



Assessment of Contributions Plan No.18 –
Bella Vista and Kellyville Station Precincts:
Technical Paper

Draft Report

September 2021

Local Government >>

Tribunal Members

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Invitation for submissions

IPART invites written comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

Submissions are due by Friday, 15 October 2021

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Review of CP18 – Bella Vista and Kellyville Station Precincts
Independent Pricing and Regulatory Tribunal
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Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders, past, present and emerging.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

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1 Overview

This paper presents our detailed assessment of Contributions Plan 18 (CP18) submitted by the Hills Shire Council for the Bella Vista and Kellyville Station precincts. It explains how we have reviewed each category of costs included in the CP in turn, as well as any issues that sit across the entire plan. This analysis elaborates on our review of all items included in CP18 against the assessment criteria in the Practice Note. For each of the draft recommendations, we provide a detailed explanation on the reasons for our decision.

This information paper is accompanied by [two other papers](#):

- Our overview report provides a summary of our recommendations and assessment of the reasonable costs of providing necessary local infrastructure to support the new development.
- An information paper outlining IPART's general process for reviewing contributions plans, including information such as its context, rationale, terms of reference, methodology and timeline.

1.1 Overview of our assessment

We found that CP18 largely reflects the reasonable costs of local infrastructure required for the new development. However, we found that the council's cost estimates for some works are too high. We have also made some recommendations on the categorisation of some infrastructure items and the apportionment of costs between residential and non-residential development.

Our draft recommendations would reduce the total cost of CP18 from \$149.6 million to \$147 million representing a decrease of \$2.6 million (1.7%). The highest value draft recommendations are to:

- Remove the 1.5% acquisition allowance from the cost of open space land and community facilities (decrease of \$1.2 million)
- Reduce the shared pathway costs along Elizabeth Macarthur Creek to reflect Landcom's cost estimate (decrease of \$0.45 million)
- Reduce the cost of Caddies Creek Sporting Complex to reflect ABS inflation estimates (decrease of \$0.4 million).

The combined impact of our draft recommendations would reduce the contribution rates in the plan for a 2-bedroom residential dwelling from \$23,962 to \$22,525 (decrease of \$1,437 or 6%).

The remainder of this paper outlines our assessment of CP18 for each cost category.

2 Transport

The total cost of transport infrastructure in CP18 is \$17.7 million (11.8% of total costs), which is entirely comprised of works costs. There are no transport land costs in the plan.

2.1 Overview of our assessment

- **Essential works** – All transport works are consistent with the essential works list (EWL). We are recommending that some transport-related costs that the council included in open space be moved to the transport category. Those costs are also consistent with the EWL.
- **Nexus** – There is nexus between all transport works in the plan and development in the Precincts.
- **Reasonable cost (works only)** – The costs of transport works are reasonable, except:
 - The council should consistently apply indexation to all transport works items, based on the ABS Producer Price Index (Road and Bridge Construction New South Wales).
 - The council should reduce the cost of the shared pathway to reflect cost estimates of per metre rates
 - The council should reduce the cost of roundabouts to reflect the cost of a comparable item
- **Apportionment** – The council's approach to apportioning costs is mostly reasonable, except:
 - Pedestrian bridges and the shared pathway enable active transport, and demand for active transport arises from both residential and non-residential development.

We recommend that the council:

- Transfer the cost of the shared pathway along Elizabeth Macarthur Creek from open space to transport works and revise the rate to reflect the cost estimate provided by Landcom.
- Reduce the cost of the signalised intersection at Balmoral Road and Mawson Avenue to reflect consistent indexation of all transport works.
- Reduce the cost of the 2 dual-lane roundabouts in the plan to reflect the actual cost of a comparable roundabout in the local government area.
- Apportion the cost of pedestrian bridges and the shared pathway to residential and non-residential development, consistent with other transport works in the plan

Our findings and recommended adjustments are summarised in Table 2.1. Based on our findings, we recommend an increase of approximately \$1.1 million in the cost of transport works in CP18. This reflects an increase in costs arising from a recommendation to transfer transport works in the open space category to the transport category and a decrease in costs from all other transport-related recommendations.

Table 2.1 IPART-recommended adjustments for transport

Criterion	Finding	Recommendation	Land (\$Jun2020)	Works (\$Jun2020)
Total costs in plan			n/a	17,667,124
Essential works	All works in the plan are consistent with the EWL			
	Some open space costs are better categorised as transport costs	Transfer the cost of shared pathway (OSE6 and OSE7) from open space to transport works		1,844,629
Nexus	Nexus is established for all works			
Reasonable cost - Works	The cost of works is mostly reasonable			
	The council has not consistently indexed transport costs	Reduce the cost of signalised intersection RT6 to reflect consistent indexation		- 15,723
	The cost of the shared pathway is too high	Revise the per metre rate for the shared pathway (OSE6 and OSE7) to reflect Landcom estimates		-455,117
	The cost of roundabouts is too high	Reduce the cost of roundabouts (RT9 and RT10) to reflect the actual costs of a comparable roundabout		- 268,473
Apportionment	Approach is mostly reasonable			
	Demand for the active transport network comes from residential and non-residential development	Apportion costs between residential and non-residential development		-
Total IPART-recommended cost adjustment			n/a	1,105,316
Total IPART-assessed reasonable cost			n/a	18,772,439

Note: Apportionment recommendations do not change the total cost of works.
Source: CP18 works schedule], IPART calculations

2.2 Transport works included in CP18

The current transport network in the precinct will be subject to major improvements to support future residential and non-residential development, including:

- through CP18: delivery of signalised intersections, roundabouts, intersection upgrades and vehicular and pedestrian bridges.
- through developer delivery: provision of local roads, asset relocation, water management devices, footpaths, street tree planting, traffic management devices and treatment of local roads.

Transport works costs represent 27.4% of the total cost of works in CP18. The cost of transport works largely reflects the cost of vehicular and pedestrian bridges (\$8.6 million or 48.7% of transport works costs) and signalised intersections (\$8.0 million or 45.1% of total works costs).

Table 2.2 shows the cost of transport works in the plan.

Table 2.2 Transport works in CP18 (\$Jun2020)

Item	Cost of works	Total cost
Vehicular bridge	3,944,365	3,944,365
Pedestrian bridges	4,666,920	4,666,920
Signalised intersections	7,964,344	7,964,344
Roundabouts	807,496	807,496
Left in left out intersection	283,999	283,999
Total	17,667,124	17,667,124

There are no transport land costs in CP18.

a. Source: CP18 works schedule.

Our assessment of transport works in CP18 against the guidance in DPIE's [Practice Note](#) is set out below.

2.3 Criterion 1: Essential works

All works for transport in CP18 are consistent with the essential works list in the [Practice Note](#).

There are no land components for any of the transport works items.

We consider that the shared pathway along Elizabeth Macarthur Creek (OSE6 and OSE7) primarily serves a transport function and recommend that the council move the costs for this infrastructure to the transport category and remove it from open space.

The shared pathway is also consistent with the essential works list.

Note that the resulting increase in transport costs (see Draft recommendation 1 below) does not equal the decrease in open space costs (see Table 4.1 in Open Space Embellishment). This is because in addition to the category transfer, we also recommend a revision of the costs of OSE6 and OSE7 following our assessment of Criterion 3: Reasonable costs (see Section 2.5.5).

