

Application for assessment of a local infrastructure contributions plan – Part A

LIVERPOOL CONTRIBUTIONS PLAN 2021 AUSTRAL AND LEPPINGTON NORTH PRECINCTS

Application

Local Government

April 2021

Contents

1	1 Instructions			
	1.1	Who should fill in this application form?	1	
	1.2	How should a council submit an application?	1	
	1.3	What other information is available?	1	
2	Preli	minary Information	2	
	2.1	All applications	2	
	2.2	For contributions plans previously reviewed by IPART	5	
3	Asse	essment Criteria	6	
	3.1	Criterion 1 – the Essential Works List	6	
	3.2	Criterion 2 – Nexus	8	
	3.3	Criterion 3 – Reasonable costs	23	
	3.4	Criterion 4 – Reasonable timeframe	31	
	3.5	Criterion 5 – Reasonable apportionment	32	
	3.6	Criterion 6 - The council has conducted appropriate community liaison and publicity in preparing the contributions plan.	35	
	3.7	Criterion 7 – The plan complies with other matters IPART considers relevant	39	
4	Qua	lity assurance	40	
5	Attachment checklist			

1 Instructions

1.1 Who should fill in this application form?

This form is for NSW councils that are submitting a **local infrastructure contributions plan** to IPART for assessment. A separate application must be submitted for each contributions plan.

Councils are encouraged to discuss information requirements or other queries relating to the contributions plan assessment process with IPART prior to submitting an application.

Call IPART on 02 9290 8400 to speak to the Local Government Contributions Plan Team.

1.2 How should a council submit an application?

Councils should complete this Application Form Part A and submit it to IPART, along with the contributions plan and all relevant supporting documentation (see Checklist in section 5) by email, post or in person. We require an electronic copy of all documents.

Email	Post	In Person
Attention: Local Government Contributions Plan Team	Attention: Local Government Contributions Plan Team	Attention: Local Government Contributions Plan Team
localgovernment@ipart.nsw.gov.au	Independent Pricing and Regulatory Tribunal PO Box K35 Haymarket Post Shop Sydney NSW 1240	Independent Pricing and Regulatory Tribunal Level 15 2-24 Rawson Place Sydney NSW 2000

1.3 What other information is available?

Please refer to IPART's website https://www.ipart.nsw.gov.au/Home/Industries/Local-Government/Local-Infrastructure-Contributions-Plans for further information on our assessment process, including current and completed assessments. The website also has copies of:

- Application Form Part B (optional)
- Section 94E Ministerial Direction for Local Infrastructure Contributions 2012, as amended (Ministerial Direction), and
- Local Infrastructure Contributions Practice Note, January 2018.

2 Preliminary Information

2.1 All applications

A. Council information

Council name	Liverpool City Council
Primary council contact details (Provide name, position, phone number, and email address)	Shaun Beckley Manager Infrastructure Planning
Secondary council contact details (Provide name, position, phone number, and email address)	Nicole Haddock GLN Planning (consultant)

B. Information about the plan

What is the name of the plan?	Liverpool Contributions Plan 2021 – Austral and Leppington North Precincts
Which clause of the section 94E Ministerial Direction for Local Infrastructure Contributions (Ministerial Direction) applies to this plan (ie, clause 6, 6A, 6B or 6C)?	Clause 6C
What is the current maximum contribution amount (per lot or dwelling) for this plan under the Ministerial Direction?	\$30,000 per residential lot (with the cap)
In the absence of any cap imposed by the Ministerial Direction, what are the indicative contribution amounts (per lot or dwelling) for each type of residential development in the catchment area?	Residential lot for a dwelling house - \$34,334 per dwelling/lot plus \$363,575 per hectare of NDA Attached dwelling, semi-attached dwellings and multi-dwelling housing - \$26,255 per dwelling plus \$363,575 per hectare of NDA Other residential accommodation - \$26,255 per dwelling plus \$363,575 per hectare of NDA

When was the plan publicly exhibited?	18 March to 14 April 2020
Has the council adopted the plan? If so, when was it adopted and when did it come into force?	The Austral and Leppington North Precincts were first rezoned by the NSW Government for urban development in March 2013.
	The NSW Government prepared <i>Liverpool Contributions Plan 2014 - Austral and Leppington North</i> , based on the Indicative Layout Plan and with input from Council. This contributions plan came into force on 26 May 2015 (with any residential contributions collected subject to the cap.). The 2014 Plan was last amended (for the COVID-19 response) on 10 June 2020.
	The new Plan (2021), which includes changes to the network of stormwater infrastructure in the precincts as well as other changes, was endorsed by Council on 31 March 2021. At this meeting, Council also agreed to consider a post-IPART-review version of the plan after the IPART assessment has been completed (and associated Ministerial advice has been received).
To what extent was the Department of Planning & Environment (DPE) involved in the development of this plan?	The NSW Government (formerly Department of Planning and Environment (DPE)) was responsible for the Precinct Planning for the Austral Leppington North Precinct in consultation with Liverpool City Council (and Camden Council).
	The contributions plan is based on the Indicative Layout Plan prepared by the DPE (now Department of Planning, Industry and Environment (DPIE) and hereafter referred to as DPIE).
	At its meeting held on 29 March 2019, Council resolved to exhibit amendments to the State Environmental Planning Policy (Sydney Region Growth Centres) 2006 – Austral / Leppington North Precinct), Liverpool Growth Centre Precinct Development Control Plan; and Liverpool Contributions Plan 2014 (Austral and Leppington North Precincts) "the Austral/Leppington North Planning Framework". Given that the precincts are zoned by, and subject to controls of a State Environmental Planning Policy, rather than Council's Local Environmental Plan, Council must work with DPIE on any amendments to the SEPP.

	DPIE considered the planning proposal for a Gateway determination for amendments to Council's LEP (with application to the SEPP) in accordance with Council's resolution. DPIE issued a Gateway determination on 10 August 2019 which required Council to place the proposal on public exhibition for a minimum of 28 days. Gateway alterations were issued on 5 December 2019 (requesting additional sites be considered), and extensions granted on the 5 August 2020, and 12 February 2021. On 31 March 2021, Council resolved to: - Proceed with Liverpool Local Environmental Plan 2008 Amendment 75 (Attachment 1) and forward the amendment to the DPIE for finalisation and gazettal Approve amendments to Liverpool Growth Centres Precinct DCP in accordance with Attachments 2 and 3, on publication of the required notice and to come into effect once Liverpool LEP 2008 Amendment 75 is gazetted.
Over what period will development in the catchment area of the plan occur?	Approximately 20 years subject to development activity.
What proportion of the total projected development in the catchment area of the plan has been approved and/or constructed?	In the precinct, a total of 6,269 dwellings have been progressed as at September quarter 2020. This includes 2,808 lots at the Pre DA stage, 840 under assessment, 1,686 approved and 935 under construction.
What planning instruments (SEPPs, LEPs, or DCPs) apply to land in the catchment area of the plan?	SEPP (Sydney Region Growth Centres) 2006 (Appendix No.8). Liverpool Growth Centre Precincts DCP 2013 as amended – Sections 1 to 6 and Schedules 1 & 2 (Austral and Leppington North & Leppington Major Centre).
Has the Minister referred this contributions plan to IPART for review? If so, provide details.	No.

2.2 For contributions plans previously reviewed by IPART

Councils only need to complete these three questions for plans that IPART has previously reviewed.

C. Information about revisions to the plan

Why is the council submitting the revised plan for IPART's review?	Not applicable
Briefly explain how the plan has been revised in response to: - recommendations made in IPART's assessment report on the previous version/s of the plan, and - any directions from the Minister for Planning in relation to IPART's assessment.	Not applicable
Briefly explain any other revisions to the plan such as updated costings, revised apportionment of costs, or amended delivery timeframe.	Not applicable

3 Assessment Criteria

We will assess the contributions plan against the criteria listed in the *Local Infrastructure Contributions Practice Note*, issued by the Department of Planning and Environment (DPE) in January 2018 (Practice Note).

Your responses to the questions in this section will assist us in understanding how the plan, including the proposed cost of land and works, has been prepared.

- ▼ If the information in your proposed response is clearly set out in the contributions plan or a separate report or document, it is sufficient to refer to the appropriate sections/pages.
- Any referenced reports and documents will need to be attached to this application (see Checklist in Section 5).

3.1 Criterion 1 – the Essential Works List

The public amenities and public services in the plan are on the Essential Works List

We are required to assess whether the land and works in the contributions plan are on the Essential Works List (EWL). Refer to the Practice Note for the most recent version of this list, including a definition of base level embellishment of open space.

Checklist for the contributions plan

Does the contributions plan			Contributions plan page reference(s)
Include land or works not on the EWL	Yes ⊠	No □	Page 65
Include costs for any land or works not on the EWL in the calculation of contribution rates	Yes ⊠	No □	Page 3

- 1. If the plan includes costs for land and/or works not on the Essential Works List:
 - a) list these items below, and
 - b) indicate how their costs are to be met.

