1,680,000	\$17,393,949

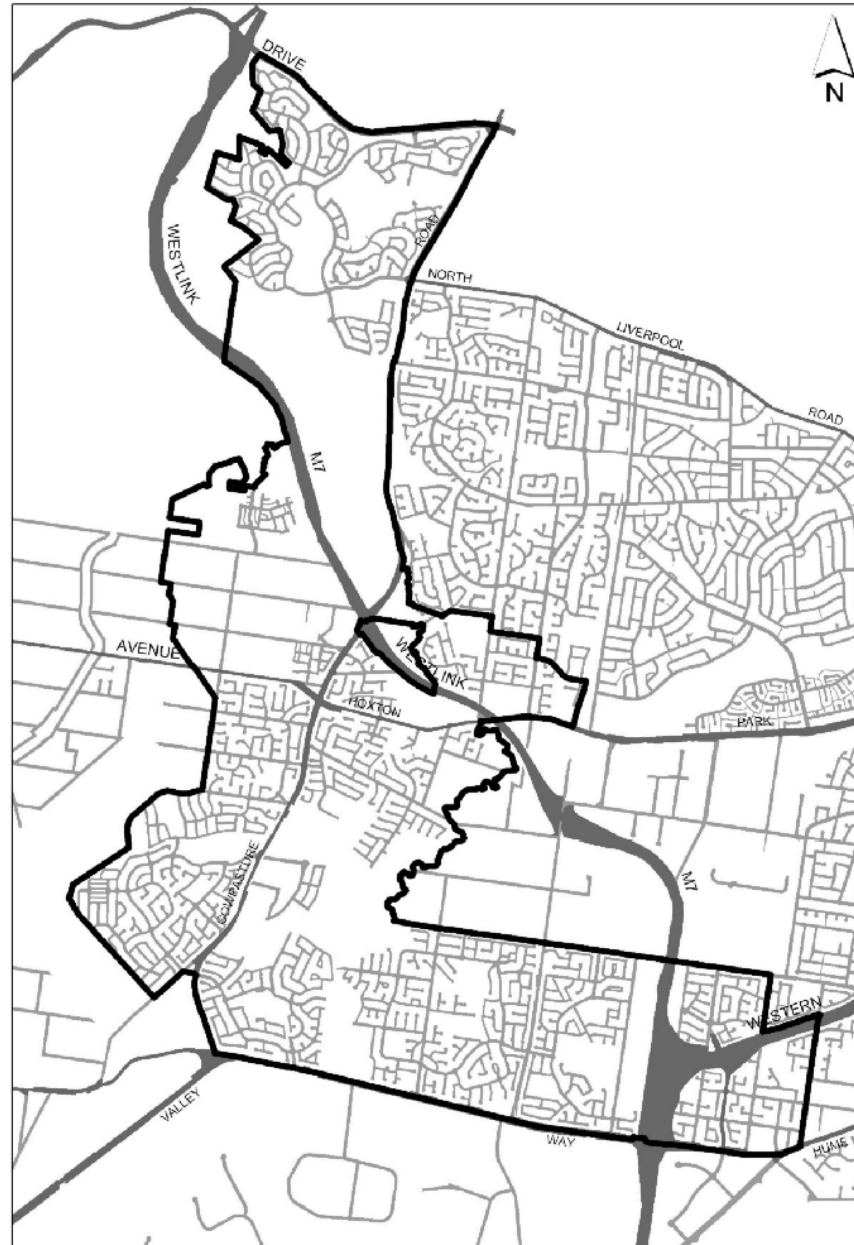


Figure 9.1 Catchment Area

9.3 Recreation Facility

Nexus

As part of its planning for the Hoxton Park Stage 2 Release Areas, Council commissioned an Open Space Strategy Report by Manidis Roberts Pty Ltd, in 1990. Frank Small & Associates also undertook market research into the Leisure Requirements for the Residents of Liverpool, a Leisure Needs Analysis for the Liverpool Community and a report on Sporting Organisations in 1994. The contents of these reports and their recommendations also form the basis for open space provision.

The 1990 report identifies the following specific District Recreation Facilities for the Hoxton Park Stage 2 Release Areas:

- District swimming pool/indoor leisure complex of 8 ha.
- District sporting area of 10 ha, with a minimum of 4 quality fields.
- District Netball Complex of 4 ha, located within a larger recreation area.
- District children playground of 2 ha, located within a larger recreation area.
- Cycleways providing links throughout the release areas (provided under local facilities)

Scope of facilities

A review of the range of district recreation facilities was undertaken in 2008. It was decided that the district recreation facility should consist of the following items:

- Tennis courts
- Indoor Recreation Centre
- Playground / Civic Park
- Playing Fields

The changes arise in part due to the impact of the M7 on the proposed open space, street and drainage networks and the *Liverpool City Wide Recreation Strategy 2020* in 2003.

Apportionment

No apportionment is allowed for as there were no existing major recreation facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

Contributing Development

15,840 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to district recreation facilities)

The area from which contributions would be received is shown on Figure 9.2.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 8 for the location of each item in Table 9.2.

Works and Land Acquisition Schedule

The range of Works for local community facilities is shown in Table 9.2.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by *Rider Hunt*.

Table 9.2 Works and Land Acquisition Schedule

No	Item	No / Area sqm	Area sqm	Land Unit Cost \$/ sqm	Total Land Costs \$	Total Works Cost \$
DR	Tennis courts	6				\$675,000
DR	Indoor Recreation Centre					\$7,860,000
DR	Playground / Civic Park	20,000				\$1,129,000
DR	Playing Fields	93,000				\$4,250,000
	Sub Total					\$13,914,000
	Project Management allowance 8%					\$1,113,120
	Contingency Sum 10%					\$1,391,400
			11,000	\$25	\$275,000	
		12.2378	34,790	\$140	\$4,870,600	
		112,000	77,210	\$175	\$13,511,750	
	Total				\$18,657,350	\$16,418,520

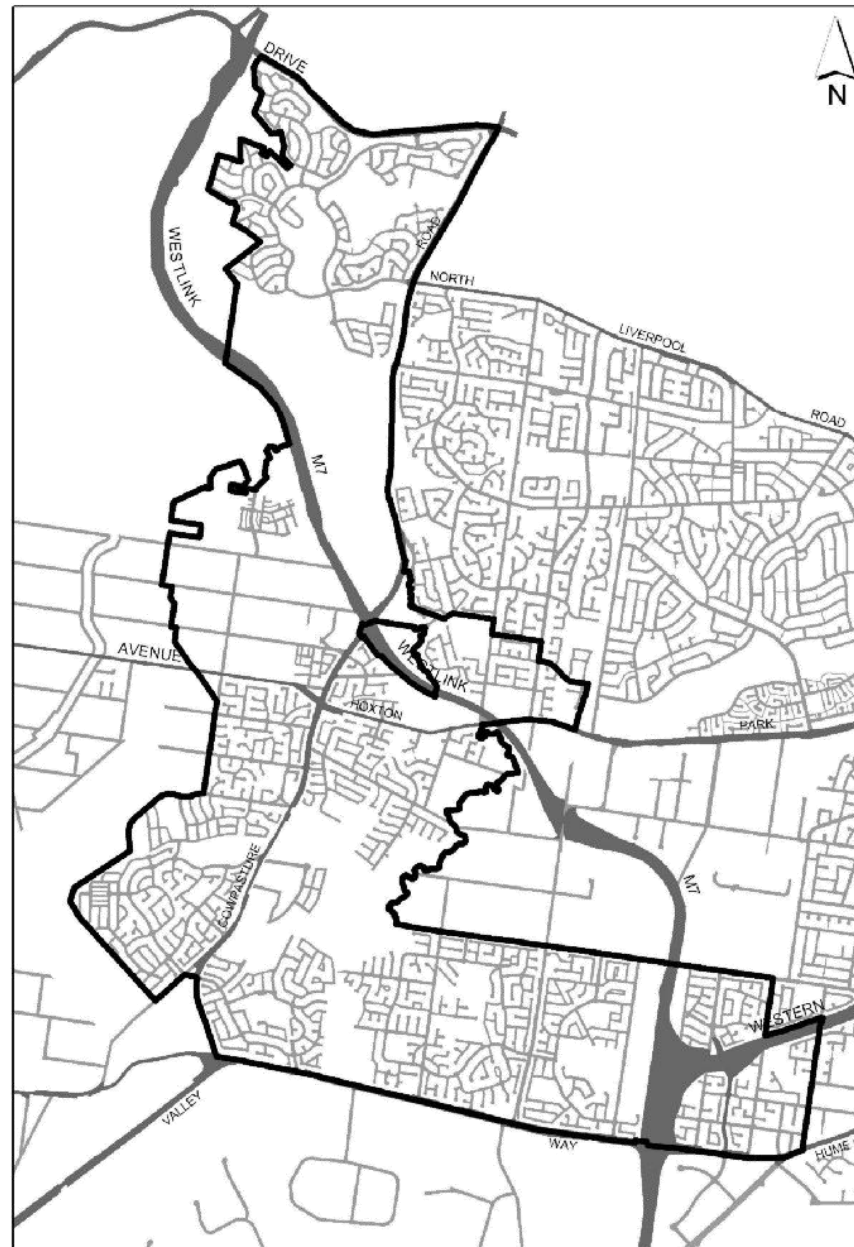


Figure 9.2 Catchment Area

9.4 Transport Facilities

Nexus

Council appreciates the need to carefully balance the management of traffic in order to achieve a safer local street system with appropriate residential amenity and to provide the efficient transfer of people, goods and services in a wider urban structure. In recognition of these objectives the road network in the Hoxton Park, Carnes Hill and Prestons areas are designed according to the principles of the *Australian Model Code for Residential Development 1990*. The Code develops a concept of "residential streets" and "transport roads". The characteristics of the "residential streets" effectively discourage major traffic intrusion into residential areas. "Transport roads" facilitate traffic efficiency and direct movement.

In adopting this strategy some cost savings on the construction of the local residential "streets" is advocated in the Code. The trade off to these benefits, that is improved safety and amenity in residential areas as well as savings in local development construction costs, is that an appropriate level of monetary contribution to the development of roads dedicated to transport is deemed appropriate.

Consequently contributions for Transport Facilities are divided into two categories:

- District Transport Facilities
- Local Transport Facilities (schemes as identified by local catchments)

Hoxton Park Stage 2 Release Areas Traffic Study

Council undertook a detailed study of the future road requirements to service the area, assuming the Hoxton Park Stage 2 Release Areas and the Prestons Industrial area have been developed by the year 2011. This study has developed a detailed computer model (T Model II software) of the land use and transport system at the present and in the future.

It is important to recognise that the future road network will be significantly congested and it has been necessary to accept a level of service of E for the design network performance. This level of service is characterised by unstable traffic flow, congestion and intolerable delays. In some instances, especially regarding access to Liverpool City Centre areas east of the Hume Highway, it has not been practical to achieve this and peak hour forced flow appear to be unavoidable.

The cost of the future road network has been estimated for the sub arterial and arterial roads in the area and proportional funding allocation has been developed based on the relative influences of various sources of traffic generation.

The Traffic Study (October 1992) developed a hypothetical apportionment on the basis of the levels of traffic, from different areas of traffic generation, which are identified as occurring on various road links or at various intersections. This apportionment took into account the local arterial and sub arterial road costs (but not including the Cumberland Highway or South Western Freeway corridors). The total cost of these works (not including land acquisition) was in the order of \$99,000,000, at 1992 costs.

This would be apportioned as follows:

Prestons Industrial Area	11%
Stage 2 Residential Release Areas	46%
Roads and Traffic Authority Through Traffic	37%
Council Existing Traffic	6%

After excluding the amount for the Roads and Traffic Authority, the proportions would be as follows:

Prestons Industrial Area	18%
Stage 2 Residential Release Areas	72%
Council Existing Traffic	10%

The emphasis in devising the works schedule has been to:

- Maintain opportunity for long term expansion of transport corridors; and
- Provide a safer road system by ensuring major roads is flood free and major intersections are appropriately controlled (signals, seagulls or roundabouts).

Scope of facilities

A review of the range of district transport facilities was undertaken in 2008. This was undertaken in conjunction with the preparation of *Liverpool DCP 2008*. This plan included amongst other items a review of the masterplan for this area. The changes arise in part due to the impact of the M7, the addition of land north of Hoxton Park Rd, changes to the land use adjacent to the Carnes Hill Centre on the proposed open space, street and drainage networks. The Cowpasture Road deviation was originally included in order to provide access to the Horningsea Park area. The scope of works did not include the full extent of road works that now exists.

Apportionment

The original traffic study estimated that 10% of the district transport works were attributable to existing traffic.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

Contributing Development

18,310 dwellings/lots (incorporating residential and equivalents from industrial development in Prestons)

The area from which contributions would be received is shown on Figure 9.3.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 2 - 17 for the location of each item in Table 9.3.

Works and Land Acquisition Schedule

The range of Works for local community facilities is shown in Table 9.3.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by Council.

Table 9.3 Works and Land Acquisition Schedule

No	Item	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Length m	Width m	Area sqm	Total Land Cost \$	Total Works Cost \$
Corridors								
RD1	Beech Rd Deviation							
	Road reserve	\$175		930	24	22,320	\$3,906,000	
	2 lane undivided carriageway		\$788	930				\$732,999
RD2	Beech Rd Widening							
	Road reserve	\$175		470	4	1,880	\$329,000	
	Structural Overlay existing central pavement		\$52	420	5.1	2,142		\$21,794
	Widen existing pavement to form 4 lane undivided urban road		\$175	420	1.9	798		\$139,893
	Lyn Parade Extension							
RD3.1	Road reserve over special use land	\$175		560	11	6,160	\$1,078,000	
RD3.2	Road reserve over special use land	\$48		560	1	560	\$26,880	
RD3.3	Road reserve over industrial land	\$175		690	2	1,380	\$241,500	
RD3.4	Environmental studies for Lyn Parade ext						\$98,900	
RD3.5	Pavement over special use land		\$1,540	560				\$862,400
RD3.6	Pavement over industrial land		\$50	690				\$34,500
RD3.7	Re-instate fence along frontage to Transmission Tower		\$133	560				\$74,610
	Kurrajong Rd							
RD4.1	Road reserve: Cowpasture Rd to Marketplace	\$175		300	24	7,200	\$1,260,000	\$175
RD4.2	Road reserve: Marketplace to Cabramatta Ck	\$175		900	20	18,000	\$3,150,000	\$175
RD4.3	Road reserve: Intersection widening - Future Road	\$175		240	15	3,600	\$630,000	\$175
RD4.4	Road reserve: Intersection widening - Mowbray Road	\$175		240	3	720	\$126,000	\$175
RD4.5	Road reserve: Intersection widening - Bernera Road	\$175		160	6	960	\$168,000	\$175
RD4.6	Road reserve: Intersection widening - San Marino Drive	\$175		80	5	400	\$70,000	\$175
RD4.7	Road reserve: Crossing of Cabramatta Creek on east side					3,783	\$1,214,500	
		\$100				3,000	\$300,000	\$100
RD4.8	4 lane urban road with median: Cowpasture Road to Marketplace		\$2,411	300				\$723,238

No	Item	Land Unit Cost \$/sqm	Works Unit Cost \$/m	Length m	Width m	Area sqm	Total Land Cost \$	Total Works Cost \$
RD4.9	4 lane urban road: Marketplace to Cabramatta Ck			900				\$5,200,000
RD4.10	Bridge over Cabramatta Ck							
	Twin bridges with 2 x 14m spans x 9.5 wide					532		\$5,000,000
RD4.11	Re-instate fence along frontage to Transmission Tower		\$133	560				\$74,610
	15% Contingency for Civil Works							\$1,638,486
RD4.12	4 lane urban Road upgrade		\$788	3,930				\$3,097,511
	Structural Overlay existing central pavement		\$49	3,930	7	27,510		\$7,350,338
	15% Contingency for Civil Works							\$1,567,177
RD5	Cowpasture Rd Deviation							
	Road Reserve	\$175				13,700	\$2,397,500	
	Two lane undivided carriageway with unsealed shoulders and table drains		\$788	800				\$630,537
RD6	Provision for bus priority facilities							
	Bus filter							\$73,290
	1 bridge over Cabramatta Ck at Bumberra St							
	2 x 14m spans x 5m wide							\$291,707
	Bemera Rd							
	Road reserve: Kurrajong Rd to Camden Valley Way	\$175		1,400	7	9,800	\$1,715,000	
RD7.1	Kurrajong Rd to Camden Valley Way							\$7,700,000
	Structural Overlay existing central pavement		\$49	1,400	7	9,800		\$68,720
RD7.2	South of Yarrawa Rd (half road width)	west side	\$920	150	6.5	Pre-existing street		\$137,925
RD7.3	Around Yarrunga St (full road width)		\$1,839	240	13	Pre-existing street		\$441,360
RD7.4	South of Yarrunga St (half road width)	west side	\$920	320	6.5	Pre-existing street		\$294,240
	15% Contingency for Civil Works							\$1,296,337
	Sub Totals						\$16,711,280	\$37,451,671
	Intersections							
RD8.1	Signalised intersection Camden Valley Way and Beech Rd Deviation (incl all RTA Fees)							\$175,897
	Turn / Slip lane, State Rd T intersection							\$304,887

No	Item	Land Unit Cost \$/sqm	Works Unit Cost \$/m	Length m	Width m	Area sqm	Total Land Cost \$	Total Works Cost \$
RD8.2	Signalised intersection Camden Valley Way & Cowpasture Rd Deviation (incl all RTA Fees)							\$175,897
	Turn / Slip lane, State Rd T intersection							\$304,887
RD8.3	Signalised intersection Cowpasture Rd & Joshua Moore Drive (incl all RTA Fees)							\$175,897
	Turn / Slip lane, State Rd T intersection							\$304,887
RD8.4	Seagull intersection at Kurrajong Rd deviation							\$175,897
RD8.5	Seagull intersection at Kurrajong Rd deviation & un-made Rd							\$175,897
RD8.6	Roundabout at intersection Kurrajong Rd deviation & un-made Rd							\$175,897
RD8.7	Roundabout at intersection Kurrajong Rd & Mowbray Rd							\$175,897
RD8.8	Signalised intersection at Bernera & Kurrajong Rds Signals Cost (incl all RTA Fees)							\$175,897
	Turn / Slip lane, Sub Arterial X intersection							\$304,887
RD8.9	Roundabout at intersection Kurrajong & San Marino Drive							\$175,897
RD8.10	Signalised intersection Bernera Rd, Wroxham St & Bomaderry Drive (incl all RTA Fees)							\$175,897
	Turn / Slip lane, Sub Arterial X intersection							\$304,887
RD8.11	Roundabout at intersection Kurrajong & Beech Rds							\$175,897
RD8.12	Roundabout at intersection of Kurrajong & Cedar Rds							\$175,897
RD8.13	Roundabout at intersection of Kurrajong & Wonga Rds							\$175,897
RD8.14	Roundabout or Seagull intersection at Kurrajong & Napier Rds							\$76,223
RD8.15	Roundabout at Beech Rd & Barcelona Drive							\$175,897
RD8.16	Roundabout at Beech Rd deviation & Pine Rd extension							\$175,897
RD8.17	Signalised intersection at Lyn Parade & Jedda Rd (incl all RTA Fees)							\$304,887
	Various signalised intersections							\$2,500,000
RD8.19	Signalised intersection at Hoxton Park & Banks Rd (incl all RTA Fees)							
RD8.20a	Camden Valley Way & Ash Rd (incl all RTA Fees)							
	Turn / Slip lane, State Rd T intersection							
RD8.20b	Camden Valley Way & Bernera Rd (incl all RTA Fees)							
	Turn / Slip lane, State Rd X intersection							
RD8.20c	Camden Valley Way & Corfield Rd (incl all RTA Fees)							
	Turn / Slip lane, State Rd T intersection							
RD8.20d	Camden Valley Way & Rynan Avenue (incl all RTA Fees)							
	Turn / Slip lane, State Rd T intersection							
RD8.20e	Camden Valley Way & Horningsea Park Drive (incl all RTA Fees)							
	Turn / Slip lane, State Rd T intersection							
RD8.20f	Cowpasture Rd & Chapman Rd (incl all RTA Fees)							
	Turn / Slip lane, State Rd T intersection							
RD8.20g	Cowpasture Rd & Kurrajong Rd extension (incl all RTA Fees)							
	Turn / Slip lane, State Rd X intersection							
RD8.20h	Cowpasture Rd & Twelfth Avenue (incl all RTA Fees)							
	Turn / Slip lane, State Rd T intersection							
RD8.20i	Hoxton Park Rd & either Webster or Calabro Rds (incl all RTA Fees)							
RD8.20j	Cartwright Avenue & Hoxton Park Rd (incl all RTA Fees)							
RD8.20k	Hoxton Park Rd & Lyn Pde (incl all RTA Fees)							
RD8.20l	Hoxton Park Rd & Ash Rd (incl all RTA Fees)							
	Turn / Slip lane, Sub Arterial T intersection							
RD8.20m	Hoxton Park, Whitford & Illaroo Rds (incl all RTA Fees)							
	Turn / Slip lane, Sub Arterial X intersection							
RD8.20n	Hoxton Park Rd & First Avenue (incl all RTA Fees)							

No	Item	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Length m	Width m	Area sqm	Total Land Cost \$	Total Works Cost \$
	Turn / Slip lane, Sub Arterial T intersection							
RD8.20o	Hoxton Park Rd & un-named Rd (incl all RTA Fees)							
	Turn / Slip lane, Sub Arterial T intersection							
RD8.20p	Hoxton Park & Cowpasture Rd (incl all RTA Fees)							
RD8.20q	Cowpasture Rd & Mannow Rd (incl all RTA Fees)							
	Turn / Slip lane, State Rd X intersection							
RD8.20r	Cowpasture Rd & Sixteenth Avenue (incl all RTA Fees)							
	Turn / Slip lane, State Rd X intersection							
RD8.20s	Cowpasture Rd & Seventeenth Avenue (incl all RTA Fees)							
	Turn / Slip lane, State Rd T intersection							
RD8.20t	Cowpasture Rd & Green Valley Rd (incl all RTA Fees)							
	Turn / Slip lane, State Rd T intersection							
RD8.20u	Cowpasture Rd & North Liverpool Rd (incl all RTA Fees)							
	Turn / Slip lane, State Rd X intersection							
	Sub Total							\$7,043,998
	Total						\$16,711,280	\$44,495,669

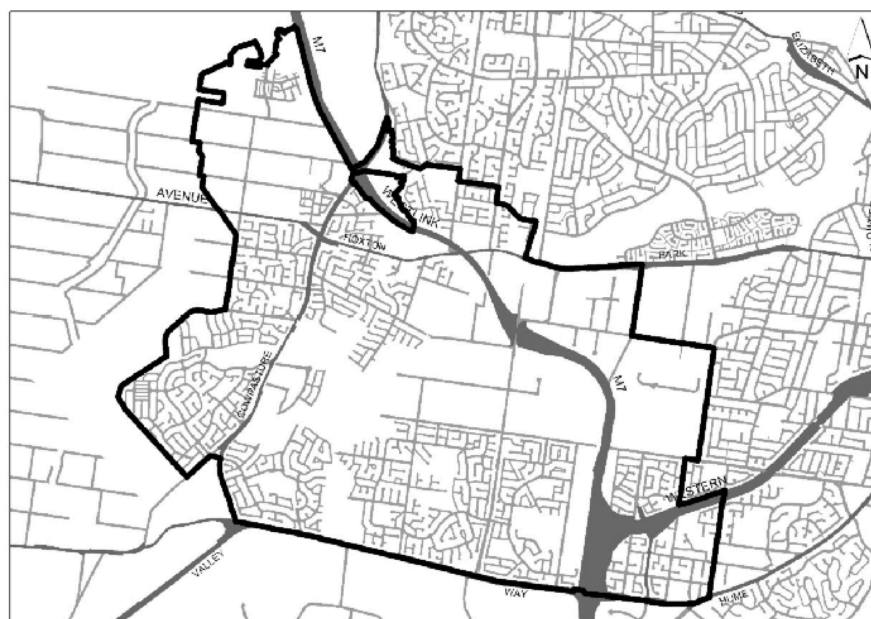


Figure 9.3 Catchment Area

9.5 Drainage Facilities

Nexus

The factors outlined at the beginning of Section 8 mean that the development of new areas may cause or exacerbate flooding problems in areas remote from the development areas themselves. Council has identified a strategic trunk drainage scheme to offset the impacts of the development in the Hoxton Park Stage 2 Release Areas and taking into account development in the Hoxton Park Stage 1 Release Areas. This scheme, known as Option A3 in the Trunk Drainage Study carried out on Council's behalf by Kinhill Engineers, involves a system of wet and dry detention basins. The scheme relies on the principle of controlling differential catchment response rates to optimise the required basin storage capacities. This is a cost effective solution and in practice means that some tributary creeks are retarded with extra basin storage compared to other tributary creeks. This is reflected in the placement of more basins on Hinchinbrook Creek.

The scheme is an effective, integrated strategy to offset the impacts of development on stormwater runoff both on the major creek tributaries within the release areas and downstream of the release areas. Consequently, the entire release area contributes as a collective whole to the implementation of the Option A3.

The drainage systems identified for developer contributions in the Hoxton Park Stage 2 Release Areas fall into two basic categories:

- The Major Trunk Drainage System of detention basins and water quality ponds system as identified in the selected Option A3 in the Kinhill's Report.
- Various local catchment pipe and channel systems as identified in the local catchment schedules by Council.

Contributions are levied on all development for both of these categories. The contribution for major drainage basins is constant throughout the whole stormwater catchment, while that for local trunk drainage varies according to the appropriate local catchment. Within the various local drainage catchments, individual developers are required to directly bear the cost of all pipelines up to 825mm diameter within or past their own land. The cost difference between any larger pipe size or drainage swale/channel is funded by developer contributions.

Background study

Capital costs for basins are based on the Kinhill Study. The land acquisition cost involves all of the basins, including those that were previously part of the Open Space Strategy.

The NSW Dams Safety Committee (DSC) has a statutory role to oversee dam owners where public safety, property and the environment could be at risk. As part of this role, the Committee prescribes (i.e. legally registers) those basins, which pose a potential threat to downstream communities with a view to ensuring the basins meet adequate safety standards. This means that these basins are treated as prescribed dams and must meet the standards set by the committee at all stages of the development and operation of the basins, including regular surveillance inspections to ensure their continuing safety.

In particular the Committee requires that these basins are designed such that during extreme floods, rather than the design flood (Probable Maximum Flood etc) the basins will behave in a manner such as not to threaten lives or cause major property/environmental damage downstream. That is, the basins are "fail safe" or designed to fail at an acceptable level and rate.

In NSW, prescribed basins owned by local government authorities also come under the oversight of the NSW Public Works under the requirements of the Local Government Act 1993.

1992 Hoxton Park Stage 2 Release Area Total Catchment Management Study – Kinhill only considered 1:100 year flood for basins and did not consider floods larger than 1:100 year. Hence no cost was allowed for in design or construction requirements of extreme floods.

Scope of facilities

A review of the range of district drainage transport facilities was undertaken in 2008. This was undertaken in conjunction with the preparation of *Liverpool DCP 2008* and decisions following the masterplanning of Middleton Grange, the preparation of the contributions plan for Edmondson Park, a review of the trunk drainage strategy by *Bewsher Consulting* and the impact of the M7.

Apportionment

No apportionment is allowed for as there were no existing district drainage facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

Contributing Development

15,450 dwellings/lots (incorporating residential, business and equivalents from industrial development in Prestons)

The area from which contributions would be received is shown on Figure 9.4.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 2 - 17 for the location of each item in Table 9.4.

Works and Land Acquisition Schedule

The range of Works for local community facilities is shown in Table 9.4.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by Council.

This area incorporates the development potential of residential lots (including the Business zones) in Hoxton Park, Carnes Hill, Prestons, Cecil Hills and the equivalent lots for Prestons Industrial Area.

There are other drainage detention facilities to be provided which contribute to the overall trunk drainage strategy in Cabramatta Creek. These are provided either by local developer contributions in Middleton Grange and Edmondson Park or by a Voluntary Planning Agreement in the future Elizabeth Hills and the former Hoxton Park Aerodrome.

Table 9.4 Works and Land Acquisition Schedule

No	Items	Area	Land Unit Cost	Land	Works
DD 3A	Basin 3A	30,380		Existing	\$1,948,235
DD 3B	Basin 3B	70,000		Within Corridor	1,024,745
DD 4	Basin 4	100,000		Existing	\$806,691
DD 6	Basin 6	55,000	\$175	\$5,725,000	
DD 10	Basin 10	133,100	\$101	\$13,469,720	\$4,718,383
DD 11	Basin 11				\$745,809
		87,434	\$116	\$12,135,349	
		16,606		\$1,639,577	
Totals				\$32,969,646	\$9,243,862

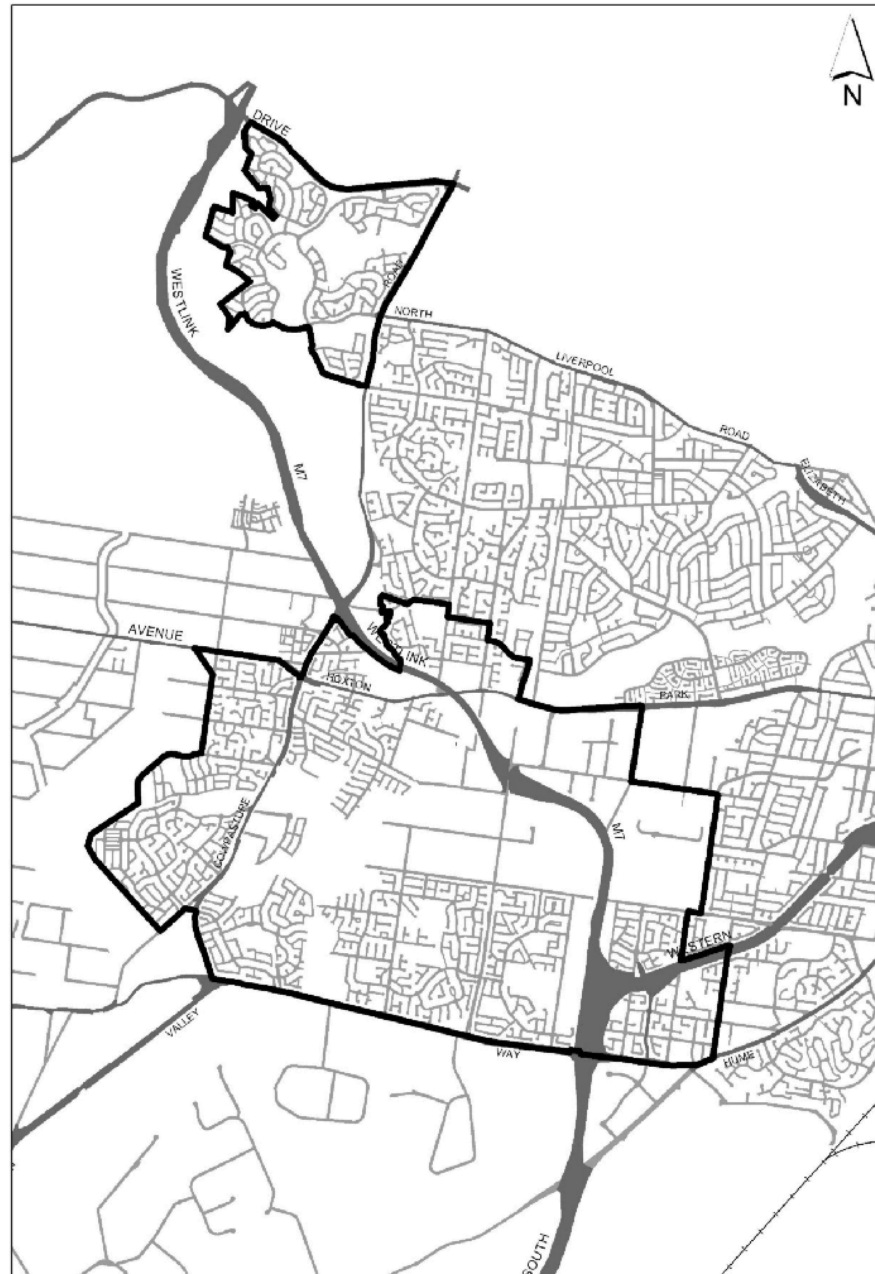


Figure 9.4 Catchment Area

9.6 Contribution Formulae

Community and Recreation Facilities

Conventional Lot Residential Subdivision, Small Lot Subdivision, Semi-detached dwellings, Multi dwelling housing and Residential Flat Buildings

Contribution by cash

$$\text{Contribution Rate = (per dwelling / lot)} = \frac{C}{N} \times \frac{OR}{3.7}$$

where C = Cost of capital works or land identified for the catchment area
N = Number of equivalent lots / dwellings in the catchment area
OR = Estimated occupancy rate for lot size or dwelling type

Contribution by land dedication

$$\text{Area of land to be dedicated = (per dwelling / lot)} = \frac{A}{N} \times \frac{OR}{3.7}$$

where A = Total area to be acquired in the catchment area
N = Number of equivalent lots / dwellings in the catchment area
OR = Estimated occupancy rate for lot size or dwelling type

For Occupancy Rate refer to Table 4.3

Aged and Disabled Persons Housing

$$\text{Contribution for total development = } \frac{\text{Conventional Lot Contribution} \times R}{3.7}$$

where 3.7 = Estimated occupancy rate for a conventional lot
R = Number of residents

Transport facilities

Conventional Lot Residential Subdivision, Small Lot Subdivision, Semi-detached dwellings, Multi dwelling housing, Residential Flat Buildings and other development

Contribution by cash

$$\text{Contribution Rate (per dwelling / lot)} = \frac{C}{N} \times \frac{V}{6.7}$$

where C = Cost of capital works and land identified for the catchment area
N = Number of equivalent lots in the catchment area
V = Vehicle trips per day for lot size or dwelling type

Contribution by land dedication

$$\text{Area of land to be dedicated (per dwelling / lot / non residential development)} = \frac{A}{N} \times \frac{V}{6.7}$$

where A = Total area to be acquired in the catchment area
N = Number of equivalent lots in the catchment area
V = Vehicle trips per day for lot size or dwelling type (refer to Table 8.5).

Table 8.5 Vehicle Trips per day per dwelling

Dwelling Type or Lot Size	Vehicle Trips per day
Residential Subdivision Lots 450 sqm or larger	6.7
Residential Subdivision Lots smaller than 450 sqm	6.0
Semi-detached dwellings, Multi dwelling housing & Residential Flat Buildings (where permitted)	
3 or more bedrooms	6.0
2 bedrooms	4.0
1 bedroom	3.3
Aged and Disabled Persons Housing (total development)	Total vehicle trips per day

Drainage Facilities

Conventional Lot Residential Subdivision

Contribution by cash

$$\text{Contribution Rate (per sqm of lots)} = \frac{C}{N \times 450}$$

where C = Cost of capital works or land identified for the catchment area

N = Number of equivalent lots / dwellings in the catchment area

Contribution by land dedication

$$\text{Area of land to be dedicated (per conventional lot)} = \frac{A}{N}$$

where A = Total area to be acquired

N = Number of equivalent lots / dwellings in the catchment area

Small Lot Subdivision, Semi-detached dwellings, Multi dwelling housing, Residential Flat Buildings, Aged and Disabled Persons Housing and Non Residential Development

Contribution by cash

$$\text{Contribution (per sqm of site area)} = \frac{\text{Conventional Lot Contribution} \times \text{CR} \times \text{Site Area}}{0.65}$$

Where CR = Runoff coefficient for the specific development type as specified in the Table 9.

Contribution by land dedication

$$\text{Area of land to be dedicated (total development)} = \frac{A}{N} \times \frac{CR}{0.65} \times \text{Site Area}$$

where A = Total area to be acquired in the catchment area

N = Number of equivalent lots / dwellings in the catchment area

CR = Runoff coefficient for the specific development type as specified in Table 8.6

The relative impacts of different types of land development on any drainage system can be estimated by comparing the peak discharge rates of runoff that the different types of development would produce. The rational formula estimates the peak discharge rates by use of runoff coefficients that are directly related to the proportion of a site that is impervious to rainfall infiltration. The following table gives the relative impacts of alternate types of land development on runoff generation.

Table 9.6 Co efficient of Runoff for development types

Development Type	Co efficient of Runoff
Conventional residential lots and schools	0.65
Semi-detached dwellings, villa houses, small lot subdivision and Aged and Disabled Persons Housing	0.75
Town houses	0.80
Shopping Centre & other non-residential	0.95

9.7 Staging of Facilities

Council will build most facilities as the population threshold for their construction is usually much larger than individual developments. These will be provided as funds become available and as land can be acquired.

10. Hoxton Park, Carnes Hill and Prestons Release Areas

10.1 Background

Development in the Cecil Hills, Hoxton Park, Carnes Hill and Prestons Residential Release Areas has now reached an advanced stage of development.

Catchment Areas

There is a single catchment for Community, Recreation Facilities and Streetscape works. There are a number of separate sub catchments for transport and drainage facilities.

10.2 Community Facilities

Background

New development, which leads to an increase in the number of residents, will also increase the demand for community facilities including multi-purpose community centres, libraries and cultural facilities.

It is intended that contributions will be levied on aged or disabled housing development (as defined under *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004*).

One of the key criteria, which allow development under the SEPP, is the local availability of support services.

Contributions are levied for aged and disabled housing development on the following grounds:

- The standard nexus between the new population and the demand for additional services.
- Older and disabled people will be future users of multi-purpose community centres and the branch library.
- Service providers in Liverpool generally will use these facilities to provide local services for the anticipated population.
- Aged or disabled housing will not provide additional facility capability to people other than residents of the development.
- Not all residents' requirements can be met from services provided on site.
- The criteria within the SEPP for availability of local support services cannot be met without Council facilities in the locality.

Nexus

Local level multi-purpose community centres provide a locally based facility. Poor public transport, inadequate human services infrastructure, distance and therefore poor access to centrally located services are key obstacles facing new residents. As a focal point for residents, community centres provide flexible space for a broad range of community activities. Some of the functions and activities that can occur in these centres include:

- Meeting space for community groups and organisations.
- An informal meeting place and information centre.
- Multi-purpose working space for a range of activities such as play groups, educational classes, cultural and leisure activities (arts and crafts classes, cultural projects, workshops, etc).
- Sessional space for visiting and specialist services such as community nurses, health services, family support services, etc.
- Office accommodation, interview rooms and generally an administrative base for community

workers and local Neighbourhood Centre services.

- Spaces for private functions such as weddings, celebrations, formal meetings, cultural events, etc.

Elected committees comprising local residents and users usually manage such centres.

Council proposes a standard for such facilities, a 600sqm building for a population of approximately 8,000 - 10,000 residents. This standard is proposed based on experience of facilities in other Liverpool release areas. In areas with a projected population over 10,000 but less than 20,000, it is proposed to build centres that are proportionately based on this standard. This will be incorporated into the floor-space ratio adopted in this Plan for community facilities.

Scope of facilities

A review of the range of local community facilities was undertaken in 2008. It was decided that a local multipurpose community centre for each suburb would be provided. An analysis of local community centres in areas adjacent release areas showed that bookings for these centres were at full capacity.

Apportionment

No apportionment is allowed for as there were no existing local community facilities in existence at the commencement of the development of the area.

Contributing Development, Works Schedule and Catchment Area

Contributing Development

10,540 dwellings/lots (number of dwellings or equivalent that are expected to contribute to local community facilities)

The area from which contributions would be received is shown on Figure 10.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 7, 8 & 13 for the location of each item in Table 10.1.

Works and Land Acquisition Schedule

The range of Works for local community facilities is shown in Table 10.1.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by *Rider Hunt*.

Table 10.1 Works Schedule

No.	Item	Works Cost \$
C1	Multi-Purpose Community Centre (600 sqm)	\$2,269,150
C2	Multi-Purpose Community Centre (600 sqm)	\$2,269,150
C3	Multi-Purpose Community Centre (600 sqm)	\$2,269,150
Total		\$6,807,450

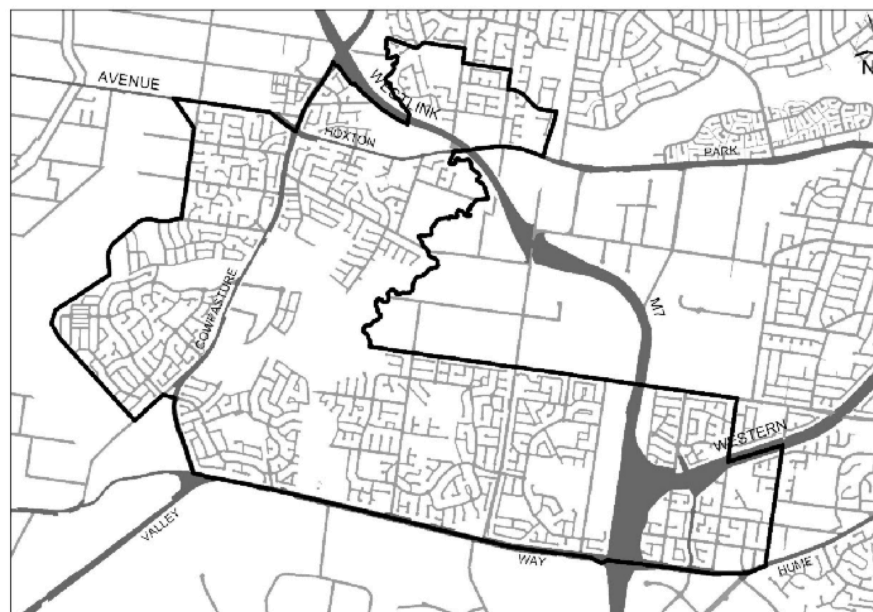


Figure 10.1 Catchment Area

10.3 Recreation Facilities

Nexus

The link between residential development, the recreational needs of the incoming population and the provision and subsequent embellishment of open space is based upon:

- Demographics of projected incoming population
- Needs of major target groups
- Market research
- Location/design constraints and requirements

As part of its planning for the Hoxton Park Stage 2 Release Areas, Council commissioned an Open Space Strategy Report by Manidis Roberts Pty Ltd, in 1990. Frank Small & Associates also undertook market research into the Leisure Requirements for the Residents of Liverpool, a Leisure Needs Analysis for the Liverpool Community and a report on Sporting Organisations in 1994. The contents of these reports and their recommendations also form the basis for open space provision.

Heather Nesbitt Planning with CD Recreation Services and Parkland Environmental Planners completed a review in March 2003.

Needs of Major Target Groups

The major target age groups from a recreational viewpoint in new release areas are children 0-14 years and adults 20-34 years. The recreational activities and open space needs for these specific age groups mainly comprise:

- Small parks within walking distance of all residences with play equipment
- Formal playing fields

- Areas for informal sporting facilities
- Corridors linking open space features
- Large natural and parkland areas

More specific desired recreational activities for these groups are.

0 - 14 years	20 - 34 years
Cricket/football	Cricket/football
Bicycle paths	Tennis
Walking for pleasure	Walking for pleasure
Parks/playgrounds	Picnic/barbeques
Picnic/barbeques	Jogging
Swimming	Swimming
Visiting friends	Squash
Going to movies	Visiting friends
Going to beach	Going to clubs
	Going to movies
	Dancing / disco

The need for open space and its embellishment also exists for age groups other than those discussed above to provide a total community environment. Local parklands, walking, bicycle paths, tennis courts and hard court areas will provide such recreational opportunities.

Location and Design

The market research stresses easy access to all facilities, which emphasises the need for good transport facilities and increased community awareness of recreational opportunities. The final location and design of facilities is however influenced by a number of factors including population thresholds, existing site conditions, transport networks, easements, and open space policy objectives. The distribution and use of Open Space is based on the hierarchy of open space as outlined in the *Open Space Strategy Report (1990)*.

The following tables outline the proposed hierarchy of open space provision within the broader Hoxton Park Stage 2 Release Area and the Department of Planning recommended quality goals for open space.

Open Space Quality Goals

Goal	Rationale
Minimum open space size of 0.5ha for new release areas.	Increased maintenance cost and reduced useability for areas smaller than this. The pocket park concept has been shown to be largely a failure and many councils are attempting to dispose of many of these sites.
Each area of greater than 10ha be linked to at least one other area.	To encourage linkages between open spaces. Footpaths and street narrowing can be used in some circumstances.
Each household should be within 500m of open space of at least 0.5ha.	Equity of distribution and to reduce car dependence.
Diversity of settings is encouraged.	Diversity of settings will more likely cater for a greater range of recreation need. In new release areas this can be facilitated through flexible design modules.
Sports fields should primarily be playable.	Sports fields should be designed to ensure that playing surfaces are in use for the maximum period possible, particularly if designed within detention basins.
Terrain should provide an alternative to that prevailing in the area.	More appeal and interest will be generated with mounding, creek lines and ridge tops
Linear open space should have capacity for good pedestrian and bicycle movements and have houses 'facing' and side-on.	Increase useability and decreased vandalism.

Source: NSW Dept of Planning - Outdoor Recreation & Open Space (1992)

Background to Open Space Design and Location

A number of constraints have influenced where and how the above mentioned open space requirements have been allocated within the precinct areas.

- Flooding/Drainage - the concept of dual use of open space for drainage functions includes the retention of natural creek lines to control flooding and the use of dry basins as sporting fields.
- Electricity Easements - the presence of large easements, some of which have been, incorporated within larger open space areas.
- Existing Dwellings - where possible locating major open spaces & collector streets away from existing development so as not to impede initial development. Due to the rate of development a number of smaller pocket parks have already been provided prior to the review of this plan.
- Street Network - where major impact on access to recreational facilities occurs, open space provisions may be either under or over desired levels.
- Landform & Vegetation - where open space has been allocated to retain natural features or where natural barriers such as creeks occur, some areas may contain smaller open space areas in close proximity.

The final layout of open space areas has also been influenced by the following open space objectives.

- District facilities are centrally located adjacent to the District Retail Centre and are easily accessible by public and private transport.
- Provision of open space links radiating from the District Retail / Recreational Centre to the surrounding precincts, to the Special Uses Corridor in the west, and along Hinchinbrook, Cabramatta and Cowpasture Creeks.
- Retention of local features such as bushland, creek lines, natural high points and vistas.

The report identifies the following specific recreation facilities for the Hoxton Park, Carnes Hill and

Prestons areas:

- District park/bushland of which a minimum 10ha is to be provided along Hinchinbrook & Cabramatta Creeks and 10ha to be provided along Hinchinbrook Ck within Precinct 3 (Middleton Grange).
- Cycleways providing links throughout
- Local Sports fields - total 20 playing fields with this number inclusive of the 4 quality fields allocated for the district sporting area.
- Precinct Park - total 8.
- Children's playgrounds - total of 10ha.

The required open space provision is 114.73ha of which 102.5ha local open space plus a proportion of district open space of 12.23ha.

Scope of facilities

A review of the range of local recreation facilities was undertaken in 2008. This was undertaken in conjunction with the preparation of *Liverpool DCP 2008*. This plan included amongst other items a review of the masterplan for this area. The changes arise in part due to the impact of the M7 on the proposed open space, street and drainage networks and the *Liverpool City Wide Recreation Strategy 2020* in 2003.

Apportionment

No apportionment is allowed for as there were no excess local recreation facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

Contributing Development

10,540 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local recreation facilities)

The area from which contributions would be received is shown on Figure 10.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 3 – 5, 7 – 9, 11 – 14, 16 & 17 for the location of each item in Table 10.2.

Works and Land Acquisition Schedule

The range of Works for local community facilities is shown in Table 10.2.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by *Rider Hunt*.

Table 10.2 Works and Land Acquisition Schedule

No.	Items	Works Unit Cost \$ per item	Land Unit Cost \$ / sqm	Area ha	Works Cost \$	Land Cost \$
Major Parks						
1	Peter Miller Park (Cedar Road)		\$175	5.6634		\$9,910,950
	Children's Play Area			0.04	\$57,426	
	Sportsfield	\$806,431		3.0000	\$2,419,293	
	Consolidated Passive Area	\$312,830		2.4299	\$760,147	
	Existing public street			0.1935		
2	Ash Road Sports Ground		\$50	10.2713		\$5,135,650
	Children's Play Area				\$57,426	
	Amenities building				\$1,100,000	
3	Macleod Park & Harvard Park (Braidwood Dr)		\$175	13.482		\$23,593,500
	Children's Play Area			0.04	\$57,426	
	Sportsfield	\$806,431		7.842	\$6,324,032	
	Consolidated Passive Area	\$312,830		5.6	\$1,751,851	
4	Schoeffel Park (Basin 11) (Strzlecki Dr)			8.584		(Dist Drainage)
	Children's Play Area			0.04	\$57,426	
	Sportsfield	\$806,431		1.81	\$1,459,640	
	Consolidated Passive Area	\$312,830		6.734	\$2,106,600	
5	Edmund Barton Park					(Dist Drainage)
6	Basin 10			13.27		(Dist Drainage)
	Children's Play Area			0.04	\$57,426	
	Sportsfield	\$2,426,751			\$4,853,503	
7	Brownes Farm Reserve (First Ave)		\$50	9.447		\$4,723,500
	Children's Play Area			0.04	\$57,426	
	Sportsfield	\$806,431		3.75	\$3,024,116	
	Consolidated Passive Area	\$312,830		2.1	\$656,944	
	Bushland / Natural Areas	\$175,065		3.017	\$528,170	
	Community Facilities			0.54		
8	Cabramatta Creek Corridor		\$17	0.157		\$27,268
			\$50	7.647		\$3,823,500
	Bushland / Natural Areas	\$175,065			\$1,338,719	
9	Hinchinbrook Creek Corridor		\$17	2.225		\$386,447
	Bushland / Natural Areas	\$175,065			\$389,519	
10	Bears Creek Corridor		\$17	1.5		\$260,526
			\$25	0.7		\$175,000
			\$50	1.422		\$711,000
	Bushland / Natural Areas	\$175,065			\$248,942	
11	Bushland (Adjacent Maxwell's Creek)		\$50	2.144		\$1,072,000
	Bushland / Natural Areas	\$175,065			\$375,339	
12	Bert Burrows Park (Warialda Way)		\$175	0.6411		\$1,121,925
	Children's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$200,556	
13	Wendy Paramor Park (12th and Mannow Ave)		\$175	0.8		\$1,400,000
	Children's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$250,264	
14	Link (Cowpasture / Muller / 2nd Ave)		\$175	3.767		\$6,592,250
	Linear Passive area	\$381,239			\$1,436,129	

No.	Items	Works Unit Cost \$ per item	Land Unit Cost \$ / sqm	Area ha	Works Cost \$	Land Cost \$
15	Link (Basin 10 - Special Uses Corridor)		\$17	1.32		\$229,263
	Linear Passive area	\$381,239			\$503,236	
16	Knoll (west Cowpasture Road)		\$175	1.4469		\$2,532,075
	Children's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$452,634	
17	Precinct Park (adjacent Horningsea Park)		\$175	0.416		\$728,000
	Children's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$130,137	
18	Precinct Park (within District Retail Centre)		\$175	0.2		\$350,000
	Children's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$62,566	
19	Precinct Park (Bumbera Road)		\$175	0.7859		\$1,375,325
	Bushland / Natural Areas	\$175,065			\$137,583	
20	Link (across Kookaburra Road)		\$175	1.724		\$3,017,000
	Linear Passive area	\$381,239			\$657,257	
21	Rettalack Park (adj. Prestons Shops)		\$175	0.487		\$852,250
	Children's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830		0.307	\$96,039	
	Community Facilities			0.18		
22	Dalmeny Reserve (east of Bernera Road)		\$175	1		\$1,750,000
	Children's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$312,830	
23	Precinct Park (Maple Road)		\$175	0.49		\$857,500
	Children's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$153,287	
26	Link (Maxwells Creek - Kurrajong Rd)		\$175	0.2		\$350,000
	Linear Passive area	\$381,239			\$76,248	
27	Land at junction of Hinchinbrook / Cabramatta Creeks		\$50	1.677		\$838,500
Sub Totals				90.7676	\$32,609,542	\$71,813,430
Playground Parks						
PP1	Pavo Park		\$175	0.2		\$350,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$35,857	
PP2	Aston Reserve		\$175	0.2		\$350,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$62,566	
PP3	Joe D'quino Park (Pacific Palms Cct)		\$175	0.2		\$350,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$62,566	
PP4	Alex Grimson Reserve		\$175	0.2		\$350,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$35,857	
PP5	A E Reay Park		\$175	0.2		\$350,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$62,566	
PP6	Off Pacific Palms Circuit		\$175	0.2		\$350,000

No.	Items	Works Unit Cost \$ per item	Land Unit Cost \$ / sqm	Area ha	Works Cost \$	Land Cost \$
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$62,566	
PP7	Off Coffs Harbour Ave		\$50	0.4		\$200,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$125,132	
PP8	Walter Baldery Park		\$175	0.6		\$1,050,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$107,570	
PP9	Glendevie Park		\$175	0.2		\$350,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$62,566	
PP10	Gatto Place		\$175	0.2		\$350,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$35,857	
PP11	Ayshford Reserve		\$175	0.2		\$350,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$35,857	
PP12	Riddell Park		\$175	0.2		\$350,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$35,857	
PP13	Dryander Ave		\$175	0.2		\$350,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$62,566	
PP14	Prout St/Cobble Circuit		\$175	0.2		\$350,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$62,566	
PP15	Wingate Ave		\$175	0.2		\$350,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$62,566	
PP16	Solander Ave		\$175	0.4		\$700,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$71,714	
PP17	Watling Ave		\$175	0.4		\$700,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$71,714	
PP19	Yalwal Court		\$150	0.2		\$300,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$62,566	
PP20	Trash & Treasure		\$150	0.8		\$1,200,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$250,264	
PP21	Abbeville Cl		\$175	0.2		\$350,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$35,857	
PP22	Taralga Street		\$175	0.2		\$350,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$35,857	
PP23	Fortunato Park		\$175	0.2		\$350,000

No.	Items	Works Unit Cost \$ per item	Land Unit Cost \$ / sqm	Area ha	Works Cost \$	Land Cost \$
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$35,857	
PP24	Linkage between Dalmeny Drive & Ash Road		\$175	0.5		\$875,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$156,415	
PP25	Sid Neville Reserve		\$175	0.4		\$700,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$71,714	
PP26	Henry Kitchen Park (Barcelona Dr)		\$175	0.6		\$1,050,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$107,570	
PP27	Pavisi Park (Corner Calabria & Venezia Streets)		\$175	0.4		\$700,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$71,714	
PP29	Morris Park at Thirroul Circuit		\$175	0.2		\$350,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$35,857	
PP30	Fintray Park		\$175	0.4		\$700,000
	Children 's Play Area				\$57,426	
	Consolidated Passive Area	\$312,830			\$125,132	
PP31	East of Dalmeny Drive		\$175	0.4		\$700,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$71,714	
PP32	Varley Park at Corfield Rd		\$175	0.2		\$350,000
	Children 's Play Area				\$36,744	
	Consolidated Passive Area	\$179,284			\$35,857	
Sub Totals					\$3,523,489	\$15,175,000
Cycleways						
Cycleways through open space linkages and along creeks					\$2,439,877	
Sub Total					\$38,572,908	
Project Management 10%					\$3,857,291	
Contingency 10%					\$3,857,291	
Totals				99.9	\$46,287,490	\$86,988,430

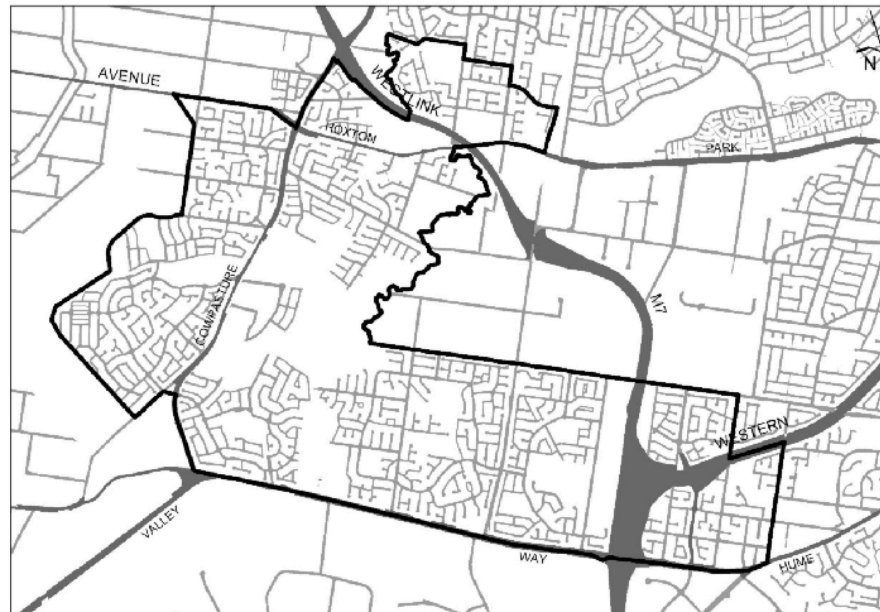


Figure 10.2 Catchment Area

10.4 Transport Facilities

Nexus

Collector Streets

In the Hoxton Park, Carnes Hill and Prestons Residential Release Areas, the Local Access Street was adopted as the benchmark to assess developer contributions. Council has adopted the philosophy that within each neighbourhood, all streets of higher standard than collector streets are necessary to provide access for everyone in that neighbourhood. Therefore there is a contribution toward the difference in cost between a local access street and each street of higher standard. This applies to the additional width, pavement depth and land value (in excess of 18m width).

Within the Council's road hierarchy are the following:

- Access places and cul-de-sac: cater for up to 300 vehicles per day (vpd) and not more than 100m long
- Local access streets: cater for up to 1,000 vpd with provision for up to 2000vpd with wider pavements
- Collector streets: cater for up to 3,000vpd
- Trunk collector streets: cater for up to 6,000 vpd and usually provide a link between the internal collector road system of a residential precinct and the major road system
- Sub arterial roads: cater for up to 15,000 vpd and are the principal traffic carriers within an urban neighbourhood

Streets adjacent to public schools, open space and drainage corridors

Streets which front public facilities such as public schools, open space and drainage corridors are not directly the responsibility of any one developer and are, therefore, levied for under this Plan. For any street which a developer has one frontage to and the other side of the road is fronted by a public facility such as public schools, open space and drainage corridors, the developer is required to provide the following:

- 9 m street reserve or half street reserve, whichever is greater
- The cost of constructing half of a street with a minimum 5.5m street pavement width, or half the designated street width, whichever is greater

The remainder of the full width street dedication and construction is funded by contributions.

Upgrading existing public roads

Where an existing road is identified within the contributions plan as requiring an upgrade, Council has made an assessment of the remaining life of the pavement and deducted this from the cost of construction of a new pavement. Where the road is identified as access denied on the relevant chapter of *Liverpool DCP 2008*, the work is costed for the construction of full width pavement. If future residential lots have access directly to the road, the contributions plan funds central pavement only.

Roundabouts

Roundabouts serve the whole street system within each neighbourhood and consequently serve each property. The cost is determined by the difference in cost between an intersection with a roundabout and a normal intersection.

Other Traffic Facilities

The other facilities include:

- Trunk Collector Streets
- Local Streets fronting open space, drainage, schools etc and within heritage precinct
- Roundabouts
- School Bus Bays
- Structural upgrading and overlay of pavements on existing streets
- Bus shelters
- Wombat crossings
- Closure of some existing streets
- Miscellaneous works

Scope of facilities

A review of the range of local transport facilities was undertaken in 2008. This was undertaken in conjunction with the preparation of *Liverpool DCP 2008*. This plan included amongst other items a review of the masterplan for this area. The changes arise in part due to the impact of the M7, the addition of land north of Hoxton Park Rd, changes to the land use adjacent to the Carnes Hill Centre on the proposed open space, street and drainage networks.

Apportionment

No apportionment is allowed for as there were no existing local transport facilities in existence at the commencement of the development of the area.

Composition of the works and land component

The composition of the works and land component for streets fronting a public facility identified in the following tables is as follows:

Table 10.3 Composition of works and land component

Item	Land component	Works component
Collector street frontage to school	$(18 - 9) = 9.0\text{m}$	$(7.5 - 5.5) = 2.0\text{m}$
Local Street frontage to school	$(14.5 - 9) = 5.5\text{m}$	$(6.5 - 5.5) = 1.0\text{m}$
Local street fronting open space or drainage res	$(14.5 - 9) = 5.5\text{m}$	$(6.5 - 5.5) = 1.0\text{m}$
Collector Street fronting Open Space or Drainage Res	$(18 - 9) = 9.0\text{m}$	$(7.5 - 5.5) = 2.0\text{m}$
Collector Street through Open Space or Drainage Res	18m	7.5m
Local Street fronting Cabramatta Creek / Drain	$(10.5 - 9) = 1.5\text{m}$	$(6.5 - 5.5) = 1.0\text{m}$

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

There are several local transport sub catchments within the Hoxton Park, Carnes Hill and Prestons Release Areas. These are shown on Figure 10.3.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by Council.