Table 2.3 Breakdown of shared pathway recommendations

Recommendation	Change in Open Space costs	Change in Transport costs	Change in Total costs
Remove shared pathway (OSE6, OSE7) from Open Space Embellishment	- 1,844,629		
Add shared pathway (OSE6, OSE7) to Transport		1,844,629	0
Revise the per linear metre rate for shared pathway (OSE6, OSE7)		-455,117	-455,117

2.3.1 Pedestrian/cyclist bridges serve a transport purpose and are consistent with the essential works list

CP18 includes a pedestrian bridge over Memorial Avenue, and 2 pedestrian/cyclist bridges over Elizabeth Macarthur Creek. The pedestrian bridge over Memorial Avenue (item RT3) serves a clear transport purpose by enabling pedestrian crossing over a road, which the NSW Government is currently upgrading to a four-lane divided road. A pedestrian bridge will minimise traffic disturbance relative to an at-grade pedestrian crossing.

The two proposed pedestrian/cyclist bridges over Elizabeth Macarthur Creek (items RT2 and RT4) are close to the eastern boundary of CP18 and will connect the Precincts with residential areas and open space outside the Precincts. The council notes that these pedestrian bridges will support the transit oriented developments in the Precincts by making it convenient and attractive to walk or cycle, and hence reducing reliance on private vehicles. We consider that this transport purpose is consistent with the essential works list.

The council notes that all 3 pedestrian bridges will 'improve pedestrian movement within (and to and from) the Precincts'. As demand for these pedestrian bridges does not solely arise from the new development in CP18, the apportionment of costs should reflect this. We consider this in our assessment of Criterion 5: apportionment (see Section 2.6).

2.3.2 The shared pathway along Elizabeth Macarthur Creek serves a transport purpose and is consistent with the essential works list

CP18 includes 2.4 kilometres of shared pathway along Elizabeth Macarthur Creek, identified as two items in the works schedule (OSE6 in the Kellyville Precinct and OSE7 in the Bella Vista Precinct). The council has included these items in the plan as 'high quality linear open space within 10 minutes walking or 800 metres to residents'. The 3 pedestrian bridges in CP18 (discussed above) are part of this shared pathway.

We consider that the shared pathway primarily serves a transport purpose as it enables residents to engage in active transport. The shared pathway provides a safe way for residents to access other areas within and adjacent to the Precincts, and makes walking and cycling viable alternatives to driving. We consider that this may also present a secondary recreational benefit.

We recommend the shared pathway be transferred from open space to transport works and as a result, have considered this pathway as part of our analysis of transport works. This is consistent with the council's classification of the pedestrian bridges which form part of, or intersect, the pathway, as transport infrastructure.

An implication of this change is that the costs of the shared pathway, as transport works, will be apportioned to both residential and non-residential development instead of being apportioned wholly to residential development as proposed.

Draft recommendation

1. Transfer the cost of the shared pathway along Elizabeth Macarthur Creek (OSE6 and OSE7) of about \$1.84 million from the open space category to the transport category. This would change the way this cost is allocated between residential and non-residential development.

2.4 Criterion 2: Nexus

In assessing whether there is nexus between the transport works and the development in the plan, we have considered the technical studies included in the state significant development applications (SSDAs), the council's proposed need for the infrastructure, and the identified location and purpose of infrastructure.

We found that nexus is established for all transport works in the plan.

2.4.1 Nexus for most transport works is established through a technical study prepared as part of the SSDA

To establish nexus for transport works in CP18, the council has relied on the Jacobs traffic and transport assessment report (June 2020) prepared for the SSDAs for the Precincts.^a We consider that this technical study establishes nexus for 6 of the 11 proposed transport works items in CP18. Nexus is established for the shared pathway (OSE6 and OSE7) through the environmental impact statements prepared as part of the SSDAs.

The council has also included an additional 5 transport works items in CP18 (not included in the technical study) based on its own assessment of traffic needs:

- A pedestrian bridge near Unaipon Avenue/Celebration Drive intersection (item RT4) to improve pedestrian connectivity within the open space network.

^a The two SSDAs are: Kellyville Station Precinct Concept Proposal (SSD 10343) and Bella Vista Station Precinct Concept Proposal (SSD 10344).

- Signalisation at Balmoral Road/Mawson Avenue (item RT6) to improve the efficiency of traffic circulation, as this intersection is located at the junction of 2 roads which will carry substantial traffic. This intersection treatment is consistent with the proposed signalisation of the nearby Balmoral Road/Celebration Drive intersection (RT7) included in the Jacobs (2020) report.
- A dual-lane roundabout near Colonial Street Vehicular Bridge (item RT9) to improve traffic efficiency and safety, as it will be a main vehicular access point to the eastern side of Elizabeth Macarthur Creek and to Memorial Avenue.
- A dual-lane roundabout north of the district open space in the Bella Vista Precinct (item RT10) to facilitate efficient and safe vehicular access to both the school and district park.
- An intersection upgrade (to a left-in-left-out intersection, without signals or roundabout) for Memorial Avenue and a Bella Vista Collector Road (item RT11) to assist with traffic flow.

The council does not have any traffic reports or internal modelling to support its conclusions on nexus for these 5 items. However, based on the council's explanations and our visit to the Precincts to view the proposed sites for the transport works, we consider that there is nexus between these transport works in CP18 and development in the Precincts.

2.5 Criterion 3: Reasonable cost of works

Including the cost of works that we are recommending are transferred to the transport category from open space (see above), the cost of works in CP18 that we have assessed in the transport category is \$17.7 million (27.4% of the total cost of works).

On a per person basis, this cost is low relative to other plans we have assessed. CP18 does not include costs for transport items we have seen in other plans, such as: local roads, asset relocation, water management devices, footpaths, street tree planting, traffic management devices and treatment for local roads. The intention is that these costs will be incurred by developers as part of the works associated with individual developments within the Precincts and provided at no cost to the council¹.

We found that:

- The council's approach to estimating the cost of transport works is reasonable.
- The use of cost estimates from the initial Landcom VPA offer^b is reasonable, as quantity surveyor estimates are not yet available.
- The council's cost estimate for the Memorial Avenue pedestrian bridge (RT3) is reasonable.
- The estimate of the base cost of the signalisation of Mawson Avenue and Balmoral Road is reasonable, but the council has not consistently indexed base cost estimates (discussed in section 2.5.4 below).
- Cost estimates of per meter rates for the shared pathway (OSE6 and OSE7) are too high and should be reduced to reflect Landcom's estimate.

^b The proposed planning agreement between The Hills Shire Council and Landcom will act as a Works-In-Kind Agreement for the delivery of infrastructure contained within the contributions plan.

- Cost estimates for roundabouts are too high and should be reduced to reflect the actual cost of a comparable roundabout in the adjoining CP12 - Balmoral Road Release Area.

2.5.1 The council has relied on the Landcom VPA offer and its own cost estimates

In assessing whether the costs of transport works in CP18 are reasonable, we considered:

- the costing approach the council used to prepare the plan
- the proposed costs with reasonable costs in other plans we have assessed

whether the choice of indices to escalate cost estimates to the base period of the plan are reasonable.