The Plan distinguishes between essential and non-essential infrastructure in **Sections 1.2.1** and **5.2** with contributions currently payable under the Plan for essential infrastructure only. Non-essential infrastructure rates are only included for demonstrative purposes in the Plan to show the cost of providing community infrastructure (capital works only) arising from the new development. This infrastructure will be funded from other non-contribution sources e.g. rates revenue.

Only the land component for community services is on the Essential Works List. However, we require details of the community services that are intended to be provided on this land, so we can determine what proportion of the land costs can be recovered through development contributions.

2. List the community services that will be provided on the land that is to be acquired for community services (eg, youth centre, library) and indicate the floor space area allocated to each.

The Plan contains land of 1.4341 ha for the following community infrastructure facilities:

- A multi-purpose community centre in Austral adjacent to the local centre of 1,500 square metres floor area, including a variety of flexible multi-purpose spaces suited to a range of community activities and programs.
- Three (3) multi-purpose community centres in other neighbourhood centres in the Precincts adjacent to local centres, each with an approximate building area of 750 square metres.

Further information regarding these facilities is in Section 4.3 of the Contributions Plan (CP) and **Attachment 17** – Elton Consulting's Demographic and Social Infrastructure Assessment.

3.2 Criterion 2 – Nexus

The proposed public amenities and public services are reasonable in terms of nexus (the connection between development and the demand created).

Nexus ensures that the land and works included in the contributions plan are required to meet the increased demand for facilities generated by the anticipated development.

Checklist for the contributions plan

Does the contributions plan			Contributions plan page reference(s)
Incorporate a map showing the geographical catchment area of the contributions plan		No □	Page 13
Detail the types of development that will occur in the catchment area(s) of the plan, and the approximate area of each land use		No □	Pages 14, 25-33
Include information about:			Pages 25-33
the existing population in the catchment area	Yes ⊠	No □	
the projected residential population and/or workforce	Yes ⊠	No □	
Include details about how the need for land and works was determined		No □	Pages 34-67
Refer to design and construction standards used in determining the works in the plan		No ⊠	-

3. Explain the process used to determine the need for all land and works in the plan.

List any supporting studies relied on and explain any deviations from recommendations in those studies.

Stormwater land and management works

Stormwater runoff in the Austral and Leppington North Precincts was proposed in precinct planning to be managed through a comprehensive Water Sensitive Urban Design (WSUD) approach.

Informed by a range of studies, the report *Austral and Leppington North Precincts Water Cycle Management WSUD Report* (the WSUD Strategy) prepared by Cardno Pty Ltd (**Attachment 4**) established the preliminary framework for the management of stormwater quantity and quality related to the expected urban development of the Precincts. This report was informed by a range of studies including:

- Cardno (2011), *Biodiversity Conservation Assessment*, Draft Final Report, prepared for the Department of Planning, January.
- Cardno (2011), *Riparian Corridor and Flooding Assessment*, Draft Final Report, prepared for the Department of Planning, February.
- GeoEnviro Consulting (2010), *Geotechnical, Salinity and Acid Sulfate Soil Investigation*, prepared for the Department of Planning, December.
- JBS Environmental (2010), *Preliminary Environmental Site Assessment*, Final report, prepared for the Department of Planning, December.
- Growth Centres Commission (2006), Growth Centres Development Code, November.

The main water management infrastructure was proposed to manage flooding within the project area and to minimise downstream impacts includes detention basins, trunk drainage pipes, overland flow paths/constructed channel systems, and culvert crossings. A series of bioretention systems and gross pollutant traps (GPTs) were also proposed to manage stormwater quality within the project area.

Refinements to the water cycle management strategy

SMEC Australia Pty Ltd (SMEC) was engaged by Council in 2018/19 to refine the water cycle management strategy and undertake investigation and detailed concept design of proposed flood mitigation, water quality control structures and other stormwater infrastructure within the precincts. It prepared the following report (**Attachment 8**):

• SMEC Australia (2019), *Detailed Concept Design Report - Austral and Leppington North Design of Water Management Infrastructure*, prepared for Liverpool City Council, March (SMEC Concept Design Report).

SMEC's recommendations resulted in a number of changes to the originally proposed stormwater facilities for the Plan which seek to achieve infrastructure efficiencies through the optimization of basin and non-basin system design.

SMEC adopted a systems-based or integrated approach for the design of the water management infrastructure, which included the removal of some Cardno-recommended basins.

There are 62 drainage systems and these were grouped into three categories as follows:

- Drainage systems with 1% AEP basins
- Drainage systems with 50% AEP basins
- Drainage systems without basins.

As a result of SMEC's findings, the Plan includes:

• eight detention basins designed to control the 50% and 1% AEP flows, and

• eleven basins designed to control only the 50% AEP flow.

A typical drainage system with a basin includes trunk drainage pipes and channels, a detention basin and water quality controls such as GPT/sedimentation pond, biofilters and raingardens. The need for culverts along the major creeks and creek enhancement works were also identified by SMEC.

Only eight of the non-basin drainage systems include trunk infrastructure works (either pipe or channel). Streetscape raingardens will be implemented throughout these drainage systems to manage stormwater quality but these will be implemented through development controls rather than via this Plan.

The remaining flood mitigation infrastructure such as trunk drainage pipes, channels, and culverts are designed to convey flows up to the 1% AEP event.

Additional basin and trunk drainage needs

One basin (B32) was outside the border of SMEC's study coverage so was retained in the CP based on Cardno's recommended facility scope and cost. This includes the associated trunk drainage infrastructure (DC65 and DC66).

In addition, Council identified the need to acquire a portion of Bonds Creek land located between Camden Valley Way and Cow Pasture Road (formerly an easement) in early 2021 as part of the stormwater management network.

Supplementary streetscape raingardens

One of the other main changes to the original WSUD strategy concerns the approach to managing water quality. The earlier WSUD Strategy recommended an end-of-pipe approach to managing stormwater quality, by either co-locating bioretention and detention basins or providing stand-alone end-of-pipe biofilters. Although a treatment train approach was advocated, most of the water quality improvement was to be achieved by the end-of-pipe bioretention basins. However, SMEC identified that it is not possible to operate a biofilter in some basins due to hydraulic constraints.

Additionally, due to the limited footprint area, the majority of the co-located biofilters were undersized relative to their catchments. Therefore, supplementary streetscape controls (i.e. raingardens) are proposed to meet the water quality treatment targets and replace the stand-alone end-of-pipe biofilters.

SMEC prepared a separate report identifying specific streetscape raingarden needs (**Attachment 11** Final Design Report – Development of Streetscape Raingarden Master Plan for Austral and Leppington North, February 2021). This report provided the design procedures and considerations adopted for the development of the Precincts' streetscape raingarden master plan.

Consistent with this master plan, the Plan includes streetscape raingarden works at 181 intersections, 383 T-junctions and 29 road bends.

Creek enhancement works

In addition to the design of the drainage and water quality infrastructure, creek enhancement works (i.e. filling of flood fringe areas up to the post development 1% AEP flood level), were proposed to maximise development potential. SMEC's modelling results indicated that the 1% AEP flood levels were increased in some locations because of the filling, but the increases were not significant. The enhancement works have not been included in the Plan.

Creek culverts

This Plan also includes 12 creek culverts based on SMEC's recommendations to remove 14 existing culverts, redesign nine existing culverts and add three new culverts compared with the earlier WSUD Strategy.

Further information on the stormwater management infrastructure is in Section 4.4 of the Plan and **Attachment 8** (SMEC's Concept Design Report).

Transport land and works

The existing road network is limited in scope and comprises generally rural roads. Accordingly, the existing road network is generally not capable of supporting increased traffic volumes and loads as a result of the new development in Austral and Leppington North.

An assessment of the traffic to be generated by development of the precincts was informed by the transport assessment reports prepared by AECOM (Attachments 13 and 14). Using industry standards developed by then Roads and Maritime Services (RMS) and the (then) Department of Planning and Infrastructure (DP&I) for classification of roads, a road hierarchy was developed, which contributed to the preparation of the ILP. That is, the standards for traffic volumes for local and collector roads determined the extent of collector roads and higher order roads in the precincts. The landform of the locality helped determine road links and creek crossings needed for an orderly road network.

The proposed network increases traffic volumes beyond the collector standard for several major roads to sub-arterial and arterial standard. These higher class roads are generally listed in the Special Infrastructure Contribution (SIC) and have therefore not been included in the Plan.

The inclusion of works in the Plan is generally identified on the basis that it would be unreasonable or impractical for an adjoining developer(s) to be solely responsible for a particular facility.