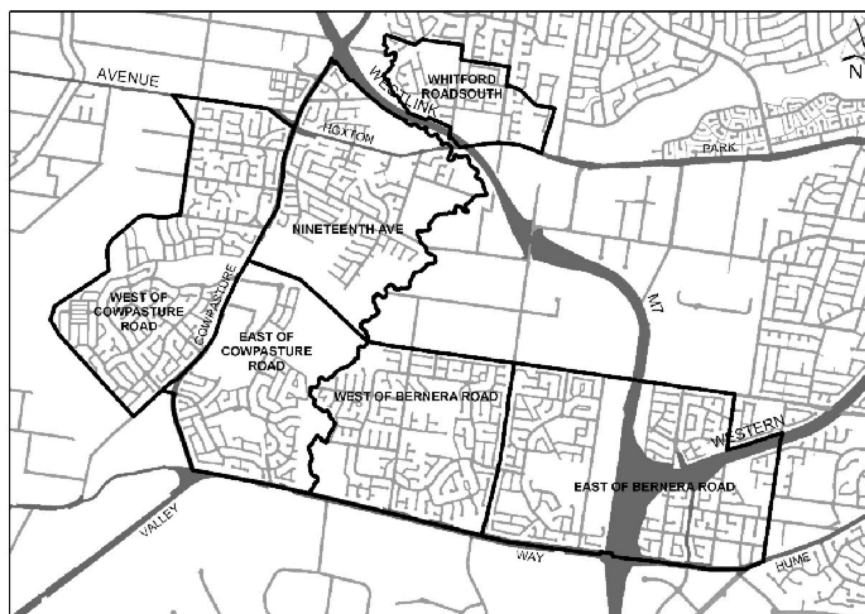


Figure 10.3 Catchment Area

East of Bernera Road Sub Catchment

Contributing Development

2,250 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 10.3.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 13, 14, 16 & 17 for the location of each item in Table 10.4.

Works and Land Acquisition Schedule

The range of Works and land acquisition for local transport facilities is shown in Table 10.4.

Table 10.4 Works and Land Acquisition Schedule

No.	Items	Length / No of items	Street / Pavement width	Frontage width	Land Unit Cost	Works Unit Cost	Total Land	Total Works
		m	m	m	\$ / sqm	\$ / m	\$	\$
Minor Roundabout								
1.1	Pine Rd & Maple Rd							\$44,118
1.2	Pine Rd & Cedar Rd							\$44,118
1.4	Myall, Box, & un-named Roads							\$44,118
1.5	Bottlebrush Av & Maple Rd							\$44,118
1.6	Wattle Rd & Cedar Rd							\$44,118
1.8	San Marino Dr/Sicilian Av/Venega Av							\$44,118
1.9	Dalmeny Dr & Bombaderry Rd							\$44,118
1.10	San Marino Dr & Dalmeny Dr							\$44,118
1.11	Ash Rd & Dalmeny Dr 120m north of Camden Valley Way							\$44,118
1.12	Cedar Rd/Acacia Av/Barcelona Rd							\$44,118
1.15	Dalmeny Dr & Venezia St							\$44,118
Collector Street Frontage to School site								
2	Dalmeny Dr	225		9	\$175	\$372	\$354,375	\$83,620
Local Street Frontage to School site								
3	Umbria St	30		5.5	\$175	\$292	\$28,875	\$8,751
4	School Bus Bay	1				\$51,471		\$51,471
Local Street Fronting Open Space or Drainage Res								
5.1	Maple Rd	145		Pre-existing street				\$150,000
5.2	Paperbark Cct	70		5.5	\$175	\$266	\$67,375	\$18,632
5.3	Geraldton St	60		5.5	\$175	\$266	\$57,750	\$15,971
5.4	Strathyre Dr	100		5.5	\$175	\$266	\$96,250	\$26,618
5.7	Toscana St	220		5.5	\$175	\$266	\$211,750	\$58,559
5.8	Flametree St	105		5.5	\$175	\$266	\$101,063	\$27,949
5.9	Off Ash Rd	150		5.5	\$150	\$266	\$123,750	\$39,926
5.10	Stansmore Av	80		5.5	\$175	\$266	\$77,000	\$21,294
5.11	William Mahoney St	80		5.5	\$175	\$266	\$77,000	\$21,294
5.12	Rowan Pl	80		5.5	\$175	\$266	\$77,000	\$21,294
5.13	Ash Rd	150		Pre-existing street		\$266		\$39,926
5.14	Dee Cl	25		5.5	\$175	\$266	\$24,063	\$6,654
5.15	Witch hazel Pl	20		5.5	\$175	\$266	\$19,250	\$5,324

No.	Items	Length / No of items	Street / Pavement width	Frontage width	Land Unit Cost	Works Unit Cost	Total Land	Total Works
		m	m	m	\$ / sqm	\$ / m	\$	\$
5.16	extension of Barcelona Dr	80		5.5	\$175	\$266	\$77,000	\$21,294
	Local Street through Open Space or Drainage Res							
6	Stansmore Av	60						
	Collector Street fronting Open Space or Drainage Res							
7.1	Dalmeny Dr at Bomaderry Dr	110		9	\$175	\$390	\$173,250	\$42,868
7.2	Dalmeny Dr at Stansmore Av	80		9	\$175	\$390	\$126,000	\$31,176
7.3	Ash Rd	450		Pre-existing street		\$390		\$175,368
7.4	Ash Rd	95		Pre-existing street		\$390		\$37,022
7.5	Ash Rd	90		Pre-existing street		\$390		\$35,074
7.6	Barcelona Dr	100		9	\$175	\$390	\$157,500	\$38,971
	Trunk Collector Street							
8.1	Bomaderry Dr	180		20	\$175	\$1,637	\$630,000	\$294,596
8.2	San Marino Dr	255		20	\$175	\$1,637	\$892,500	\$417,345
8.3	Ash Rd	120		Pre-existing street		\$1,637		\$196,398
8.4	Barcelona Dr	190		20	\$175	\$1,637	\$665,000	\$310,963
	Collector Street through Open Space or Drainage Res							
9.1	Dalmeny Dr at Bomaderry Dr	30		18	\$175	\$1,028	\$94,500	\$30,840
9.2	Dalmeny Dr at Stansmore Av	25		18	\$158	\$1,028	\$71,100	\$25,700
9.3	Ash Rd	35		Pre-existing street		\$1,028		\$35,980
	Culvert on Ash Rd	25		14.5		\$1,027		\$372,137
9.4	Ash Rd	165		Pre-existing street		\$1,028		\$169,618
	Culvert on Ash Rd	20		14.5		\$1,027		\$297,710
	Collector Street upgrade							
10	Pine Rd (south side)	200		Pre-existing street				\$250,000
11	Wombat Crossings	2				\$11,765		\$23,529
12	Bus Shelters	12				\$8,824		\$105,882
13	Road Closures							
	Beech	1				\$14,706		\$14,706
	Cedar	1				\$14,706		\$14,706
	Sub Total							\$4,024,458
	15% Contingency for Works							\$603,669
	Total						\$4,202,350	\$4,628,127

West of Bernera Road Sub Catchment

Contributing Development

2,140 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 10.3.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 12 & 13 for the location of each item in Table 10.5.

Works and Land Acquisition Schedule

The range of Works and land acquisition for local transport facilities is shown in Table 10.5.

Table 10.5 Works and Land Acquisition Schedule

No.	Items	Length / No of items m	Pavement width m	Land width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land \$	Total Works \$
1	Minor Roundabout							
1.1	Wroxham St/Minnamurra Cct/Braidwood Dr.							\$44,118
1.2	Minnamurra Cct/Kydra Cl/Yerona Cl							\$44,118
1.4	Minnamurra Cct and Braidwood Dr.							\$44,118
1.5	Braidwood Dr and Corfield Rd							\$44,118
1.6	Braidwood Dr and Bumbera St							\$44,118
1.7	Braidwood Dr and Bugong St							\$44,118
1.8	Bugong St / Yalwal Ct/ Berry Rd							\$44,118
1.9	Bugong St / Milton Ct / Taralga St							\$44,118
1.10	Bugong St and Kookaburra Rd							\$44,118
1.11	Braidwood Dr/Abbeville Cl/Batehaven Cl							\$44,118
1.12	Braidwood Dr and Mowbray St							\$44,118
1.13	Braidwood Dr/ Michelago Cct/Ulladulla St							\$44,118
1.3	Michelago Cct/Mollymook St/ Culburra St							\$44,118
	Trunk Collector Street							
4.1	Mowbray St	200	10	20	\$175	\$1,637	\$700,000	\$327,329
4.2	Wroxham St	200	10	20	\$175	\$1,637	\$700,000	\$327,329
4.3	Corfield Rd	220		Pre-existing street		\$1,637		\$360,062
5	Local Street fronting Open Space or Drainage Res							
5.1	Kiora / Yalwal Ct	40	1	5.5	\$175	\$266	\$38,500	\$10,647
5.2	Galba Cl / Bombo Cl	40	1	5.5	\$175	\$266	\$38,500	\$10,647
5.3	Quaama Cl	80	1	5.5	\$175	\$266	\$77,000	\$21,294
5.4	Richlands Pl	25	1	5.5	\$175	\$266	\$24,063	\$6,654
5.5	Thirroul Ct	80	1	5.5	\$175	\$266	\$77,000	\$21,294
5.6	Fortunato St	210	1	5.5	\$175	\$266	\$202,125	\$55,897
5.7	South of Bumbera St	180	1	5.5	\$175	\$266	\$173,250	\$47,912
5.8	Bundanoon Rd	50	1	5.5	\$175	\$266	\$48,125	\$13,309
5.9	Gerroa Cl / future st	50	1	5.5	\$175	\$266	\$48,125	\$13,309
5.10	Dapto / Greenwell	50	1	5.5	\$175	\$266	\$48,125	\$13,309
5.11	Ulladulla Dr	140	1	5.5	\$175	\$266	\$134,750	\$37,265
5.12	Tulich Av	25	1	5.5	\$175	\$266	\$24,063	\$6,654
5.13	Abbeville Cl	25	1	Pre-existing street		\$266		\$6,654

No.	Items	Length / No of items m	Pavement width m	Land width m	Land Unit Cost \$ / sqm	Works Unit Cost \$ / m	Total Land \$	Total Works \$
5.14	Bumbera St	180	1	Pre-existing street		\$266		\$47,912
5.15	Minnamurra Ct	35	1	5.5	\$175	\$266	\$33,688	\$9,316
6	Collector Street fronting Open Space or Drainage Res							
6.1	Braidwood Dr at Minerva	180	2	9	\$175	\$372	\$283,500	\$66,896
6.2	Braidwood Dr at Ulladulla	320	2	9	\$175	\$372	\$504,000	\$118,927
6.3	Braidwood Dr at Bumbera St	40	2	9	\$175	\$372	\$63,000	\$14,866
6.4	Braidwood Dr at Minnamurra	160	2	9	\$175	\$372	\$252,000	\$59,463
6.5	Braidwood Dr at Minnamurra	80	2	9	\$175	\$372	\$126,000	\$29,732
7	Collector Street through Open Space or Drainage Res							
	Braidwood Dr	50	7.5	18	\$175	\$1,028	\$157,500	\$51,399
8	Local Street fronting Cabramatta Creek / Drain							
8.1	Marulan Wy	205	1	1.5	\$175	\$266	\$53,813	\$54,566
8.2	Nerriga Ct	80	1	1.5	\$175	\$266	\$21,000	\$21,294
8.3	Taralga St	30	1	1.5	\$175	\$266	\$7,875	\$7,985
8.4	Bateman Cl	190	1	1.5	\$175	\$266	\$49,875	\$50,574
8.5	Wagga Wagga St	340	1	1.5	\$175	\$266	\$89,250	\$90,500
8.6	Bugong St	75	1	1.5	\$175	\$266	\$19,688	\$19,963
10	Overlay existing Central Pavement (sqm)							
	Bumberra Road open space frontage							
	560 x 6.3 (exist width)	1,008				\$70		\$70,683
11	Wombat Crossings	1				\$11,765		\$11,765
12	Bus Shelters	10				\$8,824		\$88,235
Sub Total								\$2,667,172
15% Contingency for Works								\$400,076
Total							\$3,994,813	\$3,067,248

East of Cowpasture Road Sub Catchment

Contributing Development

2,720 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 10.3.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 7, 8, 11 & 12 for the location of each item in Table 10.6.

Works and Land Acquisition Schedule

The range of Works and land acquisition for local transport facilities is shown in Table 10.6.

Table 10.6 Works and Land Acquisition Schedule

No.	Items	Length / No of items m	Street / Pavement width m	Frontage width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land \$	Total Works \$
Minor Roundabout								
1.1	Joshua Moore Dr /Horningsea Park Dr /Brindabella Dr							\$44,118
1.2	Horningsea Park Dr /Bunya Way / Gungahlin Dr							\$44,118
1.3	Horningsea Park Dr and Strzelecki Dr							\$44,118
1.4	Horningsea Park Dr & Joshua Moore Dr (east)							\$44,118
1.5	Joshua Moore Dr / Bimberi St / Wellumba St							\$44,118
1.6	Joshua Moore Dr /Keams Place /Sarah Hollands Dr							\$44,118
1.7	Sarah Hollands Dr & Packard Pl							\$44,118
1.8	Brindella Dr & Carruthers Dr							\$44,118
1.9	Street along west side of Cabramatta Ck							\$44,118
1.10	Street extension of Wingham Rd south of Kurrajong Rd							\$44,118
2	Collector Street Frontage to School site							
	Horningsea Park Dr	350	2	9	\$175	\$390	\$551,250	\$136,397
3	Local Street Frontage to School site							
	Toolong Pl	105	1	5.5	\$175	\$266	\$101,063	\$27,949
4	School Bus Bay					\$51,471		\$51,471
Trunk Collector Street								
5.1	Horningsea Park Dr	75	10	20	\$175	\$1,637	\$262,500	\$122,748
5.2	Joshua Moore Dr	180	10	20	\$175	\$1,637	\$630,000	\$294,596
5.3	Sarah Hollands Dr	170	10	20	\$175	\$1,637	\$595,000	\$278,230
5.4	south off Kurrajong Rd	100	10	20	\$175	\$1,637	\$350,000	\$163,665
Local Street fronting open space or drainage Res								
6.1	Wheat Pl	200	1	5.5	\$175	\$266	\$192,500	\$53,235
6.2	North side of creek and Cabramatta Ck	950	1	5.5	\$175	\$266	\$914,375	\$252,868
Collector Street Fronting Open Space or Drainage Res								
7.1	Sarah Hollands Dr	750	2	9.0	\$175	\$372	\$1,181,250	\$278,735
7.2	Strzelecki Dr	380	2	9.0	\$175	\$372	\$598,500	\$141,226
7.3	Strzelecki Dr	170	2	9.0	\$175	\$372	\$267,750	\$63,180
Collector Street Through Open Space or Drainage Res								

No.	Items	Length / No of items m	Street / Pavement width m	Frontage width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land \$	Total Works \$
8.1	Extension of Bumbera St	110						
8.2	Strezlecki Dr	30	7.5	18	\$158	\$1,028	\$85,320	\$30,840
	Culverts	25		14.5		\$1,027		\$372,137
14	Wombat Crossings	1				\$11,765		\$11,765
15	Bus Shelters	10				\$8,824		\$88,235
Sub Total								\$2,808,452
15% Contingency for Works								\$421,268
Total							\$5,729,508	\$3,229,720

West of Cowpasture Road Sub Catchment

Contributing Development

2,370 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 10.3.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 3, 4, 7, 8 & 11 for the location of each item in Table 10.7.

Works and Land Acquisition Schedule

The range of Works and land acquisition for local transport facilities is shown in Table 10.7.

Table 10.7 Works and Land Acquisition Schedule

No.	Items	Length / No of items m	Street / Pavement width m	Frontage width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land \$	Total Works \$
1	Minor Roundabout							
1.1	Mannow Ave and Mathinna Cct (west)							\$44,118
1.2	Twelfth Ave / Hoskins Ave / Gatto Pl							\$44,118
1.3	Carmichael Dr / Latrobe Rd							\$44,118
1.4	Greenway Dr and Wyattville Dr. (north)							\$44,118
1.5	Greenway Dr and Carmichael Dr							\$44,118
1.6	Greenway Dr /Wingate Ave /Mitchell Dr.							\$44,118
1.7	Greenway Dr / Hume Dr /Mitchell Dr							\$44,118
1.8	Greenway Dr / Addison Wy / Wyattville Dr							\$44,118
1.9	Muller Ave/Scottsdale Cct/Beaconsfield Cct							\$44,118
1.10	Muller Ave/Scottsdale Cct/Ringarooma Cct							\$44,118
1.11	Mannow Ave and Carmichael Dr							\$44,118
1.13	Carmichael Dr and Riddell St							\$44,118
1.14	Second Ave and Dunally St.							\$44,118
1.15	Wyattville Dr and Chapman St							\$44,118
1.16	Poole St and Chapman St							\$44,118
2	Collector Street frontage to School							
	Wyattville Dr	200	2	9	\$175	\$372	\$315,000	\$74,329
3	School Bus Bay	1				\$51,471		\$51,471

No.	Items	Length / No of items m	Street / Pavement width m	Frontage width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land \$	Total Works \$
4	Trunk Collector Street							
4.1	Greenway Dr South	160	10	20.0	\$175	\$1,637	\$560,000	\$261,863
4.2	Chapman St	135	10	20.0	\$175	\$1,637	\$472,500	\$220,947
4.3	Greenway Dr North	360	10	20.0	\$175	\$1,637	\$1,260,000	\$589,193
4.4	Latrobe Rd	80	10	20.0	\$175	\$1,637	\$280,000	\$130,932
4.5	Second Av	300	10	Pre-existing street		\$1,637		\$490,994
4.6	Mannow Av	120	10	Pre-existing street		\$1,637		\$196,398
5	Local Street fronting open space or drainage Res							
5.1	Lennox Pl	20	1	5.5	\$175	\$266	\$19,250	\$5,324
5.2	Poole St	180	1	5.5	\$175	\$266	\$173,250	\$47,912
5.3	Woodside Av	180	1	5.5	\$175	\$266	\$173,250	\$47,912
5.4	Cranbrook Cl	120	1	5.5	\$175	\$266	\$115,500	\$31,941
5.5	Riddel & Gladstone	110	1	5.5	\$175	\$266	\$105,875	\$29,279
5.6	St Helens Cl	115	1	5.5	\$175	\$266	\$110,688	\$30,610
5.7	Bridport Cl	20	1	5.5	\$175	\$266	\$19,250	\$5,324
5.8	Winnaleah St	80	1	5.5	\$175	\$266	\$77,000	\$21,294
5.9	Tunnack St	120	1	5.5	\$175	\$266	\$115,500	\$31,941
5.10	Glendevie St	95	1	5.5	\$175	\$266	\$91,438	\$25,287
5.11	Ringarooma Ct	75	1	5.5	\$175	\$266	\$72,188	\$19,963
5.12	Meander Cl	150	1	5.5	\$175	\$266	\$144,375	\$39,926
5.13	Mathina Ct	160	1	5.5	\$175	\$266	\$154,000	\$42,588
5.14	Watling Av / Hallen Pl	50	1	5.5	\$175	\$266	\$48,125	\$13,309
5.15	Erith Cl / Gretna Cl	50	1	5.5	\$175	\$266	\$48,125	\$13,309
5.16	Bicheno Cl	105	1	5.5	\$175	\$266	\$101,063	\$27,949
5.17	Swansea Pl	240	1	5.5	\$175	\$266	\$231,000	\$63,882
5.18	Bellerive Cl	25	1	5.5	\$175	\$266	\$24,063	\$6,654
5.19	Lamar Pl	80	1	5.5	\$175	\$266	\$77,000	\$21,294
5.20	Scottsdale / Cascades	200	1	5.5	\$175	\$266	\$192,500	\$53,235
5.21	Second Av	220	1	5.5	\$175	\$266	\$211,750	\$58,559
5.22	Gerraro Cr	75	1	5.5	\$175	\$266	\$72,188	\$19,963
5.23	Forcett Cl	45	1	5.5	\$175	\$266	\$43,313	\$11,978
6	Collector Street Fronting Open Space or Drainage Res							
6.1	Carmichael Dr	140	2	9.0	\$175	\$372	\$220,500	\$52,030
6.2	Greenway Dr	140	2	9.0	\$175	\$372	\$220,500	\$52,030
6.3	Carmichael Dr	60	2	9.0	\$175	\$372	\$94,500	\$22,299
6.4	Carmichael Dr	60	2	9.0	\$175	\$372	\$94,500	\$22,299
6.5		75	2	9.0	\$175	\$372	\$118,125	\$27,873
6.6		60	2	9.0	\$175	\$372	\$94,500	\$22,299
6.7		30	2	9.0	\$175	\$372	\$47,250	\$11,149
6.8		95	2	Pre-existing street		\$372		\$35,306
6.9		170	2	Pre-existing street		\$372		\$63,180
6.10		135	2	Pre-existing street		\$372		\$50,172

No.	Items	Length / No of items m	Street / Pavement width m	Frontage width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land \$	Total Works \$
7	Local Street Through Open Space or Drainage Res							
	Haraden Dr	40	6.5	14.5	\$175	\$767		\$30,685
	Meander Cl	50	6.5	14.5	\$175	\$767		\$38,357
8	Collector Street Through Open Space or Drainage Res							
	Carmichael Dr							
8.1	North	20	7.5	Pre-existing street		\$1,028		\$170,817
	Culverts	20		14.5		\$1,027		\$297,710
8.2	Second Av	20	7.5	Pre-existing street		\$1,028		\$170,817
	Culverts	20		14.5		\$1,027		\$297,710
	Carmichael Dr							
8.3	South	25	7.5	18	\$50	\$1,028	\$22,500	\$170,817
	Culverts	25		14.5		\$1,027		\$372,137
	Wombat Crossings	1				\$11,765		\$11,765
10	Bus Shelters	10				\$8,824		\$88,235
11	Road Closures							
	Second Ave	1				\$14,024		\$14,024
Sub Total								\$5,369,038
15% Contingency for Civil Works								\$805,356
Total							\$6,220,563	\$6,174,394

Nineteenth Avenue Sub Catchment

Contributing Development

1,890 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 10.3.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 4, 5 & 8 for the location of each item in Table 10.8.

Works and Land Acquisition Schedule

The range of Works and land acquisition for local transport facilities is shown in Table 10.8.

Table 10.8 Works and Land Acquisition Schedule

No.	Items	Length / No of items m	Street / Pavement width m	Frontage width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land \$	Total Works \$
1	Minor Roundabout							
1.1	Government Rd & Collarenebri Rd							\$44,118
1.2	Glen Innes Rd / Pacific Palms Cct / Byron Bay Cl.							\$44,118
1.3	Nineteenth Ave (east) & Pacific Palms Cct							\$44,118
1.4	Nineteenth Ave (west) & Pacific Palms Cct							\$44,118
1.5	Tibooburra Rd & Pacific Palms Cct.							\$44,118
1.6	First Ave & Twentieth Ave							\$44,118
1.7	Pacific Palms Cct & Wingham St							\$44,118
1.9	Pacific Palms Cct. 150 m east of School							\$44,118

No.	Items	Length / No of items m	Street / Pavement width m	Frontage width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land \$	Total Works \$
1.10	Wingham Rd, south of Pacific Palms Crt							\$44,118
2	Collector Street frontage to School	120	2	9	\$175	\$372	\$189,000	\$44,598
3	Local street frontage to School	210	1	5.5	\$175	\$292	\$202,125	\$61,259
4	School Bus Bay	1				\$51,303		\$51,303
5	Trunk Collector Street							
5.1		100	10	20.0	\$175	1,637	\$350,000	\$163,665
5.2		100	10	20.0	\$175	1,637	\$350,000	\$163,665
7	Local Street fronting Open Space or Drainage Res							
7.1	Belata Pl	100	1	5.5	\$175	\$266	\$96,250	\$26,618
7.2	Walgett Cl	180	1	5.5	\$158	\$266	\$156,420	\$47,912
7.3	Warialda Wy	460	1	5.5	\$158	\$266	\$399,740	\$122,441
7.4	Armidale Av	40	1	5.5	\$175	\$266	\$38,500	\$10,647
7.5	Merriwa Av	25	1	5.5	\$175	\$266	\$24,063	\$6,654
7.6	Wilcannia Wy	90	1	5.5	\$175	\$266	\$86,625	\$23,956
7.7	Baradine Wy	140	1	5.5	\$175	\$266	\$134,750	\$37,265
7.8	street along creek north of Pacific Palms Cct	185	1	5.5	\$175	\$266	\$178,063	\$49,243
7.9	Nymboida / Woolgoolga Av	25	1	5.5	\$175	\$266	\$24,063	\$6,654
7.10	Baradine Wy / Merriwa Av	100	1	5.5	\$175	\$266	\$96,250	\$26,618
7.11	Wollombi Wy	215	1	5.5	\$175	\$266	\$206,938	\$57,228
7.12	Bay Cl	20	1	5.5	\$175	\$266	\$19,250	\$5,324
7.13	Dorrigo Av	25	1	5.5	\$175	\$266	\$24,063	\$6,654
7.14	Coonabarabran Cr	80	1	5.5	\$175	\$266	\$77,000	\$21,294
7.15	Coffs Harbour Av	220	1	5.5	\$158	\$266	\$191,180	\$58,559
7.16	Bellingen Wy	190	1	5.5	\$175	\$266	\$182,875	\$50,574
7.17	street north side of channel	220	1	5.5	\$174	\$266	\$210,540	\$58,559
7.18	Warialda Wy extension	190	1	1.5	\$174	\$266	\$49,590	\$50,574
7.19	adjacent to park off Inverell Av	130	1	5.5	\$174	\$266	\$124,410	\$34,603
8	Collector Street fronting Open Space or Drainage Res							
8.1	Pacific Palms Cct	60	2	9.0	\$175	\$372	\$94,500	\$22,299
8.2	Link from Kurrajong Rd to Pacific Palms Cct	200	2	9.0	\$175	\$372	\$315,000	\$74,329
8.3	Link fro Kurrajong Rd to Pacific Palms Cct	240	2	9.0	\$175	\$372	\$378,000	\$89,195
8.4	Pacific Palms Cct	40	2	9.0	\$175	\$372	\$63,000	\$14,866

No.	Items	Length / No of items	Street / Pavement width	Frontage width	Land Unit Cost	Works Unit Cost	Total Land	Total Works
		m	m	m	\$/ sqm	\$ / m	\$	\$
9	Collector Street through Open Space or Drainage Res							
9.1	Pacific Palms Cct at creek	40		18		\$1,028		\$41,120
	Culvert	30		14.5		\$1,027		\$446,565
9.2	Pacific Palms Cct at creek	45		18	\$175	\$1,028	\$141,750	\$46,259
	Culvert	30		14.5		\$1,027		\$446,565
9.3	Pacific Palms Cct at Tibooburra Rd	40		18	\$175	\$1,028	\$126,000	\$41,120
9.4	Pacific Palms Cct at school	200		18	\$175	\$1,028	\$630,000	\$205,598
9.5	Link from Kurrajong Rd to Pacific Palms Cct	60		18	\$175	\$1,028		\$61,679
9.6	Wingham Rd	60		18	\$175	\$1,028	\$189,000	\$61,679
10	Local Street fronting Cabramatta Ck							
		975	1	1.5	\$158	\$266	\$231,075	\$259,522
11	Overlay existing Central Pavement (sqm)							
	Nineteenth Av (open space frontage) 570m x 5.3m (exist width)	212				\$52		\$11,001
	First Avenue (open space frontage) 460m x 4.7m (exist width)	188				\$52		\$9,755
12	Wombat Crossings	1				\$11,765		\$11,765
13	Bus Shelters	8				\$8,824		\$70,588
14	Road Closures							
	Nineteenth Ave at Cowpasture Ck & restore					\$140,244		\$140,244
	Nineteenth Ave at Cowpasture Rd					\$14,024		\$14,024
15	Culvert Upgrading in First Ave							\$200,000
16	Culvert across channel south of Government Rd							\$250,000
Sub Total								\$4,101,094
15% Contingency for Works								\$615,164
Total							\$5,580,018	\$4,716,258

Whitford Road South Sub Catchment

Contributing Development

550 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 10.3.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 5 for the location of each item in Table 10.10.

Works and Land Acquisition Schedule

The range of Works and land acquisition for local transport facilities is shown in Table 10.10.

Table 10.10 Works and Land Acquisition Schedule

No.	Items	Length / No of items m	Street / Pavement width m	Frontage width m	Land Unit Cost \$/sqm	Works Unit Cost \$/ m	Total Land \$	Total Works \$
Four Major Roundabouts (costs include \$10,000 for landscaping)								
1.1	Topnot Ave/Wilson Rd/Rossini Dr							\$44,118
1.2	Topnot Ave/Whitford Rd/Draco Rd							\$44,118
1.3	Whitford Rd/Centaurus Dr/Frigate Bird Av							\$44,118
1.4	Wilson Rd & Frigate Bird Av							\$44,118
2	Collector street fronting open space	375		5.5	\$175	\$371	\$360,938	\$0
3	90 degree parking bay	200				\$227		\$45,400
4	Minor road frontage to open space	40	4.5		\$175	\$265	\$31,500	\$10,602
5	Local street frontage to floodplain Hinchinbrook Creek	350	2		\$158	\$265	\$110,600	\$92,771
7	Minor Road frontage to High School	150	9		\$175	\$458	\$236,250	\$68,700
8	Sub-arterial with Median	500	4		\$175	\$576	\$350,000	\$287,851
Sub Total								\$681,795
15% Contingency for Works								\$102,269
Total							\$1,089,288	\$784,064

10.5 Drainage

Drainage Easements

In order to achieve an economical local drainage system it was required to drain stormwater runoff through the lowest possible path. This path was in some cases required to traverse privately owned properties, which creates the need for drainage easements or drainage reserve.

A drainage easement is the area of land dedicated to construct and maintain an enclosed drainage conduit (usually a pipe or box culvert).

The drainage easement can serve a number of privately owned properties in which case it is described to be an "inter-allotment drainage easement". The width of an inter-allotment drainage easement will be indicated by the formula given below. This will be not less than 1.2m for residential lots or 2.5 m for industrial lots.

$$\text{Easement Width} = (1.5 \times \text{depth of trench}) + \text{Pipe Diameter (or Culvert Width)}$$

The area of land required for inter-allotment drainage easement shall be dedicated for that purpose and shall belong to those properties benefiting from the drainage system within the easement. The owners the properties will be responsible for the maintenance and functioning of the drainage system.

Drainage Reserves

A drainage reserve is known as the area of land dedicated to open drainage. The drainage reserve can serve a number of privately owned properties, public land (such as road drainage, parks, etc.) or a combination of these. The area of land required for drainage reserve shall be dedicated to Council for that purpose and Council shall be responsible for the maintenance and functioning of the drainage system. The area of land dedicated to drainage reserve has been included in the contribution rate as

“cost of land acquisition” for each local drainage catchment.

Minimum size pipes

The Local Trunk Drainage is costed on the basis of drainage infrastructure requirements of the local catchment. Each of the local catchments is costed down to 900mm diameter pipe only. The individual developers are required to directly bear the cost of all pipelines up to 825mm diameter within or past their own land. The cost difference between any larger pipe size and open drainage is funded by Developer contributions.

Where it is anticipated that the developer will carry out the works as part of a development, the cost of supply, lay and backfilling of 825mm diameter is deducted from the cost of works to get the contribution. These works, when carried out by the developer, means that the developer will receive the credits of the difference between the total cost of works and the cost of 825mm diameter pipe (to be borne by the developer). Should the developer default from undertaking the works identified in this plan as the developer’s responsibility, then the developer shall pay for the cost of 825mm diameter pipe for the reach of drainage works for which they are responsible to provide as part of their development.

Where the work is costed in full without deducting the cost of 825mm diameter, it is anticipated that Council will undertake these works from contributions. Where a developer undertakes these works as part of their development, they shall receive full credits for the work as shown in this plan.

Gross pollutant traps

Gross pollutant traps have also been costed as source control for litter at the end of each network.

Scope of facilities

A review of the range of local transport facilities was undertaken in 2008. This was undertaken in conjunction with the preparation of *Liverpool DCP 2008*. This plan included amongst other items a review of the masterplan for this area. The changes arise in part due to the impact of the M7, the addition of land north of Hoxton Park Rd, changes to the land use adjacent to the Carnes Hill Centre on the proposed open space, street and drainage networks.

Apportionment

No apportionment is allowed for as there were no existing local transport facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

There are several local transport sub catchments within the Hoxton Park, Carnes Hill and Prestons Release Areas. These are shown on Figure 10.3.

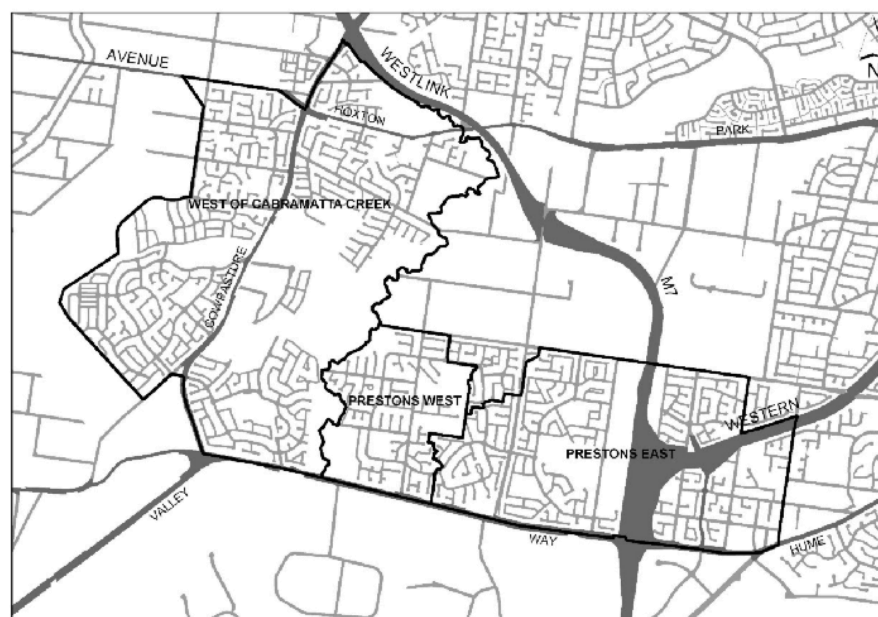


Figure 10.4

Prestons East Sub Catchment

Contributing Development

2,960 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 10.4.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 13, 14, 16 & 17 for the location of each item in Table 10.11. The location of drainage lines as shown on the maps are in the original "in principle" locations and may be constructed in a slightly different locations to match the eventual street layout.

Works and Land Acquisition Schedule

The range of Works and land acquisition for local transport facilities is shown in Table 10.11.

Table 10.11 Works and Land Acquisition Schedule

Works

From	To	Pipe Dia	Length	Unit Cost	Cost of Works	Cost of 825 dia Pipe	Total Works Cost after Credits
		mm	m	\$ / m	\$	\$	\$
109.04	109.03	900	35	\$582	\$20,370	\$12,250	\$8,120
109.02	109.01	1,050	120	\$722	\$86,671	\$42,000	\$44,671
109.01	101.1	1,200	44	\$826	\$36,346	\$15,400	\$20,946
103.04	103.03	900	20	\$582	\$11,640	\$7,000	\$4,640
103.03	103.02	1,050	90	\$722	\$65,003	\$31,500	\$33,503

From	To	Pipe Dia	Length	Unit Cost	Cost of Works	Cost of 825 dia Pipe	Total Works Cost after Credits
		mm	m	\$ / m	\$	\$	\$
103.02	103.01	1,200	175	\$826	\$144,556	\$61,250	\$83,306
103.01	102.03	1,200	125	\$826	\$103,255	\$43,750	\$59,505
102.03	102.02	1,500	125	\$1,248	\$156,021	\$43,750	\$112,271
102.02	102.01	1,500	85	\$1,248	\$106,095	\$29,750	\$76,345
102.01	101.04	1,650	115	\$1,445	\$166,119	\$40,250	\$125,869
101.1	101.09		90		\$31,500	\$31,500	
116.01	73				\$158,365		\$97,168
95.05	95.04	900	110	\$582	\$64,021	\$38,500	\$25,521
95.04	95.03	1,050	90	\$722	\$65,003	\$31,500	\$33,503
95.03	95.02	1,350	220	\$1,052	\$231,402	\$77,000	\$154,402
77.01	73.06	900	20	\$582	\$11,640	\$7,000	\$4,640
75.02	75.01	1,050	100	\$722	\$72,226	\$35,000	\$37,226
75.01	73.04	1,200	60	\$826	\$49,562	\$21,000	\$28,562
73.07	73.06	900	70	\$582	\$40,741	\$24,500	\$16,241
73.06	73	1,500	50	\$1,248	\$62,409	\$17,500	\$44,909
Swale (Maxwells Creek east to South Western Freeway)							
73	73.05		170		\$120,039	\$59,500	\$60,539
73.05	73.04		125		\$138,342	\$43,750	\$94,592
73.04	73.03		140		\$147,375	\$49,000	\$98,375
68.01	63.07	1,050	130	\$722	\$93,893	\$45,500	\$48,393
65.01	63.04	1,050	110	\$722	\$79,448	\$38,500	\$40,948
63.15	63.14	1,050	60	\$722	\$43,335		\$43,335
63.14	63.13	1,200	20	\$826	\$16,521		\$16,521
63.13	63.12	1,200	70	\$826	\$57,823		\$57,823
63.12	63.11	1,350	60	\$1,052	\$63,110		\$63,110
63.11	63.1	1,500	100	\$1,248	\$124,817		\$124,817
63.1	63.09	1,500	100	\$1,248	\$124,817		\$124,817
63.09	63.08	1,500	100	\$1,248	\$124,817		\$124,817
63.08	63.07	1,650	120	\$1,445	\$173,341		\$173,341
Swale (Maxwells Creek east to Beech Road)							
63.07	63.06				\$16,187		\$16,187
63.06	63.05				\$53,958		\$53,958
63.05	63.04				\$64,750		\$64,750
63.04	63.03				\$70,146		\$70,146

From	To	Pipe Dia	Length	Unit Cost	Cost of Works	Cost of 825 dia Pipe	Total Works Cost after Credits
		mm	m	\$ / m	\$	\$	\$
47.02	47.01	1,050	205	\$722	\$148,063	\$71,750	\$76,313
47.01	23.02	1,200	25	\$826	\$20,651	\$8,750	\$11,901
37.03	37.02	1,200	150	\$826	\$123,905	\$52,500	\$71,405
37.02	37.01	1,200	80	\$826	\$66,083	\$28,000	\$38,083
37.01	19.14	1,200	80	\$826	\$66,083	\$28,000	\$38,083
31.03	31.02	900	120	\$582	\$69,841	\$42,000	\$27,841
31.02	31.01	1,050	140	\$722	\$101,116	\$49,000	\$52,116
31.01	19.09	1,050	20	\$722	\$14,445	\$7,000	\$7,445
Swale (Maxwells Creek south west to Camden Valley Way)							
23.09	23.08		295		\$241,573	\$103,250	\$138,323
23.08	23.07		50		\$40,553	\$17,500	\$23,053
23.07	23.06		150		\$110,135	\$52,500	\$57,635
23.06	23.05		80		\$69,497	\$28,000	\$41,497
23.05	23.04		155		\$139,549	\$54,250	\$85,299
23.04	23.03		135		\$91,052	\$47,250	\$43,802
23.03	23.02		105		\$75,943	\$36,750	\$39,193
23.02	23.01		55		\$83,800	\$19,250	\$64,550
19.18	19.17	900	70	\$582	\$40,741	\$24,500	\$16,241
19.17	19.16	1,050	30	\$722	\$21,668	\$10,500	\$11,168
19.16	19.15	1,350	120	\$1,052	\$126,220	\$42,000	\$84,220
19.15	19.14	1,500	45	\$1,248	\$56,168	\$15,750	\$40,418
Swale (Maxwells Creek west to Bernera Road)							
19.14	19.13		60		\$67,959	\$21,000	\$46,959
19.13	19.12		25		\$40,055	\$8,750	\$31,305
19.12	19.11		65		\$95,796	\$22,750	\$73,046
19.11	19.1		60		\$109,700	\$21,000	\$88,700
19.1	19.09		95		\$111,515	\$33,250	\$78,265
19.09	19.08		30		\$104,417	\$10,500	\$93,917
19.08	19.07		100		\$139,351	\$35,000	\$104,351
19.07	19.06		80		\$111,482	\$28,000	\$83,482
19.06	19.05		125		\$127,232	\$43,750	\$83,482
19.05	19.04		85		\$81,926	\$29,750	\$52,176
19.04	19.03		190		\$228,246	\$66,500	\$161,746
13.02	13.01	1,050	150	\$722	\$108,338	\$52,500	\$55,838
13.01	12.03	1,200	20	\$826	\$16,521	\$7,000	\$9,521
12.04	12.03	1,050	75	\$722	\$54,169	\$26,250	\$27,919
12.03	12.02	1,500	130	\$1,248	\$162,262	\$45,500	\$116,762
12.02	12.01	1,500	25	\$1,557	\$38,918	\$8,750	\$30,168
4.12	4.11	1,050	30	\$722	\$21,668	\$10,500	\$11,168

From	To	Pipe Dia	Length	Unit Cost	Cost of Works	Cost of 825 dia Pipe	Total Works Cost after Credits
		mm	m	\$ / m	\$	\$	\$
4.11	4.1	1,050	60	\$722	\$43,335	\$21,000	\$22,335
4.1	4.09	1,050	120	\$722	\$86,671	\$42,000	\$44,671
4.09	4.08	1,200	50	\$826	\$41,302	\$17,500	\$23,802
4.08	4.07	1,200	120	\$826	\$99,124	\$42,000	\$57,124
4.07	4.06	1,350	120	\$1,052	\$126,220	\$42,000	\$84,220
4.06	4.05	1,650	70	\$1,445	\$101,116	\$24,500	\$76,616
4.05	4.04	1,650	25	\$1,445	\$36,113	\$8,750	\$27,363
4.04	4.03	1,650	90	\$1,445	\$130,006	\$31,500	\$98,506
4.03	4.02	1,650	40	\$1,445	\$57,780	\$14,000	\$43,780
3.02	3.01	900	45	\$582	\$26,191	\$15,750	\$10,441
3.01	1.04	900	20	\$582	\$11,640	\$7,000	\$4,640
Sub Total					\$7,281,802		\$4,898,705
Add 15% Contingencies							\$734,806
Total							\$5,633,511
Item No	Items				Land sqm	Land Unit Cost \$ / sqm	Total Land Cost \$
PED 1	Swale (Maxwells Creek east to South Western Freeway)				13,715	\$50	\$685,750
PED 2	Swale (Maxwells Creek east to Beech Road)				4,150	\$50	\$207,500
PED 3	Dudley Creek (Maxwells Creek south west to Camden Valley Way)				13,350	\$50	\$667,500
PED 4	Swale (Maxwells Creek west to Bernera Road)				11,410	\$50	\$570,500
PED 5	Maxwells Creek				26,421	\$50	\$1,321,050
							\$3,452,300

Prestons West Sub Catchment

Contributing Development

1,200 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 10.4.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 12, 13 & 16 for the location of each item in Table 10.12. The location of drainage lines as shown on the maps are in the original "in principle" locations and may be constructed in a slightly different locations to match the eventual street layout.

Works and Land Acquisition Schedule

The range of Works and land acquisition for local transport facilities is shown in Table 10.12.

Table 10.12 Works and Land Acquisition Schedule

Works

From	To	Pipe Dia	Length	Rate	Cost of Works	Cost of 825 dia Pipe	Total Works Cost after Credits
		mm	m	\$ / m	\$	\$	\$
M5	M4	1,200	90	\$826	\$74,343	\$31,500	\$42,843
M4	M3	1,200	130	\$826	\$107,385	\$45,500	\$61,885
M3	M2	1,650	65	\$1,445	\$93,893	\$22,750	\$71,143
M2	M1	2X1200	150	\$1,625	\$243,814	\$52,500	\$191,314
M1.7	M1.6	900	90	\$582	\$52,381	\$31,500	\$20,881
M1.6	M1.5	1,050	90	\$722	\$65,003	\$31,500	\$33,503
M1.5	M1.4	1,050	70	\$722	\$50,558	\$24,500	\$26,058
M1.4	M1.3	1,050	70	\$722	\$50,558	\$24,500	\$26,058
M1.3	M1.2	1,200	80	\$826	\$66,083	\$28,000	\$38,083
M1.2	M1.1	1,200	70	\$826	\$57,823	\$24,500	\$33,323
M1.1	M1	1,200	80	\$826	\$66,083	\$28,000	\$38,083
M1	M0	2X1650	110	\$2,791	\$306,994	\$38,500	\$268,494
N6	N5	1,050	110	\$722	\$79,448	\$38,500	\$40,948
N5.11	N5	1,050	230	\$722	\$166,119	\$80,500	\$85,619
N5	N4	1,500	90	\$1,248	\$112,335	\$31,500	\$80,835
N4	N3	1,500	70	\$1,248	\$87,372	\$24,500	\$62,872
N3	N2	1,800	50	\$1,697	\$84,848	\$17,500	\$67,348
N2	N1	2X1500	80	\$2,314	\$185,122	\$28,000	\$157,122
N1	N0	2 x 1.8 x 0.9 BC	160	\$3,035	\$485,524		\$485,524
Structures					\$84,146		\$84,146
Sub Total					\$2,519,832		\$1,916,082
Add 15% Contingencies							\$287,412
Total							\$2,203,495
Item No	Items				Land sqm	Land Unit Cost \$ / sqm	Total Land Cost \$
CCD	Cabramatta Creek (from Kurrajong Road to Camden Valley Way)				17,000	\$50	\$850,000
Total							\$850,000

West of Cabramatta Creek Sub Catchment**Contributing Development**

5,680 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 10.4.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 3 - 5, 7 - 9, 11 & 12 for the location of each item in Table 10.13.

Works and Land Acquisition Schedule

The range of Works and land acquisition for local transport facilities is shown in Table 10.13. The location of drainage lines as shown on the maps are in the original "in principle" locations and may be constructed in a slightly different locations to match the eventual street layout.

Table 10.13 Works and Land Acquisition Schedule

Works

From	To	Pipe Dia	Length	Rate	Cost of Works	Cost of 825 dia Pipe	Total Works Cost after Credits
		mm	m	\$ / m	\$	\$	\$
CW 1.1	CW 1.0	900	60	\$582	\$34,921	\$21,000	\$13,921
CW 1.2	CW 1.1	900	60	\$582	\$34,921	\$21,000	\$13,921
Structures					\$4,000		\$4,000
CW 2.1	CW 2.0	1,050	100	\$722	\$72,226	\$35,000	\$37,226
Structures					\$4,000		\$4,000
CW 3.1	CW 3.0	1,050	70	\$722	\$50,558	\$24,500	\$26,058
CW 3.2	CW 3.1	900	70	\$582	\$40,741	\$24,500	\$16,241
Structures					\$7,012		\$7,012
Swale (Basin 10 to Open Space Corridor)							
Excavation					\$277,683		\$277,683
Surface Treatment					\$385,671		\$385,671
Secondary (Northern) Channel							
Excavation					\$36,463		\$36,463
Surface Treatment					\$134,634		\$134,634
F6	F5	1,050	100	\$722	\$72,226	\$35,000	\$37,226
F5	F4	1,050	110	\$722	\$79,448	\$38,500	\$40,948
F4	F3	1,050	40	\$722	\$28,890	\$14,000	\$14,890
F3.1	F3	900	130	\$582	\$75,662	\$45,500	\$30,162
F3	F2	1,650	30	\$1,445	\$43,335	\$10,500	\$32,835
F2	F1	1,650	60	\$1,445	\$86,671	\$21,000	\$65,671
F1	F0	1,800	190	\$1,662	\$315,759	\$66,500	\$249,259
Structures					\$22,439		\$22,439
K10	K9	1,200	140	\$826	\$115,645	\$49,000	\$66,645
K9	K8	1,350	50	\$1,052	\$52,591	\$17,500	\$35,091
K8	K7	1,650	100	\$1,445	\$144,451	\$35,000	\$109,451
K7	K6	1,800	60	\$1,662	\$99,713	\$21,000	\$78,713
K6	K5	1,800	80	\$1,662	\$132,951	\$28,000	\$104,951
K5	K4	1,800	50	\$1,662	\$83,095	\$17,500	\$65,595
K4	K3	2X1350	135	\$2,034	\$274,527	\$47,250	\$227,277
K3	K2	2X1350	60	\$2,034	\$122,012	\$21,000	\$101,012
K2	K1	2X1350	60	\$2,034	\$122,012	\$21,000	\$101,012
K1	K0	2X1350	130	\$2,034	\$264,360	\$45,500	\$218,860
Structures					\$70,122		\$70,122
Flood Channel WCD4							
Excavation					\$267,866		\$267,866
Surface Treatment					\$478,232		\$478,232
H4	H3	900	200	\$582	\$116,402	70000	\$46,402
H3	H2	1,200	170	\$826	\$140,426	\$59,500	\$80,926
H2	H1	1,500	260	\$1,248	\$324,524	\$91,000	\$233,524
H1	H0		130	Swale	\$133,933		\$133,933

From	To	Pipe Dia mm	Length m	Rate \$/m	Cost of Works \$	Cost of 825 dia Pipe \$	Total Works Cost after Credits \$
Structures					\$9,817		\$9,817
J7	J6	900	80	\$582	\$46,561	\$28,000	\$18,561
J6	J5	1,050	140	\$722	\$101,116	\$49,000	\$52,116
J5	J4	1,050	60	\$722	\$43,335	\$21,000	\$22,335
J4	J3	1,200	100	\$826	\$82,604	\$35,000	\$47,604
J3	J2	1,350	70	\$1,052	\$73,628	\$24,500	\$49,128
J2	J1	1,500	70	\$1,248	\$87,372	\$24,500	\$62,872
J1	J0	1,500	60	\$1,248	\$74,890	\$21,000	\$53,890
Structures					\$16,829		\$16,829
Cabramatta Creek (Kiora Ct to Camden Valley Way)							
G9	G8	900	110	\$582	\$64,021	\$38,500	\$25,521
G8	G7	1050	80	\$722	\$57,780	\$28,000	\$29,780
G7	G6	1050	40	\$722	\$28,890	\$14,000	\$14,890
G6	G5	1200	60	\$826	\$49,562	\$21,000	\$28,562
G5	G4	2x900	90	\$1,136	\$102,238	\$31,500	\$70,738
G4	G3	2x1050	80	\$1,416	\$113,317	\$28,000	\$85,317
G3	G2	2.4x0.9 RCBC	70	\$2,030	\$142,102	\$24,500	\$117,602
G2	G1	3.3x0.9 RCBC	90	\$2,577	\$231,928		\$231,928
G1	G0	3.3x0.9 RCBC	55	\$2,577	\$141,734		\$141,734
Pits and Headwalls					\$35,061		\$35,061
L6	L5	900	170	\$582	\$98,942	\$59,500	\$39,442
L5	L4	1,050	150	\$722	\$108,338	\$52,500	\$55,838
L4	L3	1,200	80	\$826	\$66,083	\$28,000	\$38,083
L3	L2	1,500	80	\$1,248	\$99,854	\$28,000	\$71,854
L2	L0	1,650	290	\$1,445	\$418,909	\$101,500	\$317,409
Pits and Headwalls					\$28,049		\$28,049
Minor GPT					\$142,348		\$142,348
Cabramatta Creek (Kiora Ct to Lot 53 DP 2475)							
E6	E5	1,050	120	\$722	\$86,671	\$42,000	\$44,671
E5	E4	1,050	60	\$722	\$43,335	\$21,000	\$22,335
E4.2	E4.1	900	80	\$582	\$46,561	\$28,000	\$18,561
E4.1	E4	1,050	100	\$722	\$72,226	\$35,000	\$37,226
E4	E3	2x1200	90	\$1,625	\$146,288	\$31,500	\$114,788
E3	E2	2x1200	100	\$1,625	\$162,543	\$35,000	\$127,543
E2	E1	3x1050	80	\$2,104	\$168,293	\$28,000	\$140,293
E1	E0	3x1050	30	\$2,104	\$63,110	\$10,500	\$52,610
Pits & Headwall					\$36,463		\$36,463
8 Minor Gross Pollutant Traps					\$113,878		\$113,878
2 Bridges / Culverts 14m long 18m wide on Pacific Palms Ct							\$846,170
A1	A0	900	70	\$582	\$29,050	\$24,500	\$4,550
Channel - Second Ave to Cowpasture Road					\$554,644		\$554,644

From	To	Pipe Dia	Length	Rate	Cost of Works	Cost of 825 dia Pipe	Total Works Cost after Credits
		mm	m	\$ / m	\$	\$	\$
Channel - Cowpasture Road to Hinchinbrook Ck					\$493,946		\$493,946
				Area	Depth	Unit Cost	
				sqm	m	\$ / m³	
Drainage compensatory works				3,000	2	\$50	\$300,000
Drainage compensatory works				1,650	2	\$50	\$165,000
Sub Total							\$8,749,859
Add 15% Contingencies							\$1,312,479
Totals							\$10,062,338
Item No	Items			Land	Land Unit Cost	Total Land Cost	
				sqm	\$ / sqm	\$	
WCD 1	Swale (Basin 10 to Open Space Corridor)			30,800	\$50	\$1,540,000	
WCD 2	Swale (Cabramatta Creek to Cowpasture Rd)			15,280	\$50	\$764,000	
				10,800	\$25	\$270,000	
				16,600	\$17	\$288,316	
WCD 3	Swale (Cabramatta Creek to Horningsea Pk)			3,200	\$50	\$160,000	
CCD	Cabramatta Creek (Kiora Ct to Camden Valley Way)			7,000	\$50	\$350,000	
CCD	Cabramatta Creek (Kiora Ct to Lot 53 DP 2475)			2,000	\$50	\$100,000	
WCD 4	Swale (Cowpasture Road to Cabramatta Creek)			5,600	\$50	\$280,000	
				11,000	\$17	\$191,053	
CCD	Cabramatta Creek (Lot 53 DP 2475 to Twentieth Ave)			4,000	\$50	\$200,000	
WCD 5	Hopkins Creek (Second Ave and Cowpasture Rd)			18,100	\$17	\$314,368	
WCD 6	Hopkins Creek (down stream from Cowpasture Road)			19,600	\$17	\$340,421	
WCD 7	Hinchinbrook Creek (M7 to Hoxton Park Rd)			2,400	\$50	\$120,000	
WCD 8	Drainage compensatory works			3,000	\$50	\$150,000	
WCD 9	Drainage compensatory works			1,650	\$50	\$82,500	
WCD 10	Swale (Pentecost St to Hinchinbrook Ck)			4,230	\$50	\$211,500	
							\$5,362,158

10.6 Streetscape

Nexus

Council is committed to ensuring that the urban release areas are developed to the best standard possible. Part of this involves ensuring an attractive landscape setting. This involves not only the establishment of parkland but also development of the streetscape. The major roads around and within residential areas are the most visually prominent in that most residents and visitors travel them each day either as drivers, passengers or pedestrians.

Landscaping will be carried out adjacent to the arterial roads on land to be dedicated to Council for landscaping, not on the public road but as part of the visual road reserve. The responsibility for the construction of arterial roads rests with the Roads and Traffic Authority.

Landscaping will similarly be carried out on along sub-arterial roads controlled by the Council. Landscaping on other streets will be carried out in conjunction with the construction of the streets. Much of the landscaping will be carried out in conjunction with traffic facilities within the roadway designed to regulate traffic speed.

Scope of facilities

A review of the range of streetscape facilities was undertaken in 2008. This was undertaken in conjunction with the preparation of *Liverpool DCP 2008*. This plan included amongst other items a review of the masterplan for this area. The changes arise in part due to the impact of the M7, the works undertaken on arterial roads by the Roads and Traffic Authority and the changes to the land use adjacent to the Carnes Hill Centre on the proposed open space, street and drainage networks.

Apportionment

No apportionment is allowed for as there were no existing local transport facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

Contributing Development

10,540 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 10.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 3 – 5, 7 – 9, 11 – 14, 16 & 17 for the location of each item in Table 10.14. The location of drainage lines as shown on the maps are in the original “in principle” locations and may be constructed in a slightly different locations to match the eventual street layout.

Works and Land Acquisition Schedule

The range of Works and land acquisition for local transport facilities is shown in Table 10.14.

Table 9.14 Works and Land Acquisition Schedule

Mulched Garden Beds on Trunk Collector Streets

No	Length m	Width m	Area sqm	Land Unit Cost \$/ sqm	Works Unit Cost \$/ sqm	Total Land Cost \$	Total Works Cost \$
S14.1	120	3	360		\$47		\$16,970
S15.1	320	3	960	\$175	\$47	\$168,000	\$45,253
S15.2	260	3	780	\$175	\$47	\$136,500	\$36,768
S15.3	260	3	780	\$175	\$47	\$136,500	\$36,768
S15.4	80	3	240	\$175	\$47	\$42,000	\$11,313
S15.5	200	3	600		\$47		\$28,283
S15.6	420	3	1,260	\$175	\$47	\$220,500	\$59,394
S16.1	340	3	1,020	\$175	\$47	\$178,500	\$48,081
S16.2	400	3	1,200	\$175	\$47	\$210,000	\$56,566
S16.3	140	3	420	\$175	\$47	\$73,500	\$19,798
S16.4	320	3	960	\$175	\$47	\$168,000	\$45,253
S16.5	180	3	540	\$175	\$47	\$94,500	\$25,455
S16.6	100	3	300	\$175	\$47	\$52,500	\$14,141
S17.1	400	3	1,200	\$175	\$47	\$210,000	\$56,566
S17.2	380	3	1,140	\$175	\$47	\$199,500	\$53,737
S17.3	200	3	600	\$175	\$47	\$105,000	\$28,283
S17.4	420	3	1,260	\$175	\$47	\$220,500	\$59,394

\$17.5	200	3	600	\$175	\$47	\$105,000	\$28,283
\$17.6	400	3	1,200	\$175	\$47	\$210,000	\$56,566
\$17.7	200	3	600	\$175	\$47	\$105,000	\$28,283
Sub Total							\$755,153
Plus 5% contingency sum							\$37,758
Sub Total							\$792,910
Street trees at 20 m intervals on Sub Arterial Roads and Trunk Collector Streets							
			Length	No of trees	\$ per tree		
Sub-arterial roads			9,040	452	\$420		\$190,030
Trunk collector streets			10,680	534	\$420		\$224,505
Sub Total							\$414,535
Plus 5% contingency sum							\$20,727
Sub Total							\$435,262
Totals						\$2,635,500	\$1,228,172

10.7 Professional Fees

Nexus

The cost of independent land valuations and legal documents are clearly part of the costs of administering this plan. In relation to land acquisition, Council will be required to acquire land for car parking and roads and incur the associated conveyancing costs.

It is recognised that the costs associated with land acquisition could be added to the cost of individual facilities. However the cost of professional fees attributable to any one facility is completely unpredictable. It is therefore more appropriate that a pool of contribution funds is available to meet these costs as they arise.

The contribution rate is based on the following costs.

- The cost of independent valuations is anticipated to vary from \$500 - \$2,000 depending on individual sites and whether the valuation is general or specific;
- Valuations will be required at least annually for reviewing this contribution plan, and more frequently depending on movements in the property market;
- Stamp duty and estimated costs of vendor's solicitor in land acquisition.

10.8 Administration Costs

Nexus

There are significant costs associated with administering funds of this magnitude. Both the plan preparation / review and implementation aspects of Developer contributions are administered staff within Council. A core team of employees are engaged to provide support in co-ordinating such a process, as well as prepare status reports, review and relevant data, liaise with Council staff and external agencies.

In accordance with the directive of the Department of Planning, the administration costs are comprised of those expenses relative only to those personnel directly responsible for the formulation and / or administration of a Contributions Plan. The cost per lot per year has been averaged across all of the Contribution Plan areas.