Table 2.4 shows the council's approaches to costing each type of transport works. This includes cost estimates from the Landcom VPA offer, council estimates based on comparable actual costs, and council estimates based on IPART benchmark costs. In our view, these costing approaches are reasonable.

Table 2.4 The council's approach to estimating transport works costs

Item	Costing approach	Allowances
Vehicular bridge		
RT1	Landcom VPA offer	None
Pedestrian bridges		
RT2	Landcom VPA offer	None
RT3	Council estimate, based on the actual cost of the Memorial Avenue pedestrian bridge at Pellizer Boulevard, indexed to the base period of the plan	None
RT4	Landcom VPA offer	None
Signalised intersections		
RT5	Landcom VPA offer	None
RT6	Council estimate, based on actual cost of signals at Milcroft Way and Windsor Road intersection, indexed to the base period of the plan	Project management 7.5% Contingency 30%
RT7	Landcom VPA offer	None
RT8	Landcom VPA offer	None
Roundabouts		
RT9	Council estimate of cost for dual lane circulating roundabout, based on IPART benchmark, indexed to the base period of the plan	Project management 7.5% Design 7.5% Contingency 30%
RT10	Council estimate of cost for dual lane circulating roundabout, based on IPART benchmark, indexed to the base period of the plan	Project management 7.5% Design 7.5% Contingency 30%
Left in left out intersection		
RT11	Landcom VPA offer	None

Source: The Hills Shire Council, Cost estimate – master

2.5.2 The initial Landcom VPA offer costs are reasonable

The council has relied on the initial Landcom VPA offer for most of its cost estimates. These cost estimates are high level and do not provide a breakdown of cost components. Landcom has indicated that it is currently obtaining quantity surveyor (QS) estimates for all works items in the plan. The council expects to receive these detailed costings as part of Landcom's full submission of its VPA letter of offer package but is unsure when this will occur.

Landcom is best placed to estimate the costs of the infrastructure as it will deliver the infrastructure. We recognise that Landcom may have an incentive to overstate the cost of infrastructure as it will receive developer credits for the infrastructure it delivers under the VPA, which will reduce the contributions paid on its developments. However, as it is the major developer in the precinct, and given the VPA covers most works in CP18, this incentive is limited.

We also note that Landcom, in its submission to the exhibited version of CP18, requested the council use the quantity surveyor (QS) estimates when available. This suggests that Landcom is not trying to 'lock in' the VPA offer rates in the plan, which may be more (or less) favourable.

Overall, we consider that the Landcom VPA offer rates are reasonable for inclusion in CP18 until Landcom's QS estimates are available. If the QS estimates become available during our assessment, we will consider the procedural fairness implications of assessing this new information.

We do not consider it is necessary to put the assessment 'on hold' to wait for these QS estimates, as the timing of their completion is unclear and the council requires an adopted contributions plan for the Precincts.

2.5.3 The council's estimate of the base cost of the Memorial Avenue pedestrian bridge (RT3) is reasonable

CP18 includes a new pedestrian bridge across Memorial Avenue to facilitate pedestrian movement. The council's cost estimate for this bridge is the actual cost of similar pedestrian bridge crossing of Memorial Avenue at Pellizzer Boulevard, indexed to the base period of the plan.

The Pellizzer Boulevard pedestrian bridge is approximately 800 metres to the east of the proposed new bridge, located within the CP12 - Balmoral Road Release Area in the same local government area (see Figure 2.1). The Secretariat's site visit confirmed that this is an appropriate comparator for the proposed works item. The council has provided a detailed breakdown of the costs of the bridge at Pellizzer Boulevard.

We note that the council has included pedestrian bridges in its other plans for lower cost (e.g. in CP17 Castle Hill North). However, the proposed pedestrian bridges in CP17 were smaller in scope, as they did not cross divided roads and would not have enabled cyclist access. Given the length of the bridge required to cross Memorial Avenue, we consider that the council's cost estimate is reasonable.

Figure 2.1 Existing pedestrian bridge at Pellizzer Boulevard



Source: IPART.

2.5.4 The council's estimate of the base cost of the signalisation of Mawson Avenue and Balmoral Road is reasonable, but it has not consistently indexed this estimate

The council has included a signalised intersection at Balmoral Road and Mawson Avenue (item RT6).

The council's cost estimate for this works item is the actual cost of delivering a signalised intersection at Windsor Road and Milcroft Way in Beaumont Hills. The comparator intersection was constructed in 2017 and is approximately 500 metres north of the CP18 precinct boundary, within the CP8 Kellyville and Rouse Hill precinct. We consider that this is an appropriate comparator of a T-intersection between a local and collector road in the same local government area.

We have compared the cost of this signalised intersection with other intersections in other plans we have assessed within The Hills local government area (in CP12, CP13, and CP15 CP17). The cost of the proposed intersection in this plan is relatively low, and we consider that the cost estimate is reasonable.

The council has indexed the base cost to \$Jun2020 using an estimate of inflation of 2.5% per year since 2017. This is not consistent with the indexation approach specified in the draft plan and applied in the council's NPV model (Australian Bureau of Statistics' Producer Price Index (Road and bridge construction, New South Wales)). We recommend that the council update its cost estimate using this estimate of indexation.

Draft recommendation

- 2. Apply consistent indexation to all transport works in the plan. This would reduce the cost of signalised intersection (RT6) by around \$16,000. We recognise that the financial impact of this change is not material but consider that it is important that the calculations underlying contributions plans are consistent and correct.

2.5.5 The per metre rate for the shared pathway should be reduced

As discussed in section 2.3.2, we recommend that the costs of the shared pathway along Elizabeth Macarthur Creek (OSE6 and OSE7) be moved to the transport category. The council has applied different rates per linear metre for constructing sections of this pathway (\$758 and \$780 per linear metre). The council has clarified that both sections of the pathway should be subject to the same rate, and that Landcom's proposed rate of \$578 per linear metre is appropriate to apply in the absence of more detailed costings.²

We consider \$578 per linear metre is reasonable based on the cost of delivering shared pathways in the neighbouring CP12 – Balmoral Road Release Area. In CP12, the costs of delivering these pathways ranged between \$456 and \$856 per linear metre (\$Jun2017). These rates are high relative to other plans we have assessed, but in CP12 this reflected the need for a combination of boardwalks, concrete pathways and bridges on steep terrain which differ from standard concrete pathways. We consider that a similar standard of embellishment will be required for the shared pathway along Elizabeth Macarthur Creek.

Draft recommendation

- 3. Reduce the per metre rate for the shared pathway along Elizabeth Macarthur Creek (OSE6 and OSE7) to reflect Landcom's cost estimate. This will reduce total costs in the plan by approximately \$455,000.

2.5.6 The cost of roundabouts should be reduced

The council has included costs for 2 dual-lane roundabouts in the CP18 (items RT9 and RT10). The council has developed its estimate of costs for dual-lane circulating roundabouts using IPART benchmark costs indexed to the base period of the plan. The base cost for each roundabout in CP18 is \$278,447.^c

However, the council has also identified an existing roundabout at the intersection of Arnold Avenue and Colonial Street in CP12 – Balmoral Road Release Area, as an appropriate comparator for the two proposed roundabouts in CP18.³ We consider that this comparison is reasonable.