Some items (e.g. roundabout at fourth and fifth and traffic signals) were included in the AECOM study and will not be funded by the SIC, so are included in the Plan. As planning has progressed, Council has refined the transport management strategy and the specific local infrastructure needs for the Austral and Leppington North precincts to ensure alignment with other infrastructure needs (e.g. drainage) and the safe and practical operation of the overall road network. This has resulted in the determination the need for the following infrastructure items:

- Approximately 13 kilometres of new roads or road upgrades for full or half road widths as required
- 13 pedestrian crossings (plus road sections over creek culverts and crossings otherwise in drainage costs)
- Fifty (50) pedestrian refuge crossings or thresholds;
- 10 intersections (9 new roundabouts and one new signalized intersection); and
- Forty-two (42) bus shelters.

The works schedule (**Attachment 2**) provides the full list of inclusions and the updated road network map is contained in the proposed amended DCP (**Attachment 3**).

Open space land and works (embellishments)

The proposed levels of open space area and recreation facilities were generally informed by the Austral and Leppington North Precincts - Demographic and Social Infrastructure Assessment Report prepared by Elton Consulting Pty Ltd (**Attachment 17**). This is supplemented by an Addendum, prepared by Elton Consulting in July 2012 (**Attachment 18**).

The total area of local and district open space land required was calculated in the Social Infrastructure Assessment on the basis of meeting the combined needs of the Austral and Leppington North Precincts' developments.

The planning of open space areas was undertaken as part of the Precinct planning phase in an iterative manner. Earlier versions of the ILP identified more extensive passive open space areas aligning with the numerous drainage lines traversing the Austral and Leppington North Precincts. The size of the open space areas was reduced in acknowledgment of the very high cost of acquiring the substantial areas required for meeting open space demands.

In this 2021 Plan, the acquisition and existing areas of open space were reviewed by Council staff and updated, where necessary.

This Plan proposes to provide around 120 ha of open space which for a proposed population of 57,737 residents, equates to a rate of provision of 2.08 hectares per 1,000 residents. The rate of provision is based on the final Indicative Layout Plan prepared by the NSW Department of Planning and Infrastructure (now DPIE). It provides a reasonable level of provision since residents can also access a range of other open space areas, including regional open space facilities and significant bushland areas, concentrated largely around the riparian corridors.

Some of the land is already owned by Council such that only 106.64 hectares of land needs to be acquired under the Plan.

The data in the table below (as reflected in the schedule to the Plan) show a weighting toward the provision of passive rather than active open space. The high percentage of passive open space arises in part because of the extensive creek networks that traverse the Precincts.

Table Proposed land acquisition of district and local open space

Item	Facility	Area (ha)
	Future Land Acquisition	
LALP	Local passive open space facilities	36.5056
LALS	Local sporting field facilities	26.3658
LADP	District passive open space facilities	34.6994
LADS	District sporting field facilities	9.0691
	Total	106.6399

Staging / Priority of infrastructure - when surrounding development proceeds.

Council-owned land (which does not need to be acquired) includes Craik Park (9.7 hectares of which will be partially embellished under this Plan as LS5) and WV Scott Memorial Park and surrounding areas (3.75 hectares upon which the Regional Indoor Sports and Aquatic Centre is likely to be located at LP62).

The number of different facilities to be provided under this Plan are as follows:

- 46 local parks (with park furniture or embellishment and nine playgrounds),
- 11 district parks (9 with picnic facilities, park furniture and playgrounds and 6 with outdoor courts), noting only 5 are more than 3 ha in area,

- 5 local sporting fields (with parking and various other amenities including 4 with formal courts) and
- 1 district sportsground (with parking, various other amenities and formal courts).

Community services land

The Plan contains land of 1.4341 ha for the following community infrastructure facilities which were recommended by Elton Consulting to meet the demands of the additional population (**Attachments 17-18**):

- A multi-purpose community centre in Austral adjacent to the local centre of 1,500 square metres floor area, including a variety of flexible multi-purpose spaces suited to a range of community activities and programs.
- Three (3) multi-purpose community centres in other neighbourhood centres in the Precincts adjacent to local centres, each with an approximate building area of 750 square metres.

Elton noted that the ILP for the precincts incorporates these four facilities as it recommended. The proposed land take for these facilities in the Plan is as follows:

- CF2 Local community facility 0.3412 ha
- CF3 Local community facility 0.2867 ha
- CF4 Local community facility 0.5339 ha
- CF5 Local community facility 0.2723 ha.
- 4. Were any supporting studies prepared for the catchment area but not relied on? If so, explain why they were not used.

Since the completion of the original Indicative Layout Plan, Council proposed amendments to the Growth Centres State Environmental Planning Policy (SEPP) 2006 and the Development Control Plan (DCP) applying to the precincts. These amendments were first endorsed for public exhibition by Council at its meeting of 29 March 2019. DPIE issued a Gateway determination on 10 August 2019.

A summary of the main changes to the DCP (and CP) are as follows:

- Some minor adjustments to the street network;
- Deletion of some creek crossings;
- Adjustments to the drainage network arising from a recent review of the drainage strategy by SMEC (details below);
- Street cross section design to improve traffic safety and incorporate water sensitive urban design; and
- Redesign of stormwater quality management controls.

Council in 2017 commissioned consultants (SMEC) to review the drainage strategy for the Austral and Leppington North Precincts and prepare detailed concept designs for each item of major drainage infrastructure. The detailed concept designs assist with implementation of land development.

The study by SMEC superseded the recommendations of Cardno regarding the stormwater management network and has resulted in a more optimal stormwater management approach with detailed concept designs based on the nature of the land and specific infrastructure requirements.

As a result, the following amendments to the drainage strategy are incorporated in the amended Plan:

- Deletion of two detention basins;
- Replacement of some drainage channels with pipes;
- Deletion of some road frontages to deleted channels; and
- Deletion of separate rain gardens (water quality measures), which are replaced with streetscape raingarden works.

There are also minor deviations to the road network with the proposed changes to the DCP. In addition, Council has determined where it needs roundabouts and additional traffic works for safe and optimal traffic flow throughout the local road network. These intersection and other traffic treatments are reflected in the Plan and Works Schedule, but not specifically in the AECOM study.

In the Council meeting of 31 March 2020, the following summary of changes to the Austral Leppington North Planning Framework was reported as a result of the gateway determination, subsequent amended gateway determinations, liaison with DPIE officers and further refinement of controls by Council staff:

Document	Change
SEPP	Rezoning Lot 99 Gurner Avenue, Austral to SP2 Infrastructure (Electricity distribution) at the request of Endeavour Energy.
SEPP	Moving an SP2 Infrastructure (Local Drainage) zone near Tokyo Road and Cortina Avenue, Austral to reflect the constructed position of the drainage path and to facilitate residential development on lots subdivided for residential purposes.
SEPP	Moving SP2 Infrastructure (Local Road) zoned land on 1382-1384 and 1402 Camden Valley Way, Leppington. The intersection of Cowpasture Road and Camden Valley Way (near the Four Lanterns Estate) was constructed in a different layout compared to the plan which informed the zoning. This requires construction of the road through the affected properties in a different location, hence the need to move the zone.
SEPP	Rezoning Lot 2 Gurner Avenue (owned by Sydney Water) to SP2 Infrastructure (Sewerage system) at the request of Sydney Water.
SEPP	Additional land zoned SP2 Local drainage is to be zoned R2 Low Density Residential in the vicinity of 255-285 Fifteenth Avenue, Austral. The existing zoning extent would require significant disturbance to an established childcare centre and place of worship with the resultant impact being that Council would have to acquire and demolish these

	assets. A culvert solution can be achieved on these lands, which would minimise disturbance and allow privately owned social infrastructure to be retained.
SEPP	Amendments to Clauses 4.1AD, 4.1AE, and 4.1AF. Clauses allow lodgement of a 1 lot to 2 or more lot subdivision combined with DA plan for a dwelling but restricts DA plans for one dwelling only. Modification of this clause will allow Council to consider dwelling plans for more than one lot.
DCP	Changes to section 2.3.2 (Water cycle management) and 3.3.1 (Street network layout and design) as a result of changing the onus of raingarden construction from developers to the CP.
DCP	Reduction in width of the shared path on collector roads from 3.0m to 2.5m. A secondary section has also been provided for collector roads to provide details around Local Area Traffic Management (LATM) devices, bus stops, tree pits, or intersections.
DCP	Updates the local street cross-section, reducing the carriageway from 6.0m to 5.5m and increasing the verge widths from 2.8m to 3.05m each. 5.5m of carriageway still permits two-way traffic, without requiring passenger vehicles to stop. Most passenger vehicles are in the region of 2m in width, with Australian Vehicle Standards requiring vehicles (including trucks) to be no wider than 2.5m without an exemption (e.g. oversized vehicles). Carriageway narrowing was required as the combined width of the carriageway and parking bays was overlapping with standard utility allocations. This would result in stormwater pipes and Sydney Water pipes being in the same horizontal position, which would result in construction and maintenance issues/delays. Additional notes were also provided to describe the passive irrigation tree pit.
DCP	Amending the local street 20m figure. The figure shows a shared path on one side of the street despite some not being identified as bicycle routes in the DCP. A note was added to state that the shared path is only required on cycleway routes.
DCP	A culvert is required under a future local street at 275 Fifteenth Avenue Austral and would be too wide to fit under the carriageway of the new local street cross-section. The former local street cross-section will be used for roads where a 5.5m-9m wide culvert will be positioned under the carriageway.
DCP	Adding a new section in the DCP 3.3.2 Street furniture. Moved controls relating to street trees, signage, lighting to this section, as they were randomly spread throughout the street network layout and design section.