10.9 Contribution Formulae

Community and Recreation Facilities

Conventional Lot Residential Subdivision, Small Lot Subdivision, Semi-detached dwellings, Multi dwelling housing and Residential Flat Buildings

Contribution by cash

$$\text{Contribution Rate} = \frac{C}{N} \times \frac{OR}{3.7}$$

(per dwelling / lot)

where C = Cost of capital works or land identified for the catchment area
N = Number of equivalent lots / dwellings in the catchment area
OR = Estimated occupancy rate for lot size or dwelling type

Contribution by land dedication

$$\text{Area of land to be dedicated} = \frac{A}{N} \times \frac{OR}{3.7}$$

(per dwelling / lot)

where A = Total area to be acquired in the catchment area
N = Number of equivalent lots / dwellings in the catchment area
OR = Estimated occupancy rate for lot size or dwelling type

For Occupancy Rate refer to Table 43.3

Aged and Disabled Persons Housing

$$\text{Contribution for total development} = \frac{\text{Conventional Lot Contribution} \times R}{3.7}$$

where 3.7 = Estimated occupancy rate for a conventional lot
R = Number of residents

Transport facilities

Conventional Lot Residential Subdivision, Small Lot Subdivision, Semi-detached dwellings, Multi dwelling housing and Residential Flat Buildings

Contribution by cash

$$\text{Contribution Rate} = \frac{C}{N} \times \frac{V}{6.7}$$

(per dwelling / lot)

where C = Cost of capital works and land identified for the catchment area
N = Number of equivalent lots in the catchment area
V = Vehicle trips per day for lot size or dwelling type

Contribution by land dedication

$$\text{Area of land to be dedicated} = \frac{A}{N} \times \frac{V}{6.7}$$

(per dwelling / lot / non residential development)

where A = Total area to be acquired in the catchment area
N = Number of equivalent lots in the catchment area
V = Vehicle trips per day for lot size or dwelling type (refer to Table

Table 9.15 Vehicle Trips per day per dwelling

Dwelling Type or Lot Size	Vehicle Trips per day
Residential Subdivision Lots 450 sqm or larger	6.7
Residential Subdivision Lots smaller than 450 sqm	6.0
Semi-detached dwellings, Multi dwelling housing & Residential Flat Buildings (where permitted)	
3 or more bedrooms	6.0
2 bedrooms	4.0
1 bedroom	3.3
Aged and Disabled Persons Housing (total development)	Total vehicle trips per day

Drainage Facilities

Conventional Lot Residential Subdivision

Contribution by cash

$$\text{Contribution Rate (per sqm of lots)} = \frac{C}{N \times 450}$$

where C = Cost of capital works or land identified for the catchment area

N = Number of equivalent lots / dwellings in the catchment area

Contribution by land dedication

$$\text{Area of land to be dedicated (per conventional lot)} = \frac{A}{N}$$

where A = Total area to be acquired

N = Number of equivalent lots / dwellings in the catchment area

Small Lot Subdivision, Semi-detached dwellings, Multi dwelling housing, Residential Flat Buildings, Aged and Disabled Persons Housing and Non Residential Development

Contribution by cash

$$\text{Contribution (total development)} = \frac{\text{Conventional Lot Contribution} \times \text{CR} \times \text{Site Area}}{0.65}$$

Where CR = Runoff coefficient for the specific development type as specified in the Table 9.

Contribution by land dedication

$$\text{Area of land to be dedicated (total development)} = \frac{A}{N} \times \frac{CR}{0.65} \times \frac{\text{Site Area}}{450}$$

where A = Total area to be acquired in the catchment area

N = Number of equivalent lots / dwellings in the catchment area

CR = Runoff coefficient for the specific development type as specified in Table 9.16

The relative impacts of different types of land development on any drainage system can be estimated by comparing the peak discharge rates of runoff that the different types of development would produce. The rational formula estimates the peak discharge rates by use of runoff coefficients that are directly related to the proportion of a site that is impervious to rainfall infiltration. The following table gives the relative impacts of alternate types of land development on runoff generation.

Table 9.16 Co efficient of Runoff for development types

Development Type	Co efficient of Runoff
------------------	------------------------

Conventional residential lots and schools	0.65
Semi-detached dwellings, villa houses, small lot subdivision and Aged and Disabled Persons Housing	0.75
Town houses	0.80
Shopping Centre & other non-residential	0.95

Streetscape

The following formulae are use to calculate contributions.

Conventional Lot Residential Subdivision, Small Lot Subdivision, Semi-detached dwellings, Multi dwelling housing and Residential Flat Buildings

Contribution by cash

$$\text{Contribution Rate} = \frac{C}{N} \times \frac{O R}{3.7}$$

(per dwelling / lot)

where C = Cost of capital works and / or land identified for the catchment area

N = Number of equivalent lots / dwellings in the catchment area

O R = Estimated occupancy rate for lot size or dwelling type

For Occupancy Rate refer to Table 4.3

Aged and Disabled Persons Housing

$$\text{Contribution for total development} = \frac{\text{Conventional Lot Contribution} \times R}{3.7}$$

where 3.7 = Estimated occupancy rate for a conventional lot

R = Number of residents

Other Development

$$\text{Contribution for total development} = \frac{\text{Conventional Lot Contribution} \times C}{450}$$

where C = Area of site area of development

450 = Minimum area of standard lot

Contribution by land dedication

$$\text{Area of land to be dedicated} = \frac{A}{N} \times \frac{O R}{3.7}$$

(per dwelling / lot)

where A = Total area to be acquired in the catchment area

N = Number of equivalent lots / dwellings in the catchment area

O R = Estimated occupancy rate for lot size or dwelling type

Professional Fees

Residential Development

$$\text{Contribution Rate} = \frac{P F}{N}$$

(per dwelling/ lot)

Where P F = total estimated cost of professional fees

N = Number of equivalent lots / dwellings in the catchment area

All other development

$$\text{Contribution Rate} = \frac{\text{Residential Contribution} \times A}{450}$$

Where A = Site area
 450 = area of conventional lot

Administration Fees**All Development**

The cost of administering contributions plans over the coming years has been estimated at 1.2% of the value of contributions.

10.10 Staging of Facilities

Council will build most Community Facilities, as the population threshold for their construction is usually much larger than individual developments. These will be provided as funds become available and as land can be acquired from existing owners.

Some small parks and recreation facilities are likely to be provided as works in kind by developers and as such are provided at the beginning of a development. Council will build larger recreation facilities such as playing fields as the population threshold for their construction is usually much larger than individual developments. These will be provided as funds become available and as land can be acquired from existing owners.

11. Prestons Industrial Release Area

11.1 Background

A substantial part of the Prestons Industrial Area was rezoned in the early 1990's. Development has subsequently taken place over a substantial portion of this area. Since this time the M7 has been constructed which cut through this area resulting in some changes to the drainage and road network. Hoxton Park Road was also upgraded by the Roads and Traffic Authority with the provision of a service road along the southern side of Hoxton Park Road. This included drainage works in conjunction with road works.

Subsequently the area west of the Prestons Industrial Area was rezoned for industrial development. This took place after the M7 was constructed. This has necessitated changes to the range of infrastructure in the portion of the Prestons Industrial Area rezoned in the early 1990's. The planning of infrastructure in the area to the west of the M7 has taken into account the presence of the M7 and the works carried out in its construction.

11.2 Transport

Nexus

The development of the Prestons area for industrial purposes will generate a significant volume of heavy traffic. The impact of this traffic generation may be considered in terms of road network traffic capacity and road pavement bearing capacity. With regard to the first consideration, the required contribution towards the District Transport Facilities provides for the appropriate contribution from a traffic management point of view.

There are, however, a number of existing local roads that will be subjected to heavy traffic loading that they were never designed to bear. The central pavement of these roads will require reconstruction to a standard suitable to accommodate the increased volume of heavy vehicular traffic. Consequently a contribution for the upgrade of the central pavement of these existing sub-standard pavements is considered appropriate.

It may not always be appropriate for Council to require the developer to wholly reconstruct the central pavement of the roads adjoining the subject property at the time of development. It is a component only, representing the difference between a normal standard road and the upgrading required for industrial usage, for which Council levies developer contributions.

Council considers that the most efficient and equitable way of providing for Local Transport Facilities in an area characterised by fragmented ownership is via developer contributions. This approach does not preclude Council considering a proposal for works-in-kind by a group of developers or owners.

The areas west of the M7 were rural roads prior to any industrial development taking place. Any new development of land in this area will be required as a condition of consent to reconstruct the half of the road that immediately fronts the land. This work will not be funded by developer contributions.

To allow several sites to be developed in the Prestons Industrial Release Area, several new roads will be constructed.

To adequately handle the increased traffic on the site the intersection of Bernera Road / Yarrunga Street will be upgraded. This upgrade will include the installation of traffic signals. The cost of these works will be proportioned across the West of M7 Catchment.

Scope of facilities

A review of the range of local transport facilities was undertaken in 2008. This was undertaken in conjunction with the rezoning of land west and south of the area rezoned in the early 1990s.

Apportionment

No apportionment is allowed for as there were no existing local transport facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule and Catchment Areas

There are several local transport catchments within the Prestons Industrial Release Area. These are shown on Figure 11.1.

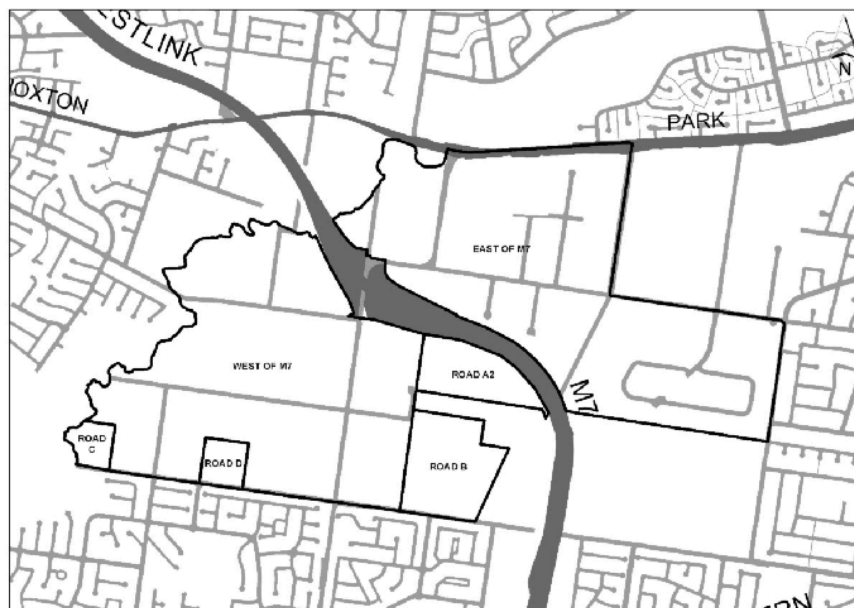


Figure 11.1 Catchment Areas

East of M7 Catchment Area

This is largely the area that was rezoned in the early 1990's. The scope of facilities and the developable area has changed following the construction of the M7.

Contributing Development

123ha (area of land that is expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 11.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 5, 6, 8, 9 & 13 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local transport facilities is shown in Table 11.1.

Table 11.1 Works and Land Acquisition Schedule

No	Item	Unit Cost \$/m	Length m	Works \$
R1	Ash Rd - half central pavement 3m width	\$402	700	\$281,357
R2	Jedda Rd - half central pavement 3m (from Ash Rd to Wonga Rd)	\$402	800	\$321,551
R3	Jedda Rd - central pavement 6m width (from Bernera Rd to Ash Rd)	\$710	810	\$575,485
Total				\$1,178,394

West of M7 Catchment Area

New industrial development in this area will generate the need for the provision of traffic signals at Yarrunga Street and Bernera Road.

Some of the area east of Bernera Road was rezoned along with the area east of the M7 in the early 1990's. It would have had frontage to Ash Road and have been required to reconstruct the half road frontage to Ash Road as well as contribute to local transport facilities. This area was cut off from Ash Road when the M7 was constructed. It was left land locked with no viable alternate road access. There is a need to provide access to Bernera Road by acquiring private land and constructing a road.

Some lots which have frontage to Kurrajong Road are required under the provisions of *Liverpool DCP 2008* to provide access other than to Kurrajong Road for industrial traffic. This is provided by new road construction off Bernera and Kookaburra Roads. There is also a need to provide pedestrian links across Cabramatta Creek to Hoxton Park

Contributing Development

137.5ha (area of land that is expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 11.2.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 6, 9, 10 & 14 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local transport facilities is shown in Table 11.2.

Table 11.2 Works and Land Acquisition Schedule

No	Item	Unit Cost \$/sqm	Length m	Width m	Area sqm	Land \$	Works \$
A1	Eastern extension of Yarrunga St	\$200	295	20	5,900	\$1,180,000	
							\$587,564
R4	Pedestrian paths to creek crossings	\$111	350	2.5	875		\$97,004
R5	Traffic Signals at Bernera Rd & Yarrunga St						\$221,722
R6	Pedestrian crossing of Cabramatta Ck at Yarrawa Rd						\$33,258
R7	Pedestrian crossing of Cabramatta Ck at Illaroo Rd						\$33,258
R8	Pedestrian crossing of Hinchinbrook Ck at Twentieth Av						\$33,258
Totals						\$1,180,000	\$1,006,065

Road A2 East of Bernera Road Catchment Area (additional to West of M7)

This area was rezoned along with the area east of the M7 in the early 1990's. It would have had frontage to Ash Road and have been required to reconstruct the half road frontage to Ash Road as well as contribute to local transport facilities. This area was cut off from Ash Road when the M7 was constructed. It was left land locked with no viable alternate road access. There is a need to provide access to Bernera Road by acquiring private land and constructing a road. The cost of Road A2 is fully attributable to the catchment.

Contributing Development

10.57ha (area of land that is expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure11.3.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 9 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local transport facilities is shown in Table 11.3.

This area also contributes to the other facilities in the "West of M7" catchment.

Table 11.3 Works and Land Acquisition Schedule

No	Item	Unit Cost \$/sqm	Length m	Width m	Area sqm	Land \$	Works \$
A2	Road north from A1	\$200	141	20	2,820	\$564,000	
							\$306,812
Totals						\$564,000	\$306,812

Road B East of Bernera Road Catchment Area (additional to West of M7)

This area having frontage to Kurrajong Road is required under the provisions of *Liverpool DCP 2008* to provide access other than to Kurrajong Road for industrial traffic. This is provided by Road B. There is a need to provide access to Bernera Road by acquiring private land and constructing a road. The cost of Road B is fully attributable to the catchment.

Contributing Development

17.73ha (area of land that is expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure11.4.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 9 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local transport facilities is shown in Table 11.4.

This area also contributes to the other facilities in the "West of M7" catchment.

Table 11.4 Works and Land Acquisition Schedule

No	Item	Unit Cost \$/sqm	Length m	Width m	Area sqm	Land \$	Works \$
B	Road east from A1	\$200	141	20	2,820	\$564,000	
							\$310,411
Totals						\$564,000	\$310,411

Road C West of Kookaburra Road Catchment Area (additional to West of M7)

This area having frontage to Kurrajong Road is required under the provisions of *Liverpool DCP 2008* to provide access other than to Kurrajong Road for industrial traffic. This is provided by Road C. There is a need to provide access to Kookaburra Road by acquiring private land and constructing a road. The cost of Road C is fully attributable to the catchment.

Contributing Development

2.33ha (area of land that is expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 11.5.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 8 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local transport facilities is shown in Table 11.5.

This area also contributes to the other facilities in the "West of M7" catchment.

If alternate road access is provided in a form acceptable to Council this contribution will not levied.

Table 11.5 Works and Land Acquisition Schedule

No	Item	Unit Cost \$/sqm	Length m	Width m	Area sqm	Land \$	Works \$
C	Road west from Kookaburra Rd	\$200	200	20	4,000	\$800,000	
							\$454,740
Totals						\$800,000	\$454,740

Road D East of Kookaburra Road Catchment Area (additional to West of M7)

This area having frontage to Kurrajong Road is required under the provisions of *Liverpool DCP 2008* to provide access other than to Kurrajong Road for industrial traffic. This is provided by Road D. There is a need to provide access to Kookaburra Road by acquiring private land and constructing a road. The cost of Road D is fully attributable to the catchment.

Contributing Development

3.83ha (area of land that is expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 11.6.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 8 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local transport facilities is shown in Table 11.6.

This area also contributes to the other facilities in the "West of M7" catchment.

If alternate road access is provided in a form acceptable to Council this contribution will not levied.

Table 11.6 Works and Land Acquisition Schedule

No	Item	Unit Cost \$/sqm	Length m	Width m	Area sqm	Land \$	Works \$
D	Road east from Kookaburra Rd	\$200	320	20	6,400	\$1,280,000	
							\$604,193
Totals						\$1,280,000	\$604,193

11.3 Drainage

Nexus

Drainage Easements

In order to achieve an economical local drainage system it is necessary to drain stormwater runoff through the lowest possible path. This path was in some cases required to traverse privately owned properties which creates the need for drainage easements or drainage reserve.

A drainage easement is known as the area of land dedicated to construct and maintain an enclosed drainage conduit (usually a pipe or box culvert). The drainage easement can serve a number of privately owned properties in which case it is described to be an "inter-allotment drainage easement". The area of land required for inter-allotment drainage easement would be dedicated for that purpose and would belong to those properties benefiting from the drainage system within the easement. The owners the properties will be responsible for the maintenance and functioning of the drainage system.

In some cases it is proposed to have an easement in favour of Council to drain water from properties and streets. This is where a drainage reserve is not considered to be practical. The cost of the construction of the drainage works will be funded by contributions. Affected lands will be required as a condition of consent to dedicate an easement in favour of Council to drain upstream land.

Drainage Reserves

A drainage reserve is the area of land dedicated to construct and maintain an open drainage conduit (usually a formed earth or concrete channel). The drainage reserve can serve a number of privately owned properties, public land (such as road drainage, parks, etc.) or a combination of these.

The area of land required for drainage reserve will be required to be dedicated to Council for that purpose and Council will be responsible for the maintenance and functioning of the drainage system. The area of land dedicated to drainage reserve has been included in the contribution rate as "cost of land acquisition" for each local drainage catchment.

Minimum size pipes

The Local Trunk Drainage is costed on the basis of drainage infrastructure requirements of the local catchment. Each of the local catchments is costed down to 900mm diameter pipe only. The individual developers are required to directly bear the cost of all pipelines up to 825mm diameter within or past their own land. The cost difference between any larger pipe size or drainage swale/channel is funded by Developer contributions.

Where it is anticipated that the developer will carry out the works as part of a development, the cost of supply, lay and backfilling of 825mm diameter is deducted from the cost of works to get the contribution. These works, when carried out by the developer, means that the developer will receive the credits of the difference between the total cost of works and the cost of 825mm diameter pipe (to be borne by the developer). Should the developer default from undertaking the works identified in this plan as the developer's responsibility, then the developer shall pay for the cost of 825mm diameter pipe for the reach of drainage works for which they are responsible to provide as part of their development.

Where the work is costed in full without deducting the cost of 825mm diameter, it is anticipated that Council will undertake these works from contributions. Where a developer undertakes these works as part of their development, they shall receive full credits for the work as shown in this plan.

Gross pollutant traps

Gross pollutant traps have also been costed as source control for litter at the end of each network.

Scope of facilities

A review of the range of local transport facilities was undertaken in 2008. This was undertaken in

conjunction with the rezoning of land west and south of the area rezoned in the early 1990s.

Apportionment

No apportionment is allowed for as there were no existing local drainage facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule and Catchment Area

There are several local drainage catchments within the Prestons Industrial Release Area. These are shown on Figure 11.2.



Figure 11.2 Catchment Areas

East of M7 Catchment Area

Contributing Development

88.05ha (area of land that is expected to contribute to local drainage facilities)

The area from which contributions would be received is shown on Figure 11.7.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 9 & 10 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local transport facilities is shown in Table 11.7.

Table 11.7 Works and Land Acquisition Schedule

Works

From	To	Pipe Diameter	Length	Unit Cost	Other	Cost of Works	Cost of 825 dia Pipe	Contribtn/ Credits
		mm	m	\$/m		\$	\$	\$
0.02	0.03	900	48	\$582		\$27,937	\$16,800	\$11,137
0.03	0.06	1,050	82	\$722		\$59,225	\$28,700	\$30,525
0.05	0.06	900	19	\$582		\$11,058	\$6,650	\$4,408
0.06	0.07	1,200	17	\$826		\$14,043	\$5,950	\$8,093
0.07	0.09	1,350	72	\$1,052		\$75,732	\$25,200	\$50,532
0.09	0.11	1.5x1.2 RCBC	99	\$1,430		\$141,618	\$34,650	\$106,968
0.11	0.13	2.1x1.2 RCBC	90	\$1,778		\$159,983	\$31,500	\$128,483
0.13	0.15	2.1x1.2 RCBC	70	\$1,778		\$124,431	\$24,500	\$99,931
0.15	0.17	2.1x1.2 RCBC	80	\$1,778		\$142,207	\$28,000	\$114,207
0.17	0.19	2.4x1.2 RCBC	74	\$2,041		\$151,001	\$25,900	\$125,101
0.19	.24A	2.7x1.2 RCBC	91	\$2,304		\$209,619	\$31,850	\$177,769
0.2	0.21	900	88	\$582		\$51,217	\$30,800	\$20,417
Structures						\$36,000		\$36,000
1.18	1.17	900	70	\$582		\$40,741	\$24,500	\$16,241
1.17	1.16	1,050	70	\$722		\$50,558	\$24,500	\$26,058
1.16	1.14	1,200	142	\$826		\$117,297	\$49,700	\$67,597
1.14	1.13	1.5x1.2 RCBC	78	\$1,430		\$111,578	\$27,300	\$84,278
1.13	1.10	1.8x1.2 RCBC	140	\$1,672		\$234,137	\$49,000	\$185,137
1.10	1.7	2.1x1.2 RCBC	118	\$1,778		\$209,756		\$209,756
1.7	1.6	3.0x1.2 RCBC	30	\$2,588		\$77,625		\$77,625
1.6	1.5	3.6x1.2 RCBC	42	\$3,397		\$142,691		\$142,691
1.5	1.1	4.2x1.2 RCBC	74	\$3,545		\$262,305		\$262,305
13.4	13.1	1,050	168	\$722		\$121,339	\$58,800	\$62,539
13.1	1.14	1,200	15	\$826		\$12,391	\$5,250	\$7,141
3.4	3.3	900	78	\$582		\$45,397	\$27,300	\$18,097
3.3	1.5	1,050	110	\$722		\$79,448	\$38,500	\$40,948
Structures						\$44,000		\$44,000
1.05	1.04	1,200	80	\$826		\$66,083	\$28,000	\$38,083
1.03	1.01	1,350	100	\$1,052		\$105,183	\$35,000	\$70,183
Structures						\$8,000		\$8,000
14.13	14.11	1,050	110	\$722		\$79,448	\$38,500	\$40,948
14.11	14.9	1,200	128	\$826		\$105,733	\$44,800	\$60,933
14.9	14.8	1.2x1.2 RCBC	66	\$1,315		\$86,776	\$23,100	\$63,676
14.8	14.5	1.5x1.2 RCBC	140	\$1,430		\$200,268	\$49,000	\$151,268
14.5	14.1	1.8x1.2 RCBC	30	\$1,672		\$50,172	\$10,500	\$39,672
14.12	14.11	1,050	30	\$722		\$21,668	\$10,500	\$11,168
15.01	11.09	900	30	\$582		\$17,460	\$10,500	\$6,960
11.09	11.08	1,050	160	\$722		\$115,561	\$56,000	\$59,561
11.08	11.07	1,200	20	\$826		\$16,521	\$7,000	\$9,521

From	To	Pipe Diameter	Length	Unit Cost	Other	Cost of Works	Cost of 825 dia Pipe	Contribtn/ Credits
		mm	m	\$/m		\$	\$	\$
11.07	11.06	1,500	240	\$1,248		\$299,561	\$84,000	\$215,561
11.06	11.05	1,650	40	\$1,445		\$57,780	\$14,000	\$43,780
11.05	11.01		315		Channel	\$446,817		\$446,817
	11.01				Energy Dissipater	\$77,134		\$77,134
13.05	13.04	1,500	70	\$1,248		\$87,372	\$24,500	
13.04	13.03	1,650	60	\$1,445		\$86,671	\$21,000	\$65,671
13.03	13.01	1,800	150	\$1,697		\$254,543	\$52,500	\$202,043
21.01	11.05	900	35	\$582		\$20,370	\$12,250	
22.01	13.05	1,050	100	\$722		\$72,226	\$35,000	\$37,226
Structures						\$46,000		\$46,000
Jedda Road Culverts				\$1,012,192				\$1,012,192
Sub Total								\$4,864,381
Add 15% Contingencies								\$729,657
Total								\$5,594,038
Land								
Item			Total Area	Proportion		Area sqm	Unit cost	Cost
Maxwells Creek Channel			23,000	60%		23,000	\$100	\$1,380,000
Total								\$1,380,000

West of M7 Catchment Area

Contributing Development

137.5ha (area of land that is expected to contribute to local drainage facilities)

The area from which contributions would be received is shown on Figure 11.8.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 8, 9 & 13 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local transport facilities is shown in Table 11.8.

Table 11.8 Works and Land Acquisition Schedule

Works

Item	From	To	Pipe Diameter	Length	Unit Cost	Cost of Works	Rate of 825mm Dia Conduit	Cost of 825 Dia Conduit	Contribution Credits
			mm	m	\$/m	\$	\$	\$	\$
	(1)	(2)	(3)	(4)	(5)	(6)=(4)x(5)	(7)	(8)=(3)x(9)	(9)=(6)-(8)
Catchment A									
Pits						\$11,655	\$1,217	\$0	\$11,655
Headwalls						\$4,450	\$1,217	\$0	\$4,450
GPT						\$34,500	\$1,217	\$0	\$34,500
Outlet Treatment						\$44,000	\$1,217	\$0	\$44,000
Catchment B									

Item	From	To	Pipe Diameter	Length	Unit Cost	Cost of Works	Rate of 825mm Dia Conduit	Cost of 825 Dia Conduit	Contribution Credits
			mm	m	\$/m	\$	\$	\$	\$
Box Section	B0	B2	-	190	\$2,966	\$563,540	\$1,217	\$231,230	\$332,310
Pipe	B2	B3	1,350	130	\$1,911	\$248,393	\$1,217	\$158,210	\$90,183
	B8	B2	1,050	40	\$1,911	\$248,393	\$1,217	\$48,680	\$199,713
Pipe	B3	B4	900	100	\$1,408	\$140,846	\$1,217	\$121,700	\$19,146
Pits						\$41,625	\$1,217	\$0	\$41,625
Headwalls						\$4,450	\$1,217	\$0	\$4,450
GPT						\$34,500	\$1,217	\$0	\$34,500
Outlet Treatment						\$70,000	\$1,217	\$0	\$70,000
Catchment C									
Pipe	C0	C1	1,050	65	\$1,911	\$124,196	\$1,217	\$79,105	\$45,091
Pits						\$9,990	\$1,217	\$0	\$9,990
Headwalls						\$4,450	\$1,217	\$0	\$4,450
GPT						\$34,500	\$1,217	\$0	\$34,500
Outlet Treatment						\$50,000	\$1,217	\$0	\$50,000
Catchment D									
Pipe	D0	D1	1,050	30	\$1,911	\$57,321	\$1,217	\$36,510	\$20,811
Pipe	D1	D2	900	152	\$1,408	\$214,085	\$1,217	\$184,984	\$29,101
Pits						\$11,655	\$1,217	\$0	\$11,655
Headwalls						\$4,450	\$1,217	\$0	\$4,450
GPT						\$0	\$1,217	\$0	\$0
Outlet Treatment						\$59,000	\$1,217	\$0	\$59,000
Catchment E									
Pipe	E0	E1	1,200	99	\$2,018	\$199,744	\$1,217	\$120,483	\$79,261
Pipe	E1	E2	1,050	200	\$1,911	\$382,143	\$1,217	\$243,400	\$138,743
Pits						\$24,975	\$1,217	\$0	\$24,975
Headwalls						\$4,450	\$1,217	\$0	\$4,450
GPT						\$34,500	\$1,217	\$0	\$34,500
Outlet Treatment						\$0	\$1,217	\$0	\$0
Catchment F									
Open Channel	F0	F1		475	\$1,548	\$735,356	\$1,217	\$578,075	\$157,281
Box Section	F1	F7	2.4x1.2 (2Nos)	425	\$8,168	\$1,735,765	\$1,217	\$517,225	\$1,218,540
Box Section	F7	F9	3.0x1.2	475	\$2,966	\$1,408,691	\$1,217	\$578,075	\$830,616
Pits						\$41,625	\$1,217	\$0	\$41,625
Headwalls						\$4,450	\$1,217	\$0	\$4,450
GPT						\$69,000	\$1,217	\$0	\$69,000
Outlet Treatment						\$75,000	\$1,217	\$0	\$75,000
Catchment G									
Open Channel	G00	G0		408	\$1,548	\$631,632	\$1,217	\$496,536	\$135,096
Box Section	G0	G1	2.4x1.5	30	\$2,600	\$1,245,579	\$1,217	\$36,510	\$1,209,069
	G1	G2	1,500	70	\$2,720	\$726,340	\$1,217	\$85,190	\$641,150
Pipe	G2	G3	1,350	150	\$2,380	\$726,340	\$1,217	\$182,550	\$543,790
Pipe	G3	G5	1,200	200	\$2,018	\$726,340	\$1,217	\$243,400	\$482,940
Pits						\$39,960	\$1,217	\$0	\$39,960

Item	From	To	Pipe Diameter	Length	Unit Cost	Cost of Works	Rate of 825mm Dia Conduit	Cost of 825 Dia Conduit	Contribution Credits
			mm	m	\$/m	\$	\$	\$	\$
Headwalls						\$4,450	\$1,217	\$0	\$4,450
GPT						\$34,500	\$1,217	\$0	\$34,500
Outlet Treatment						\$75,000	\$1,217	\$0	\$75,000
Catchment H									
Pipe	H00	H0	1,200	176	\$2,018	\$355,100	\$1,217	\$214,192	\$140,908
Pipe	H00	H1	1,050	95	\$1,911	\$181,518	\$1,217	\$115,615	\$65,903
Pipe	H1	H2	900	195	\$1,408	\$274,649	\$1,217	\$237,315	\$37,334
Pits						\$24,975	\$1,217	\$0	\$24,975
Headwalls						\$4,450	\$1,217	\$0	\$4,450
GPT						\$34,500	\$1,217	\$0	\$34,500
Outlet Treatment						\$59,000	\$1,217	\$0	\$59,000
Jedda Road Culverts						\$1,012,192	40%	of catchment	\$407,790
Sub Total									\$7,774,836
Contingencies plus contract administration					8%				\$621,987
Design					4%				\$310,993
Total									\$8,707,816
Land									
Item	From	To		Length m	Width m	Area sqm	Unit Cost \$/sqm	Cost \$	
Cabramatta Ck	Kurrajong Rd	Hinchinbrook Ck		2,230	10	22,300	\$50	\$1,115,000	
Cabramatta Ck	Hinchinbrook Ck	M7		340	10	3,400	\$50	\$170,000	
Cabramatta Ck	M7	Lot 2 DP 1051510		380	10	3,800	\$50	\$190,000	
Cabramatta Ck	Lot 2 DP 1051510	Hoxton Park Rd		520	10	5,200	\$50	\$260,000	
			Total Area	Proportion					
Maxwells Ck Channel			23,000	40%		9,266	\$100	\$926,619	
Total									\$2,661,619

North of M7

Contributing Development

2.85ha (area of land that is expected to contribute to local drainage facilities)

The area from which contributions would be received is shown on Figure 11.9.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 5 & 9 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local transport facilities is shown in Table 11.9.

Table 11.9 Works and Land Acquisition Schedule

Item	From	To	Length	Width	Area	Unit Cost	Cost
Cabramatta Ck	Hinchinbrook Ck	Hoxton Park Rd	520	10	5,200	\$50	\$260,000

Total	\$260,000
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11.4 Landscaped Buffer Areas

Wonga Road Frontage

The development of the Prestons Industrial Area has the potential for conflict with the adjoining residential area over noise generation, air pollution, security lighting, operational hours and traffic generation. Accordingly a 10 m wide landscaped buffer is to be provided along the frontage to Wonga Road.

The buffer area is essential between any industrial area and an adjoining residential area to protect the amenity of the residential area without resorting to unreasonable restrictions on business hours of operation, noise and lighting in the industrial area.

The contributing area is the area east of the M7 with an area of 123 ha. This is on the basis that the works border this release area where it adjoins the residential areas. It does not include the former Liverpool Showground, as this will provide its own buffer to the adjoining residential area to the south.

Contributing Development

123ha (area of land that is expected to contribute to Landscaped Buffer Areas)

The area from which contributions would be received is shown on Figure 10.10.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 10 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for Landscaped Buffer Areas is shown in Table 11.10.

Table 11.10 Works and Land Acquisition Schedule

No	Item	Length m	Area sqm	Cost \$/m	Land Unit Cost \$/sqm	Cost of Land \$	Cost of Works \$
Wonga Road Frontage							
S1	Landscaping		5,600		\$200	\$1,120,000	
	Landscaping	560		\$250			\$92,810
Totals						\$1,120,000	\$92,810

11.5 Professional Fees

Nexus

The cost of independent land valuations and legal documents are clearly part of the costs of administering this plan. In relation to land acquisition, Council will be required to acquire land for car parking and roads and incur the associated conveyancing costs.

It is recognised that the costs associated with land acquisition could be added to the cost of individual facilities. However the cost of professional fees attributable to any one facility is completely unpredictable. It is therefore more appropriate that a pool of contribution funds is available to meet these costs as they arise.

The contribution rate is based on the following costs.

- The cost of independent valuations is anticipated to vary from \$500 - \$2,000 depending on individual sites and whether the valuation is general or specific;
- Valuations will be required at least annually for reviewing this contribution plan, and more

frequently depending on movements in the property market;

- Stamp duty and estimated costs of vendor's solicitor in land acquisition.

11.6 Administration Costs

Nexus

There are significant costs associated with administering funds of this magnitude. Both the plan preparation/review and implementation aspects of Developer contributions are administered staff within Council. A core team of employees are engaged to provide support in co-ordinating such a process, as well as prepare status reports, review and relevant data, liaise with Council staff and external agencies.

In accordance with the directive of the Department of Planning, the administration costs are comprised of those expenses relative only to those personnel directly responsible for the formulation and / or administration of a Contributions Plan. The cost per lot per year has been averaged across all of the Contribution Plan areas and is calculated as follows.

11.7 Contribution Formulae

Transport and Drainage Facilities

$$\text{Contribution} = \frac{C}{N}$$

(per sqm)

where C = Cost of capital works and land identified for the catchment area

N = Area of land in the catchment area

$$\text{Area of land to be dedicated} = \frac{A}{N}$$

(per sqm)

where A = Total area to be acquired

N = Area of land in the catchment area

Landscaped Buffer Areas

$$\text{Contribution} = \frac{C}{N}$$

(per sqm)

where C = Cost of capital works and land identified for the catchment area

N = Area of land in the catchment area

$$\text{Area of land to be dedicated} = \frac{A}{N}$$

(per sqm)

where A = Total area to be acquired

N = Area of land in the catchment area

Professional Fees

$$\text{Contribution Rate} = \frac{\text{Residential Contribution} * A}{450}$$

(per sqm)

Where * Residential Contribution in Hoxton Park, Carnes Hill and Prestons

A = Site area

450 = area of conventional lot

Administration Fees**All Development**

The cost of administering contributions plans over the coming years has been estimated at 1.2% of the value of contributions.

11.8 Staging of Facilities

The timing of construction of specific facilities depends largely on where and when development occurs. It is the intention of Council to provide facilities at the earliest opportunity. This intention is constrained by the funding limitations, which occur due to cash flows directly linked to the rate of development. Council must accumulate sufficient contributions to meet the funding commitment to any particular facility, which is required. In this regard, facilities will be constructed as funds received allow and in response to the priority needs of the developing community.

12. Middleton Grange Release Area

12.1 Background

Liverpool City Council adopted on 24 June 2002 a masterplan for the development of Middleton Grange Release Area. The masterplan makes provision for 152ha of mostly residential development and forecasts the creation of 2,580 dwellings. This will result in an additional population of approximately 9,000 in the area. Due to this anticipated development, the current absence of public amenities and services available in the area, and the expected characteristics of the new population, it will be necessary to undertake works detailed in this Contributions Plan.

Relationship to other plans

The masterplan is supported by a set of technical Background Reports and by further background information in the draft Master Plan - December 2001. Council prepared *Liverpool DCP No 48* based on the masterplan. This DCP was subsequently incorporated into *Liverpool DCP 2008*.

Staging of all facilities and services

The timing of construction and provision of all facilities and services will depend largely on where and when development occurs. It is the intention of Council to provide facilities, services and infrastructure at the earliest opportunity in order to provide for the access, amenity and liveability of the residents of Middleton Grange. This intention will be constrained by the funding limitations of cash flows directly linked to the pace of development and by Council's ability to acquire land from existing owners.

Council must accumulate adequate funds through contributions to meet the costs of any facility. Therefore construction will occur as funds allow and in response to the priority needs of the developing community. It is intended, however that, water management facilities will be constructed for each section or water catchment of Middleton Grange as it develops.

Planning principles

Council seeks to achieve the following in Middleton Grange.

- **Accessibility** – A community that ensures the safe, convenient and appropriate movement of people and goods.
- **Social benefits** – A balanced community that provides a full and diverse range of social, community and recreational resources.
- **Environmental benefits** – A community with quality urban design and high environmental standards that values and enhances its natural and built environment.
- **Economic benefits** – A community that provides a full range of employment and training opportunities for its inhabitants.

The contributions levied by this Plan for infrastructure, facilities and services will be directed at achieving outcomes in line with these visionary elements.

The Middleton Grange originally consisted of 1.2ha rural-residential lots, the majority in separate ownership and some with dwellings; a grid of streets consisting of one north-south road and three east west roads; a private school; a church and a small club. The area to the north of the central environmental corridor along McIver Avenue is used for low intensity grazing of cattle. Three small waterways traverse the area. Given its history as a rural residential area, Middleton Grange has no facilities for recreation, community services and water cycle management or a road network to support a new resident population.

The area is envisioned to have a high quality public domain of parks, playing fields, streets, footpaths, cycle ways and open space. A network of connected roads will traverse the area and encourage walking and cycling, while transport nodes will provide access and links to public transport, both locally

and regionally. The neighbourhood centre will be the focus of the new area and include a community centre. Water quality, run-off and drainage will be incorporated into the existing watercourses and have high aesthetic appeal. The principles of ecologically sustainable development will govern the provision of all facilities.

While residential development is to be the main form of development in the Middleton Grange Release Area, there will also be some development for commercial uses as well as for church and private education purposes. These developments and uses will place demands on the road and water management system. Accordingly, they will be levied for these two forms of infrastructure for the stormwater water run-off that they generate.

Development trends

The number of additional dwellings/lots is therefore forecast to be 2,580. For the purposes of this plan, dwelling occupancy rates per lot are those adopted for the new release areas, i.e.:

- Lots 450 sqm or larger = 3.7 persons per dwelling
- Lots smaller than 450 sqm = 3.3 persons per dwelling.

Assuming an average of 3.5 persons per dwelling, the future additional resident population of Middleton Grange at the full extent of development is estimated to be approximately 9,000 persons.

Catchment Area

There is a single catchment for all local facilities in Middleton Grange. The catchment is shown on Figure 12.1.



Figure 12.1 Catchment Area and location of works and land acquisition

12.2 Community Facilities

Background

The provision of appropriate and useable community facilities is a key requirement for developing socially sustainable communities. In new development areas, residents will demand and require community facilities such as multi-purpose community centres, children's facilities, libraries and cultural facilities to meet their needs.

Middleton Grange is expected to accommodate an estimated 9,000 residents based on the development of 2,580 dwellings. As the release area will allow for both multi unit housing and separate detached dwellings, anticipated occupancy rates are likely to range from 3.3 persons per dwelling to 3.7 persons per dwelling based rates adopted for other release areas in Liverpool.

Analysis of the demographic profile of other recent release areas in Liverpool suggests that Middleton Grange may have the following characteristics:

- Large number of children aged 0-4 years
- Large number of children aged under 15 years
- Increasing number of youth aged 10-19 years living in the release area particularly as the development matures
- High proportion of adults of child-bearing age groups, i.e. 20-34 years old
- Low proportion of older residents compared to the Liverpool LGA
- High level of cultural diversity with a significant number of residents likely to be from non-English speaking background.

These characteristics together with the lack of existing community infrastructure within the immediate area require that a range of appropriate community facilities be provided to meet the need of new residents.

Nexus

As outlined in the Background Reports, this release area has no existing local neighbourhood facilities except for a non-government school and private church/club facilities. Council community facilities in the surrounding suburbs are at full capacity with direct access to these facilities difficult. Therefore given the socio-demographic profile of new residents outlined earlier, local facilities required by new residents in this community are a local multipurpose community centre and facilities for families and children. Neighbourhood level facilities and services are those, which can be accessed within the immediate area and are typically provided for communities of 8,000-10,000 residents.

Facilities

Local level multi-purpose community centres provide a locally based facility. Poor public transport, inadequate human services infrastructure, distance and therefore poor access to centrally located services are key obstacles facing new residents. As a focal point for residents, community centres provide flexible space for a broad range of community activities. Some of the functions and activities that can occur in these centres include:

- Meeting space for community groups and organisations.
- An informal meeting place and information centre.
- Multi-purpose working space for a range of activities such as play groups, educational classes, cultural and leisure activities (arts and crafts classes, cultural projects, workshops, etc).
- Sessional space for visiting and specialist services such as community nurses, health services, family support services, etc.
- Office accommodation, interview rooms and generally an administrative base for community

workers and local Neighbourhood Centre services.

- Spaces for private functions such as weddings, celebrations, formal meetings, cultural events, etc.

Elected committees comprising local residents and users usually manage such centres.

Council proposes a standard for such facilities, a 400sqm building for a population of approximately 8,000 residents. This standard is proposed based on experience of facilities in other Liverpool release areas. In areas with a projected population over 10,000 but less than 20,000, it is proposed to build centres that are proportionately based on this standard. This will be incorporated into the floor-space ratio adopted in this Plan for community facilities.

Scope of facilities

A review of the range of local community facilities was undertaken in 2008. It was decided that a local multipurpose community centre would be provided. An analysis of local community centres in adjacent release areas showed that bookings for these centres were at full capacity.

Apportionment

No apportionment is allowed for as there were no existing local community facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule

Contributing Development

2,580 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local community facilities)

The area from which contributions would be received is shown on Figure 12.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 4 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local community facilities is shown in Table 12.1.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by *Rider Hunt*.

Table 12.1

No.	Item	Land Area sqm	Land Unit Cost \$/sqm	Total Land Cost \$	Total Works Cost \$
C1	Multi-Purpose Community Centre 400 sqm)	800	\$155	\$124,000	\$1,816,435
Total				\$124,000	\$1,816,435

12.3 Recreation Facilities

Background

A sustainable community requires access to quality open space and recreation facilities. As a result of new development, natural areas also need to be maintained and enhanced to preserve the environmental quality and bio-diversity of the area. Open spaces provide increased residential amenity; a resource for flora and fauna; consolidation of diminishing natural areas as well as a place for sports, recreation, play and outdoor activities.

This plan and the *Background Reports* to the masterplan provide a detailed assessment of the size and demographic characteristics of the expected population of Middleton Grange Release Area. They

highlight the need for open space and recreation facilities, which meet the needs of new residents while also recognising the existing significant environmental features of the release.

Nexus

As presented in the Background Reports, Middleton Grange has some strong natural features such as existing creek lines, remnant bushland and scenic views. It is proposed to use these environmental qualities to develop useable, high quality open space areas with specific recreational facilities to meet the needs of residents. The population characteristics outlined in this chapter have strongly influenced the type of facilities to be provided together with information on community demands in adjoining release areas (see Background Reports). Many of the open spaces are also part of the water cycle management system and will be jointly developed for both purposes.

All residential development will contribute for the following facilities.

Facilities

Based on this information, the following open space and recreation areas are required:

Small parks

Small parks increase residential amenity by providing a focus for local residents and encouraging a "sense of place". Embellishments such as children's playgrounds, seating, lighting, planting, fencing, footpaths and shade are key requirements in this type of park.

Large neighbourhood parks

Large neighbourhood parks are larger multipurpose open spaces providing for a range of activities and age groups. As Middleton Grange will house primarily families, these parks will provide space where all age groups can recreate together. Embellishments such as children's playgrounds, seating, BBQs, shade pavilion, plantings, pathways, bicycle parking, irrigation and public art are key requirements of this type of park. Given the large number of youth aged 10-19 years expected to be living in this release, neighbourhood parks will also provide recreational facilities appropriate for youth such as a skateboard ramp, hard courts or multipurpose cycle/rollerblade paths. Only large parks of suitable size can accommodate this diversity of activities.

Bushland parks

Bushland parks are open spaces with identified high environmental values such as existing large tree stands and creeks. Where the parks are primarily bushland/environmental protection, embellishment will include bush regeneration works, soil stabilisation, fencing, site furniture, environmentally sensitive pathways and interpretative shelters.

Sportsgrounds

Sportsgrounds are active recreation areas, which provide local residents with opportunities to participate in organised and unorganised sports such as soccer, cricket, football etc. This open space will be of high quality and multipurpose with the minimum configuration of a sportsground being one oval comprising of two playing fields. Embellishments will include major site works, automatic irrigation, turfing and top soil, amenities block, cricket wicket/nets, goal posts, car parking, spectator seating, shade pavilion, basic lighting planting and playground facilities for children/youth.

There are a total of 14.7 ha of recreation and open space excluding those areas set-aside specifically for water cycle management and environmental protection. This gives a rate of 1.63ha of open space per 1,000 residents based on an anticipated population of approximately 9,000. This is less than the Department of Planning standard of 2.3 Ha per 1,000 residents and other comparable new release areas (see *Background Reports*).

The approach used, however, focuses on ensuring high quality open space, recreation facilities and bushland with careful attention to developing sites, which have appropriate levels of embellishment to meet community needs. Residents will also have the benefits of the adjoining proposed Western Sydney Regional Parklands and land primarily set aside for water cycle management.

Scope of facilities

A review of the range of local recreation facilities was undertaken in 2008. This was undertaken in conjunction with the preparation of *Liverpool DCP 2008*. This plan included amongst other items a review of the masterplan for this area.

Apportionment

No apportionment is allowed for as there were no excess local recreation facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule

Contributing Development

2,580 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local recreation facilities)

The area from which contributions would be received is shown on Figure 12.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 1 - 4 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local recreation facilities is shown in Table 12.2.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by *Rider Hunt*.

Table 12.2

No.	Item	Park Area sqm	Park Type	Land Unit Cost \$/ sqm	Works Unit Cost \$	Total Land Cost \$	Total Works Cost \$
OS01	Stante Reserve (Southern Oval)	23,355	Sportsfield		\$80.64		\$1,883,457
	Serbian club	4,496		\$155		\$696,880	
	257/2475	9,434		\$218		\$2,056,612	
	1/778319	9,425		\$203		\$1,913,370	
OS02	Stante Reserve (Northern Oval)	31,670	Sportsfield		\$80.64		\$2,553,935
	B/381267	4,195		\$221		\$925,212	
	35/1044841	3,278		\$95		\$311,410	
	36/1044841	367		\$95		\$34,827	
	189/2475	12,140		\$270		\$3,277,800	
	37/1044841	11,690		\$201		\$2,349,690	
OS04	Southern Woodland Area	10,450	Env. Protection	\$190	\$17.51	\$1,985,500	\$182,943
OS06	Park on 16th Ave	2,870	Small Park	\$110	\$31.28	\$315,700	\$89,782
OS07	Park west of 2nd Ave, south of 16th Ave.	5,641	Small Park	\$155	\$31.28	\$874,355	\$176,468
OS09	Park on Collector Street 3	1,820	Small Park	\$155	\$31.28	\$282,100	\$56,935
OS11	Park west of 2nd Ave, south of McIver Ave	5,799	Small Park	\$155	\$31.28	\$898,845	\$181,410
OS12	Park in northern area - eastern side	3,431	Small Park	\$155	\$31.28	\$531,805	\$107,332
OS13	Park in northern area - western side	7,312	Large Park	\$155	\$31.28	\$1,133,360	\$228,742
Sub Total							
	Plus 5% Contingency						\$273,050
Totals		147,373				\$17,587,466	\$5,734,054

12.4 Transport Facilities

Background

The cost of provision of streets, access and transport facilities in conjunction with a subdivision will be borne by individual developers. However, various traffic facilities and frontages to public land uses such as parks will be funded through developer contributions. As all residents use these cost should not fall on developers of individual land uses but rather should be shared across the whole precinct.

Nexus

The existing street network in Middleton Grange consists of a grid of one north-south road and three east-west roads, and connections to Fifteenth Avenue and Cowpasture Road. These are adequate for the existing population and land uses, but overall is not in good condition. The street network is not appropriate for, nor has the capacity to service, a new incoming resident population and a public transport system.

The masterplan for Middleton Grange provides a new street layout with the objective of creating a highly accessible suburb. The network is designed to enhance the internal accessibility of the area and provide external access to arterial roads and the M7. In particular it facilitates bus circulation and the use of public transport.

The design utilises existing roads in the new layout, which will need to be upgraded. In addition it provides for new collector streets, frontages to public open space, intersections with Cowpasture Road and Fifteenth Ave and various road treatments. Pedestrian safety and cyclist amenity is accommodated. Existing streets will be upgraded during the development of Middleton Grange and new facilities and infrastructure built.

While timing and staging will be dependent on available funding as a result of this plan and the location of new development, it is the intention of Council and accordingly this Contributions Plan, that access is provided to new residents as they take up residence. Staging will also accord with the provision of other infrastructure that would be built in conjunction with streets.

All residents, commercial/retail businesses, private schools, churches and other developments, will use and benefit from the new access and transport facilities.

Facilities

Collector streets

In previous release areas within the Hoxton Park Stage 2 Release Area, the local access street was adopted as the benchmark to assess developer contributions. Council has adopted the philosophy that within each neighbourhood, all streets of higher standard than local access streets (i.e. collector streets) are necessary to provide access for everyone in that neighbourhood. Accordingly there is a contribution toward the difference in cost between a local access street and a collector street. This applies to additional width, pavement depth and land value and is normally funded by the developer of land having frontage to the collector street.

Within the Council's road hierarchy are the following:

- Access streets and rear service lanes – which cater for up to 300 vehicles per day (vpd) and are not more than 100m long.
- Local access streets – which cater for up to 1,000vpd with provision for up to 2,000vpd with wider pavements.
- Neighbourhood collector streets – which cater for up to 6,000vpd and usually provide a link between the internal collector street system of a residential precinct and the major road system.
- Sub-arterial roads – which cater for up to 15,000vpd and are the principal traffic carriers within an urban neighbourhood.

In Middleton Grange additional collector streets have been added to the existing street structure to enhance accessibility of the precinct and handle the predicted traffic demand created by the new land release. The new streets are diagonal to the existing rectilinear street layout and focus on the neighbourhood centre while linking the southern and northern sections. A bridge will be built over the environment protection zone and central creek and connect the two parts of the precinct.

Streets adjacent to public reserves or public schools

Streets which front public facilities such as public schools and open space are not directly the responsibility of any one developer and are, therefore, levied for under this Plan. For any street, which a developer has one frontage to and the other side of the road is fronted by a public facility such as public schools and open space, the developer is required to provide the following:

- 9m street reserve or half street reserve, whichever is greater.
- The cost of constructing half of a street with a minimum 5.5m street pavement width, or half the designated street width, whichever is greater.

The remainder of the full width street dedication and construction is funded by developer contributions.

Upgrading existing public roads

Where an existing road is identified within this chapter requiring an upgrade, Council has made an assessment of the remaining life of the pavement and deducted this from the cost of construction of a new pavement. If future residential lots have access directly to the road, the Contributions Plan funds the central pavement only. A specific allowance has been included for the pavement upgrade to Second Avenue.

Traffic lights

New traffic lights have been included at the junction of Fifteenth and Kingsford Smith Avenues and at Flynn and Kingsford Smith Avenues.

Roundabouts

Roundabouts serve the whole street system within each neighbourhood and consequently serve each property. The cost is determined by the difference in cost between an intersection with a roundabout and a normal intersection.

Other traffic facilities

The other access and traffic facilities are detailed and summarised in the following tables. These include the provision of bridges/culverts over the water cycle management channels, additional landscaping to the collector roads, share ways, bus shelters and associated works. The costs included in this chapter have been determined by the difference in cost of a local access street and the extra cost of the additional access or traffic facilities required by *Liverpool DCP 2008*.

Scope of facilities

A review of the range of local transport facilities was undertaken in 2008. This was undertaken in conjunction with the preparation of *Liverpool DCP 2008*. This plan included amongst other items a review of the masterplan for this area. The changes arise in part due to the impact of the M7, the addition of land north of Hoxton Park Rd, changes to the land use adjacent to the Carnes Hill Centre on the proposed open space, street and drainage networks.

Apportionment

No apportionment is allowed for as there were no existing local transport facilities in existence at the commencement of the development of the area.

Table 12.3

Item	Land component	Works component
Collector street frontage to school	(18 - 9) = 9.0m	(7.5 - 5.5) = 2.0m
Local Street frontage to school	(14.5 - 9) = 5.5m	(6.5 - 5.5) = 1.0m
Local street fronting open space or drainage res	(14.5 - 9) = 5.5m	(6.5 - 5.5) = 1.0m
Collector Street fronting Open Space or Drainage Res	(18 - 9) = 9.0m	(7.5 - 5.5) = 2.0m
Collector Street through Open Space or Drainage Res	18m	7.5m
Local Street fronting Cabramatta Creek / Drain	(10.5 - 9) = 1.5m	(6.5 - 5.5) = 1.0m

Contributing Development, Works and Land Acquisition Schedule

Contributing Development

2,580 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local transport facilities)

The area from which contributions would be received is shown on Figure 12.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 1 - 4 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local transport facilities is shown in Table 12.4.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by Council.

Table 12.4 Works and Land Acquisition Schedule

No.	Item	Length / No of items m	Pavement width m	Land width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land Cost \$	Total Works Cost \$
R1	Collector Centre Street Park frontage (one side) (Qantas Boulevard)	466	9.7	17.2	\$155	\$1,315	\$1,242,356	\$612,611
R2	Local Street Type 2 (drainage frontage both sides) (Hall Cct between WM 1 & WM2)	122	9.4	17.4	\$149	\$981	included in drainage	\$119,678
C1	Bridge – Creek Crossing between water management facilities on Hall Ct							\$204,000
R3	Local Street Type 1 Drainage frontage (both sides) (Bravo Ave between Qantas & Globe)	47	7.2	15.2	\$149	\$801	included in drainage	\$37,627
R4	Local Street Type 1 Community frontage (one side) (Bravo Ave between Globe & Beard)	67	1.7	5.7	\$155	\$245	\$59,195	\$16,382
C2	Bridge – Neighbourhood Centre Bravo Av							\$205,000
R5	Collector Centre Street including over culvert Drainage frontage (one side)	22	9.7	17.2	\$130	\$1,315	\$49,192	\$28,922

No.	Item	Length / No of items m	Pavement width m	Land width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land Cost \$	Total Works Cost \$
	(Middleton Dr between Qantas & Globe)							
R6	Collector Centre Street over Culvert Drainage frontage (both sides) (Middleton Dr near Globe)	18	15.2	26.7	\$149	\$1,986	included in drainage	\$35,754
C3	Bridge – Middleton Dr	18						\$205,000
R7	Local Street Type 2 over culvert eastern side (both sides) (Hall Circuit at Swoffer Ave)	18	9.4	17.4	\$149	\$981	included in drainage	\$17,657
R8	Local Street Type 2 including over culvert western side (one side) (Hall Circuit near Swoffer St)	14	3.9	7.9	\$130	\$425	\$14,378	\$5,948
C4	Culvert – Eastern end of WM4	32						\$205,000
R9	Collector Centre Street over culvert northern side (both sides) (Flynn Boulevard at Swoffer St)	29	15.2	Pre- existing street		\$1,986		\$57,603
R10	Collector Centre Street drainage frontage including culvert on southern side (one side) (Flynn Blvd nr Swoffer)	46	8	Pre- existing street		\$1,034		\$47,581
C5	Culvert – Southern end of WM5	29						\$205,000
R11	Collector Centre Street frontage to drainage over Culvert (both sides) (Kingsford Smith @ Irvine)	77	15.2	Pre- existing street		\$1,986		\$152,947
C6	Second Av Creek Crossing south of Sixteenth Av			Pre- existing street				\$208,000
R12	Water management median street (drainage frontage) (Afflick and Irvine Gdns)	23	5.5	10	\$155	\$820	\$35,650	\$18,858
R13	Local Street Type 1 over culvert western side (one side) (Afflick and Percival Ave)	25	1.7	5.7	\$155	\$245	\$22,088	\$6,113
R14	Local Street Type 1 drainage frontage including over culvert (both sides) (Afflick and Percival)	17	7.2	15.2	\$155	\$801	included in drainage	\$13,610
C7	Culvert – Western end of OS07	42						\$265,000
R15	Parkland edge street over culvert (both sides) (Garrett St)	19	5.5	10	\$155	\$612	included in drainage	\$11,620

No.	Item	Length / No of items m	Pavement width m	Land width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land Cost \$	Total Works Cost \$
C8	Culvert – Garret St western end of Southern Creek	18						\$205,000
R16	Local Street Type 1 Parkland frontage (one side) (McGuinness Ave adjacent to park)	67	1.7	5.7	\$155	\$245	\$59,195	\$16,382
R17	Local Street Type 1 (one side) (Hall Circuit adjacent to park)	67	1.7	Pre- existing street		\$245		\$16,382
R18	Oval edge street frontage to parkland (one side) (Hall Circuit adjacent to OS 1)	151	8.5	12.5	\$221	\$981	\$416,290	\$148,095
R19	Water Management Stante Cl (both sides) Oval edge street frontage to parkland (one side) (Hall CCT nr Stante Cl)	146	14	Pre- existing street		\$1,547		\$225,913
R20	Oval edge street frontage to parkland (one side) (Bird Walton)	133	8.5	Pre- existing street		\$981		\$130,441
R21	Local Street Type 1 drainage frontage (one side) (Bird Walton)	345	8.5	12.5	\$221	\$981	\$951,126	\$338,362
R22	Bridge and approaches across central creek	510	1.7	Pre- existing street		\$245		\$124,698
R23	Culvert Middleton Dr	197		22.6		\$1,611	\$0	\$317,419
C9	Bridge – Environmental Corridor							\$205,000
B1	Local Street Type 1 parkland frontage (one side) (McIver Ave)	80	1.7	Pre- existing street		\$245		\$19,561
C10	Culvert - McIver Av							\$200,000
R25	Local Street Type 1 over culvert (both sides) (Kingsford Smith)	51	1.7	Pre- existing street		\$245		\$12,470
R26	Local Street Type 1 over culvert (both sides) (Kingsford Smith)	17	7.2	Pre- existing street		\$801		\$13,610
C11	Culvert - Second Av							\$208,000
R27	Local Street Type 1 over culvert (both sides) (Hugh Terrace nr Windsock)	30	7.2	15.2	\$155	\$801	\$70,680	\$24,018
R28	Local Street Type 1 drainage frontage including culvert (western side) (Hugh Terrace Nr Windsock)	17	1.7	5.7	\$155	\$245	\$15,020	\$4,157
C12	Culvert							\$265,000

No.	Item	Length / No of items m	Pavement width m	Land width m	Land Unit Cost \$/ sqm	Works Unit Cost \$/ m	Total Land Cost \$	Total Works Cost \$
R29	Local Street Type 1 parkland frontage (Kelsey Ave @ Hugh)	47	7.2	15.2	\$155	\$801	\$110,732	\$37,627
R30	Northern Collector Street (one side only)	120	8.1	12.6	\$155	\$940	\$234,360	\$112,746
R31	Local Street Type 1 (one side) (Love Road adjacent to park)	30	1.7	5.7	\$155	\$245	\$26,505	\$7,335
R32	Local Street Type 1 (one side) (Monoplane Ave adjacent to park)	87	1.7	5.7	\$155	\$245	\$76,865	\$21,272
R33	Mclver St (both sides)							
R34	Intersection Upgrade - 15th & Kingsford Smith Aves.							\$400,000
R35	Roundabout							\$120,000
R36	Link under M7			Under M7				\$400,000
	Traffic Calming Measure and Pedestrian Crossing Points							\$200,000
	Bus Shelters	10				\$14,270		\$112,500
T1	Traffic Lights - 15th & Kingsford Smith Ave's							\$150,000
T2	Traffic Lights - Flynn & Kingsford Smith Ave's							\$300,000
	Sub Total							\$9,215,898
	Plus 5% Contingency							\$460,795
	Total						\$3,383,630	\$9,676,693

12.5 Water Cycle Management

Background

Community standards require that stormwater be conveyed through urban areas in a manner that emphasises the cost-effective achievement of safety and amenity. This requirement leads to a development standard where drainage is managed on a catchment wide basis in a system of pipes, channels, culverts and basins. The responsibility to contribute, or nexus, is a combination of the characteristics of land development that:

- Increases stormwater runoff volumes and flow rates so that a system of pipes and channels and/or stormwater detention basins is required to offset these impacts downstream; and
- Increases population levels in the vicinity of potentially hazardous, uncontrolled rural standard drainage systems so that improvements, particularly large pipes and channel systems, are required to minimise and clearly demark the area of hazard potential.