^c The IPART benchmark cost for a 4 leg roundabout with 2 approaching lanes, including the cost of pavement in a greenfield area, is \$330,412 (\$Jun2013).

The actual cost of delivering the comparable roundabout in CP12 is \$185,870 (after indexation to the base period of CP18). We recommend that the cost of each of the 2 roundabouts in CP18 be reduced to the cost of the comparable roundabout in CP12.

The council has not applied any allowances to cost estimates based on the Landcom VPA offer. We consider this is reasonable, as once the costs are agreed in a VPA, they are similar to actual costs with no further allowances applied. This is also consistent with our assessment of VPA costs in The Hills Shire Council's CP15 – Box Hill Precinct. However, the council has also included allowances for project management, design and contingency, in addition to the costs proposed for the roundabouts (RT9 and RT10), which were based on actual costs of similar roundabouts. The council has been inconsistent in its inclusion of allowances for items where costs were estimated using actual costs.

We accepted allowances for costs based on actuals in our assessments of The Hills Shire Council's CP17 – Castle Hill North and CP13 – North Kellyville Precinct. In CP17, we considered the application of allowances for road upgrades costed based on similar/actual costs were reasonable (though we recommended the proposed allowances be reduced based on consultant advice). In CP13, we accepted the council's proposed costs for a roundabout, based on similar/actual costs, and the application of allowances for project management, design and contingency.

Draft recommendation

- 4.  Reduce the costs of 2 dual-lane roundabouts in the plan (RT9 and RT10) to reflect the actual cost of a comparable roundabout in the local government area. This would reduce the cost by about \$268,000

2.6 Criterion 5: Apportionment

In assessing apportionment of transport costs in CP18 we have taken into account demand for infrastructure arising from:

- different types of development (i.e. residential vs non-residential)
- development within and outside the Precincts.

As outlined below, we found the council's approach to apportionment of transport works costs (excluding pedestrian bridges) is reasonable. This approach involves apportionment:

- firstly, between residential and non-residential development based on the RMS Guide to Traffic Generating Developments (RMS Guide)
- secondly, amongst residential development on a per person basis and non-residential development on a per square metre of Gross Floor Area (GFA) basis.

However, we consider that the costs of some infrastructure apportioned to CP18 exceed the demand arising from development within the Precincts. In principle, a share of transport works costs should be apportioned outside of CP18. That said, we have not recommended any changes given the relatively low cost of these works items, and the difficulty in allocating the remaining costs to other relevant developments.

The council proposed a different method of apportionment for the cost of pedestrian bridges, proposing to apportion the costs to residential development only. We found that it is not reasonable for the council to apportion the costs to residential development only, and recommend that the costs of pedestrian bridges (RT2, RT3 and RT4) be apportioned between residential and non-residential development based on the RMS Guide to Traffic Generating Developments. This is consistent with the apportionment approach for other transport items in the plan.

2.6.1 The demand for some transport works items does not solely arise from development in CP18

The council has apportioned 100% of the costs of all transport works items to CP18. To assess whether this apportionment is reasonable, we considered whether:

- there is demand for the infrastructure from **within** the Precincts
- there is demand for the infrastructure from **outside** the Precincts
- the infrastructure may have been delivered in the absence of development in CP18
- the benefit to residents outside CP18 was sufficient to recommend some apportionment of costs outside CP18.

We consider that the costs of most transport works items should be fully apportioned to CP18. However, for 2 works items, we consider that the likely demand for the infrastructure arising from outside the Precincts presents an argument for reduced apportionment to CP18. These items are:

- the pedestrian bridge from Decora Drive to Wenden Avenue (RT2)
- the left slip lane from Samantha Riley Drive into Decora Drive (RT5).

Both works items provide access to Kellyville metro station. Demand for access to the metro station (by foot and by car) could have resulted in the need for these 2 works items, even in the absence of new development in CP18. We consider that up to 50% of the costs for the pedestrian bridge (RT2), and 50% of the costs of the left slip lane (RT5) could be borne outside the Precincts to reflect this demand.

However, it is not clear how the council should fund the costs which are not borne by development in CP18. The contributions plan for the adjoining precinct (CP12 – Balmoral Road Release Area) is near the end of its plan life (with development under the plan scheduled from 2006 to 2026). This means that it would be impractical for the council to apportion a share of works costs in CP18 to CP12, as the burden would disproportionately fall on the remaining developments. For these reasons, we do not propose to make a recommendation for the council to change its apportionment of these items.

We have elaborated on our analysis for some works items, below, for which the assessment of apportionment is not straightforward.

RT2 – Pedestrian bridge from Decora Drive to Wenden Avenue

The proposed pedestrian bridge over Elizabeth Macarthur Creek is located on the eastern precinct boundary. While this bridge will facilitate access to the east of the Precincts, it will also improve access to Kellyville metro station for people outside the Precincts.

The council does not have information on the projected usage of this pedestrian bridge, but notes that it will both provide access to the metro station and enable residents to access the riparian open space corridor in the Precincts.⁴ We consider that the benefits of improved pedestrian and cyclist access to the metro stations could have resulted in sufficient demand for this works item, even in the absence of development in CP18.

RT4 – Pedestrian bridge near Unaipon Avenue/Celebration Drive intersection

The proposed pedestrian bridge near the intersection of Unaipon Avenue and Celebration Drive will enable pedestrians and cyclists to cross Elizabeth Macarthur Creek, and connect CP18 with open space to the east of the Precincts.

While this works item is similar to RT2 (discussed above), we consider that the benefits are likely to be greater for residents of CP18 than for people outside the Precincts. As the bridge adjoins open space (approximately 500 metres in width), it is less likely to be used for access to Bella Vista metro station. As such, we consider that it is unlikely to have been provided in the absence of development in CP18 and should not be funded by residents outside the Precincts.

RT5 – Left slip lane from Samantha Riley Drive into Decora Drive

The left slip lane into Decora Drive is located at the north-eastern corner of the Precincts. The Traffic and Transport Assessment Report prepared for the SSDAs indicates that Decora Drive will serve as the main movement corridor through the Kellyville precinct for access to the metro commuter car park.⁵

The Traffic and Transport Assessment Report designates Guragura Street as the local access street. Within the metro station precinct, Guragura Street will function as a mixed-use town centre and enable traffic access to the metro station.⁶

The left slip lane, therefore, is likely to provide benefits to both residents in CP18 and those from outside the Precincts accessing the metro station and may have been required even in the absence of development in CP18.

However, the council has advised that the road upgrades required to support the operation of Sydney Metro Northwest were identified in the Environmental Impact statements (EIS 1 and EIS 2) and delivered as part of Sydney Metro Northwest. The council therefore proposes that any further upgrades to support the additional traffic volumes around the station (i.e. this works item) should be levied on future development.⁷

RT8 – Signalisation of the intersection of Brighton Drive and Celebration Drive

The proposed signalised intersection is located on the south-eastern boundary of CP18. The current T-intersection does not have any traffic management infrastructure. However, development in CP18 will include a new local road, making this a 4-way intersection. The new road will provide access to the community facility and open space adjoining Bella Vista metro station.

The signalisation of the intersection will improve traffic flow both within and outside the Precincts. The current intersection may have been sufficient to facilitate access to the metro station and Windsor Road, were it not for the new local road and increased population arising from CP18. As such, we consider that it is appropriate to apportion the full costs of signalisation to CP18.