	· Added a control requiring lighting on pedestrian access paths, to address CPTED requirements.
	 Added a control which recommends lighting of paths, especially key walking/cycling routes, when traversing open space (consistent with controls for open space).
	Added a control which requires the design and placement of street furniture in the public domain to consider physical distancing requirements (e.g. avoid pinch points created by clustering infrastructure such as bus-shelters next to utility boxes, or fenced pedestrian paths / bridges to be at least 3.5m wide).
DCP	Clarified various controls in the Local Area Traffic Management section.
DCP	Amending the pedestrian access path cross-section figure to provide a total width dimension. This was described in the in-text control, but the number in the figure was mistakenly omitted.
DCP	Updated the temporary half road cross-section to provide 2.75m travel lanes, as per the local street (16m) cross section of which it is derived.
DCP	Updated garage door width controls, where relevant, to clarify that the garage internal and external dimensions are to be no more than 40% of the façade width, not just the garage door. This is important in maintaining passive surveillance of the street and responds to recent DAs where double width garages have been provided with a single width door in order to avoid complying with the intent of the control.
LEP 2008	Repealing LEP 2008 maps for land zoned as per the East Leppington precinct. When the East Leppington precinct was rezoned under the SEPP in 2014, the LEP maps applying to the area were not amended / repealed. Whilst the LEP maps have no effect, the mapping of zoning and development standards on the land still creates confusion.
Contributions Plan	Retitled to Liverpool Contributions Plan 2021 – Austral and Leppington North Precincts to reflect the broad update of the plan.
Contributions Plan	Updates to the CP to reflect the removal of several bioretention basins, open drainage channels, and some detention basins. As a result of exhibition, the CP now includes the cost of in-street raingardens at nominated locations.
Contributions Plan	Indexation of costs to the December 2020 quarter
Contributions Plan	Aligns the occupancy rate of open space generation from 3.1 people per dwelling to 3.4 to respond to observed increases within the precincts. This is consistent with the generation rates elsewhere in the CP
Contributions Plan	Update to the planning principles for open space for further clarification.

Contributions Plan	Updated CP, works schedule and map to align with the above changes and most recent ILP.
Contributions Plan	Update likely location of regional Sports and Aquatic Centre to Scott Memorial Park as identified in Council's Aquatic Facilities Strategy.

5. How has non-residential development been considered in determining the need for infrastructure in the plan.

The net developable area of non-residential development is 84.42 ha, comprising local and neighbourhood retail centres, a light industrial area and a bulky goods retailing area adjoining the neighbouring Leppington Major Centre.

The anticipated extent of these non-residential developments is shown in Table 3.6 in the Plan (also shown below).

Table 3.6 Anticipated non-residential development potential

Land use category	Net Developable Area (ha)	Projected gross floor area (m²)*
Neighbourhood Centre	9.02	40,590
Local Centre	9.44	42,480
Bulky goods	25.70	115,650
Light Industrial	40.26	181,170
Total	84.42	379,890

^{*} based on an assumed average floor space ratio of 0.45:1

Source: Department of Planning and Infrastructure (now Department of Planning, Industry and Environment)

Water cycle management facilities

Non-residential land uses such as business and industrial contribute to increased stormwater runoff due to the significantly increased impervious surfaces. Accordingly, these uses are also proposed to contribute to the cost of providing stormwater management infrastructure.

Traffic management facilities

Non-residential land uses contribute to the traffic generation in the area and are also proposed to contribute to the funding of traffic management facilities.

Social infrastructure facilities

The Plan does not levy non-residential development for open space or community facility costs because the demand for these facilities is considered to arise principally from residential development in the two precincts.

Plan administration

Non-residential uses do contribute to the cost of preparing and administering the Plan.

6. In determining the need for infrastructure in the plan, what consideration was given to:

- a) the existing population in the catchment area
- **b)** any existing or projected population outside the catchment area
- c) the capacity of existing infrastructure in the catchment area, and/or
- d) any existing or proposed infrastructure outside the catchment area.

a) The existing population in the catchment area

In principle, the scope of works is based on the demand created by the "additional development or population" and not the final overall development and population. The scope of works is to be funded by the additional development and population.

Based on the ILP and original Plan, the Council estimated a net additional population of 49,686 residents for the Austral and Leppington North precincts.

Council estimated that the existing dwellings numbered 782 which suggests 2,659 existing residents (based on assumed average occupancy rates in the Plan).

Following adjustments to the land use areas in the ALN precincts (in the Liverpool LGA), primarily, as a result of changes to the drainage infrastructure network, the adjusted net additional population estimate is 55,078.

The works schedule (**Attachment 2**) provides the breakdown of the demand credits (see 'Demand credits' and 'NDA and Population Summary' worksheets), and the demand credit information is also presented in Appendix A of the Plan.

The estimate of existing development has informed the expected demand credits that would be payable to existing development.

b) The existing population outside the catchment area

Elton found in its social assessment study that there are no essential work regional or district level facilities planned for within the precincts that would service the broader local government area (LGA). The only infrastructure for which there is assumed to be shared demand from outside the precinct is the regional indoor recreation and aquatic centre, and Council already owns the land which has been identified for this site.

c) The capacity of the existing infrastructure in the catchment area

Water cycle management facilities

The only drainage infrastructure is the existing creeks. There is no surplus capacity in drainage facilities that would be available for new development.

Traffic management facilities

The existing road network consists of rural roads. The scope of works involves that required to serve the additional population and development.

Open space and recreational facilities

There are three identified local public open space areas located within the Liverpool LGA part of the Austral and Leppington North precincts. These are:

Craik Park (includes children's playground, sports field and tennis courts);

- WV Scott Memorial Park (includes children's playground, sports fields, cricket practice nets, netball courts and bushland); and
- Starr Park (bushland and not zoned RE1 (E2)).

The level of open space provision reflects the rural residential lifestyle of the area. That is, the demand for public open space (particular local and passive open space) is significantly reduced in locations where residents live on their own substantial parcel of land.

The proposed development of the area to an urban environment standard and its associated influx of new residents will require significantly more land for open space and recreation purposes.

Community facilities

Consistent with its small population and semi-rural character, existing social infrastructure within Austral and Leppington North is currently very limited, serving the existing pre-development population only. Existing facilities include:

- A community hall in Austral and Leppington •
- Four childcare centres / kindergartens and one before and after school care centre
- Leppington Progress Association Hall, which provides meeting space for local community groups and activities
- A youth centre and skate ramp in Austral
- Two non-government community service organisations which provide services to the Austral and outer Liverpool community – Outer Liverpool Community Services Inc, located adjacent to the Austral Progress Association Hall and The Junction Works Inc, at Craik Park.

Elton took these existing facilities into account (and their existing demand) in it assessment of what facilities are needed to serve the additional population in the precincts.

d) Any existing or proposed infrastructure outside the catchment area.

Water cycle management facilities

Strategies were developed on a precinct by precinct basis to deal with demand of each precinct and were generally independent. The planning of flood mitigation works in the two precincts was undertaken in conjunction with Camden Council on the basis that development within Camden Local Government Area (LGA) would not increase the peak flood discharge at the council boundary into the Liverpool LGA. It is anticipated that the future planning of other precincts to the west will deal with water cycle management separately.

Traffic management facilities

Any shared demand with other existing or future precincts will occur on the higher order roads such as arterial and sub-arterial roads, which are generally excluded from the Plan. There are few roads which link from the Austral and Leppington North precincts to other existing or future precincts other

than via higher order roads that will be funded by the Special Infrastructure Contribution, the NSW and Federal Governments.

It is anticipated that the funding of the Gurners Ave link across Kemps Creek will be shared with contributions from the future Kemps Creek precinct to the west. Other than this item, no neighbouring precincts were considered in the demand assessment for traffic management facilities.

Open space and recreational facilities

The Austral and Leppington North Precincts are bounded to the west by Kemps Creek, to the north and east by the Western Sydney Parklands. There is limited connectivity with the areas to the west, north and east.