The development of new release areas generally leads to a significant change in the stormwater runoff characteristics of drainage catchments. This change partially results from an increase in the ratio of runoff volumes to rainfall volumes due to a reduction in previous areas to absorb rainfall into the ground. It is also influenced by the reduction in catchment response times, where the impact of piping and channelising more efficiently conveys concentrated runoff to the catchment outlets. It may also be influenced by a reduction in flood plain storage of runoff volumes due to developments that incorporate landfill.

Nexus

An overall Water Cycle Management strategy has been established for the Middleton Grange area and is detailed in the Background Reports. This strategy supports the following objectives:

- Management of drainage and the flood plain contribute positively to the area

- Water quality and pollution management is to be of a high standard
- Quality of the natural environment is to be maintained and enhanced

The water cycle management strategy utilises detention basins, wetlands, natural channels, swales, gross pollution traps and other facilities to ensure that the outflow from the precinct after its development is no worse than in the pre-development situation. At the same time it returns the creeks and waterways to a more natural state. The creeks and associated riparian zone have been enhanced to provide flood mitigation and water quality improvement as well as public open space amenity. This plan has allocated the costs for management of the water cycle and for open space areas across both sets of facilities as equitably as possible. All land uses are beneficiaries of the system and the enhanced amenity of the area.

Developers will be responsible for the costs of transporting stormwater from their land to the trunk drainage system. However, the cost of the trunk drainage system will be shared over the whole precinct. As background, it is seen by Council that every property that has stormwater drainage passing through it in a pre-development state has an obligation to provide proportionally for the runoff. In addition, all upstream properties will have an obligation to contribute to the cost of downstream drainage in proportion to the increase in runoff produced by their development.

In order to achieve an economical local drainage system it is required to drain stormwater runoff through the southern most water channel. This channel in some cases traverses privately owned land.

The area of land acquired, as drainage reserves shall be dedicated to the Council for that purpose and the Council will be responsible for the maintenance and functioning of the trunk drainage system.

Facilities

The Water Cycle Management infrastructure includes the following:

- Detention basins
- Water treatment zones and wetlands
- Aquatic and riparian vegetation rehabilitation
- Drainage channels
- Swales
- Pools and riffles
- Drainage culverts
- Gross pollutant traps.

Contribution credits for works in kind will not be accepted for temporary work required to fulfil developments on individual sites. All stormwater works are to be in accordance with Council requirements.

Scope of facilities

A review of the range of local drainage facilities was undertaken in 2008. This was undertaken in conjunction with the preparation of *Liverpool DCP 2008*. This plan included amongst other items a review of the masterplan for this area.

Apportionment

No apportionment is allowed for as there were no existing local transport facilities in existence at the commencement of the development of the area.

Contributing Development, Works and Land Acquisition Schedule

Contributing Development

2,580 dwellings/lots (Number of dwellings or equivalent that are expected to contribute to local drainage facilities)

The area from which contributions would be received is shown on Figure 12.1.

Map of Works and Land Acquisition

Refer to Infrastructure Map No 1 - 4 for the location of each item.

Works and Land Acquisition Schedule

The range of Works and Land Acquisition for local drainage facilities is shown in Table 12.5.

The cost of facilities not yet built was reviewed in 2008 following a review of unit costs by Council.

Table 12.4 Works and Land Acquisition Schedule

No.	Item	Area sqm	Land Unit Cost \$/ sqm	Total Land Cost \$	Total Works Cost \$
WM1	Entry Parklands				\$898,384
	100/813874	12,140	\$174	\$2,112,360	
	10/1043937	14,180	\$207	\$2,935,260	
	Pt 260/2475	2,350	\$206	\$484,100	
WM2	Wetlands				\$445,893
	Pt 102/1128111	6,826	\$149	\$1,014,763	
	Pt 260/2475	4,674	\$206	\$962,844	
WM3	Water Cycle area in Village Centre	2,790	\$149	\$414,765	\$127,812
WM4	Water cycle area on southern creek west of village centre				\$237,731
	Pt 102/1128111	2,335	\$149	\$361,925	
		4,969	\$130	\$770,195	
WM5	Water cycle area between Monkton and Bonython Aves	3,185	\$155	\$493,675	\$147,843
WM6	Water cycle area on Irving Gardens east of Pentland	1,800	\$155	\$279,000	\$98,478
WM7	Water cycle area west of Kingsford Smith	895	\$155	\$138,725	\$93,910
WM8	Water cycle area west of Percival Ave	1,725	\$155	\$267,375	\$127,218
WM9	Water cycle area between Hugh and Kingsford Smith				\$133,085
	Pt 172/2475	1,250	\$155	\$193,750	
	Pt 173/2475	901	\$85	\$76,568	
WM10	Water cycle area between Kingsford and McIver	3,540	\$107	\$378,780	\$190,046
WM11	Water cycle area on either side of bridge	9,203	Corridor		\$607,539
WM12	Water cycle area north of playing fields, east of Bird Walton	16,707			\$667,621
	B/381267	4,195	\$221	\$925,212	
	2/1115645	10,200	\$95	\$969,000	
	3/1115645	2,159	\$95	\$205,105	
WM13	Water cycle area adjacent to Hemsworth Ave	3,209	\$155	\$497,395	\$319,058
WM14	Water cycle area adjacent to Hemsworth and Bridge	6,472	Corridor		\$496,618
WM15	Water cycle area adjacent to Bonney Flight Cct	2,005	Corridor		\$106,918
WM16	Water cycle area adjacent to Robey Ave	881	\$155	\$136,555	\$122,051
EC1			Corridor		\$494,826
EC2			Corridor		\$637,313

WM17	Water cycle area adjacent to Dragonfly Cct	7,687	\$155	\$1,191,485	\$392,915
WM18	Water cycle area adjacent to Ivor Cct	4,226	\$130	\$549,380	\$373,958
WM19	Water cycle area adjacent to Truscott Ave	2,366	\$155	\$366,730	\$476,335
Sub Total					\$7,195,551
Plus 5% Contingency					\$359,778
Totals				\$15,724,947	\$7,555,328

12.6 Administration, Professional Services and Implementation

Nexus

Implementation of this plan will require ongoing administration. A contribution is required for the costs associated with administration, professional services and implementation such as:

- Preparing this Plan;
- Ongoing monitoring, review and administration of the Plan.
- Independent reviews for the purposes of adjusting contribution rates.
- Executing legal documents for works-in-kind agreements.
- Land valuations and acquisition.
- Ongoing land valuations, to review this contribution plan, at least annually and more frequently depending on movements in the property market.
- Specialist technical studies.
- Research and investigation to amend or modify parts of this Plan.
- The up front implementation of the Plan.

Administration

The administration of contributions funds carries significant associated costs. Professional officers within Council are required to prepare, review and implement the Plan throughout its life. They are assisted by a team which provides support in coordinating the process, preparing status reports, reviewing relevant data, and liaising with other Council staff, external consultants and other external authorities.

In accordance with the requirements of the Department of Planning, the administration costs contributed under this Plan consist only of the expenses for personnel directly involved in the preparation and administration of this Plan. It is considered appropriate that a pool of funds be available to meet these costs.

Professional services

There are a number of costs associated with professional services for implementing the Middleton Grange release – such as studies in relation to Aboriginal archaeology and contamination of land identified for public open space. In addition, there are also costs for independent land valuations, legal assistance and management of the land acquisition process. In relation to land acquisition, Council will be required to acquire land for roads, public open space, community facilities and water cycle management and incur the associated conveyancing costs.

It is recognised that the costs associated with land acquisition could be added to the cost of individual facilities. However, because it is difficult to predict the cost of professional fees attributable to any one facility, it is considered more appropriate that a pool of funds be available to meet these costs as they arise.

Implementation

It is an objective of the Middleton Grange release that certain infrastructure and facilities will be in

place when residents first move into the area, requiring that key roads and water management infrastructure be provided early in the development process. As a result in the early years of the development expenditure will exceed income from contributions.

Because of the fragmented ownership situation in Middleton Grange, it will be necessary for Council to borrow funds to front fund land acquisition and construction of these road and water management facilities, and then to recoup the cost through contributions.

The plan also makes provision for costs associated with front funding the purchase of land. In acquiring parts of certain parcels there are likely to be additional costs for existing dwellings, disturbance and severance that would not be incurred if the land were to be provided as works in kind in lieu payment of contributions. It will also be necessary for Council to recover this cost in the contribution rate.

Costing

The estimated costs associated with administering and implementing this contributions plan and for professional service fees are shown in the following tables.

Given that **administration costs and professional service fees** for the Plan are likely to be the same for all residential lots, all will be levied equally regardless of sizes. However, in relation to **implementation** – where costs are linked to the value and size of land to be acquired – the contribution will be levied differentially. All residential lots will be levied equally, but non-residential uses, including housing for aged and disabled people, will be levied on the basis of an equivalent 450sqm lot. Therefore, for example, a development of 4,500sqm will contribute 10 times the standard contribution rate.

Table 12.5 Administration

Item	Cost
Preparation, review and monitoring of MG component of Contributions Plan	\$160,000
Project management and administration	\$270,000
Total	\$430,000

Table 12.6 Professional services

Item	Cost
Contamination study	\$35,000
Aboriginal archaeology	\$50,000
Land valuations and reviews	\$136,000
Project management of land acquisition	\$87,500
Total	\$308,500

Table 12.7 Implementation costs

Item	Cost
Up front land acquisition costs	\$1,644,000
Valuation fees	\$140,000
Legal fees	\$56,000
Transfer costs	\$56,000
Court costs	\$350,000
Advertising/issues of acquisition notices	\$70,000
Studies for flooding, environment	\$70,000
Relocation and disturbance	\$280,000
Stamp duty	\$440,000
Total	\$3,106,000

12.7 Contribution Formulae

Community and Recreation Facilities

Conventional Lot Residential Subdivision, Small Lot Subdivision, Semi-detached dwellings, Multi dwelling housing and Residential Flat Buildings

Contribution by cash

$$\begin{aligned} \text{Contribution Rate} &= \frac{C}{N} \times \frac{OR}{3.7} \\ \text{(per dwelling / lot)} \end{aligned}$$

where C = Cost of capital works or land identified for the catchment area
N = Number of equivalent lots / dwellings in the catchment area
OR = Estimated occupancy rate for lot size or dwelling type

Contribution by land dedication

$$\begin{aligned} \text{Area of land to be dedicated} &= \frac{A}{N} \times \frac{OR}{3.7} \\ \text{(per dwelling / lot)} \end{aligned}$$

where A = Total area to be acquired in the catchment area
N = Number of equivalent lots / dwellings in the catchment area
OR = Estimated occupancy rate for lot size or dwelling type

Transport Facilities

Conventional Lot Residential Subdivision, Small Lot Subdivision, Semi-detached dwellings, Multi dwelling housing and Residential Flat Buildings

Contribution by cash

$$\begin{aligned} \text{Contribution Rate} &= \frac{C}{N} \times \frac{V}{6.7} \\ \text{(per dwelling / lot)} \end{aligned}$$

where C = Cost of capital works and land identified for the catchment area
N = Number of equivalent lots in the catchment area
V = Vehicle trips per day for lot size or dwelling type

Contribution by land dedication

$$\begin{aligned} \text{Area of land to be dedicated} &= \frac{A}{N} \times \frac{V}{6.7} \\ \text{(per dwelling / lot / non residential development)} \end{aligned}$$

where A = Total area to be acquired in the catchment area
N = Number of equivalent lots in the catchment area
V = Vehicle trips per day for lot size or dwelling type (refer to Table 12.8)

Table 12.8 Vehicle Trips per day per dwelling

Dwelling Type or Lot Size	Vehicle Trips per day
Residential Subdivision Lots 450 sqm or larger	6.7
Residential Subdivision Lots smaller than 450 sqm	6.0
Semi-detached dwellings, Multi dwelling housing & Residential Flat Buildings (where permitted)	
3 or more bedrooms	6.0
2 bedrooms	4.0
1 bedroom	3.3
Aged and Disabled Persons Housing (total development)	Total vehicle trips per day

Drainage Facilities

Contributions for drainage are calculated as follows:

$$\text{Contribution rate (per sqm)} = \frac{C \times \text{Proportion of total Runoff of the respective dwelling density group}}{\text{Area in sqm of the respective dwelling density group}}$$

or where land is required to be dedicated in lieu of payment of a contributions for land acquisition

$$\text{Area of land to be dedicated (sqm)} = \frac{A \times \text{Proportion of total Runoff of the respective dwelling density group}}{\text{Area in sqm of the respective dwelling density group}}$$

Where:

C = Cost of works or land identified in the contributions plan.

A = Total area of land identified to be acquired in the contributions plan.

Area in sqm of the respective dwelling density group includes the full width of proposed streets within a proposed subdivision. This includes the full width of streets adjacent to open space or drainage land.

Dwelling density group means the minimum dwelling density as specified by *Liverpool LEP 2008*.

Table 12.9 gives the relative impacts of alternative types of development on runoff generation.

Table 12.9 Development Details

Dwellings/ha	Total	Dwelling Yield	Run-off Coeffs	% of Runoff
15 Dwellings / ha	106.51	1,598	0.65	63.78%
23 Dwellings / ha	24.50	563	0.95	21.44%
30 Dwellings / ha	16.89	507	0.95	14.78%
Totals	147.89	2,668		100.00%

Administration

The cost per lot per year has been averaged across all of the sub catchment and is calculated as follows:

$$CR = \frac{A}{N}$$

Where:

CR = the contribution rate for administration per lot.

A = the total cost of administration.

N = the total estimated number of additional lots at the full extent of development in Middleton Grange.

The administration cost for the District and City Wide component is estimated as \$87 per lot.

Professional services

The cost per lot per year has been averaged across all of the catchment area and is calculated as follows:

$$CR = \frac{PS}{N}$$

Where:

CR = the contribution rate for professional services per lot.

PS = the total cost of professional services.

N = the total estimated number of additional lots.

The Contribution Rate for non-residential lots/uses will be based on the following formula:

$$CR \text{ (non-residential)} = \frac{CR \text{ for residential lot} \times \text{area of non-residential development}}{450}$$

Implementation

Residential Development

$$CR = \frac{I}{N}$$

Where:

CR = the contribution rate for implementation per residential lot.

I = the total cost of implementation.

N = the total estimated number of additional lots.

The Contribution Rate for non-residential lots/uses will be based on the following formula:

$$CR \text{ (non-residential)} = \frac{CR \text{ for residential lot} \times \text{area of non-residential development}}{450}$$

12.8 Staging of Facilities

While timing and staging will be dependent on available funding as a result of this plan and the location of new development, it is the intention of Council and accordingly this Contributions Plan, that necessary infrastructure is in place as soon as possible. Staging will also accord with the provision of other infrastructure that would be built in conjunction with the water management facilities, such as parks and roads.

13. Elizabeth Hills/Cecil Hills

13.1 Background

That portion of Elizabeth Hills that was part of the former Hoxton Park Aerodrome is already zoned for residential development. The other portion west of Cecil Hills has not yet been zoned for residential development. It is anticipated that facilities in Elizabeth Hills not contained in this contributions plan will be provided by way of a Voluntary Planning Agreement.

Elizabeth Hills and Cecil Hills form part of the Hoxton Park Stage 2 Release Areas.

13.2 Local Community Facilities in Elizabeth Hills

Background

There will be additional development at Elizabeth Hills. As this area will not be of sufficient size to require a new Multi-Purpose Community Centre, it is proposed to augment the existing community centre at Cecil Hills. The rate per dwelling is the same as for dwellings in Hoxton Park, Carnes Hill and Prestons Release Areas.

Contributing Development and Catchment Area

900 dwellings/lots (Number of dwellings or equivalent that is expected to contribute to local community facilities).

The area from which contributions would be received is shown on Figure 13.1.



Figure 13.1

13.3 Local Community and Recreation Facilities in Cecil Hills

The Cecil Hills Release Area is generally complete. Local community and recreation facilities have been provided. It is considered that any further development or more intense redevelopment should contribute at the same rate as the Established Areas catchment area. Any such development will also contribute to the relevant District Facilities in the Hoxton Park Stage 2 Release Areas.

Catchment Areas

There is a single catchment in Cecil Hills. The area from which contributions would be received is shown on Figure 13.2.



Figure 13.2

14. Range Road Precinct

14.1 Background

Formerly a part of this Plan's Rural Areas catchment, the Range Road precinct was established as a new sub precinct in response to a change to the planning controls on the lots adjacent to Elizabeth Drive.

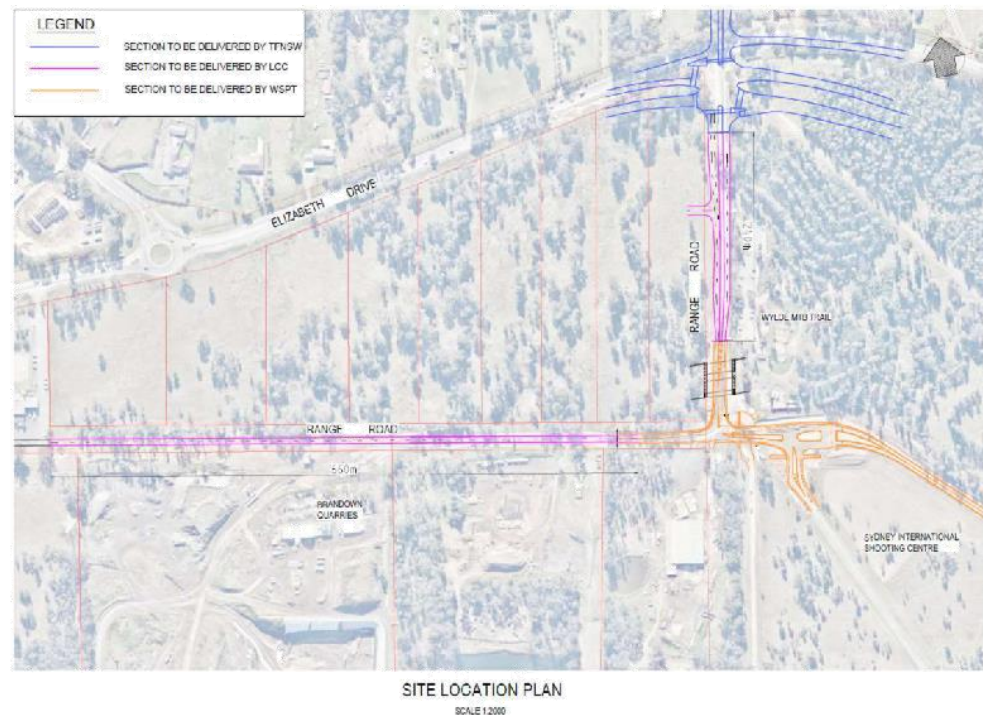
As a result of the change to the planning controls, site access for lots in the precinct is now contingent on the upgrade of Range Road to an industrial standard road.

14.2 Transport Facilities

Range Road is a local industrial road branching off Elizabeth Drive. Transport for NSW (TfNSW) are delivering the traffic signals at the intersection with Elizabeth Drive, and the Western Sydney Parklands Trust (WSPT) are delivering upgrades to a section of Range Road.

This Plan covers the remainder of road infrastructure as shown in Figure 14.1. The planned upgrade of Range Road will not require acquisition of any land.

Figure 14.1: Range Road upgrade



Contributing Development and Catchment Area

The Plan divides the remainder of Range Road into two segments, each with its own contributing area. The north segment will be delivered by a single adjacent lot, while the south segment will be funded by contributions from multiple adjacent lots benefiting from an upgraded Range Road.



North and South Segments of Range Road

Legend

- Contributing Development to Range Road - north segment
- Contributing Development to Range Road - south segment
- Range Road - north segment
- Range Road - south segment
- M12 Corridor

Fig 14.2 – Plan showing catchment area and contributing development

Works Schedule

Range Road – north segment

Contributing Development: 1 lot

Table 8.1

Item	Cost
Footpath, driveway, kerb and gutter	\$264,000
Drainage	\$142,000
4 lane pavement (4 x 3.5m)	\$734,000
Subtotal	\$1,140,000
Contingencies plus contract administration (60%)	\$684,000
Total	\$1,824,000

Range Road – south segment

Contributing Development: 5 lots

Table 8.2

Item	Cost
Footpath, driveway, kerb and gutter, island	\$204,000
Drainage	\$387,000
2 lane pavement (2 x 3.5m)	\$659,000
Subtotal	\$1,250,000
Contingencies plus contract administration (60%)	\$750,000
Total	\$2,000,000

14.3 Administration Costs

Councils incur significant costs in the preparation and administration of contributions plans.

Council staff are deployed to:

- prepare and review contributions plans;
- account for contributions receipts and expenditure; and
- co-ordinate the implementation of contributions plans and works, including involvement in negotiating Works in Kind and material public benefit agreements.

Consultant studies are also commissioned by Council from time to time in order to determine the value of land to be acquired, the design and cost of works, as well as to review the development and demand assumptions of the contributions plan. Council is also required to engage the services of legal professionals from time to time to assist it in the administration of this Plan.

As these costs arise directly as a result of the development in the Plan area, it is reasonable that the costs associated with preparing and administering this Plan be recouped through contributions from development.

Costs associated with the ongoing administration and management of the Plan will be levied on all applications that are required to pay a development contribution.

Costs included in the Range Road catchment for these purposes are based on the recommended rate by IPART, being 1.5% of the total cost of works and included in Tables 8.1 and 8.2 above.

14.4 Contributions Formula

Range Road – north segment

As there is only 1 lot contributing to the infrastructure delivery of this segment. The entire cost of delivering this segment (including plan administration costs) will be levied from the single lot's development.

Range Road – south segment

As there are a few lots contributing to this segment, the total cost is proportionally divided amongst the contributing development using a contribution rate per metre of frontage.

The contribution rate per metre of frontage is calculated as follows:

$$\begin{aligned}
 \text{Contribution Rate per metre of frontage (\$)} &= \frac{C}{L} \\
 &= \frac{\$2,000,000 + (1.5\% * 2,000,000)}{980\text{m}} \\
 &= \$2,071.43 \text{ per metre} \\
 \text{where } C &= \text{Total cost to deliver the south segment of Range Road (including plan administration costs)} \\
 L &= \text{Total frontage length of lots in the catchment}
 \end{aligned}$$

To determine the total contribution for each lot, multiply the length (in metres) of the lot's frontage to Range Road by contribution rate per metre of frontage (\$2,071.43).

14.5 Staging

At the time of preparation of the Plan, works were being undertaken by WSPT for specific upgrades to Range Road as identified in Figure 14.1.

The north segment will be delivered in connection with the redevelopment of contributing development site 1.

The south segment will be delivered by Council following redevelopment of one of the contributing development sites. Contributions from the remainder of the contributing sites will be collected retrospectively.

Range Road, Cecil Park - North/South Section approx. 240m					
DESCRIPTION	QUANTITY	UNIT	UNIT RATE	PRICE	SUBTOTALS
FOOTPATH, DRIVEWAY, KERB & GUTTER, ISLAND					\$264,000.00
Construct LCC standard concrete elements					
K&G Standard 150mm kerb and gutter with laybacks as necessary	480	m	\$ 70.07	\$ 33,633.60	
Cycleway 2.5m Wide 100mm thick concrete cycleway with SL72 mesh on 75mm thick DGB20 compacted base	1200	m2	\$ 67.34	\$ 80,808.00	
Concrete Median 240m long x 5m wide RMS standard SE type kerb 150mm thick 25MPa with SL82 mesh pedestrian median crossovers and commercial concrete driveway	240 1200	m m2	\$ 102.04 \$ 104.22	\$ 24,489.60 \$ 125,064.00	
DRAINAGE					\$142,000.00
Construct draingage pipes to LCC standard including excavation, bedding, backfilling and compaction 450mm dia. RRJ2	480	m	\$204.59	\$98,203.20	
Construct draingage structures to LCC standard including excavation, bedding, backfilling and compaction 2.4m KIP to Council Standard	6	each	\$3,308.18	\$19,849.08	
Construct draingage structures to LCC standard including excavation, bedding, backfilling and compaction Sub-soil drainage - slotted drain 100mm dia. (incl. filter sock)	480	m	\$47.83	\$22,958.40	
PAVEMENT					\$183,437.20
Road base (large works) Prepare, trim, compact Batters Supply, place and compact SMZ layer under pavement (300mm thick) Supply, place and compact DGS20 (150mm thick) Earthworks	840 840 1680 1	m2 m2 m2 Lane	\$2.93 \$14.37 \$21.70 \$100,000.00	\$2,461.20 \$12,070.80 \$36,456.00 \$100,000.00	
Road surfacing (large works) Single coat hot bitumen flush seal Asphaltic concrete first course (AC20) 75mm thick - HDA (AR450)	840 840	m2 m2	\$3.75 \$34.88	\$3,150.00 \$29,299.20	
4 LANE PAVEMENT (4 x 3.5m)	4				\$734,000.00
SUBTOTAL					\$1,140,000.00
Contingencies plus contract administration (60%)					\$684,000.00
Design (0%)					\$0.00
TOTAL ESTIMATED COSTS (EXCL. GST)					\$1,824,000.00

Range Road, Cecil Park - East/West Section approx. 660m					
DESCRIPTION	QUANTITY	UNIT	UNIT RATE	PRICE	SUBTOTALS
FOOTPATH, DRIVEWAY, KERB & GUTTER, ISLAND					\$204,000.00
Construct LCC standard concrete elements					
K&G Standard 150mm kerb and gutter with laybacks as necessary	1320	m	\$ 70.07	\$ 92,492.40	
Cycleway 2.5m Wide 100mm thick concrete cycleway with SL72 mesh on 75mm thick DGB20 compacted base	1650	m2	\$ 67.34	\$ 111,111.00	
DRAINAGE					\$387,000.00
Construct draingage pipes to LCC standard including excavation, bedding, backfilling and compaction 450mm dia. RRJ2	1320	m	\$204.59	\$270,058.80	
Construct draingage structures to LCC standard including excavation, bedding, backfilling and compaction 2.4m KIP to Council Standard	16	each	\$3,308.18	\$52,930.88	
Construct draingage structures to LCC standard including excavation, bedding, backfilling and compaction Sub-soil drainage - slotted drain 100mm dia. (incl. filter sock)	1320	m	\$47.83	\$63,135.60	
PAVEMENT					\$329,452.30
Road base (large works) Prepare, trim, compact Batters Supply, place and compact SMZ layer under pavement (300mm thick) Supply, place and compact DGS20 (150mm thick) Earthworks	2310 2310 4620 1	m2 m2 m2 Lane	\$2.93 \$14.37 \$21.70 \$100,000.00	\$6,768.30 \$33,194.70 \$100,254.00 \$100,000.00	
Road surfacing (large works) Single coat hot bitumen flush seal Asphaltic concrete first course (AC20) 75mm thick - HDA (AR450)	2310 2310	m2 m2	\$3.75 \$34.88	\$8,662.50 \$80,572.80	
2 LANE PAVEMENT (2 x 3.5m)	2				\$659,000.00
SUBTOTAL					\$1,250,000.00
Contingencies plus contract administration (60%)					\$750,000.00
Design (0%)					\$0.00
TOTAL ESTIMATED COSTS (EXCL. GST)					\$2,000,000.00



DEVELOPMENT AND SUBDIVISION OF LAND POLICY

Adopted: (Current date)

065542.2021-002



DEVELOPMENT AND SUBDIVISION OF LAND POLICY

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DEVELOPMENT AND SUBDIVISION OF LAND POLICY

DEVELOPMENT AND SUBDIVISION OF LAND POLICY

DIRECTORATE: City Economy & Growth

BUSINESS UNIT: Development Assessment

1. PURPOSE/ OBJECTIVES

Council has the following objectives in providing for the development and subdivision of land:

- 1.1 To provide a functional, attractive, and safe environment for residents that is consistent with community standards and needs.
- 1.2 To minimise adverse effects on the natural environment.
- 1.3 To provide for the needs of future users of the land in respect to building requirements, vehicular and pedestrian access, provision of services and an amenity appropriate to the zoning of the land.
- 1.4 To assist developers by providing for the economic utilisation of the land resource of the area.
- 1.5 To achieve a balance between the development / subdivision of residential, commercial, and industrial land and the amenity of existing occupants.
- 1.6 To provide for an equitable and efficient distribution of public amenities and services.
- 1.7 To minimise Council's future maintenance costs for roads, services, and open spaces.

2. DEFINITIONS (where applicable)

Approved Material - Shall mean material approved by the Engineer before use in, or on, the work site.

Council - Shall refer to Liverpool City Council.

Developer - Shall mean the applicant or their authorised contractor.

Engineer - Shall mean the Coordinator Land Development Engineering of Liverpool City Council or their representative.

Experienced soils technician - A soils technician employed by a NATA registered testing authority who has the necessary qualifications and experienced to perform the required tests and procedures.

NATA registered testing Authority - A laboratory that has been registered by NATA to perform the required testing. The laboratory shall only perform tests or procedures that are covered by the terms of their registration by NATA.

TfNSW – Transport for New South Wales (formerly RMS)

DEVELOPMENT AND SUBDIVISION OF LAND POLICY

ABBREVIATIONS

ARRB - Australian Road Research Board.

AS - Australian Standard.

Austroads - National Association of Road Transport and Traffic Authorities in Australia.

NAASRA - National Association of Australian State Road Authorities.

NATA - National Association of Testing Authorities.

SAA - Standards Association of Australia

3. POLICY STATEMENT

3.1 Council's Authority

Council is the authority responsible for granting consent to local development and subdivisions within the Liverpool Local Government Area.

3.1.1 Council has adopted Development Control Plans (DCPs) and a Local Environmental Plan (LEP) which set out objectives, development standards and controls for development and subdivision. There are also numerous State Environmental Planning Policies (SEPPs) which outline provisions for certain development.

3.1.2 In some circumstances, Council is required to obtain the concurrence of the Department of Planning Industry and Environment and Council must also comply with legislative requirements. Compliance with the provisions of Council's DCP and EPI's does not necessarily imply that Council is required to consent to, or approve, an application.

3.2 Restrictions to Council's activities

Restrictions to Council's powers to approve subdivision of land are set out in the various planning instruments, including the Local Environmental Plan (LEP) and State Environmental Planning Policies (SEPPs), which are applicable throughout the local government area. Advice as to which of these restrictions apply to a property should be initially obtained from Council by applying for a planning certificate under Section 10.7 of the Environmental Planning & Assessment Act.

3.3 Development application and consent

3.3.1 A Development Application is a requirement of the Environmental Planning and Assessment Act (EP&A Act) requesting consent for the proposed development in relation to planning controls and requirements e.g. land use, traffic generation, environmental considerations etc.

3.3.2 It is important to understand that development consent is required before land can be developed or subdivided. Council's LEP or other EPIs may identify minor development as complying or exempt development. Detail of these minor developments and the requirements of the approval process may be obtained from Council.

DEVELOPMENT AND SUBDIVISION OF LAND POLICY

3.4 Construction and Subdivision Works Certificate

3.4.1 Following Development Consent being issued by Council, the more detailed requirements of the development or subdivision are investigated during the preparation of construction / engineering designs and other matters for completion as tabled in Council's conditions of consent.

3.4.2 A Construction Certificate or a Subdivision Works Certificate is required before any works may be commenced.

3.4.3 Construction Certificates are issued by a consent authority (Council or the Minister) or an accredited certifier and allows Developers to nominate Council or a private certifier as the Principal Certifying Authority (PCA). Subject to the provisions of Section 6.5 of the Environment Planning and Assessment Act (1979).

3.5 Compliance Certificates

Compliance Certificates are issued in relation to the completion of all or various components of a development. The PCA shall identify each stage of work to be provided with certification.

3.6 Occupation Certificates

Prior to the occupation of a new building (excluding a Class 1a or 10 building under BCA), an Occupation Certificate is to be acquired. The PCA shall upon receiving a Compliance Certificate for the various aspects of the development, provide an Occupation Certificate.

3.7 Subdivision Certificates

3.7.1 In the case of subdivision, a Subdivision Certificate is issued by the PCA endorsing the plan of subdivision and any associated instruments when all aspects of the Development Consent have been satisfied including the Plan Registration and the Title Issue.

3.7.2 The issue of a Subdivision Certificate occurs upon completion of all conditions and payment of fees / levies as required in the Development Consent. Councils have varying standards for the strict compliance of works or staging of developments. Council's DCP's, Policies and Standards identify any departures that may be accepted.

3.8 Plan Registration and Title issue

Following endorsement of the final plan of subdivision, the Developer may lodge the plan for registration by the NSW Land Registry Service (LRS). Separate titles for the new lots created will subsequently be issued.

4. FORMULATING A DEVELOPMENT/SUBDIVISION APPLICATION

4.1 Development application form

A person or company making application to develop and/or subdivide an area of land within Liverpool City Council's area will be required to lodge a Development Application on the NSW Planning Portal.

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4.2 Site information

Before formally applying to Council to develop and/or subdivide, a considerable amount of information about the site needs to be sought. The Applicant should be aware of;

- the nature of title of the land,
- easements,
- items of heritage significance,
- topography,
- slope and aspect,
- stormwater flows,
- surrounding development,
- vegetation, trees,
- road and traffic situations and
- other physical characteristics pertinent to the design of the development.

4.3 Early consultation

It is recommended that preliminary consultation with Council be undertaken to enable the Applicant to determine what Council and State environmental planning instruments (SEPP or LEP) are applicable, what zone classification applies and which legislative requirements are applicable and most importantly whether professional assistance is required. For smaller scale applications, consultation with Council's Duty Planner is encouraged, whereas a formal Pre-DA meeting is recommended for large scale development and subdivisions.

4.4 Sketch plan

It is advantageous to prepare a preliminary sketch plan at this early stage indicating the location, aspect, and size of the various elements of the development including subdivision patterns surrounding the site. The more information shown on the preliminary sketch plan, the more likely the consultations with Council and others will give a true indication of possible success with a subsequent formal application.

4.5 Purpose of consultation

The purpose of consultation about preliminary sketch plans/proposals (which may be accompanied by explanatory reports or background material) is to:

- assess whether any modifications to the proposal are necessary prior to its being formally submitted;
- identify Council's requirements regarding the Development Application;
- identify any problems which may necessitate the Applicant reviewing their approach;
- indicate Council's likely subsequent requirements (e.g. development contributions, standards for construction for the asset to be accepted by Council, etc.).

4.6 Consultation – not mandatory

While consultation with Council at this early stage and the preparation of preliminary sketch plans is not mandatory, it is obviously in the Applicant's interest. It will reduce costs in preparing plans, increase the likelihood of development consent, and reduce the time the Council needs to consider the formal application. Similarly, early consultation with Public Utility Authorities is also advantageous to ascertain their requirements, e.g. water, sewer, gas, telephone, electricity.

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The applicant is advised to contact council to seek the current process of Pre DA meetings/consultation. At the time of the creation of this guideline document Liverpool City Council organised weekly Pre DA meetings for applicants.

4.7 Fees/contributions

Fees for Development Applications are prescribed in the *Environmental Planning and Assessment Regulations*. A fee schedule can be obtained from Council including fees/contributions which are likely to be required.

5. MAKING APPLICATION FOR DEVELOPMENT/SUBDIVISION

5.1 Development application information

A Development Application is only required if stated in the environmental planning instrument(s) applying to the land (SEPP, or LEP). Minor development and subdivisions such as boundary adjustments which meet specified standards set out in the relevant LEP or SEPP applying to a site do not require consent. The applicant is advised to contact council to confirm whether an application falls under exempt development. Whilst formulating the application and preparing the development/subdivision sketch plan, a description of the existing and proposed site and a statement of environmental effects should be included.

5.2 Owner's approval

The applicant must ensure that all property owners provide their consent to any application being made on the subject property.

5.3 Development application form

A Development Application is required for all types of subdivision and all forms of building construction not identified as being Exempt or Complying Development. Development Applications are made on the NSW Planning Portal.

5.5 Details of consultation with public authorities

In addition, the Applicant may be required to provide details of consultation with public authorities responsible for provision, alteration or amplification of utility services required by the proposed development /subdivision.

Council may require additional information about the proposed development to be provided where that information is essential to the assessment of the Development Application.

5.6 Additional Information

Additional information required may include:

- principles, assumptions and calculations behind stormwater drainage and on-site detention (OSD) proposals;
- rationale for the design of utilities, roads, open space, bicycle and pedestrian ways, bus routes, etc;
- a contamination assessment. (SEPP 55)
- evaluation of building lines, fencing, building materials etc.

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A checklist used by Councils Land Development Engineers to assess development applications received, is enclosed in **Appendix 2**. The applicant is encouraged to utilise these checklists and ensure all items suggested are incorporated into plans submitted as part of any development application.

6. COUNCIL'S CONSIDERATION OF APPLICATIONS FOR DEVELOPMENT AND SUBDIVISION

6.1 Assessment criteria

Council will assess each application on its merits, however, the assessment criteria in the Environmental Planning and Assessment Act 1979 (Section 4.15) shall be applied.

These criteria relate to site specific relevant matters such as:

- the provisions of any environmental planning instruments, development control plans and regulations pertaining specifically to the subject site;
- natural and built environmental impacts;
- social and economic impacts;
- suitability of the site;
- public interest.

6.2 Design standards

Council's LEP, DCPs and other planning instruments incorporate minimum design standards for different types of developments. These standards should not be interpreted as relieving the Applicant of the responsibility to properly address all criteria and to use sound planning and engineering practices in the development of designs. Council is prepared to consider alternative approaches to development / subdivision design where the Applicant satisfies Council that its objectives have been achieved.

6.3 Determination of development applications

Planning legislation requires Council to determine applications within 40 days of receipt of the application, or 60 days where the application requires referral to other authorities. Upon determination of any application, a written notification will be sent to the Applicant stating that consent has been granted subject to detailed conditions, or that consent has been refused (with reasons).

Under Section 8.7 and 8.10 of the *Environmental Planning and Assessment Act (EP&A Act) 1979*, an applicant has the right to appeal an application if it not determined within the above specified timeframes.

6.4 Review of Determination

6.4.1 If an applicant is dissatisfied with a notice of determination (such as a refusal of an application) or the conditions contained within a notice of determination, Section 8.2 of the *Environmental Planning and Assessment Act 1979* allows the applicant to request a review of the determination within six months after the date on which the application is taken to have been determined.

6.4.2 It is highly recommended that such an application is lodged within 28 days of the determination of the Development Application to enable the review of determination to

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be made within six months, as required by the Environmental Planning and Assessment Act 1979.

6.4.3 The right to consider the review of a determination does not apply to:

- a determination to issue or refuse to issue a complying development certificate, or
- a determination in respect of designated development, or
- a determination in respect of integrated development, or
- a determination made by the council under Division 4 in respect of an application by the Crown.

A council must, on a request made in accordance with this section, conduct a review.

A determination cannot be reviewed:

- (a) after the time limited for the making of an appeal under Section 8.7 and 8.10 expires, if no such appeal is made against the determination, or
- (b) after an appeal under Section 8.7 and 8.10 against the determination is disposed of by the Court, if such an appeal is made against the determination.

An applicant who is dissatisfied with a determination of an application determined under Section 8.2, 8.3, 8.4, 8.5, may appeal to the Court within 6 months the development application being determined.

6.5 Appeal to court

Alternatively, (and preferably as a last resort), the Applicant may lodge an appeal with the Land and Environment Court. Such an appeal is required to be lodged with the Court within twelve months of receipt of Council's determination of the application.

6.6 Appeal by third party

Applicants are reminded that any third-party person may lodge an appeal to the Land and Environment Court where they believe a breach of the EP & A Act (1979) has occurred (Section 9.45 of the EP & A Act).

6.7 Revocation of consent

Council can revoke or modify consent in circumstances where there is fraud or failure to comply with the Act. The Environmental Planning & Assessment Act 1979 allows Council to issue orders for breaches of the Act such as non-compliance with conditions of consent.

7. TIME REQUIREMENTS FOR DEVELOPMENT / SUBDIVISION WORKS

7.1 Maximum 5-year limit on development consent

A development consent for development / subdivision requires works to be commenced within the consent period of five years (or such other shorter period stipulated in the consent).

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7.2 Staged development

In some cases, a development may be of sufficient magnitude that it requires staging. Where staged development is proposed, the Applicant should prepare a sketch plan showing the complete concept so that Council can see the various stages in the overall context. Each stage should comply with the standard requirements.

7.3 Subdivision final survey plan, original plan release fees

7.3.1 When all conditions of Development Consent and Construction Certificate approval have been satisfied, including all construction works required as part of the subdivision being completed, the Developer will arrange for a Registered Surveyor to prepare the final survey plan.

7.3.2 This subdivision plan, together with any Section 88B Instrument under the Conveyancing Act (detailing easements, restrictions etc) is submitted to the PCA with the appropriate fees for the PCA's endorsement of the Subdivision Certificate. All applications for a Subdivision Certificate are made via the NSW Planning Portal.

7.3.3 Where council is the PCA, the applicant should ensure that all items on the subdivision certificate checklist (copy enclosed in Appendix 3) have been provided to council with the subdivision certificate application. Council will not commence assessment of the certificate prior to all this information being provided.

7.4 Private certification

Certain types of subdivision certificates can be issued by an accredited private certifier.

7.5 Section 88B instrument

The original plan, plus one copy, together with any Section 88B Instrument, all personally signed by the PCA, are then released to the Developer.

7.6 Issue of new titles

To effect plan registration and the issue of new titles for the proposed subdivision lots, the documents released should be lodged promptly with NSW Land Registry Services (Land Titles Office).

7.7 Suspension of works

7.7.1 The Council's Engineer may suspend work on site if it is determined that work is not being undertaken in accordance with the requirements of this Standard or not in accordance with directions given by the Council's Engineer.

7.7.2 The developer is to rectify any unsatisfactory work and obtain Council's approval prior to continuing with the remaining works.

7.7.3 Failure to rectify any unsatisfactory work will result in Council carrying out the works required at the Developer's expense.

7.7.4 The amount invoiced for works carried out by Council will be in accordance with Council's adopted Fees and Charges current at the time.

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8. ENGINEERING DRAWINGS AND SPECIFICATIONS

8.1 Qualification of designers

All Drawings for earthworks (site regrading), roadworks, drainage works, water supply, sewerage works, and foreshore works are to be certified by a Civil Engineer or Registered Surveyor accredited by the Institution of Surveyors for civil design in the appropriate area. All Drawings for bridgeworks, retaining walls, other major structures and pumping stations are to be certified by a Civil Engineer.

8.2 Council's specifications

Standard Drawings, Design Specifications and Construction Specifications have been prepared by Council and can be purchased for use in developments/subdivisions. Specifications other than those supplied by Council are required to be prepared by a Civil Engineer and will need to be submitted to the Principal Certifying Authority (PCA) for approval with each set of engineering Design Drawings. Such alternative specifications will be required to meet Council's minimum standards contained in Council's specifications.

In Councils Development Construction Specifications the "Superintendent" shall mean Liverpool City Councils Engineer for all developments undertaken in council's road reserve, public reserve or drainage reserve, council owned land or easements and for all subdivision/engineering works on private land where council will issue the Construction Certificate as per Part 6 of the Environmental Planning and Assessment Act (1979). For all other subdivision works the "Superintendent" shall mean the Accredited Certifier (subdivisions) or Liverpool City Councils Engineer or council's nominated representative.

9. COMMENCEMENT OF WORKS

9.1 Necessary conditions

9.1.1 No development/subdivision works are to be undertaken until the Design Drawings and Specifications are formally approved by Council or an Accredited Certifier with the issue of a Construction Certificate.

9.1.2 Works within a public road reserve, public reserve or council drainage reserve or easement must be approved by council via a Permit to Carry Out Works (Section 138 Roads Act 1993 or Section 68 Local Government Act 1993 Approval). No works are to commence, or construction certificate/s issued prior to the applicant obtaining these permits/approvals.

9.1.3 Any plans submitted whether to Council or an Accredited Certifier shall include certification reports in accordance with the requirements set out in councils "Quality Assurance Requirements for Design", Development Design Specification. This information shall be provided to the Council or Accredited Certifier's satisfaction prior to the issue of any Construction Certificate/s.

9.2 Unauthorised work for water and sewerage

The Developer must ensure that the Works are carried out in compliance with the Local Government Act 1993. Attention is drawn specifically to Chapter 16 Offences. Part 3 Clause 634(1) and (4) especially refer to unauthorised work for water and sewerage.

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9.3 Water and sewerage, operating requirements

The Developer must ensure that water and sewerage work abide by the Local Government Act and associated Regulations, in particular, Clauses 18 and 19 of the Local Government Act (Approvals) Regulation 1999 regarding complying with any operating requirements notified by the Council.

10. INSPECTIONS AND TESTING

10.1 Cost of quality testing

The full cost of all testing is to be met by the Applicant (Developer). Test results will be required to ensure that the material supplied, and the Work carried out conforms to the approved specification.

10.2 Inspections

Similarly, joint inspections at key stages of construction will be required to be carried out by representatives of both Certifying Authority for works and the Developer/Supervising Consultant (Contractor). All inspections shall require at least 24 hours prior notification to the Certifying Authority for works. Key stages may include:

- Erosion & sediment controls
- Traffic control
- Site fencing
- Clearing & stripping
- Bulk earthworks
- Site sampling and testing
- Drainage pipeline installation prior to backfilling
- Drainage pits, Headwalls
- Common Drainage lines
- Subsoil drainage
- Subgrade preparation – Roll Test
- Road Pavement construction – Roll Test
- Kerb & Gutter, dish crossings
- Laybacks & driveways
- Road Pavement surfacing (bitumen surfacing)
- Prior to the construction of footpath paving
- Signage & Line marking
- Public utilities
- Landscaping/Turfing
- Final Inspection
- End of maintenance period
- Others deemed critical by Council or the Accredited Certifier

10.3 Records of testing and inspections

The Certifying Authority for works will always insist on uninterrupted access to enable audit inspections or testing. Records of all test results required will be made available to the Certifying Authority for works promptly when requested and tests will be undertaken strictly to prescribed test procedures by testing organisations approved by Council prior to work commencement. Certain stages of construction will be subject to a hold on works pending acceptable test results. See construction specifications for further details.

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11. INSURANCES

11.1 Third party insurance public risk

The Developer's Supervising Consultant (contractor) shall take out professional indemnity insurance indemnifying themselves. The Developer's Supervising Consultant will also provide the PCA with evidence that all Contractors have obtained appropriate third party and public risk insurance (minimum insured value \$20 million) satisfactory to the PCA's requirements and prior to the commencement of any works.

11.2 Safety

The developer shall comply with all the requirements and responsibilities under:

- i) *Work Health and Safety Act (2011).*
- ii) *And respective Codes of Practice(s).*
- iii) *Respective Australian Standards.*

12. WORK-AS-EXECUTED DRAWINGS

12.1 Certification

Following completion of the work, two full set of Work-As-Executed (WAE) Drawings marked up in red showing any discrepancies from the design is to be submitted to and retained by Council. All WAE Drawings shall bear the Supervising Consultant's or Accredited Certifier's Certification stating that all information shown on the Drawings is accurate. Council prefers to accept WAE drawings in electronic format with suitable certification. Electronic copies of the WAE shall be provided in DWG format with the appropriate certification to Council.

CCTV footage in video format to Council's requirements and a report in "SEWRAT" format for all drainage within future public roads and public land. Inspections are to be carried out in accordance with the Conduit Inspection Reporting Code of Australia WSA 05-2006. Example compilation of drawings – roadworks plans are enclosed in **Appendix 4**

Accredited Certifiers are to ensure that all compliance certificates and reports are submitted to council. (refer to subdivision certificate plan checklist in Appendix 3 for an indicative list of compliance certificates and reports required to be provided)

12.2 Council's obligations – water services

For water supply WAE drawings must allow Councils to meet their obligations under Part 6 of the *Local Government (General) Regulations*

4. RELEVANT LEGISLATIVE REQUIREMENTS (where applicable)

Environmental Planning and Assessment Act
Environmental Planning and Assessment Regulations
State Environmental Planning Policies (SEPPs)
Local Environmental Plan (LEPs)
Contribution Plans
Development Control Plans (DCPs)
Community Participation Plan

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RELATED POLICIES & PROCEDURE REFERENCES

- Strategic Development Control Guidelines
- AUS-SPEC Development Design Specifications
- AUS-SPEC Development Construction Specifications

- AS 1742 Set-2009 Manual of uniform traffic control devices Set
- AS 1743-2001 Road signs - Specifications
- AS 1744-1975 Forms of letters and numerals for road signs (known as Standard alphabets for road signs)
- AS 2008 Residual Bitumen for Pavements
- AS 4058 – 2007 Precast Concrete Pipes

AUSTROADS Documents

- AGPT02/2008 Pavement Structural Design - Guide to Pavement Technology
- PART 6 Roundabouts
- PART 10 Local Area Traffic Management
- PART 14 Bicycles

AUTHORISED BY

Council Resolution

EFFECTIVE FROM

XXXX 2021.

REVIEW DATE

Two years after the adoption of this Policy.

VERSIONS

The current and previous version of the policy should be set out in the following table.

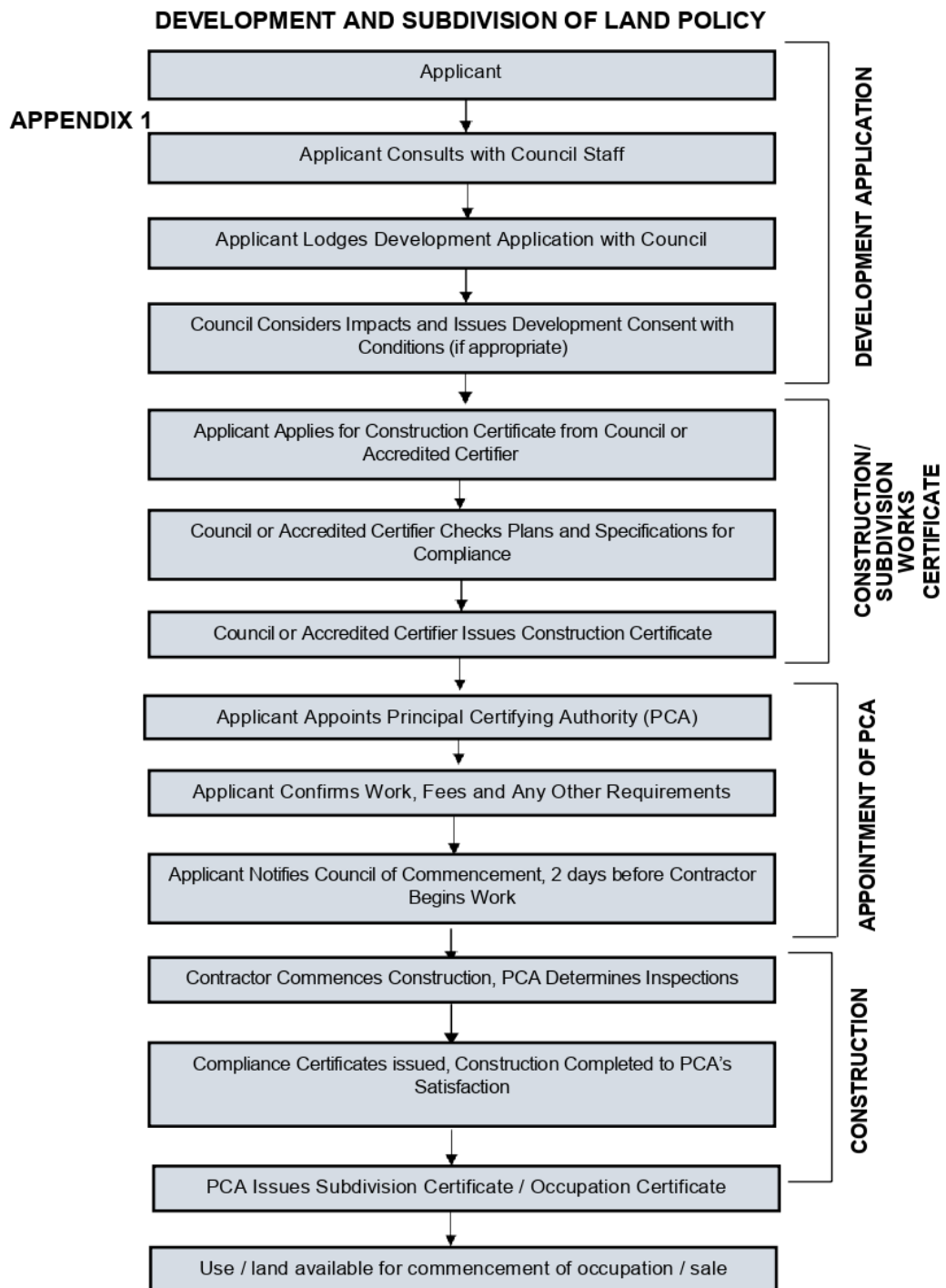
Version	Amended by	Changes made	Date	TRIM Number
1	Council Resolution	Original adoption		
2	Council Resolution	Complete Review	13/12/2017	285907.2017
3	Council Resolution	Complete Review		065542.2021-002

THIS POLICY HAS BEEN DEVELOPED IN CONSULTATION WITH

City Corporate (Governance & Legal Services).

ATTACHMENTS

1. Flowchart
2. Development Assessment Checklist
3. Subdivision Certificate (Linen Plan) Checklist
4. Requirements for design drawings
5. Subdivision Factsheet



APPENDIX 2

Development Assessment Checklist	
Lot and DP description:	
DA file number:	
Location Description:	
EXISTING TOPOGRAPHIC PLAN, SUPPLIED BY APPLICANT:	
Trees indicated?	
Existing site contours shown in sufficient extent?	
Are scales indicated on the plan? Does plan qualify scale i.e. NTS	
Spot levels shown on critical points?	
Natural Water Courses identified?	
Dimensions of the property boundaries shown?	
North Point shown on the plan	
Contours and levels in AHD?	
Levels extend into adjoining properties?	
Overhead power and other services shown on the street frontage?	
INFORMATION PROVIDED BY ADMIN. OFFICER:	
<i>Geocortex street and site plan with flood layer?</i>	<i>Council use only</i>
<i>Dates on referral correct?</i>	<i>Council use only</i>
<i>File reference number shown?</i>	<i>Council use only</i>
<i>Copy provided of the DP and 88B instrument?</i>	<i>Council use only</i>
SITE INSPECTION	
<i>Visual verification on site of submitted existing topographic (topo) plan, Deposited Plans and 88B?</i>	<i>Council use only</i>
<i>Observe any features not shown on topo plan including location of neighbour's assets.</i>	<i>Council use only</i>
<i>Observe adjoining properties and conditions. (Sight over fences for relative levels, and changes proposed to any existing overland flow paths across boundaries)</i>	<i>Council use only</i>
<i>Observe existing drainage infrastructure</i>	<i>Council use only</i>
<i>Observe existing road infrastructure.</i>	<i>Council use only</i>
SITE LAYOUT / CONCEPT GRADING PLAN SUPPLIED BY APPLICANT	
Does site conform to DA plan?	
Boundary dimensions shown.	
North point and scales shown.	
Existing contours and levels shown and in AHD(metres)	
Details of retaining walls shown?	

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Cut and fill limits shown?	
Is subdivision lot layout proposed in accordance with councils DCP's? i.e. frontage widths and lot areas conform.	
Have following items been shown in accordance with councils DCP <ul style="list-style-type: none"> - Road layout - Road widening identified - Public open space identified - Drainage reserve identified - Cycleway's identified - Roundabouts/traffic facilities accounted for - Landscape strips/acoustic fence/s accounted for 	
Check lot access to Council Roads.	
CONCEPT DRAINAGE PLAN	
Are design contours shown that adequately describe the finished site?	
Is the drainage connecting to an existing Council Drainage system?	
Is the drainage connecting to a pipeline in a private easement? If so, does the property have rights to connect? (check 88B instrument)	
If the drainage connects to the easement pipe has the pipe sufficient capacity <u>for site</u> and roof water of new proposal? (If insufficient may need pre-DA provision of new easement purchase from neighbours!)	
Has the applicant provided hydrological and hydraulic calculations addressing the suitability of future connections to Council or private drainage?	
Is there any on site detention? (Refer to Council's On-Site Detention Standard and Design Specification requirements.)	
On site detention check list: <ol style="list-style-type: none"> 1. Proposed location of OSD facility accurately dimensioned? 2. Type of onsite detention identified. 3. Point of discharge identified? 4. Overland flow path for surcharge identified? 5. Grades, pipe sizes, orifices, pits, swales shown and dimensioned? 6. Design contours shown? 7. Weir location and RL identified? 8. Pre and post development drainage calculations shown? 	
Is the stormwater both onsite and overland from neighbouring properties adequately controlled within this site? Have they been included in the calculations?	

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Details provided demonstrating that the overland flow off this site will not cause a nuisance to neighbours and makes its way to existing council trunk drainage system.	
Details provided demonstrating that the upstream catchment has been adequately catered for?	
Details provided demonstrating that the downstream discharge will not cause any nuisance to downstream properties.	
Is the site flood affected? If there is any doubt has the applicant gained a 149 Certificate indicating 1% AEP level. Is the floor level identified as per standard?	
Has the existing downstream drainage system been assessed?	
Are any works within 40 metres of a natural watercourse requiring DIPNR notification and certification?	
Is the trunk drainage infrastructure proposed in accordance with councils DCPs?	
Has the applicant indicated discharge to rubble pit? Has a design size been provided? Check location of rubble pit for proximity of overflow to neighbours' assets	
CONCEPT ROAD AND TRAFFIC ACCESS PLAN	
Is this site affected by road widening?	
Traffic interface of driveways with existing road? (Has a referral been sent to Traffic? Ask Planner to see referral from Traffic!)	
Does subdivision have access to a dedicated public road?	
Is road layout and road reserve width in accordance with councils DCP?	
Is proposed road widening shown in accordance with councils DCP and LEP?	
Is interface with existing adjoining roads safe? Need to pre-empt if site distance and rider comfort will become an obvious problem.	
Is there an interface with RTA or crown lands? If so, has comment been sought from the RTA?	
Has a temporary turning head facility been shown, to accommodate garbage vehicle turning movements?	
Does the road suggest any grudge strips? If so will need to amend to remove.	
Turning movements OK to get access for each designated garage and car space?	
FOR RURAL DEVELOPMENTS ONLY	

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Does the development create increased traffic movements? Will it cause problems for the public road shoulder? Will any required vehicle access create dust problems for neighbours?	
Does the proposal detail a new vehicle crossing driveway on Council road?	
Will the driveway require a pipe culvert or dish concrete across the table drain?	
SEDIMENTATION AND EROSION CONTROL	
Does the concept drainage plan include a sedimentation and erosion control plan?	
Does the plan conform to Councils Policy and Code?	
If the sedimentation plan failed would the overflow go to the street or cause neighbour nuisance?	
Does the sedimentation plan need integration with staged drainage construction to prevent failure?	
VEGETATION	
Have impacts on existing vegetation on site regarding: <ul style="list-style-type: none"> - locations of proposed roads - amount of filling - possible utility and infrastructure placement been checked	

SITE INSPECTION NOTES:

APPENDIX 3

LIVERPOOL CITY COUNCIL		Subdivision Certificate (Linen Plan) Check List					
Officer Completing Assessment :		strata subdivision	Body Adjustment	subd + Roadwork	subd. No Roadwork	Comm Title (no road)	Easement Only
Neighborhood Management Statement							
Neighborhood Development Contact							
Assets Management Plan (if specified in the DA consent only)							
Subdivision Plan +3 copies							
88B instrument							
Does Lot layout conform with approved DA?							
DA conditions "prior to issue SC" complied with?							
Site Validation Report							
Road dedication shown on plan and admin sheet							
Approved/Correct street names							
Dedication of drainage/public reserve shown on plan & admin sheet							
Works in parks-sign off from Council Park Maintenance Dept.							
Stormwater easements created							
Utility Certificates							
Sydney Water Section T3 Certificate							
Telecommunication Certificate -Pre Provisioning confirmation							
Endeavour Energy Notification of Arrangement							
Works as executed Plans in red and PDF copy							
Compliance Certificates for							
Road Pavement							
Drainage							
If OSD exists has restriction and positive covenant been created?							
Has Hydraulic Engineer provided certification for OSD?							
Service Crossings							
Structures Pits, headwall etc.							
Road fill areas identified on the plan							
Road fill compaction report from the geotechnical engineer							
Lot fill areas identified on the plan							
Lot fill compaction report from the Geotechnical Engineer							
Imported fill venm report and origin							
Lot Classifications							
If classifications of H1 or H2 exist has restriction been placed on lots ?							
CCTV of storm water in roads							
SC Referral							
Flooding							
Landscape							
Planning							
Property							
Other Key Business Units							
Payments							
Section 7.11 fees and payment letter							
Linen release and 88B fees paid							
Maintenance bond for roadworks							
Road restoration fees paid							
Other bonds as required by the DA or requested applicant							
Special Infrastructure Construction (SIC Levy)							

Note: Bonds can be cash or unconditional bank guarantee.