Figure 2.2 Current intersection of Brighton Drive and Celebration Drive (proposed location of RT8)



Source: IPART.

2.6.2 The council has applied RMS vehicle generation rates to apportion transport costs

The council has apportioned the costs of traffic works to residential and non-residential development in the Precincts based on vehicle generation rates specified in the RMS Guide to Traffic Generating Developments (RMS Guide). The rates used by the council are presented in Table 2.5. The council has estimated the residential rate and applied the non-residential rates in the RMS Guide.

Table 2.5 Proposed apportionment based on daily vehicle generation rates

Development type	Yield	Vehicle generation rate (RMS)	Daily vehicle trips	%
Residential	7,047 units	2.9 per unit	20,436	39%
Non-residential (other than retail)	151,000 m ²	10 per 100 m ² gross floor area	15,100	61%
Non-residential (retail)	25,736 m ²	63 per 100 m ² gross leasable floor area	16,214	
Total			50,370	100%

Source: Draft CP18

The RMS Guide does not estimate a daily vehicle generation rate for 'high density residential flat buildings', which would be the most appropriate classification for development in this precinct. To overcome this, the council has estimated a daily rate by multiplying the available peak hour rate by a factor of 10.^d

We note that the RMS guide does provide comparable 'peak hour' vehicle generation rates for the relevant types of development. If these rates were applied, the share of transport infrastructure costs apportioned to residential development would decrease by 8 percentage points (approximately \$1.4 million), with a corresponding increase the costs apportioned to non-residential development.

The council considers that daily rates better reflect the demand generated by each development type.⁸ We accept that peak hour rates do not fully capture the vehicle generation of each type of development and consider the difference between the two approaches is relatively minor relative to the total size of the plan. As such, we consider the council's assumptions are generally reasonable.

2.6.3 Demand for pedestrian bridges and the shared pathway arises from both residential and non-residential development

The council has apportioned 100% of the costs of pedestrian bridges to CP18, but has only apportioned the costs of these bridges to residential development. We do not consider this apportionment approach is reasonable.

The pedestrian bridges contribute to active transport within the Precincts. We consider that demand for this active transport is generated by both residential and non-residential development, and hence, the costs should be apportioned to all development. The council acknowledges that both residents and workers (in the non-residential development) may use this infrastructure.⁹

For the same reason, we consider that the shared pathway, which has been moved from open space to transport works, should be apportioned to residential and non-residential development.

^d The council has based this assumption on the relationship between peak and daily vehicle generation rates for 'medium density residential flat buildings' which exhibit a 1:10 ratio between peak and daily vehicle generation rates.

The RMS Guide provides estimates of vehicle traffic generation by development type but does not estimate rates of pedestrian or cyclist activity. Despite this, we consider the vehicle traffic generation rates are a good proxy for pedestrian traffic, as it accounts for different development uses rather than just floor area.

We recommend that the apportionment of the costs of pedestrian bridges and the shared pathway, between residential and non-residential development, be consistent with the approach for all other transport works items. This does not change the total costs in the plan, but reduces the share borne by residential development from 100% to 39%, which:

- reduces the costs of pedestrian bridges apportioned to residential development by approximately \$2.8 million.
- reduces the costs of the shared pathway apportioned to residential development^e by approximately \$0.8 million.

Draft recommendation

5. Apportion the cost of pedestrian bridges (RT2, RT3 and RT4) to residential and non-residential development, consistent with other transport works in the plan.

^e In the proposed CP, the shared pathway was classified as open space embellishment, and costs were fully apportioned to residential development.

3 Stormwater management

The total cost of stormwater management works in CP18 is \$3.37 million (2% of total plan costs). There are no stormwater management land costs in the plan.

On a per hectare basis, the cost of stormwater management works in CP18 is more than double the median cost in other plans we have assessed.^f The stormwater costs are apportioned wholly to residential development.

3.1 Overview of our assessment

- **Essential works** – All the stormwater management works are consistent with the essential works list. Although, we propose a draft recommendation to move the rainwater reuse infrastructure costs to the open space category as a result of the nature of the infrastructure proposed (see draft recommendation in Chapter 4).
- **Nexus** – There is nexus between the remaining stormwater items (gross pollutant traps, GPTs) and development in the Precincts.
- **Reasonable cost (works only)** – The cost of GPTs is not reasonable.
- **Apportionment** – The apportionment of GPTs costs to only residential development is not reasonable. We recommend the costs be apportioned between residential and non-residential development based on gross floor area (GFA), then amongst residential development on a per person basis and non-residential development on a GFA basis.

Table 3.1 IPART-recommended adjustments for stormwater

Criterion	Finding	Recommendation	Works (\$Jun2020)
Total costs in plan			3,366,000
Essential works	All items are consistent with the essential works list, however:		
	Rainwater reuse infrastructure (DR7) is an open space cost	Transfer cost to open space embellishment	-2,466,000
Nexus	Nexus is established for GPTs in the plan		
Reasonable cost - Works	The cost of GPTs is not reasonable	Use the GPT cost estimates from the initial Landcom VPA offer for 3 of the 6 GPTs.	-210,000
Apportionment	Approach is not reasonable	Apportion costs between residential and non-residential development on a GFA basis, then amongst residential development on a per-person basis, and non-residential on a GFA basis	

^f This cost includes the rainwater re-use infrastructure that we propose to transfer to the open space category.

Total IPART-recommended cost adjustment	-2,676,000
Total IPART-assessed reasonable cost	690,000

Our findings and recommended adjustments are detailed below.

3.2 Stormwater management works included in CP18

CP18 applies to the Bella Vista and Kellyville Station Precincts. Given the proximity of the Precincts and shared demand for infrastructure, the council considers both Precincts as a combined 'catchment area'. The Precincts' stormwater management plans identify stormwater from the Precincts will ultimately discharge to Elizabeth Macarthur Creek. The plans identify and propose several treatment devices to meet Sydney Water's stormwater pollutant reduction targets including:

- tree pits within public road reserves
- public reserve/open space natural infiltration
- rainwater reuse infrastructure within the proposed district open space
- GPTs.

CP18 proposes to levy development for the cost of 6 GPTs, and a rainwater reuse infrastructure within the district open space (Table 3.2).

Table 3.2 Stormwater management land and works in CP18 (\$Jun2020)

Item	Cost of land	Cost of works	Total cost
6 gross pollutant traps	-	900,000	900,000
1 rainwater reuse infrastructure	-	2,466,000	2,466,000
Total	-	3,366,000	3,366,000

Note: No land acquisition is required for stormwater management in CP18.

Source: CP18 works schedule

3.3 Criterion 1: Essential works

We consider that all the stormwater management works items in CP18 are consistent with the essential works list in the [Practice Note](#). However, we consider the rainwater reuse infrastructure primarily serves the district open space and should be considered as open space embellishment. We recommend the transfer of this cost to the open space category (discussion and recommendation in Section 4 – Open space).

3.4 Criterion 2: Nexus

The Precincts' stormwater management plans were prepared by Wood and Grieve Engineers. In our view these plans establish nexus for the GPTs in CP18.