Regarding the current or proposed provision of open space facilities outside the catchment, Elton in its social infrastructure assessment (**Attachment 17**) identified that:

- Local level open space within each release area has been provided to meet local level needs only, and so will not have capacity for or be readily accessible to the future Growth Centre population.
- New residents in the Austral and Leppington North precinct will be fortunate in being located reasonably close to existing urban areas to the east in Liverpool LGA, such as Carnes Hill, Hoxton Park and new urban areas such as Edmondson Park. As such, residents of Austral and Leppington North would have reasonable access to district level recreation and sporting facilities in those areas. However, the Austral and Leppington North populations have not been factored into the planning for these facilities, which will not have capacity to service this additional population.
- The current supply of recreation facilities in Camden local government area is largely located in the southern parts of the LGA in line with the urban growth of Camden. It is not anticipated that the existing district facilities would be able to accommodate the increased in demand from the projected population in Austral and Leppington North.
- Any existing capacity of district open space and recreation facilities in Camden will be taken by other new release area developments currently under construction or planned in Camden.
- There is an identified shortage of sporting facilities to satisfy current demand. Both Liverpool and Camden Council staff have indicated that there is increasing demand for more, full-sized, well drained and appropriately located sporting fields, which provide for a range of sports and with floodlighting and higher standard amenities.

Consideration was given to the proximity of the Western Sydney Parklands to the Austral and Leppington North Precincts in determining the additional open space to be provided in the precincts.

Community facilities

Elton Consulting (see **Attachment 17**) noted that the district level facilities in surrounding areas have generally been planned on the basis of demographic forecasts for the Southern Hoxton Park area and will not be large enough to meet needs from Austral and Leppington. In addition, given the local and district focus of additional surrounding services and facilities and the distance to Austral and Leppington, as well as the physical barriers presented by the Western Sydney Parklands and Sydney

Water canal, these facilities will not be able to meet needs generated by the future development of Austral and Leppington.

Elton Consulting also found that existing regional level facilities primarily located in and around Liverpool City Centre are generally considered to be operating at capacity and could not absorb additional demand from Austral and Leppington without augmentation of their resources.

In addition, there would not be any local community facilities in neighbouring areas with which the precincts would reasonably access. Accordingly, no neighbouring precincts were considered in the demand assessment for local or district level community facilities.

The regional indoor recreation and aquatic centre is proposed for a site on WV Scott Memorial Park and once constructed, this facility will be accessed by residents from outside precincts.

3.3 Criterion 3 – Reasonable costs

The proposed development contribution is based on a reasonable estimate of the cost of the proposed public amenities and public services.

IPART must advise whether the proposed development contributions are based on a *reasonable* estimate of the cost of the proposed public amenities and public services. This includes how the base costs of land and each item of infrastructure are derived and the method used to calculate the contribution rates and escalate them over time.

Checklist for the contributions plan

Does the contributions plan		Contributions reference(s)	plan	page
Explain how the proposed cost of works was derived (eg, Yoquantity surveyor or other consultant advice, standard costs used by the council)	'es ⊠ No □	Page 27		
Explain how the proposed cost of land was derived You	'es ⊠ No □	Page 27		
Include a schedule of the contributions rates (eg, \$/ha, Yo\$/person, \$/dwelling)	'es ⊠ No □	Page 7		
Explain how the contribution rates will be adjusted for You inflation/ changes in costs	'es ⊠ No □	Pages 20-23		
Provide details of accounting arrangements for contribution Ye funds (eg, is pooling of funds permitted, will internal borrowings be used to deliver infrastructure projects?)	′es ⊠ No □	Page 24		
If using a Net Present Value (NPV) approach, include You assumptions made in the modelling of costs and revenue	'es ⊠ No ⊠	n/a		

7. What is the base period for costs in the plan (eg, June 2017)?

December 2020 quarter.

8. Explain the process used to estimate costs for works for each infrastructure category.

Refer to matters such as:

- Use of consultant or QS estimates
- Use of council costs
- Use of benchmark costs
- Any allowances included, such as professional fees and contingencies
- Details of any indexation of cost estimates to the base period of the plan, including the index used

Original derivation of cost estimates

The planning for the Austral and Leppington North Precincts was undertaken by the NSW Government (then DP&I, now Department of Planning, Industry and Environment (DPIE)) in conjunction with Liverpool City and Camden councils. The contributions plans for each council were based on the same principles and planning studies, noting refinements have been required as planning for the precincts has progressed.

Council was part of a joint infrastructure cost working group that established the original infrastructure cost estimates in the plan, based on input costing studies and Council's experience. Costs for capital works were compared to similar section 7.11 plans and the rates were adjusted where appropriate.

Both councils originally sought to have as much consistency between their respective contributions plans as possible. This is reflected in the same or similar unit costs for much of the comparable infrastructure.

The Department also engaged quantity surveyors, WT Partnership to further review the draft costing rates (**Attachment 25**) and the results were considered by Council in finalising the original plan's cost estimates, particularly for open space embellishment.

In amending the Plan, Council engaged SMEC to cost its recommended stormwater infrastructure facilities (**Attachment 8**), and these costs have been adopted by Council with some amendment for more reasonable contingency, project design and on-costs (streetscape raingarden costs), and cut and fill allowances, as considered necessary by Council (**Attachment 12**).

Indexation of costs

Capital works costs in the schedule of works are escalated to the base date of this Plan by ABS producer price indexes (PPIs):

- PPI Building Construction NSW (cat no. 30) for community facilities
- PPI Non-Residential Building Construction NSW (cat no. 3020) for open space facilities; and
- PPI Road and Bridge Construction NSW (cat no. 3101) for roads and stormwater facilities.

Streetscape raingarden cost estimates were not indexed because they were prepared February 2021.

The capital works components of contributions are indexed by the CPI with the Plan's implementation.

As explained below, Council has applied new land valuations (by the land valuers, CivicMJD) to the land acquisition costs in the amended Plan which establishes new base costs for land. With the amended Plan's implementation, the land costs will continue to be indexed by Council's Land Value Index (LVI) for the Austral and Leppington North (ALN) precincts. Council has a comprehensive LVI program which applies across all of its contributions plan catchments to ensure that the contributions are adjusting with market moves in land prices.

Council's LVIs are based on periodical land valuations of the relevant catchment. The formula is as follows:

C ₃ =	C ₂ x L ₃	
	L ₂	
where:	C ₂ =	Contributions as shown on the consent
	C ₃ =	Contributions at time of payment
	L ₂ =	Average estimated land acquisition cost per square metre at the time of development consent
	L ₃ =	Average estimated land acquisition cost per square metre at time of calculating final payment

Council publishes the latest quarterly LVI factor for each catchment on each website together with the quarterly contribution rates. As shown in the formula above, the LVI factors are estimated by dividing the latest average land value by the original average land value (which is for prime residential land).

Stormwater works cost estimates

The stormwater infrastructure works costs are mainly based on SMEC's recommendations (see SMEC Concept Design Report – **Attachment 8** and SMEC's cost estimates with Council revisions – **Attachment 12**). The streetscape raingarden costs are based on SMEC's separate design report for this infrastructure (**Attachment 11**).

Cardno had originally provided the cost estimates for the proposed stormwater network (see **Attachments 4-7**) but the infrastructure needs have changed based on SMEC's assessment and detailed concept designs, and SMEC Australia provided its own preliminary cost estimates for each of the basin system, non-basin system and creek culvert facility items it recommended (see pp 210-211 of the SMEC Report and individual (adjusted) SMEC cost sheets).

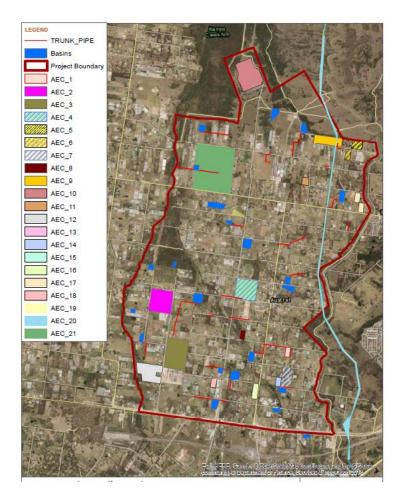
SMEC's preliminary cost estimates (as presented in its report) included the construction cost and the project management cost but did not include any inherent contingency risk (nor other project oncosts). It estimated separate disposal costs for each system or creek culvert to cover the contingency risk.

Council provided a revised cost estimate for the 1% AEP basins, 50% AEP basins, non-basin trunk drainage systems and culvert crossings in Austral and Leppington North with all SIC funded culverts removed from the cost estimate. It also made the following assumptions:

- The top 0.5m depth of soil has been assumed contaminated
- Disposal cost of the contaminated soil is \$350/tonne
- Disposal cost of non-contaminated soil is \$80/cu.m
- Disposal costs have been incorporated into the base construction cost (because they are known costs based on detailed assessment and Council's experience rather than a risk).