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NOTES:

1. Section 73 certificates may be delayed until immediately prior to linen release
2. Any bonding requests not required by Council policy are subject to an administration fee
3. Bonds require a completed application form
4. Bonds can be cash or unconditional bank guarantee.

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APPENDIX 4

EXAMPLE COMPILATION OF DRAWINGS - ROADWORKS PLANS

An example of the sequence of drawing sheets acceptable to Council in the compilation of a full set of Roadworks Drawings is set out as follows.

Sheet No	TOPIC
1	Development consent number and/or <i>Roads Act Section 138</i> permit number Locality sketch and index of sheets
2	General subdivision plan with contour details, proposed and existing, and a clear indication of the extent of work.
3	Typical road cross sections showing road widths, pavement (design) configuration, batter slopes, footpath location, kerb, and gutter types.
4	Plan and longitudinal section of each road showing set out data and services.
5	Road cross sections.
6	Kerb return profiles/details.
7	Intersection layout details.
8	Traffic calming devices details (including roundabout details).
9	Drainage catchment plan and Schedule of drainage elements (Pipelines and structures). NOTE: Drainage drawings documentation to be provided shall be in accordance with the requirements detailed in Development Design Specification "D5 – Stormwater drainage design" clauses D5.22 and D5.24.
10	Drainage profiles/long sections
11	Drainage structure details.
12	Drainage calculation tables
13	Pavement marking and signposting.
14	Traffic management plan
15	Erosion and sedimentation control plan / soil and water management plans in accordance with the requirements of development design specification "D7 – erosion control and stormwater management" (short term and long-term treatment).
16	Structure details – bridges, retaining walls, etc.
17	Street lighting design plan

NOTES:

- Any one set of Roadworks Plans may require more than 1 sheet for each of the topics

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- listed and may also require supplementary sheets for site specific details
2. Scales are required to be nominated on all drawings and north points shown on all plan views.
 3. Site Specific drawings may need to be added to list to include supplementary works required for the subdivision/engineering works (i.e. water pollution control ponds, basins, drainage channels, cycleways, public reserve and drainage reserve works, bridge crossings, gross pollutant trap structures, landscape plans).

DEVELOPMENT AND SUBDIVISION OF LAND STANDARD

APPENDIX 5

Development & subdivision
of landFACT
SHEET

Prior to lodgement of any application to subdivide, advice should be sought in regard to zoning of the land, minimum lot sizes, development application lodgement requirements and fees, relevant development control plans and local environmental plans, and Section 7.11 payments. Service authorities, the Land Registry Service and a registered surveyor should also be consulted in regard to their requirements and fees.

Those seeking to subdivide should also ascertain the land constraints affecting their land. This information is available in a 149 certificate purchased online. Persons interested in subdividing land should make themselves aware of the *Environmental Planning and Assessment Act 1979* prior to seeking approval for their proposal.

STEPS INVOLVED IN SUBDIVIDING

STEP 1 - SUBMISSION OF A DEVELOPMENT
APPLICATION (DA)

All subdivisions require approval from Council. This process starts with the submission of a Development Application (DA). The DA application form outlines what supporting documentation is required to be provided at the time of lodgement. Fees are applicable to this application and a fee estimate can be obtained from Council by calling Customer Service 1300 362 170.

Once the application is lodged via Council's Planning portal it is assigned a DA number. The application is then placed on public exhibition and submissions from the general public are received.

If any valid objections are received during the exhibition period it will be up to the applicant to address them during Council's assessment of the application.

Council's officers will then assess the proposed subdivision. A decision will then be made to determine the application either approving the application with conditions or refusing the application.

STEP 2 – SUBDIVISION WORKS CERTIFICATE
(SWC)

Either Council or a Principal Certifier – Subdivision (see Institution of Engineers Australia website <http://www.engineersaustralia.org.au/> for approved certifiers) can be used to issue your Subdivision Works Certificate (SWC). If using Council, a completed Subdivision Works Certificate application form must be submitted via the NSW Planning Portal. Engineering approval fees and Compliance Inspection fees will be payable to Council once the application has been received from the NSW Planning portal.

An application for a Subdivision Works Certificate may only be made by a person who has the benefit of the development consent. An application may not be made by a person who will carry out the building work or subdivision work unless that person owns the land on which the work is to be carried out.

Subdivision Works Certificate applications must address all relevant conditions of the Development Consent. Plans detailing Subdivision Works ~~works~~ involved must be submitted with the Subdivision Works Certificate application for approval.

Once the application has been assessed and found to be acceptable, a Subdivision Works Certificate and a set of stamped plans will be returned to the applicant. If there is no mention of a Subdivision Works Certificate being required in the Development Consent conditions then the applicant may lodge a Subdivision Certificate application after receiving Development Consent. See Step 4.



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STEP 3 - CONSTRUCTION WORKS

Once the Subdivision Works Certificate approval is issued, the applicant must submit a Notice to commence work application form at least two days prior to work commencing. There is no charge to submit the form, however failure to submit the form prior to works commencing may incur penalties.

The applicant will be required to nominate an authority to carry out inspections to ensure compliance with the approved Subdivision Works Certificate drawings. The authority can either be Council or an Accredited Certifier. To nominate Council a Council PCA appointment & service agreement form must be completed and submitted prior to commencement of any works. An inspection fee will be charged in accordance with Council's adopted fees and charges.

Please note that if an Accredited Certifier-Civil Engineering is used, a Compliance Certificate from that certifier must be obtained and submitted with the Subdivision Certificate application.

The applicant must appoint (at their own expense) either, a suitably qualified Civil engineer, registered surveyor or experienced engineering foreman to supervise the works. Council will also require an approved contractor to construct works in Council's road reserve.



STEP 4 - SUBDIVISION CERTIFICATE

This is the final Council approval of the subdivision process. A completed Subdivision Certificate form must be submitted to Council with the appropriate fees. Before issuing the Subdivision Certificate, Council requires all Development Consent conditions to be addressed, all Subdivision Works Certificate

approved works to be completed and all Compliance Certificates from certifiers to be submitted. A registered surveyor must prepare the final plan of subdivision and 88B instrument. This plan will be signed by Council and returned to the applicant.

STEP 5 - REGISTRATION OF PLANS

Upon receipt of signed final plan of subdivision and the 88b instrument the applicant must submit the documentation to NSW Land Registry Services (LRS) (www.nswlrs.com.au) for registration. Fees will apply. It is advisable to contact a registered surveyor for further information.

Council recommends using the services of a Consulting Civil Engineer or a Registered Land Surveyor in the preparation of Development Applications, Subdivision Works Certificate Applications and Subdivision Certificate Applications due to their expertise in the subdivision process.

TYPES OF SUBDIVISION

There are different types of subdivision:

- **Torrens Title**
A Deposited Plan (DP) creates the legal identity of land.
- **Strata Title**
A Strata Plan (SP) is the subdivision of a parcel of land to allow multiple occupancy and separate ownership of individual units.
- **Community Title**
A Community Plan reflects the development of planned communities where some of the land is shared.

Where consent is required for subdivision, the following process is to be followed:

- **Development Application (DA)** approval to subdivide the property; and
- **Subdivision Certificate (SC)** to authorise the registration of a plan of subdivision.

Both require the applicant to complete Council's Development & Construction form and submit any necessary plans and documents. Should you have any questions about the Subdivision process after reading this Fact Sheet please call Council's Customer Service on 1300 362 170.

Disclaimers: This information was believed to be correct at the date of its publication. This information is for general information purposes only and should not be relied upon for legal advice.



GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY

Adopted: 29 May 2019

TRIM: 2016/2682, 091748.2019



GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY

1. LEGISLATIVE REQUIREMENTS

Local Government Act 1993, Section 356

2. OBJECTIVE

Council is committed to building strong and resilient communities within the Liverpool Local Government Area (LGA) and to increase social wellbeing for all residents. One way of achieving these goals is to provide financial assistance in the form of grants, donations, and sponsorships to individuals and groups to develop leadership skills, increase participation in community life and address identified social issues. Council seeks to support programs that can build or enhance the reputation and brand of Liverpool City in accordance with Council's Community Strategic Plan.

3. DEFINITIONS

Acquittal	Reporting on the activities of a project as set out in the funding agreement. This could take the form of providing financial reports, written reports, evidence of activity performance and where funding was spent
Auspice	An agreement where an incorporated organisation agrees to apply for funding or resources on behalf of an applicant that is not incorporated. If the application is successful, the auspicing organisation then administers the resources on behalf of the applicant, and is legally responsible for ensuring that the terms of the agreement are met
Charity	Listed on the Australian Charities and Not-for-profit Commission (ACNC) website as a registered charity
Community Capacity Building	Involves the provision of community activities that contribute to people developing their own capacity and resilience to maintain and build on their own resources and to manage future challenges
Incorporated Association	A legal entity (organisation) that provides legal protection to its members in legal transactions

4. GRANT PRIORITIES

- 4.1 Council seeks to enhance the use of public funds through effective and efficient grant processes. Clear grant program objectives are linked to the organisation's strategic goals, outlined in Council's Community Strategic Plan. Council's grants and sponsorship programs provide a coordinated and integrated approach to growing Liverpool socially, culturally, economically and environmentally.

Council grants, donations and sponsorships may be provided to individuals who reside in the LGA, or to community-based groups, organisations and services that operate within the Liverpool LGA and/or for the benefit of Liverpool residents. Council facilitates nine programs for the allocation of grants, donations, and sponsorship:

1. Kick-Starter Grants
2. Small Grants
3. Liverpool Young Achievers Awards
4. Community Grants
5. Sustainable Environment Grants
6. Matching Grants
7. Corporate Sponsorship
8. Sporting Grants
9. Sporting Donations

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY**4.2 GRANT MAKING PRINCIPLES**

The key principles that inform grant making by Council are:

- Council's Community Strategic Plan. All grants align with Council's Community Strategic Plan, and other social, economic and environmental policies and plans;
- Partnerships and collaboration. Develop and maintain partnerships between Council and the community to achieve Council's strategic directions based on mutual respect and transparency;
- Capacity building. Support community groups and organisations to function positively, develop skills and increase community participation;
- Social inclusion. Liverpool is a diverse community and our grant making process encourages directing resources to specific needs of disadvantaged groups;
- Leveraging value. Council seeks to leverage community expertise, capacity, networks and resources to provide the best suite of grant programs to meet the needs of and maximise positive outcomes for the community and business. Council supports projects that represent good value for the level of cash or in-kind support requested. Through effective and efficient grant management processes, Council seeks to ensure costs for administration by the Council and grant applicants are minimised;
- Good governance. Council is committed to demonstrating integrity, professionalism and transparency in our decision making and have strong governance structures in place to support this. Council will ensure that grant processes are transparent and fair. Applications are assessed objectively against the assessment criteria. All conflicts of interests are addressed and declared as part of this process; and
- Reflection and learning. As part of Council's commitment to continuous improvement, Council will ensure there are evaluation mechanisms in place and opportunities for feedback on grant processes.

5. GENERAL ELIGIBILITY AND EXCLUSIONS**5.1 GENERAL ELIGIBILITY**

To be eligible for funding an applicant must:

- a) Acquit previous Council grants, donations or sponsorship and have no outstanding debts to Council;
- b) Be a resident of the LGA, or an organisation located in the LGA and/or principally providing services to the residents of Liverpool; and
- c) Include all required supporting documentation with their application.

5.2 APPLICATIONS THAT ARE INELIGIBLE FOR FUNDING INCLUDE:

- a) Projects that duplicate existing Council services or programs.
- b) Projects that directly contravene existing Council policy.
- c) Projects that do not meet the identified priority needs of Liverpool as set out in Council's Community Strategic Plan.
- d) Applications from government departments, political parties, or commercial/profit-making/private organisations (excluding Corporate Sponsorship which accepts applications from private organisations).
- e) Applications from charities for general donations.
- f) Applications for general fundraising activities, general operational expenditure (e.g. administration, insurance, office equipment, car parking, IT costs/equipment), shortfalls in funding by government departments, or completed/retrospective projects.
- g) For employee salaries/wages or any direct employment costs.
- h) Projects that will rely on recurrent funding from Council.

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- i) Identical projects that have previously been funded by Council (excluding Corporate Sponsorship).
- j) Projects or programs that charge people for participation, including charges to participants through an individual's NDIS funding plan.

5.3 FURTHER CONDITIONS

- 5.3.1 Council will not:
- a) Provide in-house design, printing and distribution services (organisations may apply for funding to undertake these activities themselves).
 - b) Provide cleansing and waste services for events (organisations may apply for cash funding to undertake these activities themselves).
 - c) Support political activities or activities that could be perceived as benefiting a political party or political campaign.
 - d) Support religious activities that could be perceived as divisive within the community.
 - e) Support activities that deliberately exclude any individuals or groups from participating or attending.
 - f) Provide in-kind support of any nature (eg: the provision of chairs or portable toilets for events).
- 5.3.2 For specific eligibility requirements and exclusions for each program, refer to Section 7 of this policy.

5.4 ETHICS FRAMEWORK

Council will not support any activities or entities that:

- a) Pollute land, air or water, or destroy or waste non-recurring resources.
- b) Market or promote products/services in a misleading or deceitful manner.
- c) Produce, promote or distribute products/services likely to be harmful to the community.
- d) Acquire land or commodities primarily for speculative gain.
- e) Create or encourage militarism or engage in the manufacture of armaments.
- f) Entice people into financial over-commitment
- g) Exploit people through the payment of below award wages or poor working conditions.
- h) Discriminate by way of race, religion, or sex in employment, marketing or advertising.
- i) Contribute to the inhibition of human rights generally.

5.5 CONFLICTS OF INTEREST

- 5.5.1 Council staff assessing and determining applications should identify and manage any potential conflicts of interest in accordance with Council's Code of Conduct and Ethical Governance: Conflicts of Interest Policy.
- 5.5.2 Members of Council staff and Councillors must ensure that any affiliation between them and the applicant is appropriately managed when assessing and determining applications for grants and donations.

6. GRANTS MANAGEMENT PROCESS

6.1 APPLICATIONS

All applicants must register with Council's online grants management system before applying. Applications must be submitted using the approved online application form on Council's online grants management system. Council will not accept any hard copy or emailed submissions, or any submissions after any applicable closing date or time.

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY**6.2 ASSESSMENT AND RECOMMENDATIONS**

- 6.2.1 All applications received by Council will be assessed by relevant Council staff members. Sporting Grants and Donations will be sent to the Sports Committee for review. Recommendations for funding of \$1,000 or less may be approved by the CEO or their delegate, provided the funding is in accordance with sections 356(3), 377(1A), and 378 of the Local Government Act 1993. Council will be notified of funded projects by Council report as soon as appropriately possible. Recommendations for funding over \$1,000 will be made to Council for endorsement in accordance with Section 356 of the Local Government Act 1993.
- 6.2.2 For grant programs that are open for applications all year, recommendations will be made to the next available Council Meeting. For grant programs with specific funding rounds, recommendations will be made within three months of the closing date.
- 6.2.3 Unsuccessful applicants are encouraged to seek feedback from relevant Council staff on their application. Programs are highly competitive and even though an application may meet the program criteria it may not be competitive against other applications.
- 6.2.4 Council uses the Australian Business Register (ABN) as its sole source of truth to confirm an applicant's operating status as an incorporated not-for-profit or charitable organisation <http://www.abr.business.gov.au/>.
- 6.2.5 Council values and recognises the importance of applicant financial and in-kind contributions. Applicants that demonstrate a commitment to the project through either financial or volunteer support are considered favourably.

6.3 APPROVAL

- 6.3.1 The elected Council has authority to approve grants, donations, and sponsorship. In some circumstances, specific delegation for this purpose is given to the CEO.
- 6.3.2 Approval of a grant, donation or sponsorship does not imply that Council has given any other consent. Applicants should note that events or any capital works require approvals and consents from Council, NSW Police and other state government agencies.

6.4 FUNDING AGREEMENTS

All successful applicants are required to enter into a funding agreement before funds are released and before a project can commence.

Council's support must be acknowledged on all promotional material. The Council logo should be used with the text "proudly supported by Liverpool City Council". All promotional material must be approved by Council prior to publication. Council also reserves the right to receive the following: joint media release opportunities, opportunity for Mayor to speak at the event or occasion, space at the event (table or marquee stall), and tickets to attend the event or occasion.

6.5 REPORTING

All grant recipients are required to acquit their project as detailed in their funding agreement. Reports are to be submitted using the approved online grants management system. Reports provide feedback on the success of the project in terms of the agreed outputs and outcomes, relevant data, and any lessons learnt. Funding recipients are required to submit detailed financial reports and may be requested to provide further documentation and evidence of expenditure. Council may audit recipients at any time. Previously funded applicants must receive an acknowledgement of a successful acquittal

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prior to applying for further funding. No further funding will be granted to any organisation who has failed to submit an acquittal report for previous funding from Council.

6.6 MINOR CHANGES TO THIS POLICY

Council authorises the CEO to make minor changes to this policy to reflect changes in legislation, expiry of or changes to grant programs, and changes in Council structure.

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY**7. FUNDING PROGRAMS****7.1 KICK-STARTER GRANTS | UP TO \$500 | OPEN ALL YEAR**

This program supports individuals or unincorporated community groups to establish a social enterprise aimed at addressing priorities in Council's Community Strategic Plan or a project which promotes social inclusion and increased community participation. Applications can be made for funding of up to \$500 per financial year. Repeated applications of the same project in subsequent years will not be accepted. Applications for events are not eligible under this program.

Project outcomes must meet at least one of the below priorities:

- a) Improve connections and social networks within the community.
- b) Increase participation in community activities, including by those experiencing social disadvantage.
- c) Facilitate access to education, training, or employment opportunities.
- d) Improve collaboration and coordination of community support and services.
- e) Improve social and physical wellbeing through prevention and early intervention approaches.

7.1.1 Program timeframe

Applications can be made all year. Grants must be spent within 12 months of receiving them.

7.1.2 Eligibility

To be eligible for funding applicants must:

- a) Be an individual resident or unincorporated community group based within the Liverpool LGA.
- b) Be 100% volunteer run or operate as a not-for-profit.
- c) Must update Council's Community Development Worker (Funding and Support) during the delivery of the project or initiative.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

Assessment criteria

To be considered for a grant, applicants should clearly describe the proposed project and how it will meet the following criteria:

Evidence provided to support the need for the project, including addressing at least one of the strategic directions in Council's Community Strategic Plan
The anticipated number of individuals that will benefit from the proposed project
Timeframe and budget are realistic and align with project objectives
Evidence of collaboration and partnership to maximise the use of existing community resources and to avoid duplication
Evidence that project strategies are innovative or practical to meeting the project need
Appropriate project evaluation method
Sustainability of project post funding

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7.2 SMALL GRANTS | UP TO \$1,000 | OPEN ALL YEAR

This program supports a range of small-scale community initiatives and is for community groups who may not have experience with grants programs. It aims to provide more intensive support and build the capacity of less established groups to familiarise themselves with grants programs and Council processes.

7.2.1 Expected program outcomes

Initiatives and projects can contribute to one or more of the following outcomes:

- a) Develop trial community capacity building programs or facilitate small-scale community awareness events.
- b) Increase engagement of individuals in academic, cultural, and environmental fields.
- c) Improve relative equality, resilience and adaptive capacity of Liverpool's diverse communities.
- d) Enhance positive social, cultural, or sustainability outcomes for local communities related to Council's strategic priorities.

7.2.2 Available funding

Applications can be made for funding of up to \$1,000 per project. Repeated applications of the same project or initiative in subsequent years will not be accepted.

7.2.3 Program timeframe

Grants must be spent within 12 months of receiving them.

7.2.4 Eligibility

To be eligible for funding applicants must:

- a) Be incorporated or auspiced by an incorporated organisation;
- b) A non-profit community service organisation or group providing programs/services to the residents of Liverpool; and
- c) Supply a copy of their most recent annual report and/or financial statements.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

7.2.5 Assessment criteria

To be considered for a grant, applicants should clearly describe the proposed project and how it will meet the following criteria:

Evidence that the organisation has capacity to deliver the project
Evidence provided to support the need for the project, including addressing at least one of the strategic directions in Council's Community Strategic Plan
The anticipated number of individuals that will participate in and benefit from the proposed project
Timeframe and budget are realistic and align with project objectives
Evidence of collaboration and partnership to maximise the use of existing community resources and to avoid duplication
Evidence that project strategies are innovative or practical to meeting the project need
Appropriate project evaluation method
Sustainability of project after funding ceases

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY**7.3 LIVERPOOL YOUNG ACHIEVERS AWARDS | OPEN ALL YEAR**

The Liverpool Young Achiever Awards are given as a prize to a student who has excelled in citizenship, academic studies, artistic endeavors, or sporting proficiency.

7.3.1 Available funding

Under each applicable category there will be two prizes as follows:

<u>Citizenship:</u>	<u>Artistic Endeavours:</u>
1x \$1,000 for a high school student	1x \$1,000 for a high school student
1x \$500 for a primary school student	1x \$500 for a primary school student
<u>Academic Studies:</u>	<u>Sporting Proficiency:</u>
1x \$1,000 for a high school student	1x \$1,000 for a high school student
1x \$500 for a primary school student	1x \$500 for a primary school student

Highly Commended:

All eligible nominees who are not selected for the major prize will be awarded a \$200 student donation.

Each high school and primary school are only eligible to submit one student nomination per year.

7.3.2 Program timeframe

Applications will be accepted from the beginning of school Term 1 until the end of Term 3. A presentation ceremony will be held during Term 4.

7.3.3 Eligibility

To be eligible for this award applicants must:

- Be a high school or primary school based in the Liverpool Local Government Area (LGA);
- Be nominating a student attending either a high school or primary school based in the Liverpool LGA; and
- Supply a letter of support from the principal of the applying school for the nominated student.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY**7.4 COMMUNITY GRANTS | UP TO \$5,000 | TWO ROUNDS PER YEAR**

This program provides financial assistance to community groups, organisations and services for projects that foster partnerships and collaboration, build capacity, promote social inclusion and increase community participation. The program assists in developing pilot or trialling innovative services or programs that address the needs of residents, workers and visitors. The program will support projects that:

- a) Improve connections and build social networks within the community.
- b) Increase participation of people in community activities and programs, including members of the community who are experiencing social disadvantage.
- c) Facilitate access to education, training and employment opportunities.
- d) Improve opportunities for people to build confidence and develop their skills.
- e) Facilitate inclusion and access to facilities, services, open spaces and activities.
- f) Improve collaboration and coordination of community support and services.
- g) Improve social or physical wellbeing through prevention and early intervention.
- h) Strengthen governance and accountability in community organisations.

7.4.1 Expected program outcomes

Initiatives and projects can contribute to one or more of the following outcomes:

- a) Increased involvement and engagement by communities in social activities.
- b) Increased number of people feeling a strong sense of social wellbeing.
- c) Strengthened maintenance, management or improvement of physical and mental health and wellbeing.
- d) Improved access to information and development of new skills.
- e) Increased numbers of people undertaking educational courses and gaining sustainable employment.
- f) Reduced financial hardship and social disadvantage, including food insecurity and homelessness.

7.4.2 Available funding

Applications can be made for funding of up to \$5,000 per year.

7.4.3 Program timeframe

This grant program has two rounds per year. Round dates will be advised on Council's website. Grants must be spent within 12 months of receiving them.

7.4.4 Program eligibility and exclusions

To be eligible for funding through the Community Grants Program applicants must:

- a) Be incorporated or auspiced by an incorporated organisation.
- b) A non-profit community service organisation or group providing programs/services to the residents of Liverpool.
- c) Have public liability insurance of at least \$10 million (must be active during the period of funding).
- d) Supply a copy of their most recent annual report and/or financial statements.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Conditions.

7.4.5 Assessment criteria

To be considered for a grant, applicants should clearly describe the proposed project and how it will meet the following criteria:

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Evidence that the organisation has capacity to deliver the project
Evidence provided to support the need for the project, including addressing at least one of the strategic directions in Council's Community Strategic Plan
Anticipated number of individuals participating in and benefiting from the proposed project
Timeframe and budget are realistic and align with project objectives
Evidence of collaboration and partnership to maximise the use of existing community resources and to avoid duplication
Evidence that project strategies are innovative or practical to meeting the project need
Appropriate project evaluation method
Sustainability of project after funding ceases

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY**7.5 SUSTAINABLE ENVIRONMENT GRANTS | UP TO \$5,000 | TWO ROUNDS PER YEAR**

The Sustainable Environment Grants program provides financial assistance to support schools and community groups to play an active role in reducing their impact on the environment and implementing environmentally sustainable actions. The program seeks projects focused on environmental improvement, sustainability education, awareness-raising and the promotion of sustainable living as a way of life that provide benefit to the natural environment and local community. Projects can include:

- **Waste Minimisation** – including reuse, recycling, litter reduction, composting and worm farming, waste education projects.
- **Sustainable Water Use** – including water efficiency, stormwater harvesting and water reuse, rain gardens and water quality improvements, and sustainable water use education programs.
- **Environmental Improvement** – including protection and enhancement of natural areas, habitat creation for native fauna, and natural environment education programs.
- **Sustainable Living** – including establishment of vegetable or native display gardens, bush tucker or community gardens, and the keeping of chickens or native bees.

7.5.1 Expected program outcomes

Grants from this program can contribute to one or more of the following outcomes:

- a) Build the capacity of schools and community groups to promote efficient resource use and improve the quality of the local environment.
- b) Encourage community members to become involved and take initiative in improving their behaviours for a more sustainable future.
- c) Encourage schools and community groups to identify and implement innovative approaches and positive solutions that protect and enhance Liverpool's unique natural environment.
- d) Improve the health of vegetation, water quality and healthy ecosystems contributing to cleaner waterways, air and healthier native vegetation.
- e) Raise awareness and promote sustainable living as a way of life, including actively participating in Council's environmental programs and activities.
- f) Generate positive community engagement (e.g. involvement of local businesses, environmental education centres or botanic gardens).

7.5.2 Available funding

Applications can be made for funding of up to \$5,000 per year by a school or an incorporated community group.

7.5.3 Program timeframe

This grants program has two rounds per year. Round dates will be advised on Council's website. Grants must be spent within 12 months of receiving them.

7.5.4 Program eligibility and exclusions

To be eligible for the Sustainable Environment Grants program applicants must have not received funding under this or another program for the same project (separate and additional stages of a previous project are eligible), and:

- a) Be a registered NSW school, not-for profit pre-school or child care centre; or
- b) An incorporated, non-profit, community service, welfare or charitable organisation or group providing programs or services to the residents of Liverpool; or
- c) Community group auspiced by an incorporated organisation.

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Applications will not be accepted for:

- a) For profit organisations
- b) Overall project coordination
- c) Capital works for major infrastructure or construction of buildings
- d) Work being completed on land not owned by the applicant without evidence of approval from the landowner.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Conditions.

7.5.5 Assessment criteria

To be considered for a grant, applicants should clearly describe the proposed project and how it will meet the following criteria:

Demonstrate the capacity to deliver the project or activity and subsequent sustainability of the project beyond initial funding
Evidence provided to support the need for the project, including addressing at least one of the strategic directions in Council's Community Strategic Plan
Demonstrate tangible and measurable environmental outcomes
The anticipated number of individuals that will participate in and benefit from the project
Demonstrate measurable student learning and/or increase teacher capacity to deliver environmental education
Value for money

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY

7.6 MATCHING GRANTS | UP TO \$20,000 | TWO ROUNDS PER YEAR

This program is designed to provide financial support to projects and activities that build or strengthen communities within Liverpool. These projects will focus on supporting the development and implementation of community capacity building activities and providing opportunities for a broader cross section of the community to be involved in community and recreational activities. Funding will support projects that address one of the following categories:

Arts	Contribute community art to a neighbourhood or work to increase the participation of residents within art-based programs/projects.
Community capacity building	Bring residents together and enhance participation in the community, including those who are experiencing social disadvantage, or provide benefits to address an identified community need. This could be a community event or community-based capacity building project.
Youth engagement	Focus on increasing the ability of young people to obtain skills and qualifications or increase their active participation within the community.
Accessibility	Enhance and improve access options for the community, either through education, transport, disability access or connectivity.
Environmental	Address environmental issues and concerns or contribute to environmental education and awareness.
Community safety/public space activation	Address community safety and security issues such as activities that activate or diversify the night time economy including pop up entertainment and night time performances in public spaces. These projects can also include addressing perceptions of community safety.
Sports development	Contribute to the development of sporting groups or enhance participation in sporting and recreational activities.

7.6.1 Expected program outcomes

Grants from this program can contribute to one or more of the following outcomes:

- Develop social connections and partnerships within communities, or reinforcement of those that already exist.
- Increased participation in community activities and organisations by improving collaboration and coordination of community support and services.
- Strengthened opportunities for community members and others to build personal creativity and self-expression.
- Increased opportunities for community members to acquire or develop new skills and/or employment.
- Create, renew or revitalise places and spaces within the community.
- Strengthened community members' feelings of safety and sense of belonging within public spaces.

7.6.2 Available funding

The matching grants program recognises community contribution towards a project and can offer up to \$20,000 support to match this contribution. The program supports projects that involve genuine community participation. By 'matching' what the community contributes, Council is building a sense of community and strengthening partnerships as people work together on the project. Contributions from the community or Council can be made in cash or value-in-kind. Recognised in-kind community contributions include:

- Design services, professional services, trade services (such as plumbing), provision of trucks and plant, concreting and painting, donated supplies, materials or venues.
- Volunteer time such as labour, set up and pack down, and meeting time to identify, plan and implement projects. The rate of volunteer time is calculated as \$20 per hour. For professional or contracted services, the rate is \$75 per hour.
- Direct cash input to the project through donations or income generated.

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The value of in-kind contributions should be verified by an independent quote, and where the value is in question, Council's assessment of the value of in-kind contributions will take precedence in the assessment of the matching grant given. The costs of Council and other approvals required by government agencies/authorities must also be considered when applying under this grants program.

7.6.3 Program timeframe

This program accepts applications twice per year. Grants must be spent within 12 months of receiving them.

7.6.4 Program eligibility and conditions

To be eligible for the Matching Grants program applicants must:

- a) Be incorporated or auspiced by an incorporated organisation.
- b) A non-profit community service organisation or group providing programs/services to the residents of Liverpool.
- c) Have public liability insurance of at least \$20 million (must be active during the period of funding).
- d) Supply a copy of their most recent annual report and/or financial statements.

Organisations are only eligible to receive funding through this program once each financial year. Council reserves the right to defer consideration of a Matching Grant application where planning, leasing or ownership, statutory approvals, or appropriate development issues are raised by a project.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

7.6.5 Assessment criteria

Matched contribution (financial or in-kind)
Consulted with Council staff prior to submitting application
Project is considered an appropriate development on the proposed site
Project meets Council's construction and safety standards
Evidence that the organisation has capacity to deliver the project
Evidence provided to support the need for the project, including the degree to which the project addresses at least one of the strategic directions in Council's Community Strategic Plan
The anticipated number of individuals that will participate in and benefit from the proposed project
Timeframe and budget are realistic and align with project objectives
Evidence of collaboration and partnership to maximise the use of existing community resources and to avoid duplication
Proposed project evaluation method including sustainability of project

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY**7.7 CORPORATE SPONSORSHIP | UP TO \$10,000 | OPEN ALL YEAR**

Council may provide financial contributions of up to \$10,000 through its Corporate Sponsorship Program to organisations, groups, or individuals for programs that can build or enhance Council's reputation. These include but are not limited to providing appropriate branding benefits and opportunities for Council, and/or providing cross-promotional opportunities for Council's services or facilities.

Applications to Council for sponsorship must address at least one of the following:

1. Economic benefit

- a) Delivers significant economic benefit to the Liverpool LGA.
- b) Delivers benefit to tourism, hospitality and retail sectors through the attendance of regional, national, or international delegates at events.
- c) Provides a platform for research, trade, and/or investment opportunities.
- d) Attracts national or international attention to Liverpool as a place to reside, visit, work and/or invest.
- e) Creates employment opportunities within the Liverpool LGA.

2. Community, cultural, and social benefit

- a) Provides an innovative opportunity to meet community needs and promote Liverpool's cultural diversity and celebrate our City's uniqueness.
- b) Enhances Liverpool's profile and reputation as an outward looking, creative and connected city.
- c) Creates opportunities for education and information exchange between Council, the community and the sector.
- d) To support the organisation and activation of a charity event with the Liverpool LGA. Sponsorship funds are not to be used for direct fundraising, including but not limited to the purchase of tickets or tables at a fundraising event.
- e) Attracts a major program to Liverpool that has South West-Sydney region, state or national significance.

3. Environmental benefit

- a) Enhances Liverpool's reputation as a sustainable city through leadership in waste and environment management.

7.7.1 Expected program outcomes

Projects must contribute to one or more of the following outcomes:

- a) Provide an opportunity for measurable economic, social, environmental and/or cultural benefits to Council and the Liverpool LGA.
- b) Provide opportunities for the community to participate and contribute in activities/events in the Liverpool LGA.
- c) Create a valuable strategic alliance for Council.
- d) Provide extensive coverage and promotional/publicity opportunities across a range of media outlets.
- e) Promote Liverpool's reputation as a great place to live, visit, work, and invest.

7.7.2 Program timeframe

- This program accepts applications all year.
- Applications must be submitted at least three months prior to an event taking place. Applications submitted with less than three months lead time will be deemed ineligible.

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY

- Activities should take place within 12 months of successful sponsorship funding being received.

7.7.3 Program eligibility and conditions:

To be eligible for the Corporate Sponsorship program applicants must:

- a) Be incorporated or auspiced by an incorporated organisation and hold a current ABN.
- b) A non-profit community service organisation or group providing programs/services to the residents of Liverpool.
- c) Have public liability insurance of at least \$10 million (must be current during the period of funding).
- d) Supply a copy of their most recent annual report and/or financial statements.
- e) Must apply for sponsorship towards an event or activity in the Liverpool LGA that attracts a significantly high level of attendance from the community and provides direct benefits for Liverpool based organisations and/ or Liverpool residents.
- f) Must ensure that attendance and participation is free where sponsorship is sought for a community event.
- g) Must be registered with the Australian Charities and Not-for-profits Commission if an application is for a local charity event.

7.7.4 Funding will not be provided to:

- a) Projects that do not address the identified directions of the Liverpool LGA as set out in Council's Community Strategic Plan.
- b) Charities for general donations including the purchase of tickets or fundraising tables at an event.
- c) Projects that will rely on recurrent funding from Council.
- d) More than one event within the Liverpool area in a two-month period that celebrates or marks a specific occasion or activity.
- e) Organisations whose activities are not aligned with the City's ethical framework.
- f) Previous recipients who have not fulfilled the conditions of a sponsorship.
- g) Organisations that are not registered in Australia.
- h) Activities or events that do not benefit the Liverpool LGA or its residents.
- i) Underwrite events, programs or projects.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

7.7.5 Council's current standing sponsorship resolution:

Sponsorship Activity	Amount	Council Resolution
Police Officer of the Year	\$1,000	27/06/2011

- 7.7.6 Approval of sponsorship does not imply that Council has given any other consent. Applicants should note that many festivals and events require approvals and consents from Council, NSW Police and other NSW Government agencies. For guidelines on applying to host an event in Liverpool, visit www.liverpool.nsw.gov.au/whats-on/events/event-organisers-information-kit-guidelines

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY**7.8 SPORTING GRANTS | UP TO \$5,000 | ONE ROUND PER YEAR**

This program offers funding to sporting clubs and junior disability sporting clubs to assist with the development of young people and encourage participation of the broader community in local sporting and recreational activities. Grants can also be used towards the purchase or maintenance of sporting equipment.

Funding will support applications by recreation and sporting organisations/clubs under one of six categories:

- a) **Sports development** – Coaching clinics, sports camps, or training/development
- b) **Ground development** – Minor capital improvements
- c) **Maintenance Equipment** – Line marking equipment or ground maintenance equipment (to be eligible, equipment must remain the property of the club)
- d) **Sporting Equipment** – Kits, bags, first aid supplies, safety equipment (to be eligible, equipment must remain the property of the club)
- e) **Education** – First aid training, coaching programs or safe play
- f) **Club diversity** – Introduction of additional sports or expansion of club to encourage greater community involvement

7.8.1 Expected program outcomes

Projects must contribute to one or more of the following outcomes:

- a) Increased opportunities for participation of the broader community in sporting and recreational activities.
- b) Improved condition and functionality of sporting equipment.
- c) Enhanced awareness of emerging trends in sports development and demonstrated best practice.
- d) Strengthened maintenance, management or improvement of physical and mental health and wellbeing by improving opportunities for physical activity.

7.8.2 Available funding

Grants of up to \$5,000 per sporting club are available. Clubs may submit applications for more than one project. Within the funding pool, \$5,000 is reserved to fund applications that support participants with a disability. Where eligible applications that support participants with a disability are less than \$5,000 the remaining funds are returned to the main pool of funding for distribution.

7.8.3 Program timeframe

This program accepts applications once per year. Grants must be spent within 12 months of receiving them.

7.8.4 Program eligibility and exclusions

To be eligible for the Sporting Grants Program applicants must:

- a) Be incorporated or auspiced, a non-profit recreation or sporting organisation/club, providing programs/services to the residents of Liverpool.
- b) Have public liability insurance of up to \$10 million.
- c) Supply a copy of most recent annual report and/or financial statements.
- d) Have not received funds from the Sporting Grants program in the previous year.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY

7.8.5 Assessment criteria

An independent panel consisting of members from the Liverpool Sports Committee will assess applications based on set criteria. To be considered for a grant, applicants should clearly describe the proposed project and how it will meet the following criteria:

Application received prior to the closing date
Proof of costs provided
Grant able to be spent within 12 months
Applications signed by Club Office bearers
Project meets Council's construction and safety standards
Demonstrate improvements to the delivery of junior sport in Liverpool
Demonstrate meeting an identified community need including access opportunities for specific special needs groups or individuals
Timeframe and budget are realistic and align with project objectives
Contribution from club (financial or in-kind)
Demonstrate benefit to the broader community
Proposed project evaluation method including sustainability of project

7.9 SPORTING DONATIONS | UP TO \$500 | OPEN ALL YEAR

This program enables Council to provide small amounts of funding to assist community members in their efforts to achieve excellence in sport at a regional, state or national representative level. Individuals and teams based in the Liverpool LGA are eligible to apply for donations towards the cost of participating in representative sporting events for which they have qualified. Donations are based on the level of representation achieved and where events will be held. Participation at school sport events is also eligible for consideration.

7.9.1 Expected program outcomes

Donations from this program can contribute to one or more of the following outcomes:

- Increased participation of individuals/teams in representative sporting events.
- Improved accessibility to participation in representative sporting events.
- Improved confidence and capacity of local individuals and teams by acknowledging and supporting participation at a representative level.
- Enhanced positive social outcomes and opportunities for local communities.

7.9.2 Available funding

Donations are available for the following amounts:

- \$100 for regional representation (competitor only), or for coach/referee/umpire/official representation at a regional, state or national event more than 100km from Liverpool.
- \$200 for state representation (competitor only).
- \$300 for Australian national representation at an event within New South Wales, Australian Capital Territory, Queensland and Victoria (competitor only).
- \$400 for Australian national representation at an event within Tasmania, South Australia, Northern Territory and Western Australia (competitor only).
- \$500 for Australian national representation at an overseas event (competitor only).
- \$500 for team representation.

7.9.3 Program timeframe

This program accepts applications all year and applicants are required to submit their application prior to the event taking place. Activities must take place within 12 months from when the application was submitted. Information must be provided on the costs associated with participating in the representative events.

GRANTS, DONATIONS, AND CORPORATE SPONSORSHIP POLICY

7.9.4 Program eligibility and exclusions

To be eligible for funding through the Sporting Donations Program the following criteria applies:

- a) Individual applicants must be a resident of the Liverpool LGA.
- b) Applicants must provide proof of selection for the event.
- c) Applications from students at state, private or independent schools or for participation at school sport events, are eligible for consideration.
- d) Team applications – must have a minimum of 75% of the team residing in the Liverpool LGA, club must be based in the Liverpool LGA, and a maximum of three teams per club can be funded in a financial year.

For more information on eligibility and exclusions refer to Section 5: General Eligibility and Exclusions.

7.9.5 Assessment criteria

To be considered for a grant, applicants should meet the following criteria:

Evidence the individual/team qualified for a representative sporting event
Information provided on costs associated with participating in the representative event
Evidence that the individual or 75% of the team resides in the Liverpool LGA

AUTHORISED BY

Council Resolution

EFFECTIVE FROM

XXXX 2019

DEPARTMENT RESPONSIBLE

City Community and Culture (Community Development and Planning)

REVIEW DATE

The policy will be reviewed every two years.

VERSION	AMENDED BY	DATE	TRIM NUMBER
1	Council Resolution	18 October 2010	158320.2014
2	Council Resolution	29 May 2013	097264.2013
3	Council Resolution	31 July 2013	150967.2014
4	Council Resolution	25 February 2014	026269.2014
5	Council Resolution	28 May 2014	126057.2014
6	Council Resolution	30 September 2015	227843.2015
7	Minor changes approved by CEO	12 July 2016	185151.2016
8	Council Resolution	26 April 2017	026648.2017
9	Council Resolution	26 April 2019	

THIS POLICY WAS DEVELOPED AFTER CONSULTATION WITH

City Community and Culture, Corporate Services (Governance, Legal and Procurement), Infrastructure and Environment.

REFERENCES

Australian Institute of Grants Management: Grant making Manifesto (2011)
 Liverpool City Council: Council's Community Strategic Plan
 Liverpool City Council: Code of Conduct Procedures
 Liverpool City Council: Social Justice Policy and Ethical Governance, Conflicts of Interest Policy
 Services: Community Builders Program Guideline (2012)

COMMUNITY ENGAGEMENT STRATEGY 2021-22



**LIVERPOOL
CITY
COUNCIL**

ACKNOWLEDGEMENT OF COUNTRY

Liverpool City Council acknowledges the original inhabitants of the Liverpool Local Government Area, the Darug (Dharug) and Dharawal (Tharawal) Aboriginal people. We celebrate the survival of Aboriginal people and acknowledge their right to live according to their own beliefs and culture. We acknowledge that Aboriginal culture continues to strengthen and enrich our community.

We commit ourselves to preserve past, present and future identified Aboriginal sites and cultural landscapes, and to recognise and accept the significance of the Georges River as a meeting place for the Darug (Dharug) and Dharawal (Tharawal) Aboriginal people. We accept Aboriginal history as an integral part of Australian history.

We acknowledge the contribution of Aboriginal service men and women in the defence of our country.

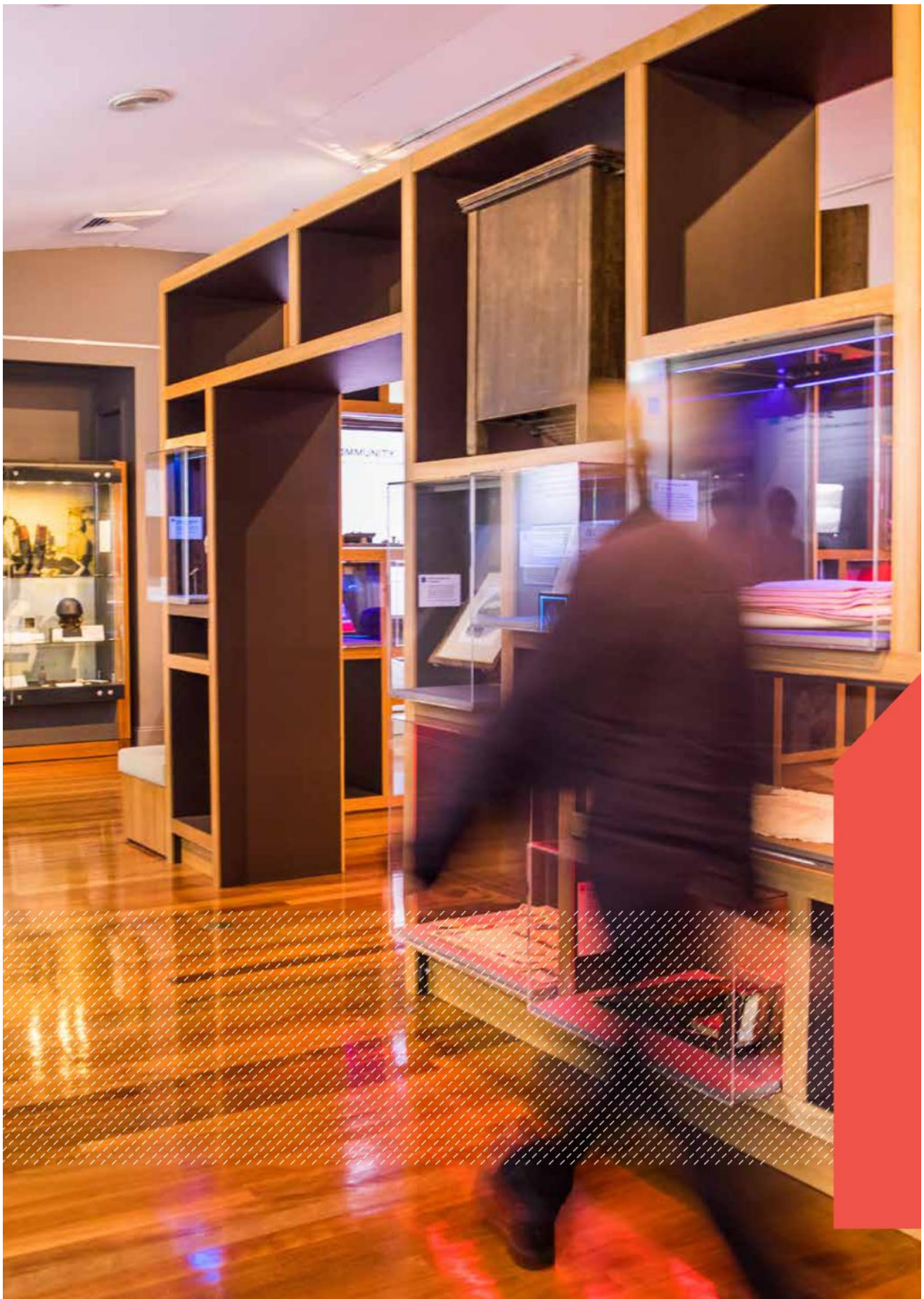
Liverpool City Council supports and encourages Aboriginal and non-Aboriginal people working together towards reconciliation.

We recognise diversity of many cultures who share the values of tolerance and respect for one another, and their rights together with all Australians to live according to their own beliefs and culture.



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INTRODUCTION

The Local Government Act (1993) requires each council to have a Community Strategic Plan (CSP) that has been developed and endorsed by Council. The CSP identifies the main priorities and aspirations for the future of the local government area covering a period of at least 10 years from when the plan is endorsed.

Councils are required to develop a CSP that addresses the quadruple bottom line of civic leadership, social, environmental, and economic issues, and is based on the social justice principles of equity, access, participation and rights. The Plan aims to address four key questions:

The Plan aims to address four key questions:

- 1. Where are we now?**
- 2. Where do we want to be in 10 years?**
- 3. How will we get there?**
- 4. How will we know when we have arrived?**



COMMUNITY ENGAGEMENT STRATEGY

The Community Engagement Strategy outlines how the Liverpool community, which includes residents, workers, businesses, and relevant agencies will be invited to inform and develop Council's new Community Strategic Plan (CSP).

With the upcoming Council election in September 2021, community engagement is necessary to reassess the needs and priorities of the community as well as the changes that have taken place over the last four years. Council will work with the community and key stakeholders to review the objectives of its current CSP *Our Home, Liverpool 2027* and develop the new CSP. The new CSP will form the basis of Council's programs, projects and strategies for its term of office including the:

- **Four-Year Delivery Program** outlining the principal activities that Council will undertake over a period of four years to deliver on its role in implementing the Community Strategic Plan;
- **One-Year Operational Plan** detailing the activities and projects to be undertaken for the year to achieve the commitments made in the Delivery Program. The operational plan includes the budget, and fees and charges; and
- **Resourcing Strategy** including the **Long-Term Financial Plan, Asset Management Strategy and Plan** and **Workforce Management Strategy**.



WHAT IS COMMUNITY ENGAGEMENT?

Community engagement is the ongoing process of fostering purposeful relationships between Council and the community. Engagement is delivered through a range of activities from informing to collaborating and providing the opportunity for the community to participate in the future direction of Liverpool.

This strategy is built on the principle that all members of the community have a right and responsibility to contribute to their community and its prospective plans.

The Community Engagement Strategy is guided by the principles of social justice which are:

- **Equity**
Everyone should have a fair opportunity to participate in planning for the future of the community. There should be fairness in decision making, prioritising and allocation of resources.
- **Access**
All people should have fair access to services, resources and opportunities to improve their quality of life.
- **Participation**
Everyone should have the maximum opportunity to genuinely participate in decisions which affect their lives.
- **Rights**
Equal rights should be established and promoted, with opportunities provided for people of all abilities and from diverse linguistic, cultural and religious backgrounds to participate in community life.



LEGISLATIVE REQUIREMENTS

Liverpool City Council is preparing to review its Community Strategic Plan, *Our Home, Liverpool 2027*. The Community Strategic Plan sets out the directions and strategies for Liverpool over the next ten years.

In 2016 and 2017 Council undertook an extensive community engagement process to inform the development of *Our Home, Liverpool 2027*.

According to the *Local Government Act (1993)*, "following an ordinary election of councillors, the council must review the community strategic plan before 30 June following the election". The next NSW council elections will be held on 4 September 2021.

The *Local Government Act (1993)*, also stipulates that Council "must establish and implement a strategy (its community engagement strategy), based on social justice principles, for engagement with the local community when developing the community strategic plan."

This strategy has been developed to outline the process that will be undertaken to review *Our Home, Liverpool 2027*. The community engagement process is an opportunity for the community of Liverpool, which includes residents, workers, businesses, and relevant stakeholders to be involved and contribute to Liverpool's future directions.

Following the engagement process and the 2021 council election, the revised plan will be placed on public exhibition for 28 days and subsequently presented to Council for adoption as Liverpool's new Community Strategic Plan.



DEFINITIONS

For the purpose of this Strategy, Council defines the following:

Community

The Community is made up of many stakeholders including people who live in, work in, and visit Liverpool. Often people belong to more than one community that can be based on geographical location, identity, and shared interests.

Community Participation

Council relies on the community to respond and provide feedback to inform future decision making. The community will be given the opportunity to attend workshops, review draft documents and resources, provide feedback through available mechanisms, whilst maintaining integrity and honesty throughout the process.



AIMS OF THE COMMUNITY ENGAGEMENT STRATEGY

The Community Engagement Strategy aims to:

- 1 Ensure the consultation process is underpinned by the social, environmental, economic, and civic leadership priorities for Liverpool.
- 2 Seek a broad range of community values, priorities and needs;
- 3 Provide the community with adequate information to assist in decision making;
- 4 Engage with the community on the basis of equality and fairness, to ensure active participation in the community engagement process; and
- 5 Capture and evaluate community feedback to inform Liverpool's future priorities and decisions.

WHO ARE THE KEY STAKEHOLDERS THAT NEED TO BE ENGAGED?

Stakeholders are any group or individual that has an interest in Council's decision making or are affected by Council's decisions and actions.

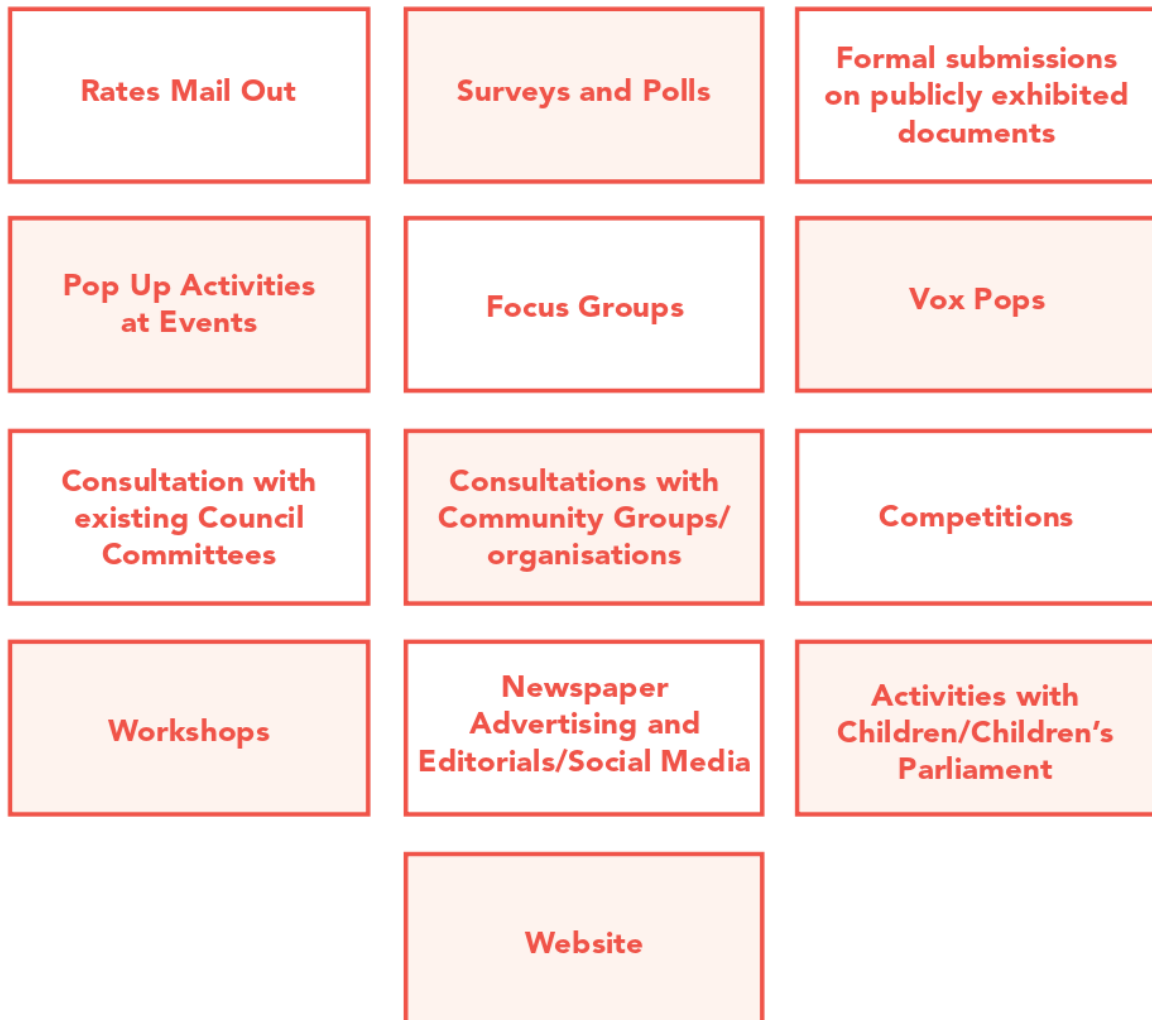
- **Residents and Property Owners**
 - Those who live in or own property in Liverpool
- **Schools and Education Providers**
 - TAFE
 - Primary and Secondary Education
 - Childcare Centres
 - Universities
 - Other educational and vocational institutions
- **Businesses and Industry**
 - Owners
 - Employees
 - Chambers of Commerce
 - Networking Groups
 - Industry Groups
 - Potential investors
- **Community Groups and Organisations**
 - Interest groups
 - Volunteer groups
 - Culturally and Linguistically Diverse (CALD) and migrant support organisations
 - Sporting Clubs
 - Youth Groups
 - Council Committees
 - Disability Groups
 - Aboriginal and Torres Strait Islander Groups
 - Liverpool City Council City Deal Officers
- **Visitors**
 - Shoppers
 - Visiting friends and relatives
 - Tourists
- **Government Agencies**
 - State and Federal Agencies
 - Western Sydney Airport Co Limited
- **Liverpool City Council**
 - Councillors
 - Council Staff
- **Media**
 - Local newspapers
 - Local ethnic media
 - Social Media
 - Radio

12 Community Engagement Strategy 2021-22

■ HOW WILL COUNCIL ENGAGE WITH THE COMMUNITY?

The Community Engagement Strategy for the new Community Strategic Plan (CSP) will build upon the current engagement that Council performs, which includes working with existing advisory committees and forums.

The methods below provide a range of opportunities for participation by the community and all stakeholders. Activities will be formulated and assessed against applied measures.



THE COMMUNITY'S RESPONSIBILITY

A comprehensive Community Strategic Plan (CSP) can only be created with sufficient participation from the community. The Liverpool community's feedback is essential and needs to be incorporated into future planning and decision making for Liverpool. It is expected that the Community will:

- Review draft documents on exhibition and provide comments to Council within specified timeframes;
- Attend public workshops, participate in activities and contribute ideas;
- Keep updated on progress through Council's website, social media and e-newsletters; and
- Be honest, respectful and maintain integrity at all times.

Public Exhibitions and Notices

Council will give notice and place the draft CSP on public exhibition in accordance with legal requirements and resolutions of Council.

This will:

- Allow the community to comment on all plans before they are finalised
- Provide the community with information on important matters; and
- Invite the community to provide feedback.

Submissions

If community members wish to lodge a submission, objection or comment regarding a matter on public exhibition, Council must receive the submission before the expiry of the exhibition period.

Written submissions are to be sent to Locked Bag 7064, Liverpool BC NSW 1871 or emailed to lcc@liverpool.nsw.gov.au.

Submissions on the draft Community Strategic Plan will also be available through Liverpool Listens (liverpool.nsw.gov.au/listens).