Table 3.3 Technical studies for stormwater works in CP18

Author	Title	Date
Wood and Grieve Engineers	Bella Vista Station Precinct Stormwater Management Plan	September 2019
Wood and Grieve Engineers	Kellyville Station Precinct Stormwater Management Plan	September 2019

Note: The technical studies were commissioned by Landcom as part of the State Significant Development applications (SSDAs) for the Precincts.

3.4.1 Nexus is established for gross pollutant traps

The stormwater management plans recommend GPTs be installed at several locations – a proposed public road, the district open space, and at discharge points into the Elizabeth Macarthur Creek. The location of GPTs at 'discharge points into the Elizabeth Macarthur Creek' are not specified in the stormwater management plans at this conceptual stage. Landcom proposed four GPTs along the Elizabeth Macarthur Creek as part of its initial VPA offer, which we consider is an appropriate interpretation of the stormwater management plans. Nexus is established for the GPTs (DR1 – DR 6) through the stormwater management plans.

3.5 Criterion 3: Reasonable cost of works

The total cost of stormwater management works in CP18 is \$3.37 million (5% of total works costs), which is low in dollar terms relative to costs in other plans. However, on a per hectare basis the costs are more than double the median cost compared to other plans we have assessed. This reflects the Precincts' relatively small net developable area (NDA) and high proposed cost for a rainwater reuse infrastructure.

3.5.1 GPT cost estimates should be reduced

The cost estimate for GPTs in CP18 is \$150,000 per unit, which the council based on 2017 tender rates for a GPT in the council's Oxlade Street Reserve North Kellyville project. The council's cost estimate includes adjustment for inflation and additional access maintenance requirements.

GPTs vary in size and capacity depending on the catchment area they service. The size of GPTs impacts the upfront cost, as does the durability or quality. More durable GPTs have lower lifetime costs.

In assessing whether the cost estimate for the GPTs is reasonable, we considered other sources for GPT costs. The highest IPART 2014 benchmark cost for a GPT system is \$118,560,¹⁰ which adjusted for inflation to the base period of CP18 (June 2020) is approximately \$130,073. We also considered other council-proposed costs for GPTs in other plans.⁹ The average proposed GPT cost across other plans is \$127,542.

Table 3.4 Proposed GPT costs in other plans

Contributions plan	Council	GPT unit cost estimate / average cost estimate (\$)
Austral Leppington North (2021)	Liverpool	113,000
West Dapto CP (2020)	Wollongong	118,560
CP15 Box Hill (2020)	The Hills Shire	65,500
Vineyard CP (2018-19)	Hawkesbury	240,000
CP13 North Kellyville (2018)	The Hills Shire	50,000
CP22 Area 20 (2018)	Blacktown	180,323
CP21 Marsden Park (2016)	Blacktown	125,410
Average of all plans GPT cost estimates		127,542

Note: The presentation of the cost estimates is for simple comparison only. The estimates do not account for differences in GPT sizes or inflation.

Source: IPART Analysis.

Landcom also provided cost estimates for the proposed GPTs in the Precincts, as part of its initial VPA offer. Landcom estimate the GPTs will cost \$80,000 per unit.

The council has not used the initial Landcom VPA offer cost estimates for the GPTs because it considers they are too low. The council considers that the delivery of fundamental local infrastructure should not rely on the VPA. The VPA acts as a 'works-in-kind' agreement for the delivery of items under the contributions plan and identifies offsets as a result of contributions plan items delivered by Landcom.¹¹ The council considers costs should be estimated as though the council was delivering the item so in the event that a VPA is not agreed, the costs in the plan are sufficient for the council to deliver the infrastructure. The council anticipates Landcom will likely deliver 3 of the 6 GPTs.¹²

We consider the initial Landcom VPA offer cost estimates are reasonable for the 3 GPTs Landcom is likely to deliver. The council's cost estimate of \$150,000 is reasonable for the remaining 3 GPTs. If the actual cost to install GPTs in CP18 is higher or Landcom's cost estimate for GPTs increases in its final VPA offer, the cost in the plan can be adjusted accordingly.

The proposed total cost for the GPTs in CP18 is \$900,000. We recommend the council use the Landcom cost estimates for 3 of the 6 GPTs. Altogether, the cost estimate for GPTs would be reduced by \$210,000.

⁹ These costs were proposed by councils and are before IPART assessment. The council-proposed costs for GPTs are shown for simple comparison only.

Draft recommendation

- 6. Adopt the initial Landcom VPA offer estimates for the 3 gross pollutant traps Landcom is proposed to deliver. This would reduce the total cost of gross pollutant traps by \$210,000.

3.6 Criterion 5: Apportionment

In CP18, the council apportions the cost of GPTs to residential development only.

In assessing the apportionment of GPTs, we consider that the need for GPTs is a direct consequence of the number of people, both residents and workers, producing surface level debris. On a gross floor area (GFA) basis, CP18 is comprised of 75.08% residential development and 24.92% non-residential development (i.e. retail, commercial and community developments). As the need for GPTs arises from both types of development, we recommend GPTs costs be apportioned between residential and non-residential development on a GFA basis, with 75% allocated to the former and 25% to the latter.

The need for most stormwater infrastructure is driven by the size of the impervious land that is being developed. As mentioned above, GPT use does not depend on land size, but on the number of people using this land for their activities and producing debris as a result. Following this consideration, we recommend apportioning costs for GPTs on a per-person basis for residential development, and on a GFA basis for non-residential development. This is because GFA represents the best proxy for the cost-driver of GPTs in non-residential developments, since such number cannot be determined with a consistent value (which is instead the case with residential dwellings).

Draft recommendation

- 7. Apportion the cost of gross pollutant traps between residential and non-residential developments on a gross floor area (GFA) basis, then amongst residential development on a per-person basis and non-residential development on a GFA basis.

4 Open space

The total cost of open space land and embellishment in CP18 is \$121.0 million (80.9% of total costs), comprising:

- \$77.6 million for land (92.1% of the total cost of land)
- \$43.4 million for open space embellishment (67.3% of the total cost of works).

4.1 Overview of our assessment

- **Essential works** – The land and embellishment for open space are consistent with the essential works list. We have made a draft recommendation to move transport-related work costs *to* the transport infrastructure category (see draft recommendation in Section 2.3), and a recommendation to move open space embellishment costs *from* the stormwater infrastructure category.
- **Nexus** – Nexus is established for the total area of land for open space, the open space provision and its embellishment. However, we note that the overall provision of open space is low.
- **Reasonable cost** – The open space embellishment costs are reasonable, except the council should consistently apply indexation to all open space embellishment, based on the Australian Bureau of Statistics' Producer Price Index (Non-Residential Building Construction, New South Wales).
- **Apportionment** – The council's approach to apportioning open space costs to residential development on a per person basis is reasonable.

We recommend that the council:

- Transfer the cost of rainwater re-use infrastructure provided as part of the rainwater re-use infrastructure in the Bella Vista district park (DR7) within stormwater management works to open space embellishment.
- Use the Australian Bureau of Statistics Producer Price Index estimates of inflation to index the cost of embellishment at Caddies Creek Sporting Complex (PF1).

We also recommend:

- reducing the cost of open space **land** by approximately \$1.1 million
- A decrease in open space **embellishment** by around \$360,000
- An increase of \$620,000 in open space **works** due to recategorization of proposed works.