In making these assumptions, Council considered SMEC's contamination assessment report (**Attachment 9**) and its experience concerning the cost of disposal at similar sites in the LGA.

SMEC's contamination assessment report identified 21 Areas of Environmental Concern (AEC) onsite as shown in the map below (from Appendix A of the report).



SMEC noted that asbestos containing material (ACM) is widespread in fill materials and visible as fragments on ground surface and/or in existing older building materials (e.g. residential homes/agricultural sheds). Hydrocarbon and metal 'hotspots' were also located throughout the site.

SMEC identified that contaminants will be encountered on overlapping AECs and proposed trunk lines and / or basins (as per the Plan) as stated below:

- AEC 1 with close proximity to B14, CHB14.2 and CHB14.1 (known ACM contamination)
- AEC 4 (known ACM and soil lead hotspot)
- AEC 7 with close proximity to B16 and CHB18 (known ACM and soil Total Recoverable Hydrocarbon (TRH), lead and zinc hotspots)
- AEC 9 with close proximity to B27 and CHNB33 (known hotspot of fibrous asbestos and soil lead and zinc hotspot)
- AEC 21 with close proximity to B18 and B19 (potential Organochloride Pesticides (OCP) and Organophosphorus Pesticides (OPP) contamination associated with past and current agricultural activities).

In the instances above where the proposed construction areas interact with the AEC's, SMEC recommended that site-specific precautions would need to be adopted to protect human health and to prevent the migration of contaminants into the wider environment. Council assumed a share of contaminated soil disposal costs accordingly.

Project on costs are assumed to be 15% of preliminary costs based upon SMEC's breakdown of costs (whereby project management costs accounted for 10% but no other project on-costs were estimated) and Council's experience.

As stated in the Nexus section, one basin (B32) was outside the border of SMEC's concept design study coverage so has been retained in the amended Plan based on Cardno's recommended facility scope and cost estimate (see 'Drainage Con' tab of the Works Schedule at **Attachment 2** for a detailed explanation of the calculation and **Attachment 5**). This includes the associated trunk drainage infrastructure (DC65 and DC66).

Traffic works cost estimates

The traffic works cost estimates in the Plan are based on a variety of different cost sources as outlined in the Works Schedule and summarised below:

- Local and collector road costs are based on advice from AECOM (c/o Davis Langdon see
 Attachment 16), plus additional allowance for intersection signage, street lighting (at 40m spacing one side only), Low Voltage conduits (one side only) and for earthworks. These costs are based on Oran Park CP and adjusted. There is also an additional allowance for Traffic Management costs.
- Street planting costs are based on the unadjusted rate in Rawlinsons 2010 of \$130 for supply and planting of an 'Average Size Tree (45 Litre)', adjusted by 2% as per Rawlinsons published BPI to \$132.60. The assumed application is for one tree every ten metres for length of roads on both sides of the road.
- Pedestrian crossings costs are based on a Camden contribution plan cost for a 21m span crossing in Elderslie plus an additional 10% for indexation over 5 years.
- The new crossing bridge (BR12) cost is based on Council's own experience with other new bridge crossing costs
- Some road segments over channels are based on the Pacific Palm Circuit creek crossing cost (for similar works) provided by Council (**Attachment 16**)
- Other new road culvert crossing road segment estimates (e.g. for BR4 and BR8) are based on the assumed unit road rates (as above)
- Roundabout cost estimates are based on AECOM rates (Attachment 16).
- Traffic signal estimates are also based on AECOM rates plus an additional allowance based on Camden Council advice (and to be consistent with its costs in its contributions plan).
- Crossing/refuge works cost estimates are based on Council's rate of pedestrian crossings.
- Bus shelter cost estimates are based on Oran Park CP and adjusted.
- Dwelling and outbuilding demolition estimates are based on Council's experience.
- Demolition of existing creek crossings estimate is based on Rawlinsons 2010.
- Project "On costs" are estimated to be 25% based on Council's experience. It includes preliminaries (6%), margin (5%), LSL (0.3%), approvals (1%), professional fees (10%) and project management costs (2.5%).
- The contingency is estimated to be 7% based on Council's experience.

Open space embellishment cost estimates

The cost of embellishing local parks, district parks, local sporting fields and district sporting fields are based primarily on costing advice from Elton Consulting (**Attachment 19**) and WT Partnership (**Attachment 25**) as identified for each item in the Works Schedule.

Other sources informing the cost estimates are as follows:

- The riparian open space embellishment cost estimate is based on advice from Camden Council (from its experience with similar works).
- The shared pathway cost estimate is based on Camden Council's tender (at plan preparation stage) for 'Spring Farm and Elderslie Streetscape and Concrete Paving' in October 2011. It includes excavation of base mesh reinforcement and 2.5m width. The assumed width was increased to 3m to comply with requirements in the Leppington Major Centre Public Domain Strategy.
- The dwelling and outbuilding demolition estimate is based on Council's experience.
- Project "On costs" are estimated to be 27% based on Council's experience. It includes preliminaries (6%), margin (5%), LSL (0.3%), approvals (1%), professional fees (10%) and project management costs (5%).
- The contingency is estimated to be 7% based on Council's experience.

9. Explain the process used to estimate the cost of plan preparation and administration.

Plan preparation and administration costs amount to 1.5% of 'essential' capital works costs in the Plan consistent with IPART's benchmark.

10. What, if any, land has the council already acquired to provide local infrastructure for development in the catchment area? How has the cost of this land been included in the plan?

Where Council owned land for infrastructure needs prior to the rezoning of land for urban development, the costs have not been included in the Plan (e.g. Council owns land at LS5 and LP62 for open space facilities.)

11. Explain the process used to estimate the cost of land yet to be acquired by the council.

Refer to:

- Details of any inclusions for just terms compensation
- Details of any indexation of cost estimates from the base period of the plan, including the index used

Estimates of the value of land were originally provided by MJ Davis Valuations P/L (Attachment 21).

Since the adoption of the original contributions plan in 2015 the value of land has increased substantially. Council, in recent negotiations for the acquisition of land has experienced substantial increases in the value of land (determined by the NSW Valuer-General and the Land and Environment Court), even in excess of the indexed value anticipated by the current contributions plan.

Council commissioned revised estimates for the acquisition of englobo land from independent valuers (CivicMJD, Land Valuations for the Austral Precinct, 1 July 2019 - **Attachment 22**). The rates adopted in the amended Plan (i.e. used when applying rates to areas of assumed underlying zonings) are as follows:

Table Assumed land values for various classifications

Land classification	Base assumed land cost (per sqm)	Land cost (per sqm)
Riparian corridors (constrained land and land below the 20-year Annual Recurrence Interval (ARI) event)	\$35	\$40
Residential land between the 20-year and 100-year ARI events	\$135	\$155
Low density residential prime land (R2) above the 100-year ARI event	\$340	\$389
Medium density residential prime land (R3) above the 100-year ARI event	\$430	\$493
Commercial/ Neighbourhood Business (B1) prime land within the town centre and above the 100 - year ARI event	\$400	\$458
Commercial/ Business Development prime land (B5) within the town centre and above the 100-year ARI event	\$450	\$515
Employment lands/ Industrial	\$370	\$424

Despite the general increases in land acquisition costs across the precinct, the cost of acquisition of flood liable land is expected to be reduced, as identified in the independent valuers report.

The scope of land acquisition will slightly increase as a result of the revised ILP (as per the proposed amended DCP).

A land acquisition contingency of 12% is also incorporated in the Plan based on MJ Davis advice originally for these costs in both the Liverpool and Camden contributions plans (**Attachment 21**), noting this is consistent with the 12% amount endorsed by IPART in its assessment of the Camden Growth Areas Contributions Plan.

12. If contributions rates in the plan are calculated using an NPV model,

- a) Does the model use real or nominal values?
- b) If the model uses nominal values, what indexation assumptions are applied to costs and revenue?
- c) What discount rate does the model use, and why?

Not applicable.

13. What measures have been taken to minimise costs in the contributions plan (eg, adjustment to design or alternative engineering solutions)?

During the preparation of the ILP, the preliminary cost of infrastructure and land acquisition was carefully considered and opportunities to reduce costs where possible were acted upon. For example:

- Many half road frontages to open space and drainage were not included because they could instead be provided directly by individual developments.
- The street layout in the ILP sought to minimise the need for funding by contributions.
- The land that was already owned by Council (Craik Park and WV Scott Memorial Park) were not included in land costs.
- There was a reduced land take for open space and some parks were relocated to land near creeks, which has a lower land value, thereby serving to reduce land acquisition costs.
- The number of bridge crossings of existing creeks was limited to only those that were needed
 for adequate circulation of traffic and to achieve adequate flood free evacuation routes.
 Where possible, bridges have been replaced with culvert crossings. Edmondson Ave was
 established as a flood free route through the precinct, which is being separately funded by
 the Special Infrastructure Contribution.