TIMELINE

The Community Engagement Strategy for the development of the new Community Strategic Plan is summarised below:

Activities	July 2021	August 2021	September 2021	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022	April 2022	May 2022	June 2022
Rates Mail Out	✓											
Surveys and Polls		✓	✓	✓	✓	✓	✓	✓	✓			
Telephone Survey			✓	✓								
Formal submissions on publicly exhibited documents									✓			
Pop Up Activities at Events			✓	✓	✓	✓	✓					
Focus Groups									✓			
Vox Pops					✓							
Consultation with existing Council Committees		✓	✓	✓	✓	✓	✓	✓				
Consultations with Community Groups/organisations		✓	✓	✓	✓	✓	✓	✓				
Competitions				✓								
Workshops				✓								
Newspaper Advertising and Editorials/Social Media	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Activities with Children/Children's Parliament					✓							
Website	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Local Government Elections			✓									
Community Strategic Plan drafted								✓				
Community Strategic Plan on Exhibition									✓			
Community Strategic Plan adopted												✓

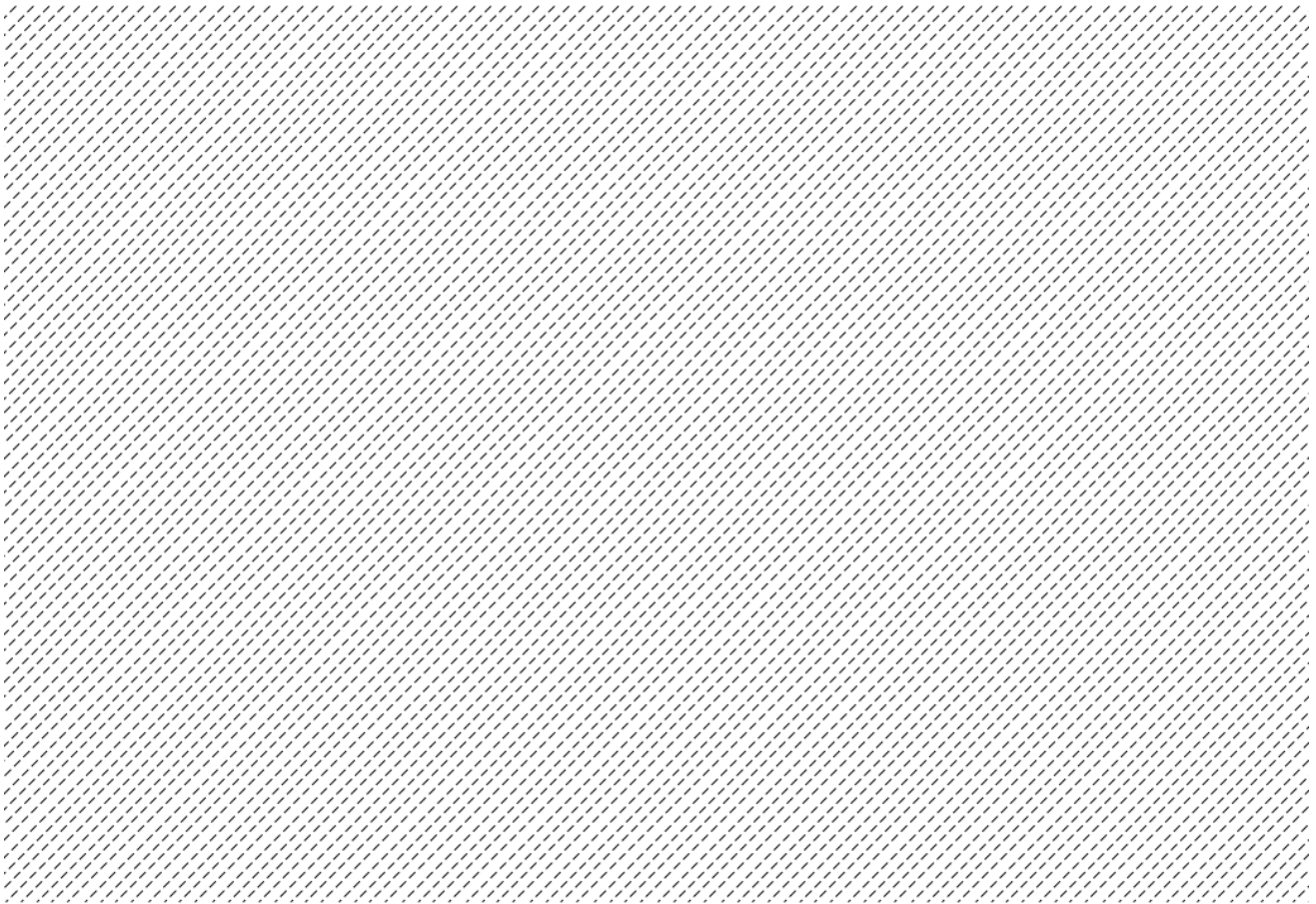
Disclaimer: Timing of planned activities may change due to unforeseen circumstances.

To be notified of opportunities to engage with Council, please contact the Corporate Strategy and Performance team on **1300 36 2170** or **CorporatePlanning@liverpool.nsw.gov.au**

APPENDIX

Community Engagement activities and measures

Activities	Measures	Key Performance Indicators
Rates Mail Out	<ul style="list-style-type: none"> Quantity of responses 	<ul style="list-style-type: none"> 800 responses received
Surveys and Polls	<ul style="list-style-type: none"> Quantity of responses Representative of resident population (i.e. Culturally and Linguistically Diverse (CALD), age) 	<ul style="list-style-type: none"> 300 responses received
Formal submissions on publicly exhibited documents	<ul style="list-style-type: none"> Quantity of responses 	<ul style="list-style-type: none"> 20 responses received
Pop Up Activities at Events	<ul style="list-style-type: none"> Number of people engaged Representative of resident population (i.e. CALD, age) Number of suburbs Number of activities held 	<ul style="list-style-type: none"> 100 people engaged 5 pop up activities 5 suburbs utilised to host pop-up activities
Focus Groups	<ul style="list-style-type: none"> Verbal and/or written feedback from all stakeholders Participant satisfaction 	<ul style="list-style-type: none"> 20 attendees per session 2 focus groups held 60% positive feedback from participants
Vox Pops	<ul style="list-style-type: none"> Verbal feedback Participant satisfaction 	<ul style="list-style-type: none"> 25% response rate of people approached
Consultation with existing Council Committees	<ul style="list-style-type: none"> Verbal and/or written feedback from stakeholders Participant satisfaction 	<ul style="list-style-type: none"> 30 responses from committee members
Consultations with Community Groups/organisations	<ul style="list-style-type: none"> Verbal and/or written feedback from all stakeholders Participant satisfaction 	<ul style="list-style-type: none"> 30 responses
Competitions	<ul style="list-style-type: none"> Number of entries in competition 	<ul style="list-style-type: none"> 500 reach 20 entries
Workshops	<ul style="list-style-type: none"> Number of workshops held Verbal and/or written feedback from stakeholders 	<ul style="list-style-type: none"> 5 internal workshops 100 responses
Newspaper Advertising and Editorials	<ul style="list-style-type: none"> Engagement reach Open rate on e-newsletter 	<ul style="list-style-type: none"> 50% e-newsletter open rate
Social Media	<ul style="list-style-type: none"> Reach 	<ul style="list-style-type: none"> Number of people reached
Activities with Children/Children's Parliament	<ul style="list-style-type: none"> Verbal and/or written feedback from all stakeholders 	<ul style="list-style-type: none"> 20 children involved
Website	<ul style="list-style-type: none"> Website traffic 	<ul style="list-style-type: none"> Number of website visits





If you do not understand this document, please ring the Telephone Interpreter Service (131 450) and ask them to contact Council (1300 362 170). Office hours are 8.30am to 5.00pm, Monday to Friday.

ARABIC

إذا لم تستطع فهم هذا الطلب ، الرجاء الاتصال بخدمة الترجمة الهاتفية على رقم 131 450 واسألهم أن يتصلوا بالبلدية على رقم 1300 362 170 . دوام ساعات العمل هي من الساعة 8.30 صباحًا إلى 5.00 بعد الظهر من الاثنين إلى الجمعة.

CHINESE

如您看不懂此信 / 申請書，請打電話給「電話翻譯服務台」(131 450)，請他們聯絡市政廳(市政廳電話 1300 362 170)。市政廳辦公時間，星期一至星期五，上午八時三十分至下午五時。

CROATIAN

Ako ne razumijete ovo pismo/aplikaciju, molimo nazovite Službu prevodilaca i tumača (Translating and Interpreting Service - na broj 131 450) i zamolite ih da nazovu Općinu (na 1300 362 170). Radno vrijeme je od 8.30 ujutro do 5.00 popodne, od ponedjeljka do petka.

GERMAN

Wenn Sie diesen Brief/Antrag nicht verstehen können, rufen Sie bitte den Telefon Dolmetscher Dienst (Telephone Interpreter Service) (131 450) an und lassen Sie sich vom Personal mit dem Gemeinderat (Council) in Verbindung setzen (1300 362 170). Geschäftsstunden sind von 8:30 bis 17:00 Uhr, montags bis freitags.

GREEK

Αν δεν καταλαβαίνετε αυτή την επιστολή/αίτηση, σας παρακαλούμε να τηλεφωνήσετε στην Τηλεφωνική Υπηρεσία Διεμνηνέων (131 450) και να τους ζητήσετε να επικοινωνήσουν με το Δημοτικό Συμβούλιο (1300 362 170). Τα γραφεία του είναι ανοιχτά από τις 8.30π.μ. μέχρι τις 5.00π.μ. από Δευτέρα μέχρι και Παρασκευή.

HINDI

अगर आप इस पत्र/आवेदन को पढ़कर समझ नहीं पा रहे हैं तो कृपया टेलीफोन सहायक सेवा (131 450) को फोन करें और उनसे काउंसिल (1300 362 170) से संपर्क करने को कहें। कार्यालय का समय सोमवार से शुक्रवार तक प्रातः ८:३० बजे से सायं ५:०० तक है।

ITALIAN

Se non comprendi questa lettera/questo modulo di domanda, telefona al Servizio traduzioni e interpreti al numero 131 450 chiedendo di essere messo in contatto con il Comune (telefono 1300 362 170). Orario d'ufficio: ore 8.30 -17.00, dal lunedì al venerdì.

KHMER

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Business Case for a Koala / Wildlife Hospital and Sanctuary in the Liverpool Local Government Area



**Report to Liverpool City Council
June 2021**

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Koala Hospital & Sanctuary: Liverpool LGA

Abbreviation	Description
AoO	Area of Occupancy
BC Act	<i>NSW Biodiversity Conservation Act 2016</i>
DPIE	Department of Planning, Industry and Environment
EoO	Extent of Occurrence
EPBC Act	<i>Environmental Protection and Biodiversity Conservation Act 1999</i>
IUCN	International Union for the Conservation of Nature
LCC	Liverpool City Council
LEP	Local Environmental Plan
LGA	Local Government Area
MCP	Minimum Convex Polygon
NSW	New South Wales
SW Sydney	South West Sydney
Sydney Wildlife	Sydney Metropolitan Wildlife Services Inc.
WIRES	NSW Wildlife Information, Rescue and Education Service Inc.

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Executive Summary

The koala (*Phascolarctos cinereus*) population of South West (SW) Sydney is unique in NSW in that populations are increasing, expanding westwards from Campbelltown and colonising the Georges River in Liverpool. To protect and enhance the local koala population, Liverpool City Council is considering the establishment of a koala-specific hospital and sanctuary, to care for sick, injured and orphaned koalas. A wildlife-general hospital which would serve a conservation function across the Liverpool Local Government Area (LGA) and SW Sydney more broadly, is also an option.

Needs Analysis was considered from the perspective of a koala-specific *versus* a wildlife-general hospital, informed in part by foundational data on the status of the Liverpool koala population. Analysis of 172 historical records dating from 1980 - 2019 indicates that the distribution of koalas is largely restricted to the south-east of the Liverpool LGA and spatial analyses of these records imply that there has been a substantial increase in several key range parameters when koala records leading up to 2002 are compared to 2002 - 2019. These outcomes include a four-fold increase in the geographic extent of koala occupancy across the LGA and a significant increase in occupancy levels within this geographic boundary (occupancy now estimated at $63.33\% \pm 4.74\%$ (SE) of the available habitat). Records which recur in the same localised area over a time frame which extends beyond a single koala lifespan indicates the presence of a resident population in south-eastern Liverpool. These outcomes confirm that the Liverpool koala population is currently in a process of recovery and expansion, presumably by way of recruitment from the Campbelltown area. SW Sydney represents something of an anomaly with substantive recent increases in the geographic extent of koala occupancy across both the Liverpool and Campbelltown LGAs standing in contrast to population decreases in the order of 28% – 66% across NSW more broadly, over a similar time period.

Wildlife carer records from the NSW Wildlife Information, Rescue and Education Service (WIRES) indicates that across an area which might reasonably be considered a catchment for a hospital, an average of ~26 koalas (to a maximum of 73 in 2018) are likely to require veterinary support annually. Interviews with existing veterinary hospitals that treat koalas in SW Sydney, approximates 20 koalas requiring care annually. This should be considered in the context of koala hospitals in other parts of the state which treat ~250 (Port Macquarie Koala Hospital) – ~350 (Lismore Koala Care and Research Centre) koalas annually. Such a difference in numbers recommends against the establishment of a koala-specific hospital facility in the Liverpool LGA however it does not diminish the demand for veterinary care of koalas in SW Sydney, just that this might be effectively achieved in the context of veterinary support for a range of native species.

BiolinkKoala Hospital & Sanctuary: Liverpool LGA

Considering native wildlife more broadly, data from wildlife carer returns to the Department of Planning, Industry and Environment (DPIE) reveals that the most commonly encountered threatened species requiring veterinary care in Liverpool and across a broader area which might be considered a catchment for a hospital, is the grey-headed flying fox (*Pteropus poliocephalus*), with an estimated average of 411 requiring assistance annually across the identified catchment area, a > 10-fold increase compared to the estimated average number of koalas thought to require veterinary intervention annually. The most common non-threatened native species groups requiring veterinary care across this same catchment are birds (45.05% of records), possums (11.63%) and reptiles (11.28%). Current options for veterinary treatment of native wildlife across SW Sydney are limited to an informal network of local veterinarians including those associated with the University of Sydney, namely the Camden Avian, Reptile & Exotic Pet Hospital and the Sydney School of Veterinary Science – specialist and generalist practice (Camperdown). Other providers in this network include the Canley Heights Veterinary Clinic, Kirrawee Veterinary Hospital, Campbelltown Veterinary Hospital, Ingleburn Veterinary Clinic and the Animal Referral Hospital (Homebush). The results of an online survey distributed to SW Sydney volunteer wildlife carers indicated a need for increased access to veterinary care and strong support (97% of respondents, $n = 38$) for the establishment of a wildlife hospital in the Liverpool LGA. It is noteworthy that the options for veterinary treatment of flying foxes are further limited by the need for appropriate vaccination of veterinary staff.

Needs Analysis also considered existing wildlife-tourism operators within a 100 km radius of the Liverpool LGA and identified 19 such zoos / sanctuaries which range in size from ~1.5 ha (WILDLIFE Sydney Zoo and SEALIFE aquarium combined) to ~111 ha (Sydney Zoo). These wildlife-tourism ventures are situated on land with a variety of land zonings, most commonly Rural (RU1, RU2) and Recreational (RE1, RE2), but with some ventures located on Residential (R1, R5), Special (SP1, SP3) and Environmental (E3, E4) lands. All of these wildlife-tourism ventures are located outside the Liverpool LGA and are therefore subject to the zoning requirements / consents of their individual Councils. Only one operator (Taronga) is located on a rail / ferry line. Eleven of the 19 ventures are identified as being likely competitors for a wildlife sanctuary in Liverpool, based on considerations of the current market environment. A unique opportunity in the wildlife-tourism market is identified as the presence of a wildlife hospital with some degree of public interaction, as well as educational opportunities and more standard wildlife experience offerings.

Subsequent to the Needs Analysis, a Feasibility Study addressed the viability of a wildlife hospital as a stand-alone undertaking by examining licencing, zoning and likely expenditure, inclusive of establishment and on-going costs. Veterinary facilities in the Liverpool LGA are allowable with consent

on zonings B1, B2, B3, B4, B6, IN2, R5, RU1, RU4 and RE2 and the spatial requirements are similar to that of a standard residentially-sized building. A useful minimum size of a permanent wildlife hospital is 0.1 ha based on the Camden Avian, Reptile & Exotic Pet Hospital. A relatively new occurrence in wildlife veterinary care is the establishment of mobile veterinary hospitals. These have diminished requirements in terms of space and zoning and can serve as traditional, stationary hospitals or move to the site of natural disasters, such as bushfires, if required. The establishment costs for a mobile veterinary hospital can vary considerably, from ~\$200,000 (based on the Sydney Wildlife Mobile care Unit) to ~\$700,000 (based on the Byron Bay Mobile Wildlife Hospital). Establishment costs for a static veterinary hospital within the Liverpool LGA are likely to be > \$900,000 based on property costs and the required equipment. The running costs of a veterinary hospital will vary according to the size and scope of the venture, with costs primarily from expenditure on staffing, animal husbandry (including food), consumables and record keeping / licencing requirements. For comparative purposes, the Port Stephens Council projected costs for its koala hospital for 2021 at \$451,235 and the Port Macquarie Koala Hospital estimates its running costs to average between ~\$700,000 to \$1 million annually. The funding and operational models of other similar ventures in native animal care were examined, with most being reliant on a combination of donations (including crowd funding) and tourism revenue. Both the Port Macquarie Koala Hospital and the Port Stephens Koala Sanctuary and Hospital are reportedly self-financing, though they are situated in areas which are established tourist destinations. The Koala Care and Research Facility (Lismore) and the Port Macquarie Koala Hospital have previously received grants, though neither of these granting schemes are currently available. It has been reported that Taronga Zoo recently received ~\$30 million from the NSW State Budget to expand their wildlife hospital.

A Feasibility Study for a wildlife hospital plus sanctuary (wildlife-tourism venture) identified multiple locations across the Liverpool LGA that met the size and zoning requirements. Recreationally zoned land (RE2) is the most amenable for these dual purposes, though there may be a heavy encumbrance on recreational lands across the LGA. Re-zoning of land could be considered, as could the potential of SP1 (Special Activities) zoning. Considering RE2 lands, there is a site near the Georges River which is partly Crown-owned and is in proximity to the expanding koala population, which may be of interest to Council. The Moorebank Voluntary Acquisition Scheme Area may also be an option for Council to consider. The next step by Council should include an assessment of the various options available, in terms of operational models, to determine which options are most likely to present a low-risk prospect to generate environmental benefits while creating economic, social and educational opportunities in the LGA.

1. Background

Koala (*Phascolarctos cinereus*) populations are in steep decline across much of New South Wales (NSW) (Lane *et al.* 2020; Adams-Hoskin *et al.* 2016) and the species is listed as threatened by both the *Environmental Protection and Biodiversity Conservation (EPBC) Act* (1999) and the *NSW Biodiversity Conservation (BC) Act* (2016). Koalas in South West (SW) Sydney are something of an anomaly in that populations in this region are increasing, specifically in and around the Campbelltown Local Government Area (LGA) (McAlpine 2015). The Campbelltown koala population is possibly unique in NSW in that it currently lacks overtly clinical signs of chlamydia (Close & Durnham 2016; Close, Ward & Phalen 2017). This growing population is expected to expand further into the adjacent Liverpool LGA to the west, particularly along the Georges River where fertile soils support preferred koala habitat (R. Close pers comm). Liverpool itself has a history of koala occupancy, albeit at low density, and the south-east portion of the Liverpool LGA intersects with the Bungonia Area of Regional Koala Significance (ARKS) (Rennison & Fisher 2017) (**Figure 1**). Koala populations in this region escaped the bulk of the fire impacts in the 2019 – 2020 bushfire season, which heavily impacted other ARKS (Lane *et al.* 2020). This safe-guarded the SW Sydney koala population in an immediate sense, however it remains increasingly vulnerable to fire risks in the future. Koalas in this region face the further challenge of existing at the peri-urban interface and are impacted by an increasing human population, and specifically by vehicle-strike and dog attack.

In this context, and borne from concern for the continued viability of free-ranging koala populations into the future, the *NSW Koala Population and Habitat in NSW Parliamentary Inquiry* was launched in 2019. The inquiry found, amongst other outcomes, that without urgent intervention wild koalas will possibly become extinct in NSW by 2050 (NSW Legislative Council 2020). Among the recommendations stemming from this inquiry was Recommendation 18 “*That the NSW government support the establishment of a well-resourced network of wildlife hospitals in key areas of the state, including the North Coast, North-West, Blue Mountains, South West Sydney, Southern Tablelands and South Coast, staffed by suitably qualified personnel and veterinarians, including funding where appropriate*” and Recommendation 24 “*That the NSW Government increase funding to local councils to support the implementation of local koala conservation initiatives.*”

Liverpool City Council (LCC) recognises that their LGA supports a resident koala population, as well as 51 other threatened fauna species (Liverpool Biodiversity Management Plan 2012), and that the LGA occurs within an area identified in Recommendation 18 from the Parliamentary Inquiry, pertaining to the establishment of wildlife hospitals. At present there are several koala-specific hospitals in NSW

which are located in areas with documented histories of koala occupancy and where koala populations have been the subject of extensive study, providing information on koala population trends, densities, locations and threats (e.g. PSC 2002; PMHC 2018; Biolink 2017a). The LCC has initiated this project to investigate the possibility of establishing a wildlife hospital, either koalas-specific or wildlife-general, within their LGA, which may be developed in association with a sanctuary / wildlife-tourism operation. Accordingly, LCC requires foundational information on their local koala population and an associated assessment of the feasibility of such a project.

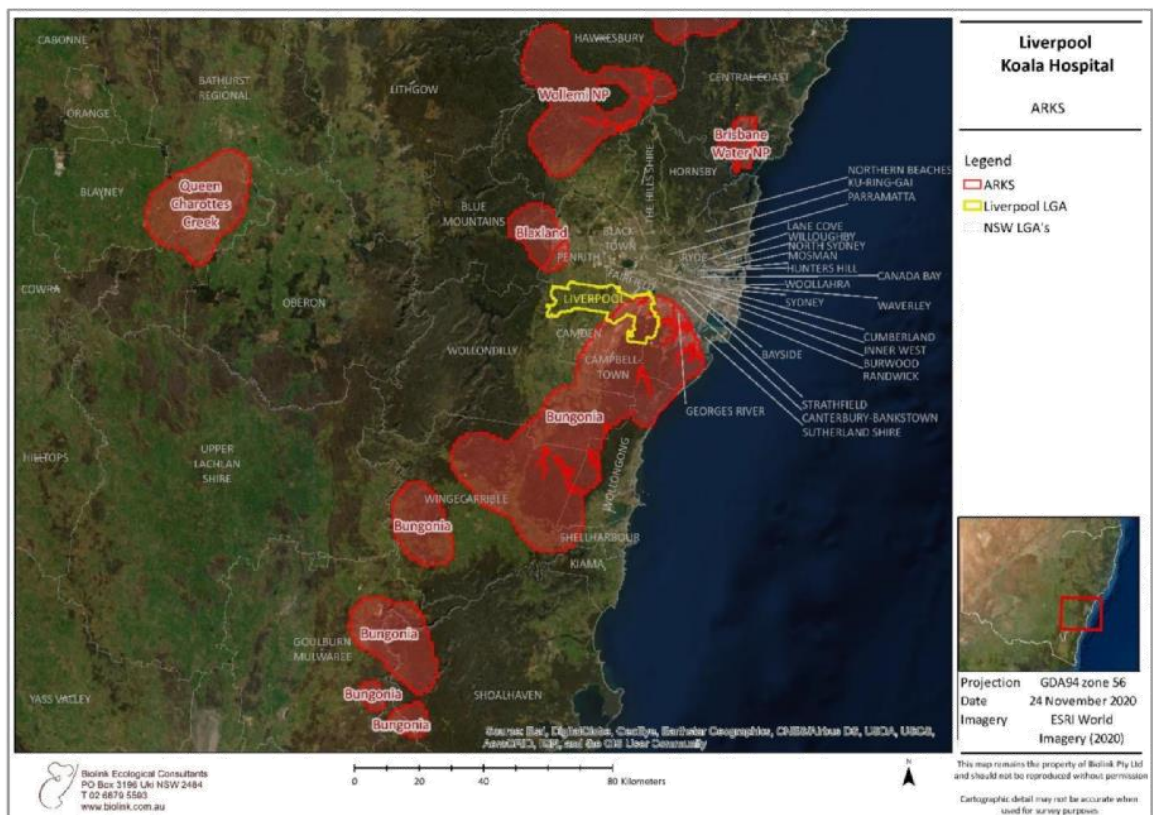


Figure 1: The Liverpool Local Government Area in the context of Areas of Regional Koala Significance (ARKS) across central-east NSW. Note the overlap between Liverpool and the north-western corner of the Bungonia ARKS.

1.1. Project aims and report structure

This project aims to determine the need for, and feasibility of, building a koala-specific or wildlife-general hospital situated in the Liverpool LGA. This is considered both as a stand-alone undertaking and in combination with a sanctuary / wildlife tourism operation.

A Needs Analysis will objectively address the need for a koala/wildlife hospital by establishing the following:

- Koala population trends across the Liverpool LGA.
- The number of koalas requiring veterinary care annually in the Liverpool LGA and across a broader geographic scope that might reasonably be considered a catchment for a koala hospital.
- The number and species of other native wildlife requiring veterinary care annually in the Liverpool LGA and across a broader geographic scope that might reasonably be considered a catchment for a wildlife hospital.
- Whether current options for veterinary care are meeting demands.
- Relationships with existing stakeholders.

The Needs Analysis will address the need for a koala/wildlife sanctuary as follows:

- Identify wildlife tourism operators within a 100 km radius of Liverpool LGA.
- Examine the current market environment and identify opportunities.

This is followed by a Feasibility Study which address the viability of a koala/wildlife hospital, as a stand-alone undertaking and in combination with a wildlife tourism venture. This will be informed by:

- Legal and licencing obligations
- Space and zoning requirements
- Estimated expenditure (establishment and on-going)
- Funding models
- Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis

Sections outlining the **key findings** of each component of this report are highlighted with this colouration.

1.2. Project scope and limitations

Koalas in Liverpool have been examined as a component of wider studies into the koala population of south-west Sydney (Close and Durnham 2016) however thus far there has not been an LGA-specific study of Liverpool's koala population which could establish population numbers / trends or key threatening processes. There is also not a preferred location for a wildlife hospital or sanctuary across the Liverpool LGA, or a current preference by Council regarding the size / scope of such a venture. This report aims to provide foundational information for Council to use, particularly in relation to the potential location and financial feasibility of different organisational structures for a wildlife hospital / sanctuary, along with informed estimates of expenditure (establishment and on-going costs) and legal / licencing requirements. In the absence of definitive information on the scope of the venture, the various sources of uncertainty are too large for detailed financial evaluation, including sensitivity analysis, to provide meaningful output. In light of this, financial planning is approached broadly with information provided only where it can be determined with some confidence.

2. Needs Analysis

The Needs Analysis in this report comprises two parts - initially it establishes the need for a koala-specific *versus* wildlife-general hospital from an animal welfare perspective, and secondly the demand for a wildlife-themed venture from a tourism perspective.

2.1. Koalas in Liverpool: records analysis

To establish basic information on the status of the Liverpool koala population, records obtained from government (Bionet) and higher research (Campbelltown Koala Research and Database; Close and Durnham 2016) sources were used to inform on trends in the geographic distribution of, and population trends for, koalas in the Liverpool LGA. The locational accuracy of these records is within 100 m (median value). A detailed explanation of this analysis including methodology can be found in **Appendix A**, a summary of which follows.

2.1.1 Records Analysis: summary of methods and results

Analysis of 172 historical records confirms the enduring presence of koalas across the Liverpool LGA with records generally increasing over time, from the first koala record in 1980 to a peak of 35 records in 2018 (**Figure 2**). Spatial analysis indicates substantive recent growth in the key parameter *Extent of Occurrence* (EoO), this being the area contained within the shortest continuous boundary that encompasses all records for a defined period of time and/or locality *i.e.*, this is the geographic extent of koala occupancy across the Liverpool LGA. **Figure 3** illustrates the westwards expansion of the EoO, with records *pre*-2002 being limited to Holsworthy in the east and *post*-2001 records being located as far west as Denham Court and Middleton Grange. This represents a four-fold increase in the EoO, estimated at 3,114 ha for the time period 1980 - 2001 and increasing to 13,461 ha for the period 2002 – 2019. The use of these timeframes is further explained in **Appendix A**.

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Koala Hospital & Sanctuary: Liverpool LGA

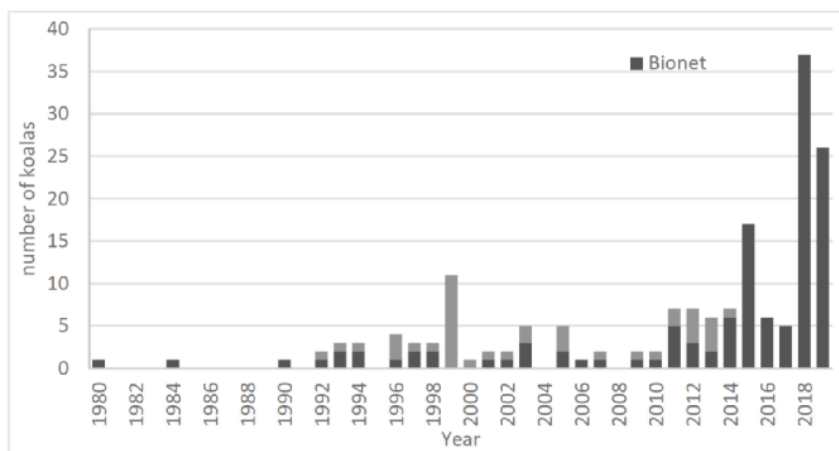


Figure 2. Frequency histogram detailing chronological distribution of 172 records for the Liverpool LGA for the period 1980 - 2019 with records originating from Bionet in black and Koala Research and Database in grey.

The related measure, *Area of Occupancy* (AoO) represents the proportional area which is actually occupied by koalas, reflecting the fact that a species will not usually occur throughout its entire EoO. When comparing AoO *pre-2002* to *post-2001* there is a significant increase in the proportional amount of habitat being utilised by koalas, from $27.33\% \pm 5.18\%$ (SE) for the time period 1980 – 2001, to $63.33\% \pm 4.74\%$ (SE) for the time period 2002 - 2019 (Levene's test: $F = 1.195$, $P = 0.397$, 9 *df*; $t = -5.125$, $P < 0.01$, 18 *df*).

The records were also examined for re-occurrence in the same localised area over periods that extend beyond a single koala life-span to reveal the location of resident koala populations. The results of this analysis implied that approximately 45.45% of the Liverpool LGA constrained by the EoO supported resident koala populations over the time period 2002 - 2019. **Figure 4** illustrates the widespread distribution of these areas, the largest being located to the east (10,000 ha) extending from Liverpool in the north, Voyager Point in the east, Holsworthy in the south and Casula in the west. A smaller area (2,500 ha) was identified near Edmonson Park and the western edge of Denham Court, albeit with most of this area situated outside of the Liverpool LGA.

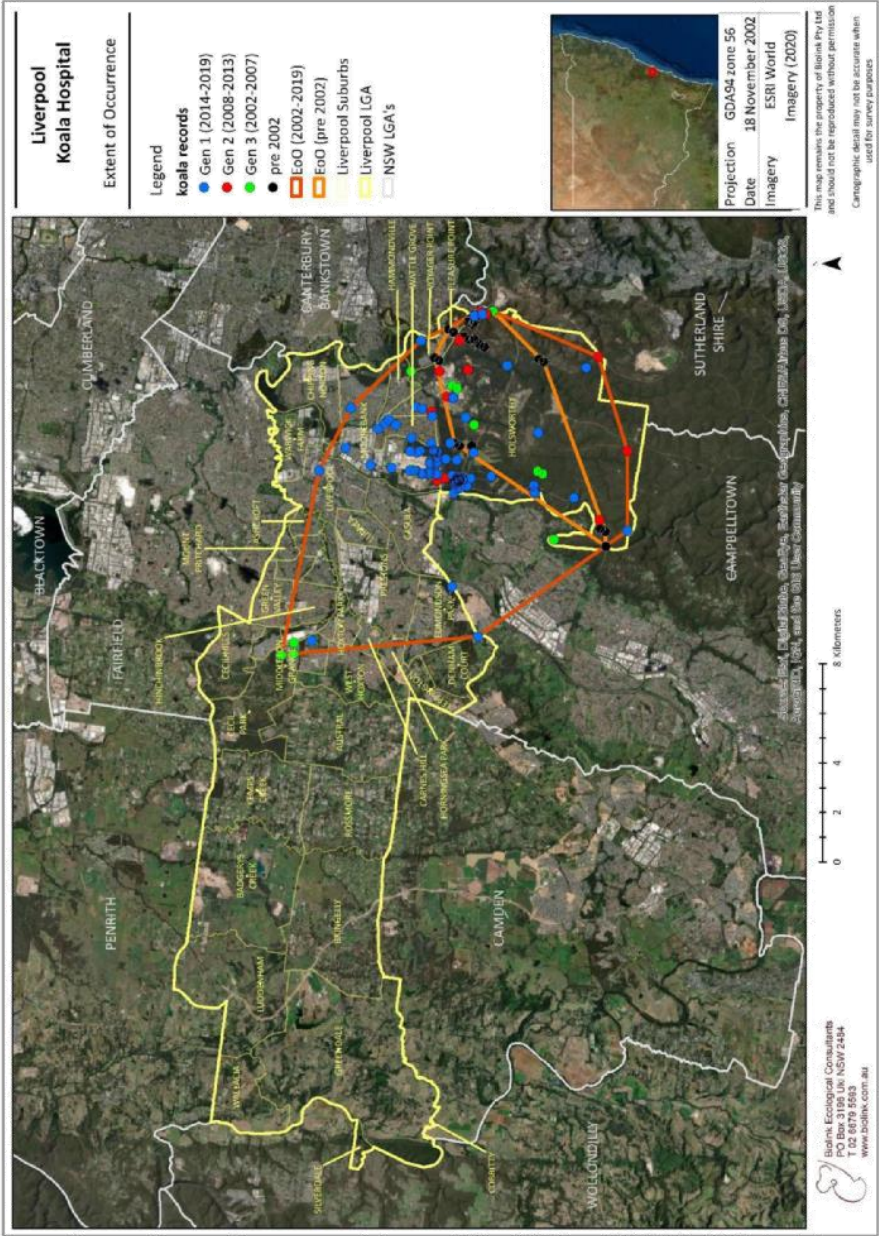


Figure 3. Extent of Occurrence (EoO) of koalas across the Liverpool Local Government Area over the two time periods 1980 - 2001 (light orange) and 2002 - 2019 (dark orange), the latter period of time representing the most recent three koala generation

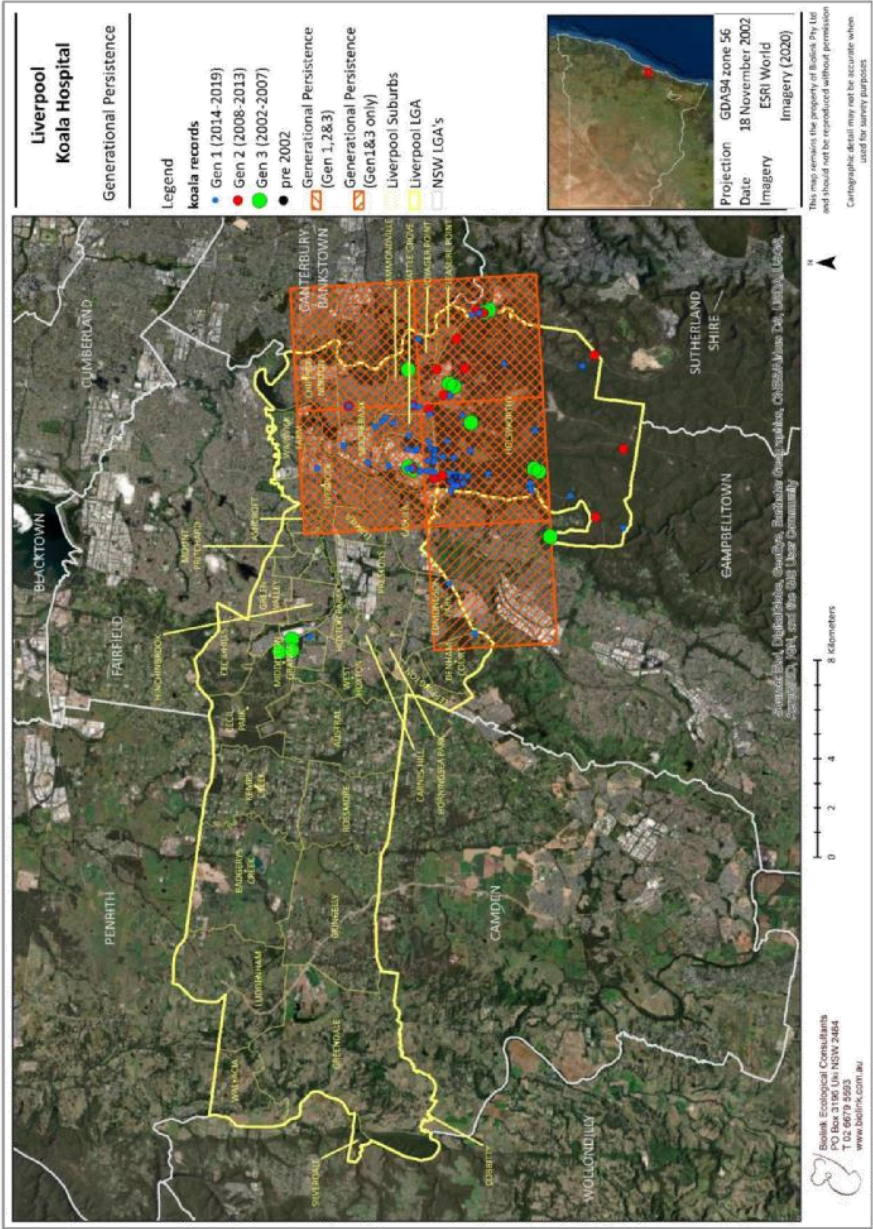


Figure 4. Areas of Generational Persistence (GP) across the Liverpool Local Government Area (orange cross-hatched cells) for the most recent three koala generations 2002-2019) and diagonally hatched cells for generation 1 and 3 only

2.1.2 Koala Records Analysis: discussion and key findings

Taken collectively, the results of spatial analyses indicate that koalas have a history of occupancy across Liverpool, specifically in the south-eastern portion of the LGA and this has increased significantly over time when comparing records *post*-2001 to the preceding period (*pre*-2002) (choice of timeframes explained in **Appendix A**). This result is concordant with expert opinion that the local koala population is in a process of recovery and expansion, moving west-wards out of Campbelltown and now colonising the area surrounding the Georges River in Liverpool (R. Close, pers comm; Close & Durnham 2016; Close *et al.* 2017). These findings stand in contrast to broad population trends for NSW, over which koala populations have decreased by at least 28% and up to 66% over a similar time period (2001 – 2018) (Lane *et al.* 2020). Liverpool and Campbelltown LGAs currently support the only known *chlamydia* free koala populations in the state and both LGAs have exhibited substantive recent increases in the geographic range over which koalas are recorded (Biolink 2021). Records analyses such as these are useful in revealing population trends but should not inform baseline population estimates, this figure being more accurately calculated via field survey. In summary;

- The first koala was recorded in the Liverpool LGA in 1980, with records increasing over time.
- Extent of Occurrence (EoO) - the geographic extent of koalas in the Liverpool LGA – has increased four-fold *post*-2001.
- Area of Occupancy (AoO) – the proportion of the geographic extent (EoO) which is actually occupied by resident koalas – has significantly increased *post*-2001.
- There is re-occurrence of koala records in the same localised areas over time-frames that extend beyond the lifespan of a single animal, indicating resident koala populations.

2.2. Koalas in Liverpool: wildlife carer data

It is a condition of native wildlife care licencing that all carers and carer organisations submit records annually to the Department of Planning, Industry and Environment (DPIE). These records were made available to Biolink by DPIE in November Of 2020, for the period 2013/2014 (financial year) to 2017/2018 (financial year) for 12 LGAs which might reasonably be expected to be a broad catchment for any proposed koala / wildlife hospital in Liverpool, these being:

- Blacktown
- Camden
- Campbelltown
- Canterbury-Bankstown
- Cumberland
- Fairfield

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- Liverpool
- Penrith
- Sutherland
- Wingecarribee
- Wollondilly
- Wollongong

Records were also made available by the NSW Wildlife Information, Rescue and Education Service (WIRES) for the period March 2005 – October 2020 for a similar geographic extent as the DPIE data, as covered by the following WIRES branches: South, Northwest, Wollondilly, Wingecarribee, Macarthur, Cumberland and Illawarra. These two data sets overlapped heavily and when compared in Microsoft Access the results were found to be identical for some species (for overlapping time periods), including koalas. Consequently, and because WIRES data covered a longer time period / had a higher level of geographic resolution (by identifying suburbs rather than LGAs), the WIRES dataset was used to examine current levels of veterinary care for koalas and DPIE data was used to examine trends in veterinary care for other native species.

2.2.1 WIRES data

Across the 42 suburbs that intersect with the Liverpool LGA, 59 koalas were recorded in the WIRES database for the period March 2005 – October 2020. The vast majority of these koalas were reported from Holsworthy (31), followed by Wattle Grove (8), Silverdale (6), Moorebank (4), Liverpool (3), Voyager Point (3), Pleasure Point (2), Denham Court (1) and Wallacia (1) (**Figure 6** and **Figure 7**).

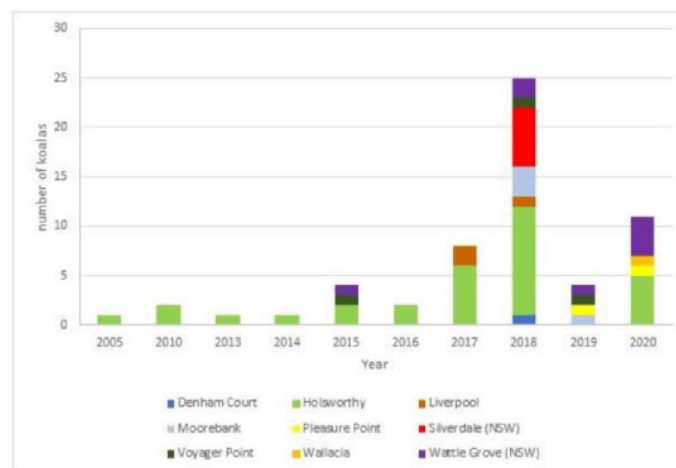


Figure 6. Koala records located in suburbs intersecting the Liverpool LGA, extracted from the WIRES database, partitioned by year (2005 – 2020) and colour coded by suburb. Years returning zero records are not shown.

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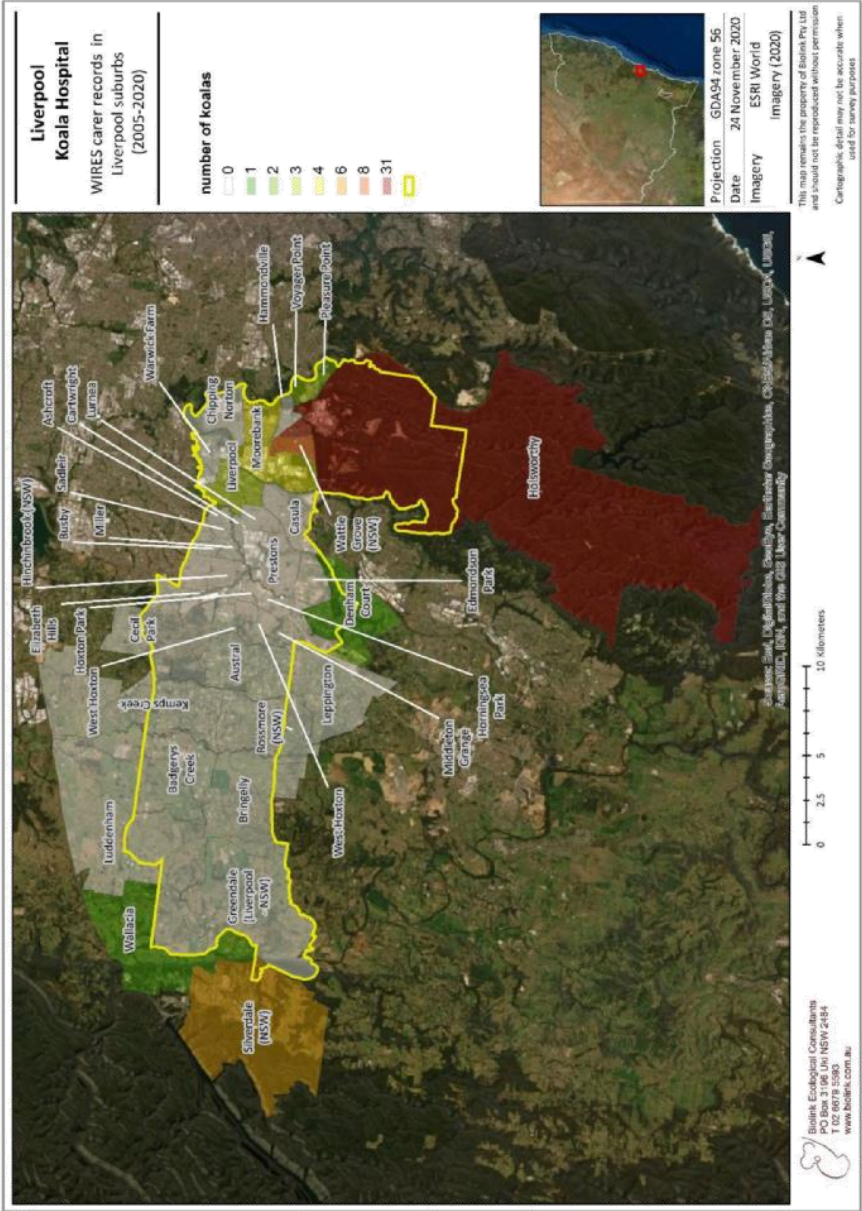


Figure 7. Total number of koalas reported to WIRES 2005 – 2020 from suburbs intersecting with the Liverpool Local Government Area. Most records were from Holsworth, followed by Wattle Grove, Silverdale, Moorebank, Liverpool, Voyager Point, Pleasure Point, Denham Court and Wallacia.

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Of these 59 koala records, 39 did not appear to involve a veterinary interaction, 11 being labelled as 'sightings', 17 as 'left and observed', six 'disappeared before rescue', three were 'relocated' (generally due to an animal being found in an unsuitable environment), and the further details for two were unknown. Of the 20 remaining koala records, seven were 'dead / died' - a category that can include roadkill that is never taken to a vet but may also include koalas that died while in veterinary care. Thirteen more koalas were considered to be likely recipients of veterinary intervention; two were euthanised, three went into care within the WIRES network; one had an unknown resolution by vet, three had resolution by a non-WIRES animal organisation and four were subsequently released (details not known). Taking the most inclusive approach and considering all koalas other than those labelled 'sightings', 'left and observed' 'disappeared before rescue', 'relocated' and 'unknown/unclassified', this averages 1.25 koalas annually in the Liverpool LGA who may have required veterinary intervention, ranging from zero in 2006, 2007, 2008, 2009, 2011, 2012 to seven in 2018.

Contextualising the results of koalas in the Liverpool LGA by examination of koala records across a broader area (geographic scope is defined for WIRES data in preceding section), from March 2005 – October 2020, 1,059 koalas were recorded in the WIRES database. The geographic distribution of these records is shown in **Figure 8**, with the top ten suburbs reporting koalas being;

1. St Helens Park – Campbelltown LGA (n =116)
2. Appin – Wollondilly LGA (n = 108)
3. Rouse – Campbelltown LGA (n = 108)
4. Leumeah – Campbelltown LGA (n = 57)
5. Airds – Campbelltown LGA (n = 53)
6. Campbelltown – Campbelltown LGA (n = 40)
7. Wedderburn – Campbelltown LGA (n = 38)
8. Kentlyn – Campbelltown LGA (n = 32)
9. Hollsworthy - Campbelltown / Liverpool LGAs (n = 31)
10. Macquarie Fields – Campbelltown LGA (n = 30)

Of these records 22% were 'sightings', 26% were 'left and observed', 9% 'escaped before rescue', 1% was 'relocated' and 3% were 'unknown/unclassified/deleted call sheet'. Considering koalas falling into the preceding categories as not being in need of veterinary care, ~413 koalas may have been recipients of veterinary care in some form over the aforementioned period, an estimated average of 25.81 koalas annually, ranging from one in 2005 to 73 in 2018.

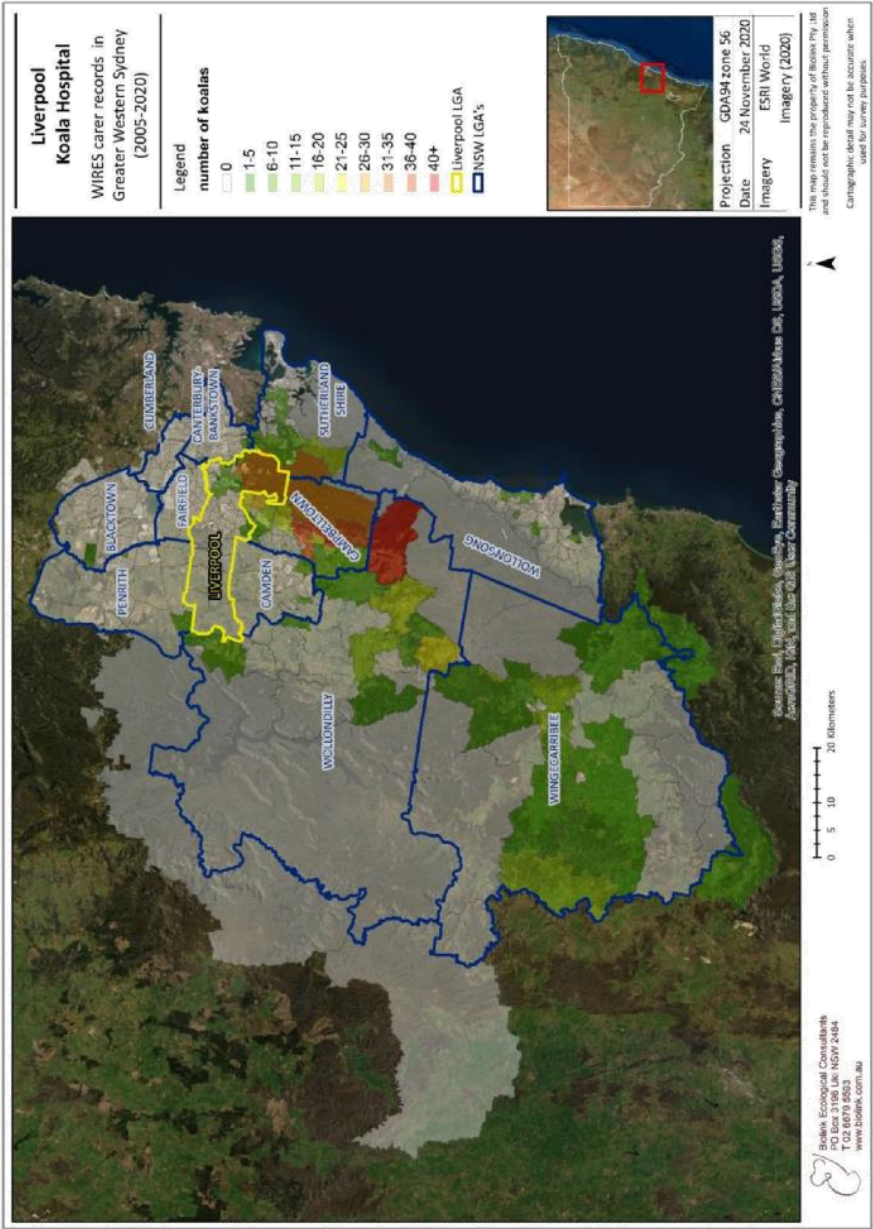


Figure 8. Total number of koalas reported to WIREs 2005 – 2020 across a geographic scope which might reasonably be expected to be a broad catchment for any proposed koala / wildlife hospital in the Liverpool Local Government Area.

2.2.2 Wildlife carer survey data

An online survey (created by Biolink with SurveyMonkey, for the purpose of addressing the aims of this project) was made available to the network of carers across South West (SW) Sydney inclusive of WIRES and Sydney Metropolitan Wildlife Services (Sydney Wildlife). The survey had 38 respondents, with six of these individuals reporting that they had one or more koalas requiring veterinary intervention annually.

2.2.3 Wildlife carer data (koalas): discussion and key findings

Koalas are occasionally reported to the wildlife care organisation WIRES in the Liverpool LGA (average 4.5 annually, 2005 - 2020), however most of these animals do not require veterinary assistance. It is estimated that an average of 1.25 koalas annually (2005 – 2020) required veterinary assistance across suburbs intersecting the Liverpool LGA (highest number being seven koalas in 2018). Over this same time period but across a geographic area which might reasonably be expected to be a broad catchment for any proposed koala / wildlife hospital in the Liverpool LGA (described in Section 2.2), an average of 81.46 koalas were reported to WIRES annually, with an estimated average of 25.81 koalas annually that may have required veterinary intervention (highest number being 73 in 2018). Information from the WIRES database was also reflected in DPIE carer returns records. Data shows that the incidence of koalas requiring veterinary assistance in SW Sydney is increasing over time, an unsurprising outcome of a koala population which is expanding at the peri-urban interface. Higher rates of veterinary interactions involving koalas are likely the consequence of an increasing koala population combined with increasing threats arising from urban growth, such as dog attack and vehicle strike.

Given uncertainties surrounding how this data is classified and with no definitive indication of the precise number of koalas for which veterinary assistance was sought or received, these figures must be taken as an estimate only which is likely to represent the upper limit of the number of koalas requiring clinical care. Information which further refines the estimate of koalas requiring care is presented in Section 2.5 of this report.

2.3. Native wildlife in Liverpool: wildlife carer data

To gain an understanding of which species present in the Liverpool LGA most commonly require veterinary assistance we utilise wildlife carer data provided by DPIE and the results of an online survey which was made available to the network of carers across SW Sydney inclusive of WIRES and Sydney Wildlife (survey also referred to in Section 2.2.2).

2.3.1 DPIE data

The dataset had 4,000 records representing 139 species of which 13 were threatened under the NSW BC Act (2016). As illustrated by previous examination of WIRES data, not all records reflect an animal for which veterinary assistance was sought, with a preponderance of records being 'sightings'. To identify which records most likely reflect animals for which veterinary care was sought, attributes in the database were used to inform a refinement process. The attributes identified as informative to this process were 'encounter type', 'animal condition' and 'fate'. There are various categories available for each of these attributes, those relevant to the refinement process are listed in **Table 2**.

Table 2. Three attributes in the DPIE database; 1) encounter type, 2) animal condition and 3) fate, which were used to exclude animals as not likely to require veterinary care. A record had to include a category listed in the table for each of the three attributes to be excluded.

Encounter type	exotic / captive	habitat loss	nuisance / problem fauna	stranded / unsuitable environment	unclassified / unknown	weather
Animal condition	alive / ok / healthy	dead / DOA / moribund	no apparent distress	fair or fair condition	nothing apparent	unclassified / unknown
Fate	could not locate / catch	disappeared before rescue	inquiry/advice given	left and observed	unclassified / unknown	

If a record included a category listed in **Table 2** for each of the three attributes being considered, then it was excluded from the dataset. By way of example, an animal whose encounter type was 'nuisance fauna', animal condition was 'no apparent distress' and fate was 'advice given', would be excluded from further consideration as likely to represent an animal for which veterinary care was not sought or received.

The resulting dataset, considered to represent animals who may have required care, had 3,839 records representing 125 species, of which 10 were threatened under the NSW BC Act (2016) (**Table 3**). The threatened species most commonly encountered / requiring veterinary care were:

1. grey-headed flying foxes (*Pteropus poliocephalus*) ($n = 101$)
2. koalas ($n = 21$)

These two species comprise 90.37% of the threatened species records assumed to require veterinary care, with all remaining species collectively having 13 records (**Table 3**).

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The top ten non-threatened species requiring veterinary assistance are:

1. rainbow lorikeet (*Trichoglossus haematodus*) ($n = 375$)
2. red-bellied black snake (*Pseudechis porphyriacus*) ($n = 278$)
3. unidentified snakes ($n = 261$)
4. eastern blue-tongue (*Tiliqua scincoides*) ($n = 249$)
5. Australian magpie (*Cracticus tibicen*) ($n = 216$)
6. unidentified birds ($n = 170$)
7. unidentified flying fox ($n = 138$)
8. sulphur-crested cockatoo (*Cacatua galerita*) ($n = 127$)
9. noisy minor (*Manorina melanocephala*) ($n = 115$)
10. galah (*Eolophus roseicapillus*) ($n = 77$)

It should be noted that records of unidentified flying foxes most likely refer to threatened grey-headed flying foxes, potentially increasing these numbers considerably (**Table 3**).

Table 3. Records for species potentially requiring veterinary assistance across the Liverpool LGA between financial years 2013/2014 – 2017/2018, according to a refined DPIE dataset.

Scientific name	Common Name	Threatened NSW BC Act	# records	# species	# records identified to species	# records not identified to species
Amphibia						
Non-threatened Amphibia			4	1	1	3
Aves						
Non-threatened Aves			2,091	79	1,569	522
<i>Geophaps scripta</i>	Squatter Pigeon	Y	1			
<i>Glossopsitta pusilla</i>	Little Lorikeet	Y	1			
<i>Neophema splendida</i>	Scarlet-Chested Parrot	Y	1			
<i>Ninox strenua</i>	Powerful Owl	Y	2			
Reptilia						
Non-threatened Reptilia			1,051	21	730	321
<i>Antaresia stimsoni</i>	Stimson's Python	Y	1			
<i>Caretta caretta</i> *	Loggerhead Turtle	Y	3			
<i>Chelonia mydas</i> *	Green Turtle	Y	3			
Mammalia						
Non-threatened Mammalia			562	14	251	311
<i>Cercartetus nanus</i>	Eastern Pygmy-Possum	Y	1			
<i>Phascolarctos cinereus</i>	Koala	Y	21			
<i>Pteropus poliocephalus</i>	Grey-Headed Flying-Fox	Y	101			

* Carer records from DPIE may give the location of the wildlife rescuer / carers home. We suggest that there may be a specialist marine turtle carer residing within the LGA.

The results for native wildlife in the Liverpool LGA were contextualised by examining DPIE records across a geographic area encompassing 12 LGAs which might reasonably be expected to be a broad catchment for any proposed koala / wildlife hospital in Liverpool (listed on pages 15 & 16). The same refinement process as outlined above was used to identify the animals which were most likely to have required veterinary care. The resulting dataset had 52,437 records, of which 4.87% ($n = 2,568$ records) were classified as threatened species under the NSW *BC Act* (2016). The two threatened species most commonly encountered / requiring veterinary care were:

1. grey-headed flying foxes ($n = 2,056$)
2. koalas ($n = 241$)

These two species comprise 89.45% of the threatened species records assumed to require veterinary care, with all remaining species having less than 40 records each (collectively 271 records) (**Appendix B**). Canterbury-Bankstown LGA had the highest recorded number of grey-headed flying foxes requiring veterinary assistance, followed by Wollongong and Blacktown (**Figure 9**). It should be noted that the numbers of grey-headed flying foxes are likely to be underestimated as there are a further 1,164 records of unidentified flying fox (*Pteropus sp.*) in the dataset that are not labelled as threatened.

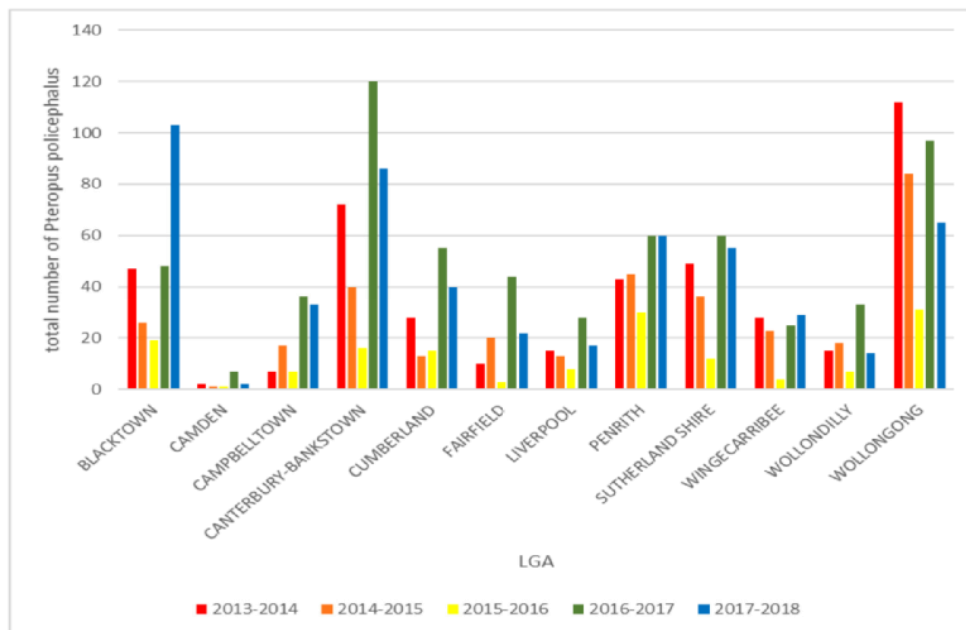


Figure 9. The number of grey-headed flying foxes (*Pteropus poliocephalus*) potentially requiring veterinary assistance across 12 LGAs between financial years 2013/2014 – 2017/2018, according to a refined DPIE dataset.