Table 4.1 IPART-recommended adjustments for open space (\$Jun2020)

Criterion	Draft finding	Draft recommendation	Land	Works
Total costs in plan			77,606,308	43,376,109
Essential works	All land and works in the plan are consistent with the essential works list, however:			
	The shared cycleway sections (OSE6 and OSE7) are transport costs	Transfer costs to transport works		- 1,844,629
	Costs for rainwater re-use infrastructure are open space costs	Transfer costs from stormwater works		2,466,000
Nexus	Nexus is established for all land and works in the plan.			
Reasonable cost - Land	The cost of land is reasonable, except:			
	The 1.5% acquisition allowance is not reasonable	Remove the 1.5% acquisition allowance from the cost of open space land	- 1,146,891	
Reasonable cost - Works	The cost of embellishment is reasonable, except:			
	The council's use of inflation estimates is not reasonable	Reduce the cost of embellishment at Caddies Creek Sporting Complex (PF1) to reflect ABS estimates of inflation		- 361,119
Apportionment	Approach is reasonable			
Total IPART-recommended cost adjustment			- 1,146,891	260,252
Total IPART-assessed reasonable cost			76,459,416	43,636,360

Note: The recommendation relating to the reasonable cost of land for open space (i.e. to remove the 1.5% acquisition allowance) is discussed and estimated in Chapter 6.

Source: CP18 works schedule, IPART calculations

4.2 Open space embellishment included in CP18

CP18 includes 17.6 hectares of open space, comprising 9.5 hectares located outside the Precincts (Caddies Creek Sporting Complex) and 8.1 hectares within the Precincts. The council classifies the open space within the Precincts as 'passive open space', including local parks, neighbourhood parks, riparian parks, courts under the viaduct, urban plazas and district open space (Table 4.2). These parks and sporting facilities will serve a population of around 14,000 people.

Table 4.2 Open space costs in CP18 (\$June2020)

Item	Cost of land	Cost of embellishment	Total cost
Caddies Creek Sporting Complex (PF1)	10,933,581	20,747,948	31,681,529
Local parks (OSE9, OSE10)	18,428,416	2,762,760	21,191,176
Neighbourhood park (OSE5)	18,707,749	1,762,992	20,470,741
Land/courts under viaduct (OSE4)	1,433,556	2,761,968	4,195,524
District open space – Bella Vista (OSE8)	19,189,590	7,233,600	26,423,190
Town square urban plazas (OSE3, OSE11)	6,625,920	2,956,800	9,582,720
Riparian parks (OSE1, OSE2, OSE12)	2,287,495	3,305,412	5,592,907
Cycle path along creek (OSE6, OSE7)	-	1,844,629	1,844,629
Total	77,606,308	43,376,109	120,982,416

Source: CP18 works schedule, IPART calculations

4.3 Criterion 1: Essential works

We found that the land and embellishment items in CP18 are generally consistent with the essential works list in the [Practice Note](#). Given the stage of development, the council does not have detailed plans for the embellishment of open space. The council lists a skate park, which is not consistent with the essential works list. The remaining items listed are consistent with the essential works list.

We consider that the cycle path along Elizabeth Macarthur Creek (OSE6, OSE7) should be characterised as transport works and recommend the transfer of these costs to the transport infrastructure category (see Transport section for more information). There are no land costs associated with this cycleway.

Similarly, we consider that the rainwater re-use infrastructure (including irrigation pumps) within the district park (included in CP18 as stormwater infrastructure) should be classified as open space embellishment. We recommend the costs of this infrastructure be transferred to the open space category and consider that it meets the requirements of essential works.

We note that embellishment at Caddies Creek Sporting Complex also includes some works which may be considered transport or stormwater infrastructure. We have not made recommendations to transfer these costs as the full costs associated with the sporting complex are most appropriately borne by residential development. Transferring these costs to other infrastructure categories could change this apportionment or add unnecessary complexity to the plan.

4.3.1 Embellishment at Caddies Creek Sporting Complex is consistent with the essential works list

The Caddies Creek Sporting Complex will include 4 single playing fields (including 1 cricket oval), parking, amenities buildings, a playground and pathways. These items are consistent with the essential works list.

In developing a cost estimate for the sporting complex, the council included several other embellishment items, including but not limited to, an access road, pedestrian crossings, road humps, sports field drainage, stormwater pits and pipes, and rainwater re-use tanks. These items are consistent with the essential works list but may be more appropriately classified as essential works for transport or stormwater management. The council has explained that it included these costs in open space embellishment as they form part of a single open space project, and detailed designs are not yet available.¹³

While we have previously made recommendations to transfer works costs to a more reflective category, in this case, we consider that it is appropriate for these works to remain as open space works costs because the costs should be fully apportioned to residential development.

- In the case of **transport infrastructure** – the proposed works items (including a new road, concrete road humps and pedestrian crossings) serve a clear transport function but are only necessary because of the provision of open space at Caddies Creek Sporting Complex. As the sporting complex is located outside the Precincts, there will be no demand for the transport infrastructure from non-residential development within CP18. As such, it is appropriate for residential development to bear the full costs of providing these transport works.
- In the case of **stormwater management infrastructure** – the proposed works items (stormwater pits and pipes, and re-use water tanks with pumps) are intended to assist with drainage at the sporting complex. The need for stormwater management works at the sporting complex solely arises from the sporting complex itself, which is being provided to meet the needs of the residential population in CP18. As non-residential development in CP18 neither contributes to demand for the sporting complex nor impervious area outside the Precincts, it is appropriate for residential development to bear the full costs of providing these transport works.

Transferring these costs to the transport or stormwater management works categories would either change this apportionment (by apportioning some of the costs to non-residential development) or require bespoke changes to apportionment for these items, as distinct from other works items in the respective infrastructure categories. The administrative impracticality of the latter means that the most practical solution to achieve the desired apportionment is to make no change to the classification of costs in the plan.

4.3.2 The proposed embellishment of passive open space is generally consistent with the essential works list

The council has identified a range of embellishment items for the open space areas in CP18. These items are consistent with the essential works list, except for the skate park proposed for the local park under the viaduct (OSE4)^h.

^h Skate parks are excluded from the EWL and therefore, not able to be included in an IPART endorsed contributions plan.

Table 4.3 Open space costs in CP18 (\$June2020)

Open space classification	Proposed embellishment items	Embellishment cost (\$ per square metre)
Riparian open space	<ul style="list-style-type: none"> n/a 	198
Local/neighbourhood parks	<ul style="list-style-type: none"> small courts skate park shelter seating amenities quiet spaces planting open lawn kickaround area children's playground 	264
District park	<ul style="list-style-type: none"> multi-use space to cater for sports and events dog off leash areas play equipment passive areas 	244
Urban plazas	<ul style="list-style-type: none"> multi-use town square public seating 	924

Source: CP18 works schedule

The council has estimated the costs of embellishing open space using a per square metre rate based on the classification of open space. We do not recommend removing the skate park from the local park under the viaduct for several reasons:

- Detailed plans for parks are not yet available, and we expect the proposed items are indicative at this stage of development.
- The specific embellishment items in each of the local parks vary, despite costs being estimated using a common rate.
- The council has not specifically costed each embellishment item in preparing its estimates.
- The council has submitted several plans to IPART for assessment and has demonstrated an understanding that skate parks are embellishments outside the essential works list.
- A recommendation to reduce the per square metre rate applied to local parks could prevent the provision of other embellishment items.