Following the revision of the ILP, the dwelling yield also increased from 13,882 to 15,351. This has the effect of reducing the eventual contribution rates by dividing the infrastructure and land costs by a larger number.

Council has also sought to maintain efficiencies in infrastructure provision in preparing the amended Plan and progressing the planning for the Precinct with detailed concept designs.

In particular, Council commissioned SMEC to review stormwater infrastructure needs within the precincts and produce detailed concept designs for required facilities. This process resulted in SMEC recommending a system-based network which incorporated reduced infrastructure facility needs in the Plan and more detailed assessment of site specific factors (including contamination and fill disposal needs).

3.4 Criterion 4 – Reasonable timeframe

The proposed public amenities and public services can be provided within a reasonable timeframe

Checklist for the contributions plan

Does the contributions plan	Contributions plan page reference(s)
Include details of the anticipated rate of development in the Yes \boxtimes No \square catchment area and how this was determined	Pages 35-36
Include a program for infrastructure delivery and explain Yes \boxtimes No \square how it relates to the anticipated timing of development	Pages 69-82
Include a statement regarding potential revision of the Yes \boxtimes No \square scheduled timing for infrastructure delivery	Pages 23-24

14. How has the council determined the timing of infrastructure provision?

Provide details of the program for delivery of infrastructure in the contributions plan and explain its underlying rationale.

The original overarching strategy that guided the staging and priority of infrastructure in the Plan was the Infrastructure Delivery Plan (**Attachment 23**).

It is acknowledged that this is now dated (2012)

It is anticipated that development within the ALN Precincts will take at least 20 years. It is intended that the Plan is implemented over the life of development within the Precincts and will be reviewed as necessary over this period.

The primary determinate for the commencement of development will be the provision of sewer. At this stage, Sydney Water's Growth Servicing Plan of Sydney Water provides guidance on the timing of water and wastewater for some but not all of the areas of the ALN precincts (**Attachment 24**).

In general, the timing of infrastructure will be dependent on the timing of development and given the fragmented ownership in the ALN precincts, this timing can be difficult to forecast.

With these uncertainties, the facility staging and priorities details that are shown in Part 5 of the Plan are general in their scope. The priorities are indicated either as adjoining development occurs or sequentially with reference to other infrastructure provision trigger points.

Future reviews of the Plan provide the opportunity to specify the estimated timing of infrastructure, should the timing of development become clearer at that stage.

3.5 Criterion 5 – Reasonable apportionment

The proposed development contribution is based on a reasonable apportionment of costs between existing and new demand, and also demand generated by different types of development.

Apportionment is about ensuring the allocation of costs equitably between all those who will benefit from the infrastructure or create the need for it. While nexus is about establishing a relationship between the development and demand for infrastructure, apportionment is about quantifying the extent of the relationship.

Checklist for the contributions plan

Does the contributions plan		Contributions plan page reference(s)		
Include details of apportionment calculations	Yes ⊠ No □	Pages 35, 49, 58, 65, 66, 67		

15. How does the plan apportion costs?

Provide details of calculations made, and explain how the apportionment takes into consideration demand arising from (as relevant):

- new and existing development in the catchment area
- different stages of development
- different sub-catchments
- residential and non-residential development
- different residential development densities
- new and/or existing development outside the catchment area

Transport land and works

The Plan has a single catchment for transport infrastructure throughout the ALN precincts given the shared demand from anticipated new development for the new road network. Therefore, aggregate infrastructure costs are shared equally among new developments (to which the Plan applies).

Transport costs haven been first split between residential and non-residential development on a relative area basis (estimated aggregate Net Developable Area for both types of development). Costs are then apportioned:

- on a per person basis to residential development, reflective of demand for the transport facilities being most accurately linked to the new population in the absence of any detailed trip generation data by development type and location, and
- on a per ha of NDA basis to non-residential development, once again, in the absence of any detailed trip generation data being available.

New transport management infrastructure has been designed to meet the needs of the planned urban development. Therefore, no allowance is made for the demand for transport management attributable to the development that existed at the time the land was rezoned for urban purposes.

The demand for the transport infrastructure arises from new development in the precincts only and so the Plan does not incorporate any external shared apportionment of transport items. The exception is a crossing upgrade (Kemps Creek Gurner Road (upgrade crossing to 100 ARI) - BR12) for which the cost has been apportioned 50% to the ALN Precincts and 50% to the Rossmore Precinct based on anticipated relative demand.

Stormwater management land and works

Demand for stormwater infrastructure is based on the impervious surface area of development and so all stormwater infrastructure costs are apportioned on a per hectare of NDA basis to both residential and non-residential development.

Costs are shared equally across development in the precinct in a single catchment which reflects the interconnected nature of the various features of the stormwater management network.

Rural residential development also contributes to increased stormwater runoff but due to the lower density of development, an adjustment has been made in the NDA calculations (upon which contributions are based) accordingly (see the 'NDA and Population Summary' tab of the works schedule at **Attachment 2**).

Demand for the infrastructure is considered to arise from development within the precinct only such that there is no external shared apportionment and any additional demand from outside precincts for the facilities is considered only incidental.

Open space land and works (embellishments)

Open space costs are apportioned on a per person basis to residential development, across the whole precinct.

All open space land and embellishment costs in the Plan are apportioned 100% to the ALN Precinct, consistent with the findings in the Elton study that demand for the new infrastructure will arise from new development internal to the precinct.

Non-residential development in the ALN precincts is not apportioned any of these costs because any demand is considered only incidental to residential development demand.

In calculating contributions for open space infrastructure, the Plan provides for an allowance to be made (i.e. credit given) for the demand for open space infrastructure attributable to development that existed at the time the land was rezoned for urban purposes.

Community services land

Community services land costs are apportioned on a per person basis to residential development, across the whole precinct. This reflects shared access to the facilities within the precinct, particularly given the facility locations near the local centres.

With respect to the Regional Sports and Aquatic Centre, the demand is spread over a large catchment (120,000 residents). However, the centre will be located on land already owned by Council at WV Scott Memorial Park (almost 4 ha land in total already owned by Council, with the actual indoor facility estimated to span only around 3 ha), which means that there is no additional cost to Council from acquiring this land.

Given the relatively low rate of open space provision in Austral Leppington North (in the Liverpool City section, in particular) and strong need for any residual open space to be allocated to the needs of new residents, the remainder of this site which is privately owned (some 1.21 hectares) is to be for outdoor purposes only, and so has been fully apportioned to the Plan.

Council will seek funding from other sources to meet the capital works cost for the Regional Sports and Aquatic Centre facility.

Plan preparation and administration

Contributions for plan preparation and administration are levied on a per hectare of NDA basis across all development in the Plan.

3.6 Criterion 6 - The council has conducted appropriate community liaison and publicity in preparing the contributions plan.

We require evidence that the plan has been exhibited and publicised in accordance with the statutory requirements and that submissions received during the exhibition period have been taken into account. The post-exhibition version of the plan should not differ so significantly from the exhibited version that it requires re-exhibition.

It is not necessary that the relevant information is included in the contributions plan itself.

16. When was the plan publicly exhibited?

The new plan was exhibited from 18 March to 14 April 2020 (inclusive). It was exhibited together with other amendments to "the Austral/Leppington North planning Framework":

- SEPP (Sydney Region Growth Centres) 2006 Austral/Leppington North Precincts
- Liverpool Growth Centres Precinct DCP Main Body May 2019
- Liverpool Growth Centres Precinct DCP Schedule 1 May 2019, and
- Relevant supporting material.

In April 2020, the existing 2014 plan in force was also re-exhibited separately just to include Council's COVID-19 response concerning contribution payment conditions. The plan was subsequently amended 10 June 2020.

17. In developing the contributions plan, was any publicity and community liaison undertaken outside the mandatory exhibition period?

The original plan was also exhibited and the Department conducted community consultation as part of the rezoning process.

Also, prior to public exhibition of the amended plan (March/April 2020), LEP Amendment 75 was subject to public agency consultation. Most public agencies did not object and provided general comments or additional considerations. Where these comments were in keeping with the scope of the planning proposal (e.g. rezoning sites owned by utility authorities to SP2 Infrastructure) those changes have been facilitated.

An objection was received by the DPIE's Environment, Energy and Science (EES) group regarding Council not providing a Biodiversity Consistency Report in their preferred template. This report has since been provided to the EES group.

18. How has the council taken into account submissions received on the draft plan placed on exhibition?

The issues raised and how Council has responded to these issues are outlined in the following table.