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Of the top ten non-threatened species requiring veterinary assistance there are five bird species and a single bird group:

- rainbow lorikeet (*T. haematodus*) ($n = 5,547$)
- Australian magpie (*C. tibicen*) ($n = 2,562$)
- sulphur-crested cockatoo (*C. galerita*) ($n = 2,069$)
- noisy minor (*M. melanocephala*) ($n = 1,550$)
- unidentified bird ($n = 1,423$)
- tawny frogmouth (*Podargus strigoides*) ($n = 1,192$).

The remaining species are comprised of two mammal species, both possums:

- common ringtail possum (*Pseudocheirus peregrinus*) ($n = 3,066$)
- common brushtail possum (*Trichosurus vulpecula*) ($n = 2,482$);

and two reptile species:

- eastern blue-tongue (*T. scincoides*) ($n = 3,055$)
- red-bellied black snake (*P. porphyriacus*) ($n = 1,266$).

2.3.2 Wildlife carer survey data

An online survey (created with SurveyMonkey by Biolink for the purposes of this report) was made available to the network of carers across SW Sydney inclusive of WIRES and Sydney Wildlife, in order to better inform on the species which are most requiring care / veterinary support. Wildlife carers were asked to rank the most commonly rescued group of animals and of the 38 respondents, 30% of carers ranked birds most highly, followed by possums (19%), bats inclusive of flying foxes (16%), reptiles (15%), amphibians (5%), wombats (5%), koalas (2%), gliders (1%) and other (1%). This was generally reflected in the groups of animals that they most commonly cared for, with 28% of carers ranking birds most highly, followed by possums (20%), reptiles (18%), bats inclusive of flying foxes (14%), macropods (6%), amphibians (5%), wombats (5%), koalas (2%), gliders (1%) and other (1%).

2.2.3 Wildlife carer data (all native species): discussion and key findings

According to a refined dataset of wildlife carer records provided by DPIE, the most commonly reported threatened species likely to require veterinary care across both the Liverpool LGA and a geographic area which might reasonably be expected to be a broad catchment for any proposed koala / wildlife hospital in the Liverpool LGA (described in Section 2.2), were:

1. grey-headed flying foxes
2. koalas

The number of grey-headed flying foxes records were close to 10-fold greater than the number of koala records. When considering all species regardless of threat classification, across a geographic scope which might reasonably approximate the catchment for a wildlife hospital, the group which most commonly require veterinary assistance are:

1. birds (45.05%)
2. possums (11.63%)
3. reptiles (11.28%).

This was also reflected in a survey of wildlife carers. This analysis deliberately took a broad approach to identifying the number of individual animals requiring veterinary care and these numbers must be taken as an estimate only, which is likely to represent the upper limit of those actually requiring clinical care. With this in mind, there may be as many as 411 flying-foxes requiring care annually (this being the estimated average per year), in addition to non-threatened species groups such as birds (estimated average 4,724 annually), possums (estimated average 1,219 annually) and reptiles (estimated average 1,183 annually).

2.4. Available care for koalas / wildlife in Liverpool

2.4.1 Available care for koalas

Across NSW there are four koala-specialist facilities, these being:

- Port Macquarie Koala Hospital
- Port Stephens Koala Sanctuary and Hospital
- Koala Care and Research Centre (Lismore)
- Koala Health Hub (Camperdown, Sydney)

The first three of the above listed are not within the vicinity of the Liverpool LGA. The Koala Health Hub operating from the University of Sydney (Camperdown) focuses on chlamydial disease and koala retrovirus, primarily providing diagnostic support (testing) and advice on clinical care. In this capacity, the Koala Health Hub collaborates with voluntary carer organisations (*i.e.* WIRES, Sydney Wildlife) and with the koala-specialist hospitals listed above.

Koalas requiring veterinary intervention in SW Sydney are typically taken to wildlife veterinarians associated with the Camden Avian, Reptile & Exotic Pet Hospital (Camden), or the Sydney School of Veterinary Science – specialist and generalist practice (Camperdown), these two clinics being associated with the University of Sydney (M. Krockenberger pers comm; V. Lett pers comm.). These centres serve a triage and critical care function with koalas then being sent either to trained wildlife

carers for recovery or to specialists such as orthopaedic surgeons or ocular specialists. Following triage, koalas are on occasion sent to Port Macquarie Koala Hospital. Discussion with Prof. Mark Krockenberger (Sydney School of Veterinary Science) indicated that University of Sydney veterinary hospitals treated or referred an estimated 10 – 15 koalas annually from the greater Sydney area, most commonly the result of dog attack or vehicle-strike. The Ingleburn Veterinary Clinic (privately operated) is also accessed by koala-centric wildlife carers and they estimate that they treat ~10 koalas annually (Ingleburn Veterinary Nurse, pers comm.).

2.4.2 Available care for native wildlife

Wildlife reporting data (DPIE / WIRES) does not include information on the specific clinics which are being accessed in any given area for the treatment of native species. Consequently, to inform this aspect of the report we relied on interviews with stakeholders including Deborrah Kerr (Director, Sydney Wildlife), Vicky Lett (WIRES), Prof. Mark Krockenberger (Sydney School of Veterinary Science), Dr. Robert Close (Koala Research Unit, University of Western Sydney) and Pat & Barry Durnham (local authorities on native species in Liverpool / Campbelltown). We also utilise the results of the SurveyMonkey wildlife carer survey (described in Section 2.2.2).

On this basis we report that native wildlife requiring care in the Liverpool LGA are triaged / serviced by two licenced, voluntary wildlife carer networks, these being:

- WIRES
- Sydney Wildlife

Carers from these organisations undergo formal training in the rescue and care of non-critical cases of injury, distress and disease in native species. Wildlife carers in Liverpool requiring veterinary support access an informal network of local veterinarians who treat native species and /or the Camden Avian, Reptile & Exotic Pet Hospital. Sydney Wildlife has established a mobile veterinary clinic, the aim of which is to provide professional clinical assistance to wildlife carers across Sydney while having the capacity to travel to bushfire or other natural disaster zones to offer assistance. This Sydney Wildlife Mobile Care Unit predominantly services the northern beaches of Sydney at present and is not heavily utilised by carers across SW Sydney. Carers from WIRES and Sydney Wildlife within Liverpool on rare occasions access veterinary help from Taronga Zoo.

Results of the SurveyMonkey wildlife carer survey (described in Section 2.2.2) indicates that 50% of carers utilise the Camden Avian, Reptile & Exotic Pet Hospital when seeking veterinary care. Other veterinary facilities used to a lesser degree by SW Sydney based wildlife carers include;

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- Canley Heights Veterinary Clinic
- Kirrawee Veterinary Hospital
- Campbelltown Veterinary Hospital
- Ingleburn Veterinary Clinic
- Animal Referral Hospital (Homebush)

These clinics were contacted and confirmed that they regularly treat native animals. Kirrawee, Camden, Canley Heights and the Animal Referral Hospital indicated that they sometimes treat flying-foxes though this depends on whether staff who have the appropriate vaccinations are on duty. Campbelltown and Ingleburn are not able to treat flying foxes at this time due to vaccination issues. The animal group most commonly cited as requiring veterinary care were birds (30% of respondents), followed by reptiles (20% of respondents).

Carers supported the establishment of a wildlife hospital in the Liverpool LGA, with 97% of respondents saying that they would travel to use the facility. When asked what would be most beneficial to them to support the care of wildlife, most carers (95%) said access to a Veterinary Practitioner would be most useful, followed by a soft-release facility and then a wildlife ambulance. The lack of trained staff to handle venomous reptiles and appropriately vaccinated staff to treat bats including flying foxes was raised multiple times.

2.4.3 Available care for koalas / native wildlife in SW Sydney: key findings

An informal network of local veterinary practices services the needs of koalas and other native wildlife in SW Sydney, with the Camden Avian, Reptile & Exotic Pet Hospital (associated with the University of Sydney) often serving a triage function and being the most commonly accessed (50% of wildlife carers commonly attend). Other providers include:

- Canley Heights Veterinary Clinic
- Kirrawee Veterinary Hospital
- Campbelltown Veterinary Hospital
- Ingleburn Veterinary Clinic
- Animal Referral Hospital (Homebush)
- Sydney School of Veterinary Science – specialist and generalist practice (Camperdown)

The results of an online survey distributed to SW Sydney volunteer wildlife carers (WIRES and Sydney Wildlife) indicated a need for increased access to veterinary care and strong support (97% of respondents, $n = 38$) for the establishment of a wildlife hospital in the Liverpool LGA. It is noteworthy that the options for veterinary treatment of flying foxes are limited by the need for appropriate vaccination of veterinary staff.

2.5. Wildlife Tourism in and around Liverpool

A 100 km radius of the Liverpool LGA was searched for wildlife tourism operators, the resulting data set consisting of 19 zoos, sanctuaries and reserves under a range of ownership models inclusive of government, charity and privately owned. None of these operations are located within the Liverpool LGA itself and range from 1.3 km – 98 km distant, as summarised in **Table 4** with locations shown in **Figure 10**.

2.5.1 *Current market environment*

Of the 19 wildlife tourism operations within 100 km of the Liverpool LGA (**Table 4**), two offer big cat experiences (Wildcat Conservation Centre and Zambi Wildlife Retreat) which are highly priced (\geq \$150), by private tour only and could arguably be considered to appeal to a very specific market. The SEALIFE aquarium offers a marine and freshwater experience only. A further two operations (Golden Ridge Animal Farm and Calmsley Hill City Farm) offer primarily a farm animal experience, though Calmsley Hill also holds native animals including koalas. Of the 14 remaining operations, two (Kangaroo Preservation Co-operative and Secret Creek Sanctuary) are only available for private tours, though these can be done at low-cost (\$10 - \$18). The 12 remaining operations all hold native animals and at least nine of them specifically hold koalas. All offer animal encounters, such as patting or feeding koalas. These 12 wildlife tourism operations cater to a range of markets, with Taronga and WILDLIFE Sydney Zoo appealing primarily to an international market, located as they are, in the city centre. They are more highly priced, \$26 - \$44 (Taronga) and \$33 - \$46 (WILDLIFE Sydney Zoo) *versus* an average \$16.75 - \$33.15 for the other ten operators, excluding Central Gardens Wildlife Exhibits which has free admission. There is one koala-centric wildlife venue, Koala Park Sanctuary in the Hornsby LGA, though at present they have a small number of resident koalas.

To identify wildlife tourism ventures that are most likely to be direct competitors with a venture in the Liverpool LGA we applied the following criteria;

- Holds terrestrial native species
- Is open to the public (not private bookings)
- If local market: < 20 km of Liverpool LGA
- If international / national market: < 75 km of Liverpool LGA

Applying the above criteria identified 11 wildlife tourism operators, marked with * in **Table 4**.

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Table 4. Wildlife tourism operators within a 100 km radius of the Liverpool Local Government Area.

Name	LGA	Km from Liverpool	Ownership model	Public/private	Native species	Exotic species	Primary Market	Distance to rail / ferry ^β	Wildlife hospital function	Zoning	Pooled lot size (ha)
Zambi Wildlife Retreat	Penrith	1.3 km	Animal welfare charity	Private tours (\$150)	Yes.	Yes	National	18.3 km	No	RU1	61
Calmsley Hill City Farm *	Fairfield	1.6 km	Privately owned	Public access (\$15 - \$27)	Yes. Includes koalas.	No (farm animals)	Local	9.5 km	No	-	77
Central Gardens Wildlife Exhibits *	Cumberland	7 km	Council owned	Public access (free admission)	Yes.	No	Local	4.2 km	No	RE1	12
Auburn Botanic Gardens *	Cumberland	7 km	Council owned	Public access (\$0 - \$5)	Yes	No	Local	3.8 km	No	RE1	11
Sydney Zoo *	Blacktown	10 km	Privately owned	Public access (\$20 - \$40)	Yes. Includes koalas	Yes	Local / National	3.8 km	No	-	182
Featherdale Sydney Wildlife Park *	Blacktown	13 km	Privately owned	Public access (\$15 - \$25)	Yes. Includes koalas	Birds only	Local / National	1.7 km	No	RE2	2.7
Symbio Wildlife Park *	Wollongong	18 km	Privately owned	Public access (\$22 - \$36)	Yes. Includes koalas	Yes	Local / National	5 km	No	SP3	6.5
Koala Park Sanctuary *	Hornsby	19 km	Privately owned	Public access (\$15 - \$28)	Yes. Includes koalas	No	Local / National	3.6 km	No	RE2	3.25

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WILDLIFE Sydney Zoo *	Sydney	22 km	Privately owned	Public access (\$33 - \$46)	Yes. Includes koalas	No	Inter-national	0.5 km	No	-	1.5
SEA LIFE aquarium	Sydney	22 km	Privately owned	Public access (\$33 - \$46)	Yes	No	Inter-national	0.5 km	No		
Kangaroo Protection Co-operative Wildlife Orphanage and Sanctuary	Hornsby	24 km	Animal welfare charity	Private bookings (\$ admission)	Yes	No	Local	11.6 km	Yes	RU2	3.7
Golden Ridge Animal Farm	The Hills Shire	26 km	Privately owned	Private bookings (\$20)	No	No (farm animals)	Local	9.3 km	No	RU6	2
Taronga Zoo *	Mosman	26 km	NSW Government owned	Public access (\$26 - \$44)	Yes. Includes koalas.	Yes	Inter-national	0 km	Yes	SP1	28
Wildcat Conservation Centre	Hawkesbury	36 km	Animal welfare charity	Private tours (\$340 - \$540)	No	Yes	National	12.6 km	No	RU1	14
Australian Walkabout Wildlife Park *	Central Coast	58 km	Privately owned	Public access (\$15 - \$30)	Yes. Includes koalas.	No	Local / National	16.2 km	No	RU2	12
Australian Reptile Park *	Central Coast	61 km	Privately owned	Public access (\$25 - \$43)	Yes. Includes koalas.	Yes	Local / National	9.1 km	No	E4	30.5
Secret Creek Sanctuary	Lithgow	64 km	Privately owned	Private tours (\$10 - \$18)	Yes. Includes koalas.	No	Local	2.2 km	No	R1	57

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Taralga Wildlife Park	Upper Lachlan Shire	90 km	Privately owned	Public access (\$ admission)	Yes	No (farm animals)	Local	55.9 km	No	R5	81
Shoalhaven Zoo and Adventure Park	Shoalhaven	98 km	Privately owned	Public access (\$17 - \$30)	Yes. Includes koalas.	Yes	Local / National	5.7 km	No	E3	13

* Most likely to be a direct competitor with a wildlife tourism venture in the Liverpool LGA (as outlined in Section 2.5).

β Distance to rail / ferry station is via road, not straight line

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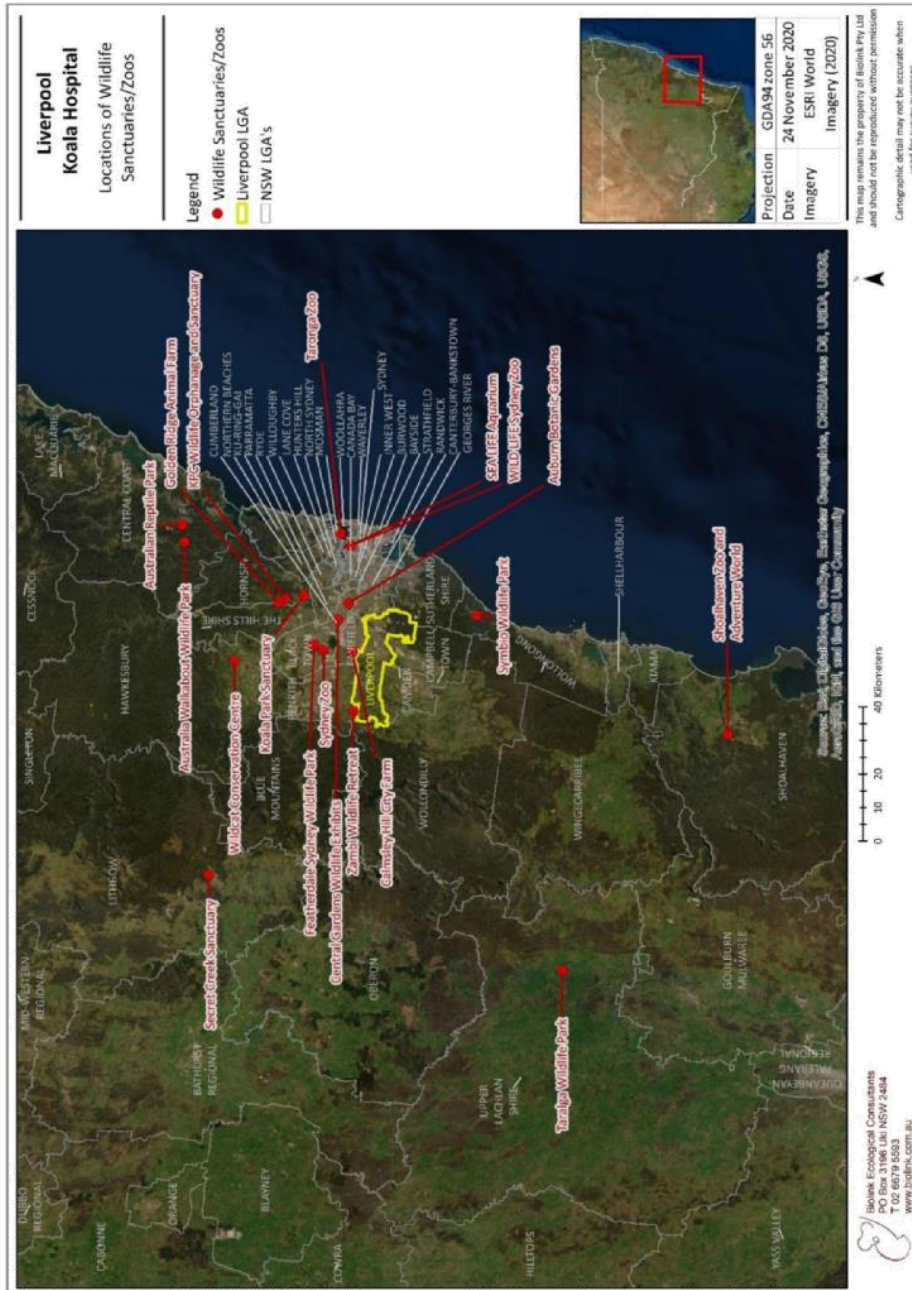


Figure 10. The location of wildlife tourism operators within a 100 km radius of the Liverpool Local Government Area

2.5.2 Current market opportunities

Of the 11 wildlife tourism operators identified as being the most likely competitors for a wildlife venture in Liverpool LGA (**Table 4**) - nine have koalas and prices range from free admission (Central Gardens Wildlife Exhibits, Cumberland LGA) to \$33 - \$46 (WILDLIFE Sydney Zoo, Sydney LGA). All have a clear nature focus and some have strong ties to conservation, however only Taronga Zoo is known to routinely treat sick and injured native wildlife. The Taronga Zoo Wildlife Hospital is promoted as treating and rehabilitating wildlife and is staffed by full-time Veterinary Practitioners. The NSW State government is partially funding a large extension to this hospital that will be named the 'Centre for Wildlife Rescue, Conservation Medicine and Species Recovery' and is expected to open in 2024.

Many of the identified wildlife tourism operations have a broad educational focus, with Sydney Zoo offering teacher toolkits for specific age ranges (*e.g.* Early Stage 1 & 2). Sydney Zoo is also informed by an indigenous aspect, with information on Aboriginal culture and history. Featherdale Sydney Wildlife Park has contracts with major bus companies who bring tourists on their way to the Blue Mountains, in order to have koala photos. Some operators are branching out into adventure activities, with recent additions of a playground and waterpark at Symbio.

The Georges River Environmental Education Centre is not identified as a wildlife-tourism operator, but is potentially informative to the process of identifying a vision for Council. This is an environmental education school that runs curriculum-based school excursions, explicitly linking activities / modules to key components of the curriculum (<https://georgesriv-e.schools.nsw.gov.au/>). Council is also currently pursuing the establishment of an Environmental Education Centre, which may further inform the vision for a wildlife hospital / sanctuary within the LGA. A possible opportunity that will remain relevant in the long-term is the establishment of a wildlife hospital with a degree of public interaction and a strong native animal conservation focus, a tree-tops walk to spot koalas and other arboreal mammals (kept under exhibited animal licencing), and the potential to include green buildings for venue bookings and explicit educational opportunities.

Unique aspects to consider:

- A wildlife hospital with some measure of public interaction, *e.g.* one-way windows in approved locations and / or keeping animals requiring permanent care as 'exhibited', each with their story told, akin to the Port Macquarie Koala Hospital (requires Exhibitors Licence).
- Opportunity to work with the University of Sydney School of Veterinary Science (M. Krokenberger, pers comm.).

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- Explicit educational outcomes met by linking activities / modules with the curriculum. There are 20 schools in the Liverpool LGA, and in Greater Western Sydney there are 310 Primary Schools and 104 High Schools.
- Tree-tops walk.

This could be pursued in combination with more standard offerings such as:

- Sanctuary which is open to the public and offering koala / native wildlife experiences - patting, feeding *etc* (requires Exhibitors Licence).
- Café
- Gift shop with philanthropic focus (wildlife hospital) *as per* the Port Macquarie Koala Hospital.

2.5.3 Wildlife Tourism in Liverpool: key findings

Needs Analysis for a native animal sanctuary / wildlife-tourism operation in the Liverpool LGA found the following:

- There are 19 wildlife tourism operators within a 100 km radius of Liverpool LGA
- Eleven (11) of these are characterized as likely competitors for a wildlife-tourism venture in the Liverpool LGA based on the market environment.
- Only one (1) of these 11 likely competitors currently supports a wildlife hospital (Taronga), which is currently undergoing a period of expansion, partly funded by NSW State Budget.
- Proximity of the identified wildlife-tourism operators to rail / ferry transport varies (0 km – 16.2 km) with only one (Taronga) directly located on a rail / ferry line.
- A unique opportunity in the current market is identified as the presence of a functioning wildlife hospital with opportunities for public interaction. Other aspects could include a strong focus on native animal conservation / collaboration with the University of Sydney School of Veterinary Science / educational focus partnering with schools to deliver curriculum-based programs / tree tops walks.

2.6. Needs Analysis: Final Recommendations

The number of koalas that are currently requiring veterinary care across an area which could reasonably be considered a catchment for a koala/wildlife hospital in the Liverpool LGA is 20¹ – 73² koalas annually - substantially less than that of established koala hospitals. Port Macquarie Koala Hospital treats ~250 koalas annually (C. Flanagan pers comm.) and the Koala Care and Research Facility (Lismore) treated 353 koalas in 2019 (K. Jefferey pers comm.). Such a difference in numbers recommends against the establishment of a koala-specific hospital facility in the Liverpool LGA however it does not diminish the growing need for veterinary care of koalas in SW Sydney, just that this might be effectively achieved in the context of veterinary support for a broader range of native species. There are substantial numbers of other native species requiring veterinary care, including grey-headed flying foxes, the threatened species for which veterinary care is most commonly sought (estimated average 411 annually across a likely hospital catchment).

¹ Based on interviews with M. Krokenberger (Camden Reptile, Avian & Exotic Pet Hospital) and Ingleburn Veterinary Clinic.

² Based on refined DPIE wildlife carer records, largest number of koalas likely to have received veterinary assistance in any given year (2018).

3. Feasibility Study – Wildlife hospital

This portion of the report addresses the viability of a wildlife hospital as a stand-alone undertaking by providing necessary information regarding licencing, zoning, space requirements and likely expenditure (establishment and on-going). The potential for such an operation to be self-funding, not reliant exclusively on donations or external sources of funding, will be addressed by exploring the funding models and organisational structures of similar ventures.

3.1. Legal and licencing obligations

The required licensing is akin to that for a standard Veterinary Practice. Veterinary Practitioners must be registered with the Veterinary Practitioners Board of NSW according to the *NSW Veterinary Practice Act 2003 / Licensing and Registration (Uniform Procedures) Act 2002*. Medical records must be retained for a minimum period, usually for seven years (ASAV Manual of Hospital Standards 2011).

Licenses are required for any premise where procedures requiring a general or spinal anaesthetic are performed (referred to as major surgery in the *NSW Veterinary Practice Act 2003*). Licensed premises are referred to as hospitals. This licence applies to the premises itself and the type of surgery performed will determine the requirements and the type of licence as either a;

- small animal hospital licence
- large animal hospital licence, or a
- large and small (or mixed) animal hospital licence.

Various species of native wildlife are considered to be ‘small’ and others ‘large’ (Minimum Requirements for Veterinary Hospitals – Veterinary Practitioners Board). All hospitals must have a Superintendent which requires a separate registration and application process.

3.2. Space and zoning requirements

Veterinary facilities are allowable with consent on the following land zonings - B1, B2, B3, B4, B6, IN2, R5, RU1, RU4 and RE2, according to the Liverpool Local Environmental Plan (NSW Government 2020). The required space depends on the scope of the venture. A standard veterinary clinic can be run in a residentially-sized building in accordance with Minimum Requirements for Veterinary Hospitals. The sizes of other wildlife hospitals are shown in **Table 5**. Areas with zoning that allows veterinary facilities with consent are shown in **Figure 11**.

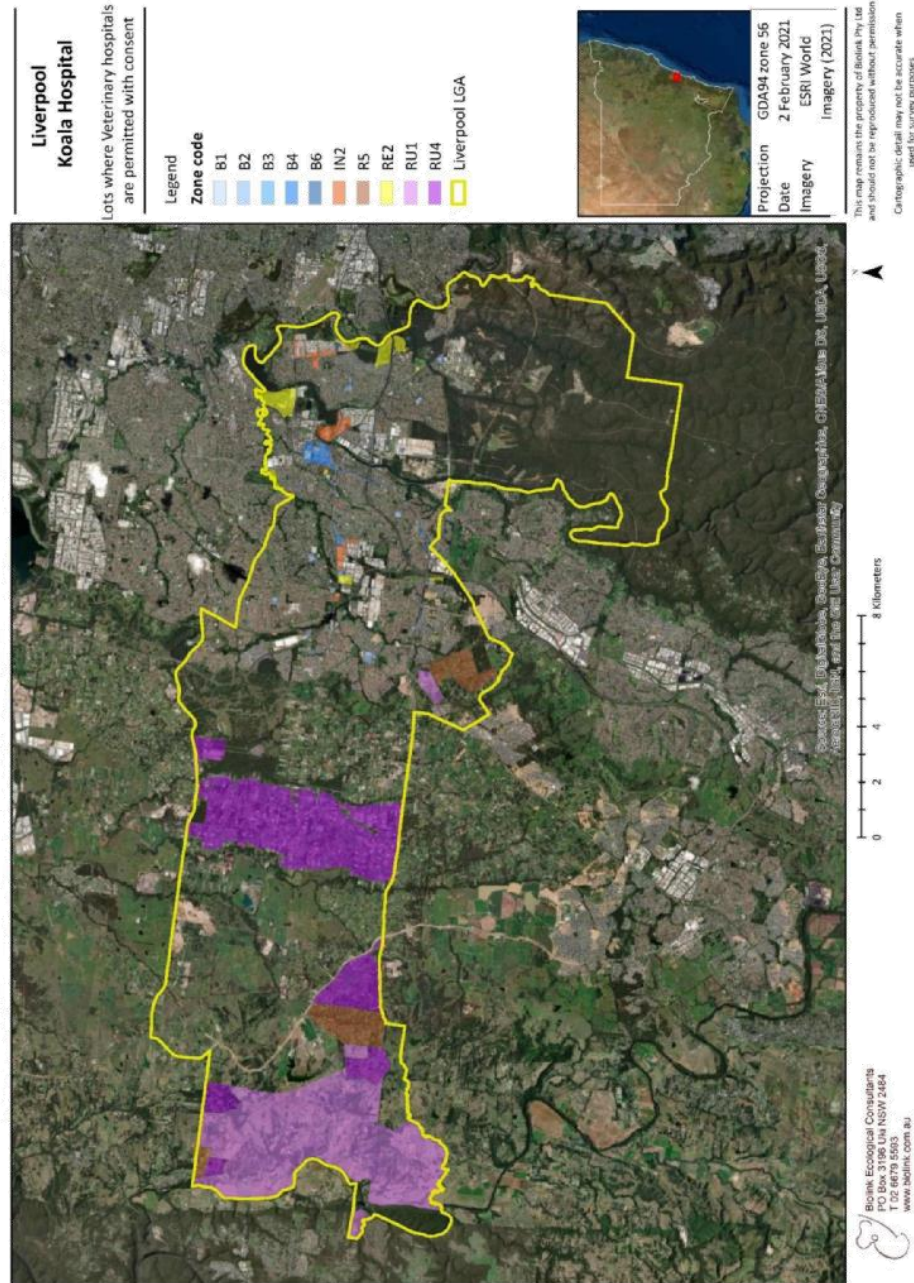


Figure 11. Areas across the Liverpool LGA with zoning that allows veterinary facilities with consent (B1, B2, B3, B4, B6, IN2, R5, RE2, RU1, RU4).

Table 5: Sizes and underlying land-zoning of selected wildlife hospitals in NSW

	Zoning	Hospital size*	Venue size ^β
Port Macquarie Koala Hospital	E4	0.3 ha	10 ha
Koala Care and Research Facility / Friends of the Koala (Lismore)	RE1	0.6 ha	1.72 ha
Port Stephens Koala Sanctuary and Hospital	RE1	0.2 ha	8.2 ha
Camden Avian, Reptile & Exotic Pet Hospital	SP1	0.1 ha	-

* Does not include plantations used for food. Clinic / hospital dimensions only.

β Does not include plantations used for food. Figure is indicative of the size of the venture including any wildlife-tourism components.

3.2.1 Mobile veterinary clinics

Mobile Veterinary Clinics are a relatively new phenomenon, with two mobile clinics / hospitals specifically for native wildlife known to be operating in NSW. These are the Byron Bay Mobile Wildlife Hospital (licensed as a hospital) and the Sydney Wildlife Mobile Care Unit, both discussed further in Sections 3.3.2 and 3.5 of this report. In the context of space and zoning, mobile clinics have diminished requirements and are able to park in most locations that can accommodate them.

3.3. Establishment costs

Information provided in this section of the report is based in part on interviews with Veterinary Practitioners and Clinical Directors of koala-specific and wildlife-general hospitals, including the Port Macquarie Koala Hospital, Byron Bay Wildlife Hospital, Sydney Wildlife and the Camden Avian, Reptile & Exotic Pet Hospital. Sources are acknowledged through-out.

3.3.1 Equipment

Equipment costs will vary according to how independent the hospital aims to be. Port Macquarie Koala Hospital partners with the Port Macquarie Veterinary Hospital, who performs their x-rays and theatre surgery (C. Flanagan pers comm.). Other Veterinary Practices, including the Camden Avian, Reptile & Exotic Pet Hospital uses specialist services of other clinics as required (M. Krokenberger pers comm.). Notwithstanding this, the typical equipment required may include;

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- Exam and procedure tables
- Lighting
- Ultrasound machine
- Digital x-ray imaging machine
- Anaesthetic machine
- IV pump
- Autoclave and sterilizer
- Veterinary stethoscope
- Cauterising machine
- Scales
- Centrifuges
- Microscopes
- Respiratory ventilators

In total the cost is upwards of ~\$150,000, but these needs can arguably be moderated by the level of collaboration with other clinics.

3.3.2 Venue

This depends on the scope of the venture, but Veterinary Clinics are likely to reflect typical real estate costs of the region with a minimum space requirement of 150 m², plus remodelling costs. Based on current (November 2020) real estate prices in the Liverpool LGA for areas with appropriate zoning for a veterinary facility, venue costs are likely to start at \$750,000 for a permanent hospital location (realestate.com.au).

An exception to this is the case of mobile veterinary hospitals / clinics. Of the two mobile hospitals / clinics which are known to be operating in NSW, the Byron Bay Mobile Wildlife Hospital cost ~\$700,000 for all establishment expenses, inclusive of the venue (a highly modified semi-trailer) and equipment (S. Van Mill pers comm.). The Sydney Wildlife Mobile Care Unit (not a licensed hospital) cost ~\$200,000 for all establishment expenses, inclusive of the venue (a highly modified campervan) and equipment (D. Kerr pers comm.).

Veterinary hospitals require appropriate licencing as outlined in Section 3.1. This costs \$600 (licence fee \$150 annually, plus \$250 application fee).

3.4. On-going costs

Information provided in this section of the report is based in part on interviews with Veterinary Practitioners and Clinical Directors of koala-specific and wildlife-general hospitals and clinics, including the Port Macquarie Koala Hospital, Byron Bay Wildlife Hospital, Sydney Wildlife, the Camden Avian,

Reptile & Exotic Pet Hospital and Paul O'Callaghan, formerly of Lone Pine Koala Sanctuary and Australia Zoo. Sources are acknowledged through-out.

The running costs of a veterinary hospital vary according to its size and scope. The Port Macquarie Koala Hospital treats ~250 koalas annually and estimates its running costs to average between ~\$700,000 to \$1 million annually, including the care of permanent care koalas (C. Flanagan pers comm.). These costs originate primarily from expenditure on staffing, animal husbandry (including food), consumables and record keeping / licensing requirements. The Port Stephens Council projected costs for its koala hospital for 2021 at \$451,235 (PSC 2017).

3.4.1 Staff

To meet licensing obligations a veterinary facility requires a Veterinary Surgeon Level 4 - \$38.28 per hour (\$72,696 pa) based on Pay Guide - Animal Care and Veterinary Services Award 2010 (Australian Government 2019). A Veterinary Nurse Level 2 costs - \$826.60pw (\$42, 983 pa) according to the same award rates.

3.4.2 Husbandry / food

The short-term husbandry of small animals in a veterinary hospital must meet minimum requirements as outlined by the Veterinary Practitioners Board of NSW, including adequate heating / cooling, ventilation, sound proofing and being of adequate size and with processes for the safe toileting of the species of animals present, who are to be individually accommodated.

Costs of feeding animals in long-term care can be considerable. A single koala in permanent care requires 1,000 trees planted in a plantation, utilising a space of 1 - 2 ha, in order to meet its nutritional needs (Jackson *et al.* 2000; P. O'Callaghan pers comm.). Housing permanent care koalas and other native species can translate to costs in the thousands per week (P. O'Callaghan pers comm.). A more economically viable option is to serve a critical care veterinary function, with wildlife carers taking animals home after treatment, greatly reducing the cost of food. It is worth noting that wildlife carers (koala carers specifically) tend to prefer this arrangement (V. Lett pers comm.). The costs of permanent care animals are covered in Section 4.3 of this report.

3.4.3 Consumables

It is estimated that ~20% of the overall running costs of a wildlife hospital relate to consumables (M. Krokenberger pers comm.). Consequently, a final figure for this depends on the scope of the venture.

3.5. Funding Models

Information provided in this section of the report is based on interviews with Veterinary Practitioners and Clinical Directors of koala-specific and wildlife-general hospitals, including the Port Macquarie Koala Hospital, The Koala Care and Research Centre, Byron Bay Wildlife Hospital and Sydney Wildlife, as well as Veterinary Nurses at clinics and hospitals who take wildlife as a portion of their clients, including the Campbelltown Veterinary Hospital, Kirrawee Veterinary Hospital and Ingleburn Veterinary Clinic. Sources are acknowledged through-out and information is summarised in **Table 6**.

3.5.1 *Koala hospitals*

Port Macquarie Koala Hospital (C. Flanagan pers comm.)

The Port Macquarie Koala Hospital was established with donations in 1973, by the Port Macquarie Koala Preservation Society and is currently overseen by Management Committee / Board. They have no set catchment but generally take sick, injured and orphaned koalas from Nambucca to Taree, though they will take koalas from further afield to support the care of difficult cases.

This is a charitable organisation with ~150 volunteers running various aspects of their operation, from animal husbandry to social media and staffing of the gift shop. Volunteers doing animal husbandry ideally require a Certificate 3 in Captive Animal Management. The only paid positions are Administration, Clinical Director (Veterinary Practitioner), Assistant Clinical Director, Project Manager and several Leaf Collectors (food plantations).

The Port Macquarie Koala Hospital has ~300 visitors per day and ~100,000 annually. Visitors are 50:50 Australian and international, with the main international visitors being English and German. Entry to the facility is by donation, which is optional.

The operation is financially self-sustaining being funded by donation on entry (>\$500,000 annually), the gift shop, and other philanthropic donations. Following the 2019 / 2020 bushfires they Crowd Funded > \$7 million. They also received a Re-start Tourism Grant (Australian Government, no longer current) several years ago, in part due to their geographic location. They are in a growth phase of their operation and are in the process of pairing with another tourist venture (ropes / adventure course) to increase their visibility.

Friends of the Koala / Koala Care and Research Facility (Lismore) (K. Jeffery pers comm.)

Friends of the Koala was established by volunteers in 1986 and is an Incorporated charity and volunteer organisation overseen by a Management Committee. They have no set catchment but their

focus is the rescue, rehabilitation and release of koalas in the Northern Rivers of NSW, servicing an area from Tenterfield and Grafton to the Gold Coast.

This charitable organisation has a volunteer base of ~100 people. Whilst the Koala Care and Research Facility was established by Friends of the Koala in 1996 to treat sick and injured animals, they were only granted approval to operate as a veterinary hospital in mid-2020. They employ one part-time Superintendent Veterinarian and one part-time Veterinarian Nurse. They are looking to employ a Subordinate Veterinarian and another part-time Veterinarian Nurse. They oversee a number of functions, including a 24-hour rescue line, a sightings database, they distribute koala food trees, offer advice to landholders and engage in environmental advocacy.

As aforementioned, they have only recently been officially approved to operate a koala hospital, but they treated 353 koalas in some capacity in 2019. Upon approval as a hospital they established a tours program, but there are no firm estimates on the number of visitors or revenue raised, as they closed out of precaution regarding covid-19. The venture is currently sustained by donations and a grant (the granting program was not specified but is apparently no longer offered).

3.5.2 *Wildlife hospitals*

Byron Bay Wildlife Hospital (S. Van Mill pers comm.)

Whilst not yet operational, the Byron Bay Wildlife Hospital was founded by donations in 2019, driven by two volunteer Veterinarians. It is run as a charity with a CEO, Directors and Secretary. The organisation has no set catchment but focuses on the Northern Rivers of NSW. They are distinguished from the nearby Koala Care and Research Facility (Lismore) in that they aim to treat all native species and are not specific to koalas. As this charitable organisation has not yet started treating wildlife, it is not possible to discern its revenue and financial position. It has commissioned the building of a mobile hospital in a semi-trailer (at a cost of ~\$700,000) to serve as a disaster response unit and also plans a separate permanent location, wildlife ambulance service and a wildlife refuge. They aim to upskill other Veterinary Practitioners and have built a network that includes Currumbin (QLD), SeaWorld (QLD), Australia Zoo (QLD), the University of Queensland and Taronga Zoo (NSW).

Funding has so far been largely from donation (includes \$250,000 from the World Wide Fund for Nature), Crowd Funding after the bushfires, an online shop, corporate partners (brewing company making Koala Lager), philanthropic partners and patrons (musician Iggy Pop). They are in talks to develop a reality show which would serve as another revenue stream. Their estimated first year budget is \$1 million.

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3.5.3 *Mobile care units*

The Byron Bay Mobile Wildlife Hospital is described above as part of the Byron Bay Wildlife Hospital.

Sydney Wildlife Mobile Care Unit (D. Kerr pers comm.)

This mobile care unit started operating in early 2020 and contributed to the bushfire response. It is run by Sydney Wildlife, a voluntary charitable organisation launched in 1997. They have no paid staff. The Mobile Care Unit (licenced as a veterinary clinic rather than a veterinary hospital) was Crowd Funded over a period of approximately two years and cost ~\$200,000. It is staffed by volunteer Veterinary Practitioners who devote a portion of their working week to the project. The unit was designed as a disaster response service and to support the needs of wildlife carers who volunteer within the organisation. It is most frequently parked in the Northern Beaches region of Sydney, due to the availability of volunteer Veterinary Practitioners in that area. Due to its voluntary staffing it does not have large financial overheads and is funded entirely by donations to Sydney Wildlife.

3.5.4 *Generalist vets*

Camden Avian, Reptile & Exotic Pet Hospital (M. Krokenberger pers comm.)

This is a University of Sydney (Sydney School of Veterinary Science) hospital with some staffing from University of Sydney staff members and student Veterinarians gaining experience. As it is run by the University of Sydney and serves a teaching function, it is difficult to discern if it is financially self-sustaining. Revenue comes from paying patients (domestic animals), who are ≥ 50% of the clients. This subsidises, in part, the wildlife care. There may be opportunities for LCC to collaborate with the Sydney School of Veterinary Science for Veterinarian and other training.

Ingleburn Veterinary Clinic / Campbelltown Veterinary Hospital / Kirrawee Veterinary Hospital

(Veterinary Nurses pers comm.)

All clinics are privately owned and treat native species for free or at highly reduced rates, with wildlife carers (WIRES, Sydney Wildlife) sometimes paying for any required medications. No clinics were in receipt of grants for their work and it was a voluntary arrangement with Veterinary Practitioners and Nurses giving their time at no cost. The expense of running a hospital / clinic is absorbed as the majority of patients are paying (domestic animals), with native species forming a small portion of their patients.

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Table 6. Details of a range of veterinary clinics / hospitals in NSW which treat native species, including their organisational structure and sources of revenue. Blank cells indicate that information is not known.

Structure	Paid staff	Volunteers	Donations	Tourism revenue	Other revenue	Costs (pa)	Income
Port Macquarie Koala Hospital	Yes	Yes	Yes	Yes	Gift shop, Crowd Funding, grants	~\$700 k - \$1 million	Self-sustaining
Koala Care and Research Facility / Friends of the Koala (Lismore)	Yes	Yes	Yes	Potential (recent establishment)	Grants		Self-sustaining
Byron Bay Wildlife Hospital	Yes		Yes	Potential (recent establishment)	Crowd Funding, online shop, corporate sponsors, reality TV (possible)	~\$1 million	
Sydney Wildlife Mobile Care Unit	No	Yes	Yes	No			Self-sustaining
Camden Reptile, Avian & Exotic Pet Hospital	Yes – includes University staff	Veterinary students	No	No	Paying patients – not 100% wildlife		
Ingleburn / Campbelltown / Kirrawee Vets	Yes – though vets time for wildlife is volunteered		No	No	Paying patients – not 100% wildlife		Self-sustaining

3.6. Feasibility Study (wildlife hospital): Key Findings

A Feasibility Study for a wildlife hospital in the Liverpool LGA found the following:

- Required licensing is akin to that for a standard veterinary clinic or hospital
- Veterinary facilities are allowed with consent on land zoned B1, B2, B3, B4, B6, IN2, R5, RU1, RU4 and RE2.
- Spatial requirements are similar to a standard veterinary clinic. For comparative purposes the size of other wildlife hospitals range from 0.1 ha (Camden Avian, Reptile & Exotic Pet Hospital) – 0.6 ha (Koala Care and Research Facility, Lismore).
- Mobile veterinary units are a lower cost option that are able to respond to natural disasters and / or can serve as standard hospitals / clinics.
- Establishment costs vary from ~\$200,000 (for a mobile care unit) to > \$900,000 (for a permanent, owned facility in the Liverpool LGA).
- On-going costs vary with the scale of the venture. The Port Stephens Council projected costs for its Koala Hospital for 2021 at \$451,235. Port Macquarie Koala Hospital estimated annual costs at ~\$700,000 - \$1 million, inclusive of the care of permanent care animals.
- With the exception of veterinary clinics who donate only a portion of their time to wildlife, all other identified wildlife hospitals / clinics took private donations.
- The main sources of revenue are identified as donations, tourism (admission / tours), Crowd Funding, grants, gift shops / online shops and various sponsorship arrangements.

3.7. Feasibility Study (wildlife hospital): Final Recommendations

The costs of establishing and running a wildlife hospital are substantial and may initially require capital funding. To be financially self-sustaining and not reliant exclusively on donations, tourism offers a source of revenue. Hospitals incorporating tourism revenue have been shown to be self-financing (*e.g.* Port Macquarie Koala Hospital). The possibility of a mobile hospital should also be considered as a lower cost option with reduced spatial and zoning requirements.

4. Feasibility Study – Wildlife hospital and sanctuary

This portion of the report addresses the viability of a wildlife hospital run in association with a sanctuary / wildlife-tourism venture, by providing necessary information on legal and licencing obligations, zoning, spatial requirements and likely on-going expenditure. Establishment costs will not be addressed as they vary substantially according to the size and scope of the venture.

4.1. Legal and licencing requirements

A wildlife sanctuary, or other wildlife-tourism venture, is a separate enterprise to a wildlife hospital and requires separate licensing. Animals that are receiving or recovering from treatment in a hospital cannot be used for display and animals that are used for display must be kept physically separate from hospital animals. Animals who cannot be released and subsequently require permanent care can become display animals with appropriate changes to their licencing status.

The basic requirement for the display of native fauna is an Exhibitors Licence, from the NSW Department of Primary Industries. This allows for the display of animals listed under Schedule 2 (includes native species). Qualifying for this licence depends on a number of factors relating to the physical environment (housing) and requires an experienced and qualified Zoo Keeper on-site seven days a week (Certificate 3 in Captive Animal Management). Other specific licences / approvals include:

- Approval to construct an animal display establishment
- Permit to exhibit a prescribed species (application is species-specific)
- Application to acquire non-indigenous species for exhibition (application is species-specific)
- Approval to construct or alter an animal enclosure or facility (application is species-specific)

In order that a sanctuary or wildlife-tourism venture is able to acquire animals for display, they should become a member of the Zoological & Aquarium Association, first as a subscriber and then as a regional member. This is how operators move animals between facilities.

Record keeping is a legal requirement and is generally performed with record keeping software such as ZIMS, which has annual membership fees.

The breeding of captive animals should be done only as part of a carefully managed program for 'studbook species', which includes koalas. The studbook for NSW and QLD koalas is jointly managed by Dreamworld (QLD) / Taronga (NSW).

4.2. Space and zoning requirements

Zones that support tourism in NSW include E1, E2, E3, B2 and RU2 (NSW Government 2020). The Liverpool Local Environmental Plan is not explicit on the topic of tourism other than the potential for tourist and visitor accommodation (B2, B4, RU1, RU2, RU4, E1, E2, E3) and tourism specifically related to boating. Major recreation is explicitly prohibited on E2 zoned lands. Outdoor recreation facilities / areas are permitted with consent on RU1 and RU2. Indoor and outdoor recreation facilities / areas are permitted with consent on RU4, IN1 and R1. Recreation areas are permitted with consent on R2, R3, R4, R5 and B1. Indoor and outdoor recreation facilities are allowable with consent on B2, B3, B4, B5 and B6. Zoning IN3 allows recreation areas and outdoor recreation facilities. The broadest range of activities are allowable with consent on zoning IN2, RE1 and RE2 which allows with consent recreation areas, recreation facilities (major) indoor and outdoor. We identify RE2 as being of particular interest as this zoning also allows veterinary facilities with consent. It should be noted that if Council is taking a long view, then the re-zoning of land could be considered, particularly given the typically heavy encumbrance on recreation zoned lands. **Table 4** identifies the zoning of other wildlife sanctuaries and **Table 5** identifies the zoning of other wildlife hospitals, though all are located outside the Liverpool LGA and are therefore subject to the zoning controls of their individual Councils. For context, these identified wildlife-tourism ventures are located predominantly on rural and recreationally zoned lands, and to a lesser extent on residential and special activity zoned lands (**Table 4**).

The required space depends on the scope and size of the venture. We apply a conservative 2 ha cut-off as a realistic minimum when identifying potential sites of interest, based on the size of Featherdale Sydney Wildlife Park (2.7 ha). This minimum size includes adjacent lots with the same zoning. Areas that may have potential as a site for tourism are shown in **Figure 12**, with RE2 zoned areas being of particular interest as they allow veterinary facilities with consent, as well as a broad range of recreational activities, including those considered to be 'major'. It is acknowledged that much of the land currently zoned as RE2 appears to already be in use *eg.* New Brighton Golf Club, Moorebank Sports Club, Warwick Farm Racecourse, which limits the potential of a new development.

It is apparent from **Figure 12** that there is a substantial amount of RE2 zoned land (82.7 ha across 17 lots) adjoining the Georges River in the north-east of the Liverpool LGA (**Figure 13**). The ownership of these lots is mixed with at least some of it comprising Crown Lands. Examination of satellite imagery reveals some cleared land that could potentially be built on, or be revegetated by plantations. Expert opinion is that the local koala population is expanding along the Georges River (R. Close pers comm.; B. Durnham pers comm.).

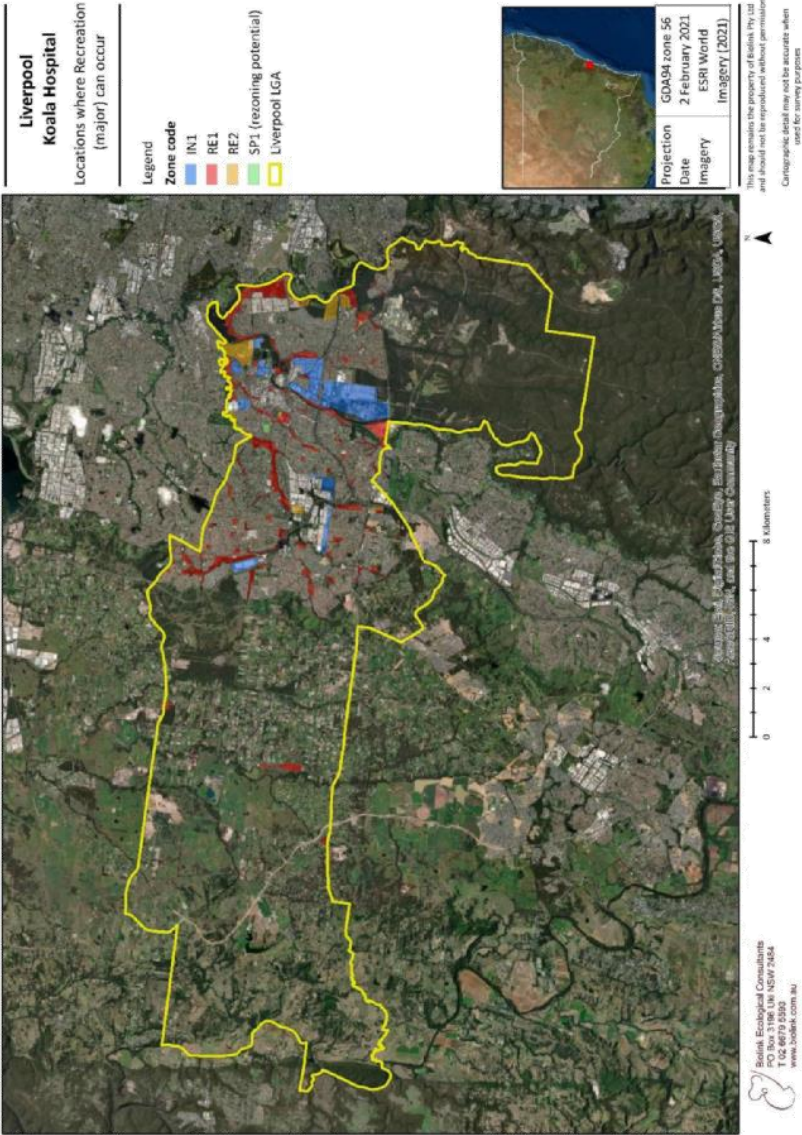


Figure 12. Areas across the Liverpool LGA with areas ≥ 2 ha which is zoned to allow for major recreation activities with consent that (IN2, RE1, RE2). RE2 zoned areas also allow for veterinary facilities with consent. Land currently zoned as SP1 is included as this is the current zoning for Taronga.

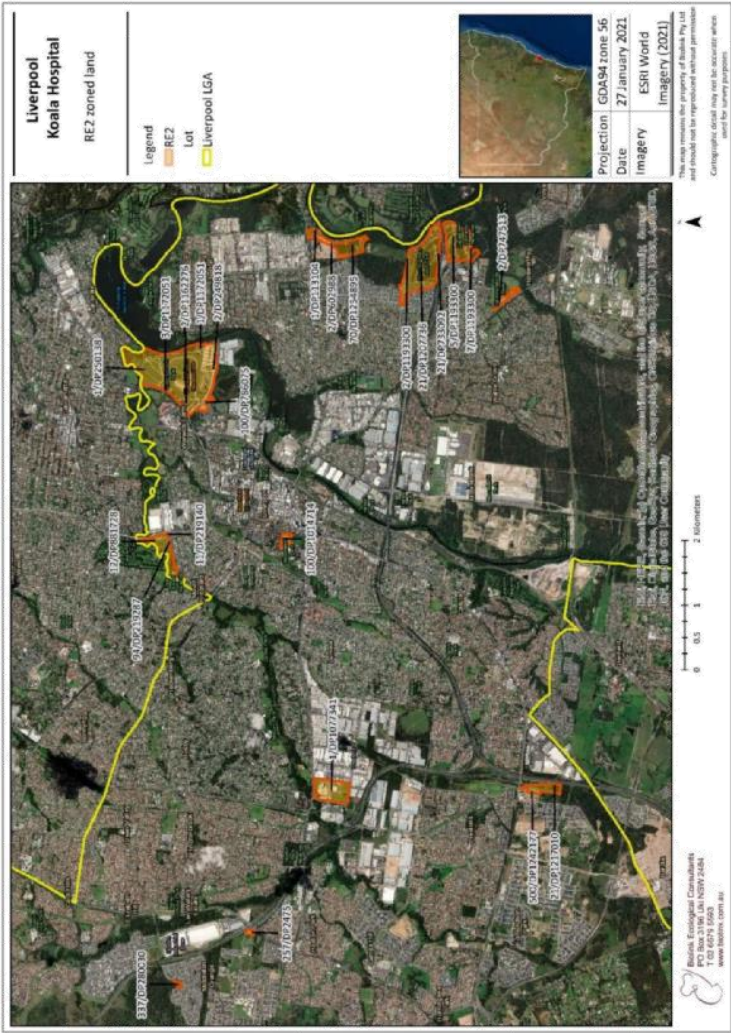


Figure 13. An area near the Georges River in the north-east of the Liverpool LGA that is zoned RE2, which allows both recreational activities (major) and veterinary facilities with consent. The local koala population is expanding along the Georges River.

4.3. On-going costs

4.3.1 Staff

The granting of an Exhibitors Licence is dependent on the employment of a qualified and suitably experienced Zoo Keeper, on-site seven days a week. This requires a Certificate 3 in Captive Animal Management, for which the pay scale is;

- Animal Care Level 3: \$862.50 pw (\$44,850 per annum)

It is worth noting that a Zoo Keeper with this qualification can be voluntary. It is a 2-year course that costs ~\$7,000.

Additional staff involved in captive animal husbandry may hold the same qualification, or Certificates 2 in Animal Studies, for which the pay scale is;

- Animal Care Level 2: \$826.60 pw (\$42,983 per annum)

Again, suitably qualified persons can be voluntary.

Pay Guide is according to the Animal Care and Veterinary Services Award 2010 (Australian Government 2019).

As discussed in Section 4.3.2 there may also be the need for Leaf Cutters and at least occasional / part-time employment of a Veterinary Practitioner (pay rates in Section 3.4.1).

4.3.2 Captive koalas

There are standards for keeping koalas for display purposes, in terms of the size and condition of enclosures. Koala enclosures can be open, semi-enclosed or totally enclosed and must provide freedom of movement, both vertically and horizontally. There must be protection from inclement weather and sufficient shade. The enclosures are required to have at least two tree forks that must be above 1.8 m from ground level and must be at least 0.9 m apart and should have a readily cleanable substrate (not concrete). Staff must manage public interaction with koalas and koalas cannot be held, though they can be patted and cuddled. Enclosures must be escape-proof and able to prevent wild koalas from climbing in, where they are present. Extensive record keeping is required (NSW Department of Primary Industries, 2006).

Captive koalas require a large amount of suitable food which is sourced from specialised plantations. A single koala requires 1,000 trees with a plantation space of 1 - 2 ha (Jackson *et al.* 2000; P.

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O'Callaghan pers comm.). By way of example, the Port Macquarie Koala Hospital has 130 ha of plantation to sustain its animals (C. Flanagan pers comm.). Options are available to collaborate with other institutions who already have plantations e.g. Taronga, or to establish a new plantation. Plantation site selection includes consideration of underlying soil fertility and access to year-round water, amongst other factors (Jackson *et al.* 2000). Plantations include preferred food trees, which in SW Sydney comprises *Eucalyptus punctata* and *E. agglomerata* (Sluiter *et al.* 2002; Phillips & Callaghan 2000) and the likely inclusion of *E. tereticornis*, *E. robusta*, *E. moluccana*, *E. propinqua* and *E. resinifera*. Koalas from other areas may initially require different eucalypt species. Plantations generally require a Manager and one or more Leaf Collectors. As a rough guide, feeding 10 koalas is likely to cost a minimum of \$25,000 annually, excluding the costs of establishing a plantation but including paying a part-time Leaf Cutter (P. O'Callaghan pers comm.).

4.3.3 Other captive wildlife

Other native species can be displayed with an Exhibitors Licence and the appropriate species-specific Permit for a prescribed species. Being granted a Permit for a native mammal depends on meeting the Standards for Exhibiting Australian Mammals in NSW (*Exhibited Animals Protection Act 1986*) which pertains primarily to the size and condition of enclosures. Examples of these standards are given for possums & gliders and bats.

Possums and gliders

- 1) Enclosures must contain visual barriers e.g. freshly cut native foliage
- 2) Appropriately sized nest boxes must be provided to offer refuge. Outdoor nest boxes should be positioned to be protected from inclement weather
- 3) Adequate climbing and gliding opportunities
- 4) Social structure should be provided for e.g. feathertail gliders live in large extended groups.

Bats

- 1) Natural light must be provided for flying-foxes
- 2) Flying-foxes must be given basking opportunities and provided with adequate shade
- 3) Adequate climbing opportunities
- 4) Enclosure walls and roosting area must be non-abrasive and sealed
- 5) Social structure should be provided for – flying-foxes cannot be held as solitary animals
- 6) Space to fully stretch both wings and make short flights
- 7) Multiple feed stations spaced throughout the exhibit

- 8) Viewing area can be glass or with a stand-off area if through wire. Walk through enclosures are not advised.
- 9) Staff must be vaccinated against Australian Bat Lyssavirus with the rabies vaccine.

(NSW Department of Primary Industries, 2006)

4.4. Potential income streams

Similar models of wildlife-tourism include the Port Macquarie Koala Hospital and the Port Stephens Koala Sanctuary and Hospital. While the exact income streams of these two ventures differ, both rely on a combination of donations and tourism-based revenue and both are reportedly self-financing. A distinguishing feature of the Port Macquarie Koala Hospital is that it does not charge admission and there is no obligation for a donation upon entry, whereas the Port Stephens Koala Sanctuary and Hospital charges \$15 admission. The admission prices of wildlife-tourism ventures near Liverpool are presented in **Table 4**. Using similar operators as a guide, potential revenue streams are;

- Grants (may become available in future)
- Donations – crowd funding, adopt-an-animal programs, corporate sponsors
- Admission / tours
- Animal encounters – photos, feeding *etc.* (cannot include ‘hospital animals’)
- Nature experiences / walks - *e.g.* tree tops walk
- Curriculum-based programs to schools
- Café
- Gift shop
- Venue booking

The projected number of annual visitors to the Port Stephens Koala Sanctuary and Hospital is 45,000 annually (PSC 2017) and the estimated number of annual visitors to the Port Macquarie Koala Hospital is ~100,000 (C. Flanagan pers comm.). Both of these ventures are located in areas which are known tourist destinations and have a substantial volume of international tourists (50% of visitors to Port Macquarie Koala Hospital, C. Flanagan pers comm.).

The demographics of the Liverpool LGA may indicate the likely revenue to be gained from local tourism. The 2016 census reported that there was 27,084 people living in Liverpool, and the LGA has a higher percentage of children under the age of fourteen (21.0%) than the state average (18.5%). It is culturally diverse with 66.7% of Liverpool residents speaking a language other than English in their home. The average weekly income for people over the age of fifteen was \$1,089, 26.72% lower than the state average (Australian Bureau of Statistics 2020). The number of young families in Liverpool

suggests that an educational / family focus may be appropriate. The average weekly income would advise against high admission charges.

In terms of the potential to apply for grants as a source of funding, there are no current Commonwealth or NSW grants that apply to the proposed venture. Grants previously obtained by other organisations include a Re-start tourism grant to the Port Macquarie Koala Hospital (no longer current, area specific) and a conservation grant to the Koala Care and Research Centre (Lismore) (no longer current). Funding for the expansion of the wildlife hospital at Taronga came directly from the NSW State Budget.

4.5. Preliminary costing considerations

The on-going costs will vary considerably according to the size and scope of any venture. The following gives approximate on-going costs for a hospital based on considerations of staffing, licences / reporting and animal husbandry based on 10 captive koalas in a sanctuary and a functioning licenced wildlife hospital. In theory all staff positions can be voluntary for a charity, though we present costs for paid staff. By way of comparison, projected costs of Port Stephens Koala Hospital for 2021 are \$451,235, though the breakdown of these costs in terms of the number of animals treated is unknown.

Table 7 is likely to represent an underestimate of costs.

Table 7. Approximate annual costs of establishment and running of a wildlife hospital and the on-going costs of a sanctuary, based on available data.

	Establishment	Staffing (pa)	Licences / reporting (pa)	Animal husbandry and consumables (pa)	Total (pa)
Mobile Hospital	\$200,000 - \$700,000 *	> \$115,679 ¥	> \$1,336**	> \$90,247***	> \$207,262
Static Hospital in Liverpool	> \$900,000	> \$115,679 ¥	> \$1,336**	> \$90,247***	> \$207,262
Sanctuary	varies	> \$146,606 β	> \$3,167 ζ	> \$25,000 €	> \$174,773

*Based on cost the of the Sydney Wildlife Mobile Care Unit and the Byron Bay Mobile Wildlife Hospital.

¥ Based on one full time Superintendent Vet and one full time Veterinary Nurse.

** Based on ZIMS record keeping and annual hospital licence fee including application.

*** Based on 20% of total running costs of Port Macquarie Koala Hospital (20% from Section 3.4.3).

β Based on one full time & one part time Zoo Keeper (level 3) and one full time zoo keeper (level 2) and a part-time Veterinary Practitioner.

ζ Based on renewal of Exhibitors Licence, record keeping and ZAA membership.

€ Based on costs associated with Leaf Cutter employment and does not include plantation establishment or maintenance.

4.6. SWOT Analysis for a wildlife hospital and associated sanctuary

Strengths	Weaknesses
Multiple sites meet the zoning and size criteria and / or Council could pursue re-zoning	May require removal of potential habitat to build
Proximity to one of NSW only growing koala populations, one that to date has also not been impacted by chlamydia	Capital funding required to establish
Access to the growing SW Sydney market	Development is 'from scratch' unless paired with an existing operation
Vision identified: hospital with some public interaction	On-going costs are high
Support from wildlife carer groups	Liverpool is currently outside the primary range to capture international tourism
Multiple sources of potential revenue: philanthropy / café / gift shop / admission fee	Camden Avian, Reptile & Exotic Pet Hospital has an established role in wildlife care in SW Sydney
	Taronga Zoo is currently expanding its wildlife hospital
Opportunities	Risks
Potential to be self-financing	Competitive wildlife tourist market
Potential for relationship with University of Sydney Veterinary School – enables educational opportunities	International visitors may not be an accessible market – reliance on the local and national tourist market
The Nancy-bird Walton Airport is due to begin operations in 2026 which may increase access to the international tourist market.	Overall expected tourist numbers may not be realised – importance of realistic financial forecasting
Provides goodwill and social responsibility credibility for Council	Hospital under-utilised due to lack of funds for on-going costs
Job creation and training opportunities	
Strengthens community identity	

4.7. Feasibility Study (wildlife hospital and sanctuary): Key findings

A Feasibility Study for a wildlife hospital and associated wildlife-tourism venture in the Liverpool LGA found the following:

- A sanctuary, or other wildlife-tourism venture is a separate enterprise to any wildlife hospital and animals must be kept apart and have separate licencing.
- Animals recovering from hospital treatment cannot be displayed, however permanent care animals can be reclassified as display animals with appropriate changes to their licencing.
- A wildlife-tourism venture requires an Exhibitors Licence, along with species-specific Permits, which are given in accordance with meeting the Standards for Exhibiting Australian Mammals in NSW (*Exhibited Animals Protection Act 1986*).
- The zoning which allows the broadest range of recreational activities are IN2, RE1 and RE2, of which RE2 also allows veterinary facilities with consent. Other zones which allow some form of outdoor recreation along with veterinary facilities with consent are RU1, RU4 and IN2. SP1 (zoning for Taronga) may also be of interest.
- Re-zoning of lands could be considered.
- 2 ha is considered the likely minimum requirement for a wildlife-tourism venture. Spatial requirements for an associated wildlife hospital are small (0.1 ha based on Camden Avian, Reptile & Exotic Pet Hospital).
- On-going costs vary with the scale of the venture. The costs of staffing and animal husbandry are the most substantial. Minimum on-going annual costs are >\$207,000 (wildlife hospital) and >\$174,000 (sanctuary).
- Revenue can be sourced via philanthropy / donations / admission / tours / gift shop / online shop / café / collaborations with schools and various sponsorship arrangements. Grants for conservation and tourism may become available in the future.

4.8. Feasibility Study (wildlife hospital and sanctuary): Final Recommendations

The costs of establishing a wildlife-tourism venture will vary with its size and scope and while the running costs will also differ, they invariably include the costs of staffing, licences and animal husbandry (including plantations if housing koalas permanently). A cheaper alternative to starting from scratch might be to encourage an existing wildlife-tourism operator into the LGA. Notwithstanding this there are several locations which may be appropriate for Council to initiate its own venture and re-zoning of land to Recreation or Special Interest could be considered.

5. Summary/Conclusion

This report aimed to provide foundational knowledge to LCC to inform their decision-making process when considering the viability of a koala / wildlife hospital and associated wildlife-tourism venture in the Liverpool LGA. Records analysis revealed an expanding koala population across the LGA, however interrogation of DPIE wildlife carer records demonstrated that there are substantially fewer koalas likely to require veterinary care across an area that could reasonably be expected to serve as the catchment for a hospital (20 - 73 annually) than are treated by other koala hospitals (≥ 250 average for Port Macquarie Koala Hospital, 353 in 2019 for the Koala Care and Research Centre Lismore). With that in mind, the need for veterinary care for koalas is increasing and there is an abundance of other wildlife for which veterinary support is regularly sought across the area, including a large number of threatened grey-headed flying foxes for whom veterinary options are currently limited. We note that the recommendation stemming from the *Koala Population and Habitat in NSW Parliamentary Inquiry* does not state the support for koala-specific hospitals, rather support for “...the establishment of a well-resourced network of wildlife hospitals in key areas of the state...”. Despite recommending this support, there is as yet no associated grants system or defined pathway for obtaining such funds. A unique opportunity in the wildlife-tourism market is identified as the presence of a wildlife hospital with some degree of public interaction, as well as nature recreation (e.g. tree-tops walk), educational opportunities from curriculum-based programs and more standard wildlife experience offerings.

The next step by Council should include an assessment of the various options available, in terms of operational models, to determine which options are most likely to present a low risk prospect to generate environmental benefits while creating economic, social and educational opportunities in the LGA. We suggest that these options include, but not be limited to:

- Council seeks ways to support the existing network of veterinary clinics treating native wildlife across the LGA and / or supporting a mobile veterinary clinic.
- Mobile wildlife hospital collaborates with Council Reserves / Wildlife Protection Areas – *in situ* conservation focus.
- Wildlife hospital / wildlife tourism venture commensurate to market demand in the area.

We note that the opening of the Nancy Bird Walton airport may impact tourism patterns across greater Sydney, altering the market environment in Liverpool.

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Appendix A – Records Analysis

Historic records obtained from community and government sources can be used to inform on trends in the geographic distribution of, and population trends for, koalas in the Liverpool LGA. Consequently, to establish basic information on the status of the Liverpool koala population, two datasets of historical koala records were used for evaluation, namely Bionet and Campbelltown Koala Research and Database (Close & Durnham 2016), both of which we restricted to records from the Liverpool LGA. These two datasets were linked and/or shared records to varying degrees. Once the extent of these relationships between the records were determined and duplicates removed, a final data set was merged and uploaded into a Microsoft Access database where they were again checked for duplication and spatial context.

Data from the preceding approach was then partitioned to enable comparisons *pre*-2002 and *post*-2001 - the time frames 2002 – 2007, 2008 – 2013, 2014 – 2019 approximating the time intervals for the most recent three koala generations, the measure of which has been estimated to be six years (Phillips 2000). This approach was taken in order to express the results of analyses in the context of International Union for the Conservation of Nature (IUCN) criteria that place weight on the concept of population change over a period of three (taxon-specific) generations (WCUSSC 1994). This is also the time-period used by the NSW Scientific Committee when considering the listing of species or populations under the NSW *Threatened Species Conservation Act* (1995).

Outcomes of the preceding data are that within the Liverpool LGA there are 172 koala records spanning the period from the first record (1980) to 2019, with a general increase in records from 2011. There is also a single spike prior in 1999, entirely due to Koala Research and Database Records (**Figure 1**).

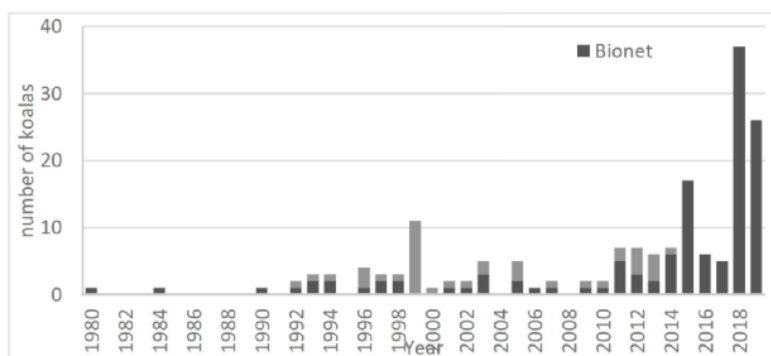


Figure 1. Frequency histogram detailing chronological distribution of 172 records for the Liverpool LGA for the period 1980 - 2019 with records originating from Bionet in black and Koala Research and Database in grey.

BiolinkKoala Hospital & Sanctuary: Liverpool LGAExtent of Occurrence (EoO)

The *Extent of Occurrence* (EoO) is the area contained within the shortest continuous boundary that encompasses all records for a defined period of time and/or locality and is typically represented as that area enclosed by a Minimum Convex Polygon (MCP). By convention, MCPs are constructed by connecting the outer-most records such that no internal angle is greater than 180 degrees. The following EoOs for the Liverpool LGA's koala population were determined:

- a) All koala records (Historical EoO)
- b) Koala records from the date of first record (1980) to 2001,
- c) Koala records for the most recent three generations (2002 – 2019).

The records indicate an historical EoO of koalas of approximately 13,461 ha (**Figure 2**). The distribution of these records has had a four-fold increase, estimated at 3,114 ha for the time period 1980 - 2001 increasing to 13,461 ha (the same area as the historical EoO) for the most recent three koala generations (2002-2019) (**Figure 3**).

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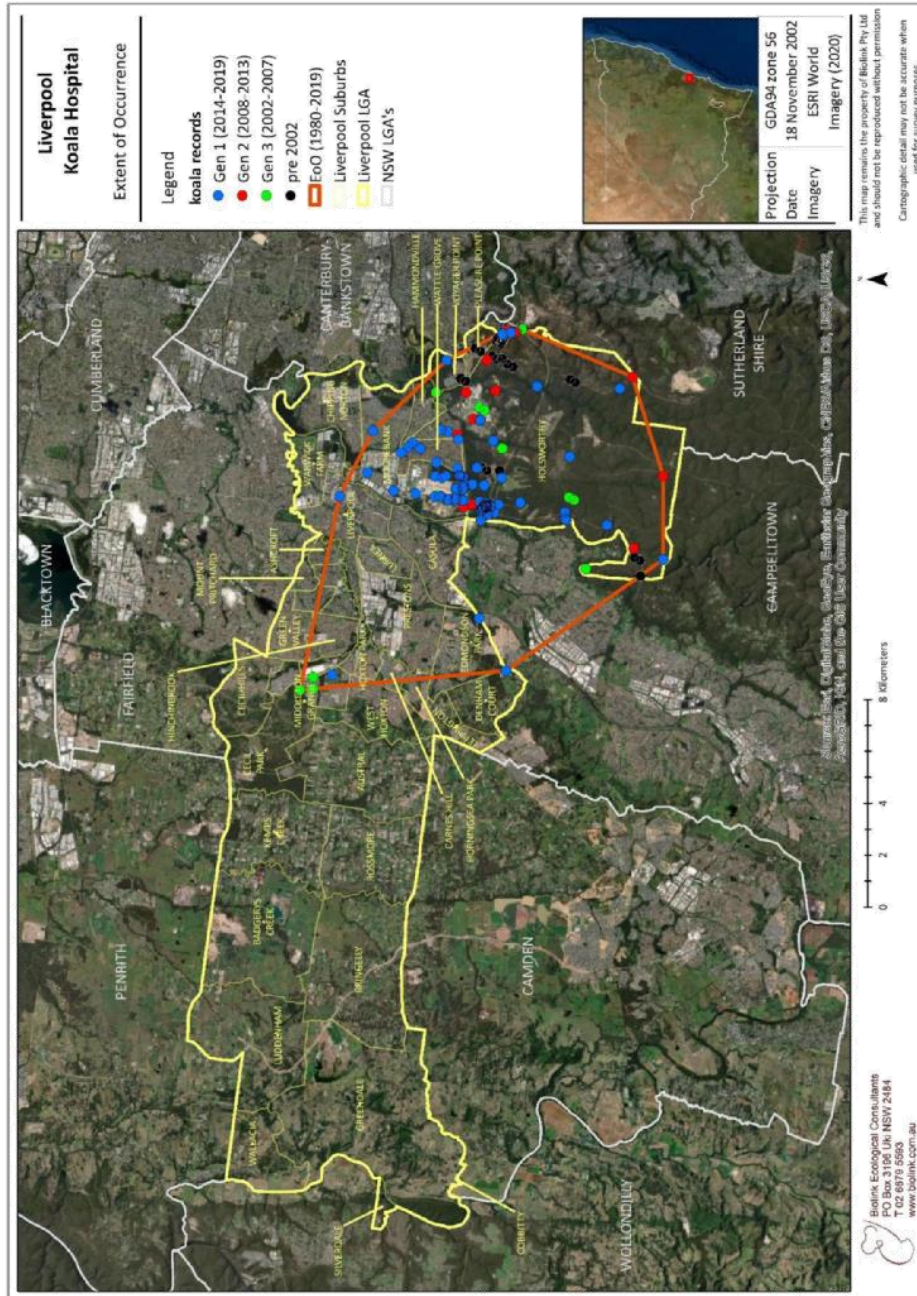


Figure 2. Historical Extent of Occurrence (EoO) of koalas across the Liverpool Local Government Area from the date of first records (1980) to 2019.

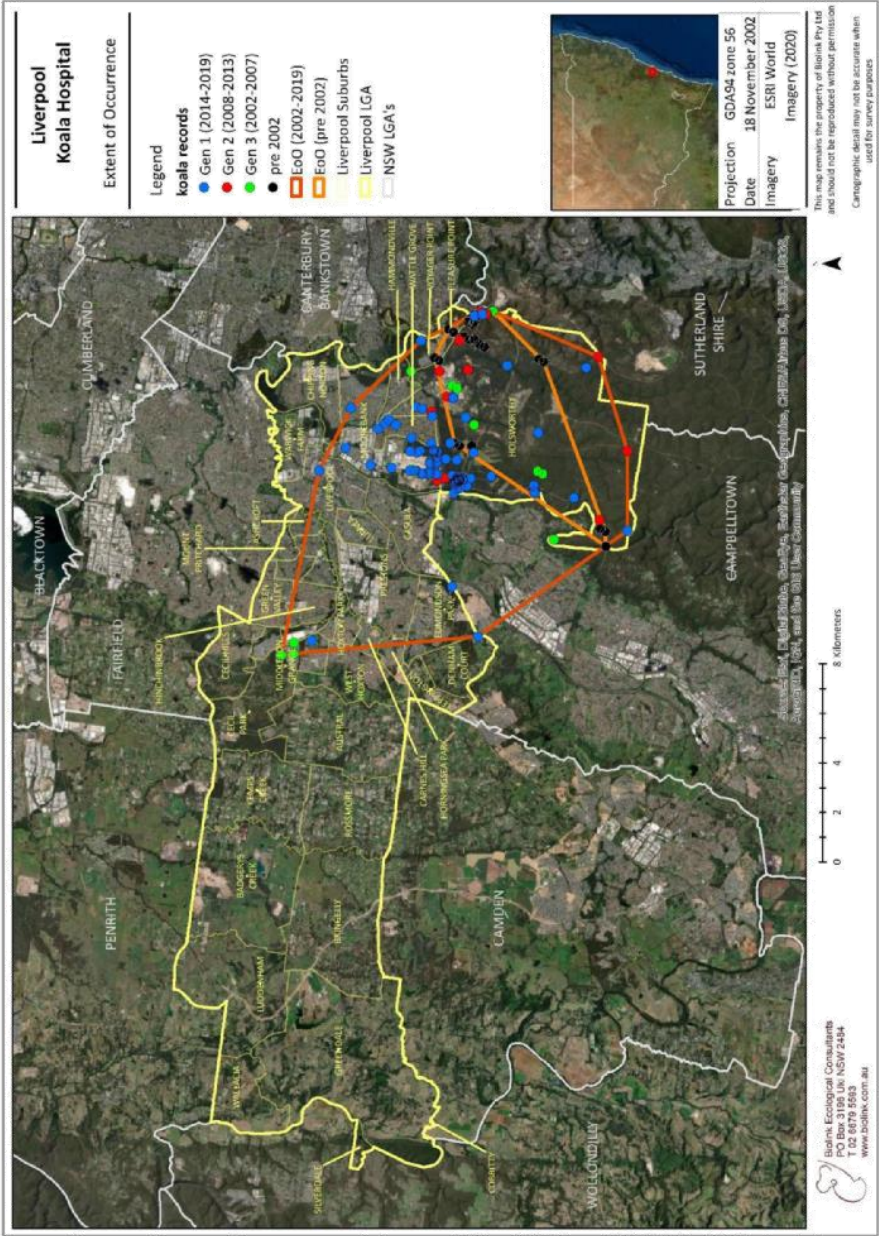


Figure 3. Extent of Occurrence (EoO) of koalas across the Liverpool Local Government Area over the two time periods 1980 - 2001 (light orange) and 2002 - 2019 (dark orange), the latter period of time representing the most recent three koala generation

Area of Occupancy (AoO)

The *Area of Occupancy* (AoO) is a measure of record heterogeneity across the landscape which estimates the actual area within the EoO that is occupied by the taxon of interest, reflecting the fact that a species will not usually occur throughout the entire EoO. Historical koala records must be carefully considered when estimating the AoO because of their tendency to reflect observer density / survey effort more so than koala density, the latter being best assessed *via* systematic survey. In most areas there is also a tendency for the reporting rate to change over time, with a greater number of recent records reflecting the contemporary availability of reporting applications (*e.g. I Spy*) and increased community engagement.

In order to estimate the AoO, a fixed-grid overlay (5 km x 5 km) as used for the Koala Likelihood Model (Predavec *et al.* 2015) constrained by the boundaries of the historical EoO and the Liverpool LGA was used to create a series of cells for sampling purposes, the primary assessment mechanism being whether a koala record for the period being investigated was either present or absent within a given cell, as opposed to using the numbers of individual records.

In order to correct for changes in reporting rates over time, the number of koala records utilised for analysis in each instance was determined with regard to the smaller of the representative data set being analysed (*i.e.* if there were only 100 records in one of the two data sets being compared and the other was represented by 250 records, then 100 records were randomly selected from the latter data set). To normalise data output for analysis, 50% of the grid-cells in the fixed grid overlay were randomly selected through each of ten iterations for each period of interest. At each iteration, the number of cells within which koala records were present was recorded to estimate the proportion of suitable habitat within the historical EoO that was occupied. The process of iteration enables a mean and central tendency measure of the AoO to be calculated for both time periods, the associated variances tested for homogeneity prior to being compared using two-sample t-tests.

Area of Occupancy (AoO) estimates for the Liverpool LGA's koala population were calculated for the following time periods:

- a) From the date of first record (1980) to 2001, and
- b) For the most recent three koala generations (2002 – 2019).

Results of these analyses indicate that 11 x 5 km x 5 km grid-cells cover the historical EoO, with the habitat occupancy / utilisation rate then estimated from 35 records for the time-period 1980 – 2001 compared to a subset of 35 randomly selected records for the time-period 2002 – 2019. Randomly

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sampling 50% of the 11 grid cells within the historical EoO over ten iterations for each of these two time periods returned the following results:

1980 – 2001: AoO estimated at $27.33\% \pm 5.18\%$ (SE)

2002 – 2019: AoO estimated at $63.33\% \pm 4.74\%$ (SE)

A comparative analysis of the data-sets informing the preceding outcomes implies that there has been a significant increase in the proportional amount of habitat being utilised by koalas when comparing the last three koala generations (2002 - 2019) to the period preceding this (1980 - 2001) (Levene's test: $F = 1.195$, $P = 0.397$, 9 *df*; $t = -5.125$, $P < 0.01$, 18 *df*) across the Liverpool LGA.

Generational Persistence (GP) Assessment

The records were also examined for re-occurrence in the same localised area over periods that extend beyond a single koala generation. For the purposes of *Generational Persistence (GP)* Assessment, 'localised' was considered as the area within each of the aforementioned 5 km x 5 km grid-cells generated to support the AoO assessments. GP was then determined for each grid-cell based on a requirement for the presence of a minimum of a single koala record within each of the three most recent generations 2002 – 2007, 2008 – 2013 and 2014 – 2019, and also (for comparative purposes) for generations 1 (2013-2019) and generation 3 (1999-2005) only. This latter measure has been applied in areas with either a low frequency of reporting and/or widely dispersed records, and offers a more conservative appraisal by presuming the likely presence of GP in areas where records occur for only the first and third generational periods, but not the second (Biolink 2017; Biolink 2019).

For the three koala generations covering the time period 2002 – 2019, four of the 11 x 5 km x 5 km grid cells reflecting the historical EoO contained one or more koala records for each of the three constituent koala generations 2002 – 2007, 2008 - 2013 and 2014 -2019 respectively, this result (*i.e.* 4/11) implying that approximately 36.36% of Liverpool LGA constrained by the EoO was supporting resident koala populations over this time period. **Figure 4** illustrates the widespread distribution of areas of GP. The largest area of GP is located to the east (10,000 ha) extending from Liverpool in the north, Voyager Point in the east, Holsworthy in the south and Casula in the west. The extra grid cell included if only generation 1 and 3 are considered (2,500 ha), is a small patch that includes Edmonson Park and the western edge of Denham Court, albeit being mostly outside of the Liverpool LGA.

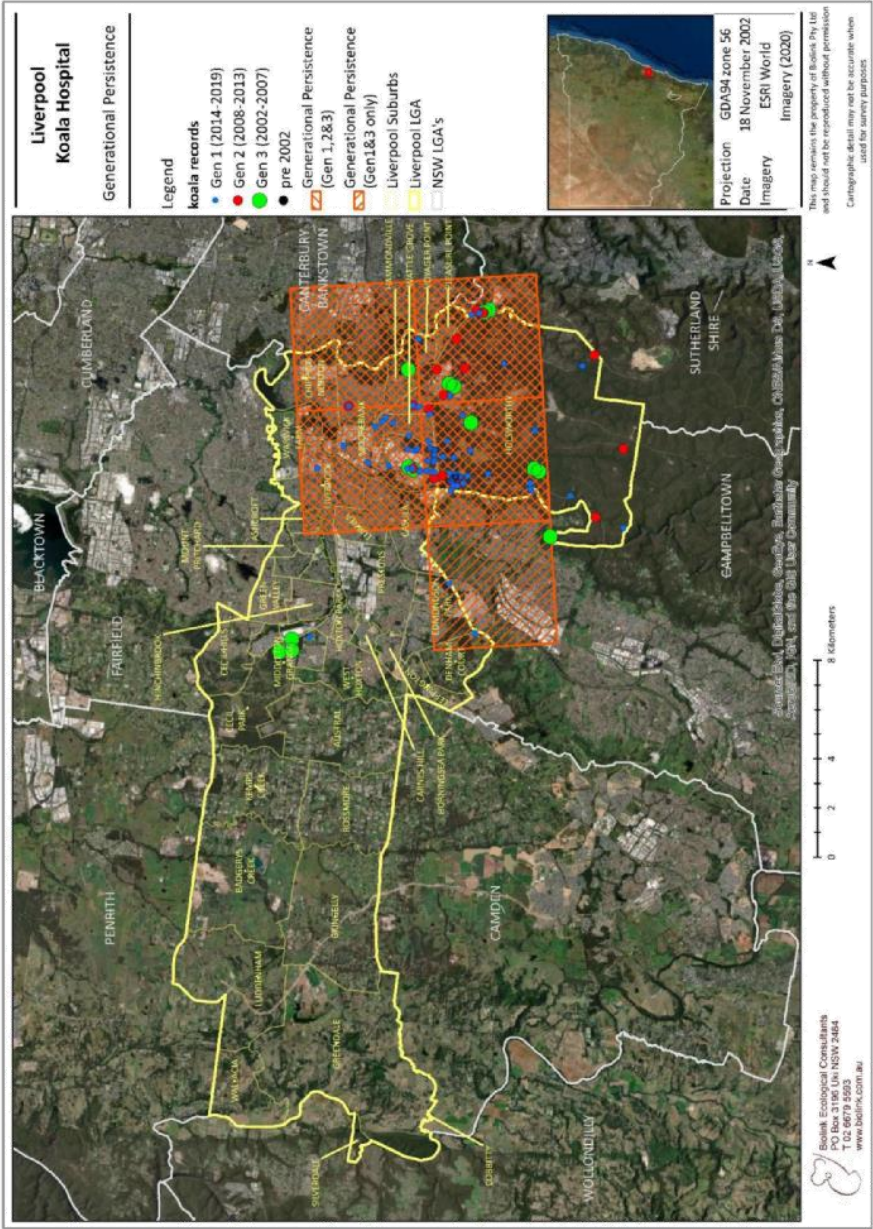


Figure 4. Areas of Generational Persistence (GP) across the Liverpool Local Government Area (orange cross-hatched cells) for the most recent three koala generations 2002-2019) and diagonally hatched cells for generation 1 and 3 only.

Appendix B – DPIE Records

Department of Planning, Industry and Environment (DPIE) wildlife carer returns records. Data covers 12 Local Government Areas: Blacktown, Camden, Campbelltown, Canterbury-Bankstown, Cumberland, Fairfield, Liverpool, Penrith, Sutherland, Wingecarribee, Wollondilly and Wollongong. Time period is 2013 – 2018 (financial years).

Common Name modified	Scientific name	veterinary assistance	total number of animals
Threatened species in NSW			
Grey-Headed Flying-Fox	<i>Pteropus poliocephalus</i>	2,056	2,423
Koala	<i>Phascolarctos cinereus</i>	241	739
Green Turtle	<i>Chelonia mydas</i>	39	73
Gang-Gang Cockatoo	<i>Callocephalon fimbriatum</i>	28	29
Eastern Pygmy-Possum	<i>Cercartetus nanus</i>	19	23
Loggerhead Turtle	<i>Caretta caretta</i>	17	25
Powerful Owl	<i>Ninox strenua</i>	15	27
Ground Parrot	<i>Pezoporus wallicus</i>	12	13
Major Mitchell's Cockatoo	<i>Lophochroa leadbeateri</i>	10	18
Stimson's Python	<i>Antaresia stimsoni</i>	7	9
Little Lorikeet	<i>Glossopsitta pusilla</i>	7	10
Large-Footed Myotis	<i>Myotis adversus</i>	5	6
Glossy Black-Cockatoo	<i>Calyptorhynchus lathami</i>	5	7
Eastern Bentwing-Bat	<i>Miniopterus schreibersii oceanensis</i>	5	5
New Zealand Fur-Seal	<i>Arctocephalus forsteri</i>	5	49
Squirrel Glider	<i>Petaurus norfolcensis</i>	5	8
Large-Eared Pied Bat	<i>Chalinolobus dwyeri</i>	4	4
Little Bentwing-Bat	<i>Miniopterus australis</i>	4	6
Woma	<i>Aspidites ramsayi</i>	4	7
White-Bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	4	6
Superb Parrot	<i>Polytelis swainsonii</i>	4	5
Western Blue-Tongued Lizard	<i>Tiliqua occipitalis</i>	3	5
Barking Owl	<i>Ninox connivens</i>	3	4
Swift Parrot	<i>Lathamus discolor</i>	3	3
Mountain Pygmy-Possum	<i>Burramys parvus</i>	3	4
Hooded Plover	<i>Thinornis rubricollis</i>	3	4
Sooty Tern	<i>Onychoprion fuscata</i>	3	3
Little Whip Snake	<i>Suta flagellum</i>	3	6
Barred Cuckoo-Shrike	<i>Coracina lineata</i>	2	3
Border Thick-Tailed Gecko	<i>Uvidicolus sphyrurus</i>	2	2
Little Eagle	<i>Hieraaetus morphnoides</i>	2	4
Greater Broad-Nosed Bat	<i>Scoteanax rueppellii</i>	2	2
Sooty Owl	<i>Tyto tenebricosa</i>	2	2
Southern Giant Petrel	<i>Macronectes giganteus</i>	2	2

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Northern Giant-Petrel	<i>Macronectes halli</i>	2	2
Masked Owl	<i>Tyto novaehollandiae</i>	2	5
Red-Tailed Black-Cockatoo	<i>Calyptorhynchus banksii</i>	2	8
Scarlet Robin	<i>Petroica boodang</i>	1	1
Black Falcon	<i>Falco subniger</i>	1	1
Black-Chinned Honeyeater	<i>Melithreptus gularis</i>	1	1
Australian Painted Snipe	<i>Rostratula australis</i>	1	1
Pied Oystercatcher	<i>Haematopus longirostris</i>	1	2
Australian Fur-Seal	<i>Arctocephalus pusillus doriferus</i>	1	18
Eastern Bristlebird	<i>Dasyornis brachypterus</i>	1	1
Brush-Tailed Rock-Wallaby	<i>Petrogale penicillata</i>	1	1
Bush-Hen	<i>Amaurornis moluccanus</i>	1	1
Collared Kingfisher	<i>Todiramphus chloris</i>	1	1
Delicate Mouse	<i>Pseudomys delicatulus</i>	1	1
Dusky Woodswallow	<i>Artamus cyanopterus</i>	1	1
Pink Robin	<i>Petroica rodinogaster</i>	1	1
Australasian Bittern	<i>Botaurus poiciloptilus</i>	1	1
Broad-Headed Snake	<i>Hoplocephalus bungaroides</i>	1	2
Shy Albatross	<i>Thalassarche cauta</i>	1	1
Little Shearwater	<i>Puffinus assimilis</i>	1	1
Yellow-Footed Rock-Wallaby	<i>Petrogale xanthopus</i>	1	2
Southern Scrub-Robin	<i>Drymodes brunneopygia</i>	1	1
Albert's Lyrebird	<i>Menura alberti</i>	1	2
Spotted Harrier	<i>Circus assimilis</i>	1	1
Spotted-Tailed Quoll	<i>Dasyurus maculatus</i>	1	2
Eastern Freetail-Bat	<i>Mormopterus norfolkensis</i>	1	1
Sooty Oystercatcher	<i>Haematopus fuliginosus</i>	1	1
Turquoise Parrot	<i>Neophema pulchella</i>	1	1
Northern Hairy-Nosed Wombat	<i>Lasiorhinus krefftii</i>	1	1
Olive Whistler	<i>Pachycephala olivacea</i>	1	1
White Tern	<i>Gygis alba</i>	1	1
Flesh-Footed Shearwater	<i>Ardenna carneipes</i>	1	1
Flame Robin	<i>Petroica phoenicea</i>	1	1
Eastern Quoll	<i>Dasyurus viverrinus</i>	1	2
Eastern Long-Eared Bat	<i>Nyctophilus bifax</i>	1	1
Star Finch	<i>Neochmia ruficauda</i>	1	1
Non-threatened species in NSW			
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	5,547	7,431
Common Ringtail Possum	<i>Pseudocheirus peregrinus</i>	3,066	4,023
Eastern Blue-Tongue	<i>Tiliqua scincoides</i>	3,055	4,827
Australian Magpie	<i>Cracticus tibicen</i>	2,562	4,416
Common Brushtail Possum	<i>Trichosurus vulpecula</i>	2,482	3,841
Sulphur-Crested Cockatoo	<i>Cacatua galerita</i>	2,069	3,535
Noisy Miner	<i>Manorina melanocephala</i>	1,550	2,191
Unidentified Bird	<i>Bird sp.</i>	1,423	2,995

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Red-Bellied Black Snake	<i>Pseudechis porphyriacus</i>	1,266	3,978
Tawny Frogmouth	<i>Podargus strigoides</i>	1,192	1,702
Unidentified Flying-Fox	<i>Pteropus sp.</i>	1,164	1,840
Eastern Grey Kangaroo	<i>Macropus giganteus</i>	1,063	1,453
Unidentified Kangaroo/Wallaby		978	2,202
Laughing Kookaburra	<i>Dacelo novaeguineae</i>	969	1,461
Galah	<i>Eolophus roseicapillus</i>	909	1,318
Common Wombat	<i>Vombatus ursinus</i>	886	1,490
Australian Wood Duck	<i>Chenonetta jubata</i>	704	968
Unidentified Snake		642	4,174
Eastern Snake-Necked Turtle	<i>Chelodina longicollis</i>	638	751
Magpie-Lark	<i>Grallina cyanoleuca</i>	624	856
Unidentified Duck		613	1,403
Unidentified Possum	<i>Possum sp.</i>	531	1,916
Crested Pigeon	<i>Ocyphaps lophotes</i>	498	653
Australian White Ibis	<i>Threskiornis molucca</i>	463	759
Australian Raven	<i>Corvus coronoides</i>	436	711
Australian King-Parrot	<i>Alisterus scapularis</i>	425	547
Unidentified Ibis		418	737
Pied Currawong	<i>Strepera graculina</i>	403	552
Masked Lapwing	<i>Vanellus miles</i>	402	1,001
Short-Beaked Echidna	<i>Tachyglossus aculeatus</i>	391	974
Australian Pelican	<i>Pelecanus conspicillatus</i>	385	513
Pacific Black Duck	<i>Anas superciliosa</i>	357	469
Silver Gull	<i>Chroicocephalus novaehollandiae</i>	327	416
Unidentified Fauna	<i>Fauna sp.</i>	322	1,206
Swamp Wallaby	<i>Wallabia bicolor</i>	320	390
Eastern Brown Snake	<i>Pseudonaja textilis</i>	297	954
Crimson Rosella	<i>Platycercus elegans</i>	285	336
Unidentified Rosella	<i>Platycercus sp.</i>	284	440
Unidentified Wattlebird	<i>Anthochaera sp.</i>	276	384
Unidentified Dove		273	514
Sugar Glider	<i>Petaurus breviceps</i>	260	300
Unidentified Microbat	(<i>Microchiroptera suborder</i>) (<i>Microchiroptera suborder</i>)	249	531
Unidentified Pigeon		248	735
Carpet/Diamond Python	<i>Morelia spilota spilota x mcdowelli</i>	224	591
Unidentified Kingfisher	<i>Todiramphus sp.</i>	220	319
Unidentified Corella	<i>Cacatua sp.</i>	215	350
Unidentified Tortoise		214	317
Little Corella	<i>Cacatua sanguinea</i>	211	243
Eastern Rosella	<i>Platycercus eximius</i>	211	244
Sacred Kingfisher	<i>Todiramphus sanctus</i>	203	218
Unidentified Turtle		186	237
Welcome Swallow	<i>Hirundo neoxena</i>	186	248

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Common Wallaroo	<i>Macropus robustus</i>	183	203
Unidentified Parrot		178	396
Eastern Water Dragon	<i>Intellagama lesueurii</i>	169	255
Southern Boobook	<i>Ninox novaeseelandiae</i>	161	206
Satin Bowerbird	<i>Ptilonorhynchus violaceus</i>	154	179
Golden-Crowned Snake	<i>Cacophis squamulosus</i>	150	192
Eastern Koel	<i>Eudynamis orientalis</i>	146	208
Unidentified Lorikeet	<i>Trichoglossus/Glossopsitta sp.</i>	146	239
Unidentified Honeyeater		134	189
Unidentified Butcherbird	<i>Cracticus sp.</i>	133	208
Bearded Dragon	<i>Pogona barbata</i>	118	174
Lace Monitor	<i>Varanus varius</i>	112	323
Lesser Long-Eared Bat	<i>Nyctophilus geoffroyi</i>	103	110
Purple Swampphen	<i>Porphyrio porphyrio</i>	101	147
Unidentified Corvid	<i>Corvus sp.</i>	100	243
Black-Faced Cuckoo-Shrike	<i>Coracina novaehollandiae</i>	93	103
Red Wattlebird	<i>Anthochaera carunculata</i>	90	112
Unidentified Currawong	<i>Strepera sp.</i>	90	127
Unidentified Wallaby		90	151
Unidentified Lizard		81	317
Grey Butcherbird	<i>Cracticus torquatus</i>	80	91
Little Wattlebird	<i>Anthochaera chrysoptera</i>	79	82
Musk Lorikeet	<i>Glossopsitta concinna</i>	79	93
Unidentified Brushtail Possum	<i>Trichosurus sp.</i>	78	120
Willie Wagtail	<i>Rhipidura leucophrys</i>	77	109
Unidentified Swallow		71	118
Feathertail Glider	<i>Acrobates pygmaeus</i>	71	76
Long-Billed Corella	<i>Cacatua tenuirostris</i>	71	86
Unidentified Bowerbird		70	100
Emu	<i>Dromaius novaehollandiae</i>	69	132
Channel-Billed Cuckoo	<i>Scythrops novaehollandiae</i>	69	99
Unidentified Finch		68	107
Unidentified Seagull		64	136
Common Tree Snake	<i>Dendrelaphis punctulatus</i>	62	134
Nankeen Kestrel	<i>Falco cenchroides</i>	62	72
Unidentified Cockatoo		62	190
Unidentified Cacatua	<i>Cacatua sp.</i>	62	100
Azure Kingfisher	<i>Ceyx azureus</i>	62	67
Red-Rumped Parrot	<i>Psephotus haematonotus</i>	62	76
Unidentified Shearwater		60	79
Black Swan	<i>Cygnus atratus</i>	58	152
White-Faced Heron	<i>Egretta novaehollandiae</i>	58	80
Pied Butcherbird	<i>Cracticus nigrogularis</i>	55	70
Barn Owl	<i>Tyto alba</i>	55	83
Unidentified Owl		53	121

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Australasian Figbird	<i>Sphecotheres vieilloti</i>	52	66
Gould's Wattled Bat	<i>Chalinolobus gouldii</i>	51	53
Silvereye	<i>Zosterops lateralis</i>	47	61
Unidentified Cormorant	<i>Phalacrocorax sp.</i>	45	81
Scaly-Breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	42	50
Eastern Carpet Python	<i>Morelia spilota mcdowelli</i>	41	86
Brown Goshawk	<i>Accipiter fasciatus</i>	41	50
Grey Currawong	<i>Strepera versicolor</i>	41	59
Common Bronzewing	<i>Phaps chalcoptera</i>	39	43
Black Flying-Fox	<i>Pteropus alecto</i>	38	42
Unidentified Bat		38	205
Peregrine Falcon	<i>Falco peregrinus</i>	37	45
Unidentified Wren		37	50
Spotted Pardalote	<i>Pardalotus punctatus</i>	37	49
Unidentified Quail	<i>Coturnix sp.</i>	37	69
Budgerigar	<i>Melopsittacus undulatus</i>	35	150
Gould's Long-Eared Bat	<i>Nyctophilus gouldi</i>	35	36
Dusky Moorhen	<i>Gallinula tenebrosa</i>	35	52
Little Crow	<i>Corvus bennetti</i>	33	72
Yellow-Faced Whip Snake	<i>Demansia psammophis</i>	32	52
Fan-Tailed Cuckoo	<i>Cacomantis flabelliformis</i>	32	36
Eurasian Coot	<i>Fulica atra</i>	32	46
Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	32	34
Dollarbird	<i>Eurystomus orientalis</i>	32	34
Shingle-Back	<i>Tiliqua rugosa</i>	31	39
Unidentified Heron		30	58
Unidentified Waterbird		30	65
Unidentified Cuckoo		29	52
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>	28	31
Topknot Pigeon	<i>Lopholaimus antarcticus</i>	28	45
Little Forest Bat	<i>Vespadelus vulturnus</i>	27	28
Red-Necked Wallaby	<i>Macropus rufogriseus</i>	26	27
Unidentified Penguin		26	28
Large Forest Bat	<i>Vespadelus darlingtoni</i>	24	24
Unidentified Hawk		23	49
Cockatiel	<i>Nymphicus hollandicus</i>	22	67
Eastern Small-Eyed Snake	<i>Cryptophis nigrescens</i>	22	23
Australian Owlet-Nightjar	<i>Aegotheles cristatus</i>	22	25
Australian Hobby	<i>Falco longipennis</i>	22	22
Superb Fairy-Wren	<i>Malurus cyaneus</i>	22	24
Central Bearded Dragon	<i>Pogona vitticeps</i>	20	22
Highland Copperhead	<i>Austrelaps ramsayi</i>	20	26
Yellow-Tailed Black-Cockatoo	<i>Calyptrorhynchus funereus</i>	19	29
Wedge-Tailed Shearwater	<i>Ardenna pacificus</i>	18	20
Eastern Water-Skink	<i>Eulamprus quoyii</i>	17	23

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Bush Rat	<i>Rattus fuscipes</i>	16	29
Brown Cuckoo-Dove	<i>Macropygia amboinensis</i>	16	21
Unidentified Seabird		16	33
Unidentified Cuckoo-Shrike		16	18
Unidentified Reptile	<i>Reptile sp.</i>	16	112
Collared Sparrowhawk	<i>Accipiter cirrocephalus</i>	15	18
Cattle Egret	<i>Ardea ibis</i>	15	18
Pied Cormorant	<i>Phalacrocorax varius</i>	15	25
Diamond Python	<i>Morelia spilota spilota</i>	14	29
Red-Browed Finch	<i>Neochmia temporalis</i>	14	16
Australian Brush-Turkey	<i>Alectura lathami</i>	14	52
Unidentified Mammal	<i>Mammal sp.</i>	14	53
Unidentified Antechinus	<i>Antechinus sp.</i>	14	19
Golden Whistler	<i>Pachycephala pectoralis</i>	14	15
Macquarie River Turtle	<i>Emydura macquarii macquarii</i>	13	24
Black-Shouldered Kite	<i>Elanus axillaris</i>	13	15
Unidentified Egret	<i>Ardea/Egretta sp.</i>	13	22
Darter	<i>Anhinga melanogaster</i>	13	14
Gould's Goanna	<i>Varanus gouldii</i>	13	85
Wedge-Tailed Eagle	<i>Aquila audax</i>	13	18
Pacific Baza	<i>Aviceda subcristata</i>	12	13
Peaceful Dove	<i>Geopelia striata</i>	12	12
Flatback Turtle	<i>Natator depressus</i>	12	16
White-Throated Nightjar	<i>Eurostopodus mystacalis</i>	12	13
Brown Quail	<i>Coturnix ypsilophora</i>	11	12
Unidentified Grass Skink	<i>Lampropholis sp.</i>	11	24
White-Headed Pigeon	<i>Columba leucomela</i>	11	13
Common Death Adder	<i>Acanthophis antarcticus</i>	11	19
Australasian Grebe	<i>Tachybaptus novaehollandiae</i>	11	12
Unidentified Gannet		10	10
Short-Tailed Shearwater	<i>Ardenna tenuirostris</i>	10	12
Grey Goshawk	<i>Accipiter novaehollandiae</i>	10	11
Unidentified Robin		10	12
Blotched Blue-Tongue	<i>Tiliqua nigrolutea</i>	10	22
Lesueur's Velvet Gecko	<i>Amalosia lesueurii</i>	10	10
Copperhead	<i>Austrelaps sp.</i>	10	51
Olive-Backed Oriole	<i>Oriolus sagittatus</i>	9	11
Lewin's Honeyeater	<i>Meliphaga lewinii</i>	9	10
Fairy Martin	<i>Petrochelidon ariel</i>	9	10
Unidentified Bandicoot	<i>Isodon/Perameles sp.</i>	9	21
Green Tree Frog	<i>Litoria caerulea</i>	9	42
Mustard-Bellied Snake	<i>Drysdalia rhodogaster</i>	9	10
Tiger Snake	<i>Notechis scutatus</i>	9	23
Yellow-Faced Honeyeater	<i>Caligavis chrysops</i>	9	10
Blackish Blind Snake	<i>Anilius nigrescens</i>	8	10

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Noisy Friarbird	<i>Philemon corniculatus</i>	8	8
Carpet & Diamond Pythons	<i>Morelia spilota</i>	8	21
Eastern Broad-Nosed Bat	<i>Scotorepens orion</i>	8	10
Chocolate Wattled Bat	<i>Chalinolobus morio</i>	8	8
Eastern Free-Tailed Bat	<i>Mormopterus ridei</i>	8	8
Brown Honeyeater	<i>Lichmera indistincta</i>	8	11
Grey Fantail	<i>Rhipidura albiscapa</i>	8	9
Chestnut Teal	<i>Anas castanea</i>	8	8
Unidentified Emydura	<i>Emydura sp.</i>	8	11
Unidentified Raptor	<i>Raptor sp.</i>	8	32
Unidentified Frog	<i>Frog sp.</i>	8	46
Unidentified Falcon	<i>Falco sp.</i>	8	16
Unidentified Grebe		8	9
White-Winged Chough	<i>Corcorax melanorhamphos</i>	8	9
Wonga Pigeon	<i>Leucosarcia melanoleuca</i>	8	13
Greater Glider	<i>Petauroides volans</i>	7	7
Eastern Yellow Robin	<i>Eopsaltria australis</i>	7	10
King Quail	<i>Excalfactoria chinensis</i>	7	10
Red Kangaroo	<i>Macropus rufus</i>	7	8
Black Butcherbird	<i>Cracticus quoyi</i>	7	9
Unidentified Nightjar		7	7
Brown Falcon	<i>Falco berigora</i>	7	12
Little Red Flying-Fox	<i>Pteropus scapulatus</i>	7	9
Australasian Gannet	<i>Morus serrator</i>	7	10
Rufous Fantail	<i>Rhipidura rufifrons</i>	7	7
Green Catbird	<i>Ailuroedus crassirostris</i>	6	7
Red-Naped Snake	<i>Furina diadema</i>	6	7
Bell Miner	<i>Manorina melanophrys</i>	6	8
Bar-Shouldered Dove	<i>Geopelia humeralis</i>	6	6
Black-Faced Monarch	<i>Monarcha melanopsis</i>	6	7
Little Penguin	<i>Eudyptula minor</i>	5	22
Southern Forest Bat	<i>Vespadelus regulus</i>	5	5
Yellow-Bellied Seasnake	<i>Pelamis platurus</i>	5	10
Fluttering Shearwater	<i>Puffinus gavia</i>	5	5
Jungle Carpet Python	<i>Morelia spilota cheyni</i>	5	5
White-Plumed Honeyeater	<i>Ptilotula penicillatus</i>	5	5
Superb Lyrebird	<i>Menura novaehollandiae</i>	5	13
Painted Button-Quail	<i>Turnix varius</i>	5	5
Saw-Shelled Turtle	<i>Wollumbinia latisternum</i>	5	5
Unidentified Eagle		5	10
Crested Tern	<i>Thalasseus bergii</i>	5	5
Little Button-Quail	<i>Turnix velox</i>	5	6
White-Browed Scrubwren	<i>Sericornis frontalis</i>	5	5
Brown Antechinus	<i>Antechinus stuartii</i>	5	10
Unidentified Thornbill	<i>Acanthiza sp.</i>	5	5

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Unidentified Pardalote	<i>Pardalotus sp.</i>	5	9
Unidentified Thrush		5	7
Zebra Finch	<i>Taeniopygia guttata</i>	4	7
Grey Plover	<i>Pluvialis squatarola</i>	4	8
Unidentified Teal		4	4
Peron's Tree Frog	<i>Litoria peronii</i>	4	4
Torresian Crow	<i>Corvus orru</i>	4	7
Jacky Lizard	<i>Amphibolurus muricatus</i>	4	4
Centralian Carpet Python	<i>Morelia bredli</i>	3	3
Children's/Eastern Small-Blotched Python Hybrid	<i>Antaresia childreni x maculosa</i>	3	5
Great Cormorant	<i>Phalacrocorax carbo</i>	3	5
Unidentified Grassbird	<i>Cincloramphus sp.</i>	3	3
Stubble Quail	<i>Coturnix pectoralis</i>	3	5
Grey Shrike-Thrush	<i>Colluricincla harmonica</i>	3	4
Unidentified Kite		3	3
White-Necked Heron	<i>Ardea pacifica</i>	3	3
Unidentified Tern		3	6
Unidentified Flycatcher	<i>Myiagra sp.</i>	3	5
Unidentified Goshawk	<i>Accipiter sp.</i>	3	3
Eastern Horseshoe-Bat	<i>Rhinolophus megaphyllus</i>	3	3
Unidentified Black-Cockatoo	<i>Calyptorhynchus sp.</i>	3	6
Unidentified Fairy-Wren	<i>Malurus sp.</i>	3	5
Buff-Banded Rail	<i>Gallirallus philippensis</i>	3	4
Brown-Striped Frog	<i>Limnodynastes peronii</i>	3	7
Eastern Whipbird	<i>Psophodes olivaceus</i>	3	4
Shining Bronze-Cuckoo	<i>Chalcites lucidus</i>	3	3
Little Raven	<i>Corvus mellori</i>	3	3
Grey Teal	<i>Anas gracilis</i>	3	4
Mary River Tortoise	<i>Elusor macrurus</i>	3	3
Platypus	<i>Ornithorhynchus anatinus</i>	3	5
Lewin's Rail	<i>Lewinia pectoralis</i>	3	5
Little Black Cormorant	<i>Phalacrocorax sulcirostris</i>	3	5
Hawksbill Turtle	<i>Eretmochelys imbricata</i>	3	5
Little Egret	<i>Egretta garzetta</i>	3	4
Little Pied Cormorant	<i>Microcarbo melanoleucos</i>	2	4
Little Grassbird	<i>Megalurus gramineus</i>	2	4
Common Tern	<i>Sterna hirundo</i>	2	2
Unidentified Gecko		2	3
Tree Martin	<i>Petrochelidon nigricans</i>	2	2
Little Bronze-Cuckoo	<i>Chalcites minutillus</i>	2	2
Unidentified Swift		2	5
Rose Robin	<i>Petroica rosea</i>	2	2
Double-Banded Plover	<i>Charadrius bicinctus</i>	2	2
Dusky Antechinus	<i>Antechinus swainsonii</i>	2	2

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Eastern Dwarf Tree Frog	<i>Litoria fallax</i>	2	2
Eastern Forest Bat	<i>Eptesicus pumilus</i>	2	2
Risso's Dolphin	<i>Grampus griseus</i>	2	2
Black-Faced Cormorant	<i>Phalacrocorax fuscescens</i>	2	2
Apostlebird	<i>Struthidea cinerea</i>	2	2
Yellow-Throated Scrubwren	<i>Sericornis citreogularis</i>	2	2
Pallid Cuckoo	<i>Cacomantis pallidus</i>	2	3
White-Lipped Snake	<i>Drysdalia coronoides</i>	2	2
Bassian Thrush	<i>Zoothera lunulata</i>	2	2
Princess Parrot	<i>Polytelis alexandrae</i>	2	6
Long-Nosed Bandicoot	<i>Perameles nasuta</i>	2	3
Black-Bellied Swamp Snake	<i>Hemiaspis signata</i>	2	2
Unidentified Rat	<i>Rattus sp.</i>	2	7
Black-Fronted Dotterel	<i>Elseya melanops</i>	2	2
Westland Petrel	<i>Procellaria westlandica</i>	2	2
Masters' Snake	<i>Drysdalia mastersii</i>	2	2
Brown Tree Snake	<i>Boiga irregularis</i>	2	8
Lovely Fairy-Wren	<i>Malurus amabilis</i>	2	3
Unidentified Skink		2	10
Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	2	2
White-Cheeked Honeyeater	<i>Phylidonyris niger</i>	2	2
Green Rosella	<i>Platycercus caledonicus</i>	2	2
Fairy Prion	<i>Pachyptila turtur</i>	2	2
Intermediate Egret	<i>Ardea intermedia</i>	2	2
Jacky Winter	<i>Microeca fascians</i>	2	2
Swamp Rat	<i>Rattus lutreolus</i>	2	2
Southern Blind Snake	<i>Anilius australis</i>	2	2
Southern Leaf-Tailed Gecko	<i>Saltuarius swaini</i>	2	5
Spotted Python	<i>Antaresia maculosa</i>	2	3
Spangled Drongo	<i>Dicrurus bracteatus</i>	2	2
Spotless Crake	<i>Porzana tabuensis</i>	2	3
Hardhead	<i>Aythya australis</i>	2	2
Great Egret	<i>Ardea alba</i>	2	3
Splendid Fairy-Wren	<i>Malurus splendens</i>	2	2
Spotted Nightjar	<i>Eurostopodus argus</i>	2	2
Western Grey Kangaroo	<i>Macropus fuliginosus</i>	1	1
Whistling Kite	<i>Haliastur sphenurus</i>	1	1
Mistletoebird	<i>Dicaeum hirundinaceum</i>	1	1
Horsfield's Bronze-Cuckoo	<i>Chalcites basalis</i>	1	1
Grassland Melomys	<i>Melomys burtoni</i>	1	1
Whiptail Wallaby	<i>Macropus parryi</i>	1	1
Blind Snake	<i>Anilius sp.</i>	1	1
Blue Bonnet	<i>Northiella haematogaster</i>	1	1
Bourke's Parrot	<i>Neopsephotus bourkii</i>	1	2
Broad-Billed Prion	<i>Pachyptila vittata</i>	1	1

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Mastiff-Bat	<i>Mormopterus sp.</i>	1	1
Brown Booby	<i>Sula leucogaster</i>	1	1
Wandering Whistling-Duck	<i>Dendrocygna arcuata</i>	1	1
Unidentified Woodswallow		1	3
Masked Woodswallow	<i>Artamus personatus</i>	1	1
Rainbow Bee-Eater	<i>Merops ornatus</i>	1	1
Brown Thornbill	<i>Acanthiza pusilla</i>	1	1
Black-Throated Finch	<i>Poephila cincta</i>	1	1
Pink-Tongued Lizard	<i>Cyclodomorphus gerrardii</i>	1	1
Albatross	<i>Diomedea sp.</i>	1	1
Grey-Headed Albatross	<i>Thalassarche chrysostoma</i>	1	1
Pale-Headed Rosella	<i>Platycercus adscitus</i>	1	1
Yellow-Throated Miner	<i>Manorina flavigula</i>	1	1
Yellow-Footed Antechinus	<i>Antechinus flavipes</i>	1	1
Pale-Yellow Robin	<i>Tregellasia capito</i>	1	1
Small-Headed Blind Snake	<i>Anilius affinis</i>	1	2
White-Winged Triller	<i>Lalage sueurii</i>	1	1
Northern Leaf-Tailed Gecko	<i>Phyllurus cornutus</i>	1	2
White-Throated Tree creeper	<i>Cormobates leucophaea</i>	1	2
Mountain Dragon	<i>Rankinia diemensis</i>	1	1
Australian Ringneck	<i>Barnardius zonarius</i>	1	6
Black Kite	<i>Milvus migrans</i>	1	1
Agile Wallaby	<i>Macropus agilis</i>	1	1
Smooth Knob-Tail	<i>Nephrurus laevis</i>	1	4
Bandy-Bandy	<i>Vermicella annulata</i>	1	3
White-Faced Storm-Petrel	<i>Pelagodroma marina</i>	1	1
Barred-Sided Skink	<i>Eulamprus tenuis</i>	1	1
Sooty Shearwater	<i>Ardenna grisea</i>	1	1
White-Eared Honeyeater	<i>Nesoptilotis leucotis</i>	1	1
Haswell's Froglet	<i>Paracrinia haswelli</i>	1	1
Prong-Snouted Blind Snake	<i>Anilius bituberculatus</i>	1	1
Marbled Velvet Gecko	<i>Oedura marmorata</i>	1	1
White-Tailed Tropicbird	<i>Phaethon lepturus</i>	1	2
Rufous Whistler	<i>Pachycephala rufiventris</i>	1	1
Crested Bellbird	<i>Oreica gutturalis</i>	1	2
Unidentified Friarbird	<i>Philemon sp.</i>	1	2
King Brown Snake	<i>Pseudechis australis</i>	1	2
Unidentified Freetail Bat		1	1
Cunningham's Skink	<i>Egernia cunninghami</i>	1	3
Kreff's River Turtle	<i>Emydura macquarii krefftii</i>	1	1
Diamond Dove	<i>Geopelia cuneata</i>	1	4
Swamp Harrier	<i>Circus approximans</i>	1	2
Diamond/Jungle Python Hybrid	<i>Morelia spilota spilota x cheynei</i>	1	4
Eastern Spiny-Tailed Gecko	<i>Strophurus williamsi</i>	1	2
Brush Bronzewing	<i>Phaps elegans</i>	1	1

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Tern	<i>Sterna sp.</i>	1	1
Subantarctic Fur-Seal	<i>Arctocephalus tropicalis</i>	1	1
Leaden Flycatcher	<i>Myiagra rubecula</i>	1	1
Unidentified Dolphin	<i>Dolphin sp.</i>	1	4
Unidentified Blind Snake		1	2
Satin Flycatcher	<i>Myiagra cyanoaleuca</i>	1	1
Three-Toed Skink	<i>Saiphos equalis</i>	1	1
Tiliqua Scincoides Scincoides	<i>Tiliqua scincoides scincoides</i>	1	1
Nankeen Night Heron	<i>Nycticorax caledonicus</i>	1	2
Latham's Snipe	<i>Gallinago hardwickii</i>	1	1
Eastern Reef Egret	<i>Egretta sacra</i>	1	1
Top End Carpet Python	<i>Morelia spilota variegata</i>	1	3
Double-Barred Finch	<i>Taeniopygia bichenovii</i>	1	2
Forest Raven	<i>Corvus tasmanicus</i>	1	1
Red-Backed Kingfisher	<i>Todiramphus pyrrhopygius</i>	1	1
Brush Cuckoo	<i>Cacomantis variolosus</i>	1	2
Eastern Or Mainland Tiger Snake	<i>Notechis scutatus scutatus</i>	1	1
Redback Spider	<i>Latrodectus hasselti</i>	1	4
Burton's Snake-Lizard	<i>Lialis burtonis</i>	1	1
Spotted Black Snake	<i>Pseudechis guttatus</i>	1	3
Spotted Bowerbird	<i>Ptilonorhynchus maculatus</i>	1	1
Unidentified Snipe		1	3
Caspian Tern	<i>Hydroprogne caspia</i>	1	1
Friilled Lizard	<i>Chlamydosaurus kingii</i>	1	1
Copper-Tailed Skink	<i>Ctenotus taeniolatus</i>	1	2
Central Netted Dragon	<i>Ctenophorus nuchalis</i>	1	3
Kelp Gull	<i>Larus dominicanus</i>	1	2
Unidentified Scrubwren		1	1
Unidentified Rhynchoedura	<i>Rhynchoedura sp.</i>	1	1
Children's Python	<i>Antaresia childreni</i>	1	4
Red-Backed Fairy-Wren	<i>Malurus melanocephalus</i>	1	1
Little Woodswallow	<i>Artamus minor</i>	1	1
Unidentified Petrel		1	1
Straw-Necked Ibis	<i>Threskiornis spinicollis</i>	1	1
Common Dolphin	<i>Delphinus delphis</i>	1	6
Striated Pardalote	<i>Pardalotus striatus</i>	1	1
Red-Necked Pademelon	<i>Thylogale thetis</i>	1	1
Brown Treecreeper	<i>Climacteris picumnus</i>	1	1
Unidentified Sea Turtle	<i>Cheloniidae sp.</i>	1	2