Relevant infrastructure / headline issue	Specific matter raised	Council response
Traffic management infrastructure	A developer questioned why Council's contribution plan has line items for traffic facilities, namely roundabouts and pedestrian crossings, which were not identified by the traffic study in support of the precinct rezoning.	The traffic study identified traffic facilities (e.g. roundabouts and traffic signals), that would be required to ensure that intersections operate at minimum traffic efficiencies as per the traffic model prepared at the precinct planning stage. The study only focussed on the high-order road network, did not account for intersections operating safely, did not identify the need for pedestrian crossings near centres and schools, and did not account for traffic calming near town centres. Council staff identified the need for some additional facilities at the precinct level when the CP was adopted. However, it is understood that traffic models only represent a guess as to how a road network will operate, and in many situations traffic facility intervention may be required on streets where it would not have been predicted that intervention was required. An allowance was made for retrospective facilities that may be required as problems become apparent in the precinct's development.
Water management infrastructure – land areas	Some developers were concerned that the required filtration area for residential uses was very similar to the commercial and industrial area (usually it is considerably lower).	SMEC modelled that the area of raingardens would be restricted to road intersections, of which there are fewer in commercial and industrial areas. As such, residential catchments would have to make up for the lower filtration of commercial areas. Given that raingardens are now proposed to be funded under the CP, matters of financial equity are considered resolved.

Water management infrastructure – retrospective applicability	Developers asked whether raingardens would require retro-fitting in existing developments.	No, raingardens will be identified by the CP and are to be in areas not yet developed. Any retro-fitting would be considerably more expensive.
Water management infrastructure – constructability in fragmented areas	Under the exhibited controls, developers were concerned that raingardens are required to treat the run-off from new subdivisions, but the downstream raingarden area might be located on an adjacent property.	The integration of the raingardens into the CP will resolve this issue. Developers will provide lead-in works for any raingarden on their site, with Council constructing the facility at a later date.
Water management infrastructure – alternative options	A handful of developers objected to the proposal to introduce streetscape raingardens. They preferred that Council retain an end-of-pipe solution and investigate alternative options. Suggestions included retaining the existing bioretention basins or using wetlands.	Council staff would also prefer end- of-pipe filtration areas as they are generally easier to deliver and are a consolidated asset to maintain. Unfortunately, due to the flat topography of Austral, particularly near creeks, the water inlet of these systems was not high enough to allow for these basins to function. These systems could not function.
		Wetland systems were investigated, but these have higher land requirements (additional acquisition costs), and extended periods of drought would result in stagnant waters, algal blooms, or the use of drinking water to replenish wetlands. Managing pests such as mosquitoes also becomes an issue.
		Streetscape raingardens at intersections were chosen as a solution which required no additional land-acquisition, allows for point source treatment, minimises loss of parking, driveway conflicts etc. associated with midblock raingardens, and the ability to provide greater greenspaces and urban cooling throughout the suburb.

19. Does the council intend to undertake any further publicity or community liaison?

At this stage, no further exhibition of the plan is planned unless material changes are to be made to it and exhibition is a requirement of the legislation and/or Ministerial Direction.

3.7 Criterion 7 – The plan complies with other matters IPART considers relevant

IPART may take into consideration other matters relevant to our overall assessment of the contributions plan.

These matters may include compliance with the statutory requirements for making local infrastructure contribution plans and with the Practice Note, whether the plan uses up-to-date information, as well as issues of transparency and accountability in the council's proposed arrangements for the levying and collection of contributions under the plan.

20. Is there any other information relating to the contributions plan (such as use of VPAs) which may assist us to assess it against this criterion?

There are no relevant Council VPAs to the Precincts.

21. Is the council aware of possible changes to any underlying assumptions used in preparing the plan which may be relevant to our assessment?

Such matters could include:

- revised population projections
- potential rezoning or changes to dwelling yields
- other changes to the applicable LEP, SEPP or DCP
- changes to NSW government policy for infrastructure delivery

As discussed, in the nexus section regarding stormwater infrastructure, Council has proposed amendments to the DCP relevant to the Austral and Leppington North Precincts.

Council's planning proposal, which has since been approved by the Department, sought to rezone several land parcels in the Austral and Leppington North precincts primarily certain drainage lands for which Council's detailed concept designs for the drainage network revealed are surplus to requirements and to make minor zone boundary adjustments to conform to a rationalised DCP road network.

The amended DCP (with relevant adjusted maps) is at **Attachment 3**. The development yields also changed as a result of these amendments, which have been reflected in the submitted draft plan.

22. Provide any other information which you consider would assist or expedite our assessment.

Not applicable.

4 Quality assurance

We also request that council undertake a quality assurance (QA) check of the contributions plan before it is submitted to IPART for review.

The purpose of the council's QA check is to identify and address any errors or inconsistencies within the work schedules and also between the contributions plan and relevant supporting information to ensure that the plan, as submitted, is accurate. This should reduce the risk that our assessment is delayed by the need for corrections to be made, or our report unnecessarily include recommendations to correct what are, in essence, calculation errors.

Checklist for the contributions plan

Has the contributions plan been checked for	
Typographical errors	Yes ⊠ No □
Calculation errors (including checking infrastructure and land cost calculations)	Yes ⊠ No □
Use of the most up-to-date- data and information	Yes ⊠ No □

23 Explain the quality assurance process undertaken for the contributions plan prior to submitting it to IPART for review.

The Plan has been comprehensively reviewed to ensure that the precincts are supported by a robust plan that minimises financial risk to Council and provides value for money to developers and the broader community.

The precinct planning process was undertaken by the Department and input studies which originally informed the Plan were peer reviewed by Council officers and subject to sign-off by the respective Project Working Groups and Project Control Groups (including representatives from Liverpool City and Camden councils) for each precinct.

In preparing the amended Plan in 2018/19, Council's consultant, GLN Planning and Council officers (from its planning and finance teams) reviewed the works schedule and cost estimates, including the new stormwater works costs. Various corrections were made to the Plan assumptions and costs as a result of this process.

The Plan has been further reviewed by Council's consultants and officers before proceeding to public exhibition.

In 2020/21, further updates to the Plan have been made by Council, in consultation with its consultants, with further checks (including of open space areas and map item reconciliations) occurring.

A final review of the Plan was undertaken by Council prior to reporting it to Council for final endorsement.

5 Attachment checklist

Please complete the checklist below to ensure that all information necessary for IPART's assessment is submitted.

Councils should complete and attach Application Form Part B,1 or provide IPART with spreadsheets (.xls files) that:

- detail all infrastructure items included in the plan, with references to the studies that support their inclusion in the plan as relevant
- detail the cost of each infrastructure item (including source and date of costings, and any indexation of cost estimates)
- ▼ list all parcels of land required for infrastructure in the plan
- detail the cost of any land that has already been acquired and land that the council is yet to acquire
- show how the total cost of land and works for each infrastructure category (or subcategory) have been apportioned
- show how the contributions rates in the plan have been calculated (including net present value modelling if this approach is used), and
- show indicative contribution amounts for each type of residential dwelling.

Checklist for council application

Application attachment			
Nork schedules and calculation of contribution rates			
Application form Part B or	Yes □	No ⊠	
spreadsheets that provide the information listed above	Yes ⊠	No □	
Contributions plan			
Version of contributions plan incorporating any post exhibition changes	Yes ⊠	No □	
Version of contributions plan publicly exhibited	Yes ⊠	No □	
Version of contributions plan previously submitted to IPART for review	Yes □	No □	N/a ⊠
Public consultation			
Copy of all submissions to publicly exhibited contributions plan	Yes ⊠	No □	N/a □
Summary of submissions and council's response	Yes ⊠	No □	N/a □
Fechnical studies and consultant documents			
Land valuation report/s	Yes ⊠	No □	N/a □
Supporting studies for stormwater management infrastructure (eg, Flooding and Water Cycle Management report)	Yes ⊠	No □	N/a □

Application Form Part B is available on IPART's website.

pplication attachment			
Supporting studies for transport infrastructure (eg, Traffic and Transport Assessment report)	Yes ⊠	No □	N/a □
Supporting studies for open space infrastructure (eg, Demographic and Social Infrastructure report)	Yes ⊠	No □	N/a □
Supporting studies for community services (eg, Demographic and Social Infrastructure report)	Yes ⊠	No □	N/a □
aps			
Plan catchment map/s	Yes ⊠	No □	N/a □
Final Indicative Layout Plan	Yes ⊠	No □	N/a □
Zoning map/s	Yes ⊠	No □	N/a □
Land acquisition map/s	Yes ⊠	No □	N/a □
Constrained land maps/s	Yes ⊠	No □	N/a □
ther documents			
VPAs	Yes □	No □	N/a ⊠
Details of other funding agreements for state or local infrastructure in the area covered by the plan (including draft agreements)	Yes □	No □	N/a ⊠
Council business papers or meeting minutes related to the preparation of the contributions plan	Yes □	No □	N/a ⊠
Any other documents that you think could be useful in IPART's assessment of the contributions plan	Yes □	No □	N/a ⊠