4.3.3 Rainwater re-use infrastructure in the district park should be classified as open space embellishment

The Wood & Grieve Engineers stormwater management plan identifies the rainwater re-use system (including a pumped irrigation system) in the proposed district park within the Precincts.¹⁴ Infiltrated stormwater will be collected by a series of subsoil drains, which will discharge to a subsurface rainwater storage tank.

The council, in consultation with Landcom, explained that the rainwater re-use infrastructure would only collect water from the district park (i.e. it would not collect runoff from nearby impervious development area). The council also noted that the collected water would only be used to irrigate the park.¹⁵

While the rainwater re-use system could also improve the quality and quantity of stormwater runoff, and potentially reduce erosion at Elizabeth Macarthur Creek, we consider this impact is likely to be limited as the district park will be mostly pervious area.

As the primary purpose of the rainwater re-use infrastructure is to benefit open space, we recommend that these costs be transferred from the stormwater infrastructure category to open space embellishment. This change will not affect total costs in the plan but will increase the share of costs apportioned to residential development, and reduce the share apportioned to non-residential development.

Draft recommendation

- 8. Transfer the cost of rainwater re-use infrastructure in the Bella Vista district park (DR7) within stormwater management works to open space embellishment. This would increase open space costs by approximately \$2,466,000.

4.4 Criterion 2: Nexus

Based on information from the council and our analysis, we consider nexus is established for open space land and embellishment in the plan but note that the overall provision of open space is low.

We found that:

- The provision of 17.2 hectares of open space in CP18 is below the Growth Centres' benchmark estimate of demand generated by the population in the new development of 39.18 hectares
- Provision of open space outside the Precincts is reasonable given land constraints (availability and cost).
- Nexus is established for the level of embellishment in the plan.

4.4.1 The council relied on technical studies and its recreation strategy to establish nexus

To establish nexus, the council relies on a social infrastructure and open space assessment prepared as part of the SSDA process. The council also relies on its Recreation Strategy of October 2019 to justify the provision of open space in the current plan.¹⁶ The Wood & Grieve Engineers stormwater management plan establishes nexus for the rainwater re-use system in the proposed district park.

Table 4.4 Technical study for open space embellishment in CP18

Author	Title	Date
Elton Consulting	Social infrastructure and open space assessment	August 2019
Wood and Grieve Engineers	Bella Vista Station Precinct stormwater management plan	September 2019

Note: These reports were commissioned by Landcom as part of the SSDA documentation.

4.4.2 Nexus is established for open space land but the overall rate of provision is low

The plan includes 17.2 hectares of open space land proposed to be used by the residents of the proposed precinct. The council classifies 9.5 hectares of this land as 'active open space' at Caddies Creek Sporting Complex, and the other remaining 7.7 hectares as 'passive open space' comprising a network of parks and other open space in the Precincts. We consider that nexus is established for the open space provision and the new residents.

The council's provision of 9.5 hectares of active open space is lower than the traditional benchmark for greenfield locations (2.83 hectares of active open space per 1,000 people, which equates to 39.2 hectares for the expected population in the Precincts).

Similarly, the council's provision of 7.7 hectares of passive open space is relatively low compared with the benchmark of 1.62 hectares per 1,000 people¹⁷ (which for this development would be equivalent to 20.9 hectares to provide for the needs of the new population). The level of provision also represents a shortfall relative to the recommendations of the Elton Consulting study. This study recognised the Precinct's limitations and recommended 8 hectares of open space be provided through a network of local parks, a district park and linear open space along Elizabeth Macarthur Creek. The council considers the shortfall is justifiable in the Precincts because of:

- the availability and high cost of land
- the likely density of future development and the urban character of the Precincts, which is more condensed than a greenfield release area
- the level of embellishment of the individual open spaces
- the high amenity and informal passive open space opportunities provided within the Elizabeth Macarthur Creek riparian corridor, including walking and cycling opportunities along the planned north-south cycleway.

4.4.3 Nexus is established for open space embellishment

The council's embellishment of local parks is informed by its 2019 Recreation Strategy. Recognising the council has proposed that higher levels of embellishment are a trade-off for relatively low provision of open space land, we consider that nexus is established for the proposed level of embellishment in the parks.

Detailed designs are not available for the embellishment at Caddies Creek Sporting Complex. The level of embellishment proposed at the sporting complex is high relative to embellishment of similar facilities we have assessed.ⁱ However, again recognising the trade-off between the level of embellishment and quantum of open space provision, we consider that nexus is established for the proposed level of embellishment at the sporting facility.

4.4.4 Nexus is established for rainwater re-use infrastructure in the district park

The Wood and Grieve Engineers Bella Vista stormwater management plan recommends rainwater re-use infrastructure be installed within the district park. The size/capacity of the rainwater re-use infrastructure is not specified in the stormwater management plan. However, Landcom's cost estimate (via its initial VPA offer) for the infrastructure is based on a 2.74 hectare size (the district park is 2.97 hectares).

We consider that nexus is established for the rainwater re-use infrastructure via the technical study, as the infrastructure will enable irrigation of the open space and manage minor event stormwater runoff from the district open space.

4.5 Criterion 3: Reasonable cost (embellishment only)

The council has not delivered any of the open space embellishment in the plan and, as a result, the plan includes estimated embellishment costs. We found:

- the council's costing approaches are reasonable
- the per square metre embellishment cost rates are reasonable
- the use of inflation assumptions for indexation of the base costs of the sporting complex is not consistent with the indexation approach outlined in the draft CP18.

4.5.1 The council's approach to estimating costs for open space embellishment is reasonable

Table 4.5 shows the council's approach to estimating costs for open space embellishment items and the allowances applied. We consider the allowances are reasonable compared with the IPART Benchmark Report.

ⁱ Based on IPART analysis of open space cost per square metre in similar plans we have assessed

Table 4.5 The council's approach for estimating open space embellishment costs

Item	Costing approach	Allowances
Sporting complex	Council estimates utilising IPART and Rawlinsons benchmark costs, indexed to the base period of the plan by a rate of 2.5% per year.	Project management (7.5%), design (7.5%) and contingency (20%)
Passive open space (riparian open space, local/neighbourhood parks, district park and urban plaza)	Initial Landcom VPA offer	None

Source: The Hills Shire Council

4.5.2 The initial Landcom VPA offer costs are reasonable

The council has relied on the initial Landcom VPA offer for most of its cost estimates. These cost estimates apply a per square metre rate of embellishment for different types of open space, multiplied by the planned size of the open space. The cost estimates do not currently provide a breakdown of embellishment items within open space, but Landcom has indicated that it is currently obtaining quantity surveyor (QS) estimates for all works items in the plan.

We consider that the initial Landcom VPA offer rates are reasonable for inclusion in CP18 until Landcom's full QS estimates are available. If the QS estimates become available during our assessment, we will consider the procedural fairness implications of assessing this new information.

Landcom is best placed to estimate the costs of open space embellishment as it will be delivering it. However, we also recognise that Landcom may have an incentive to overstate the cost of embellishment as the value of developer credits for the delivered open space will reduce the contributions paid on its developments.

We have compared the proposed per square metre rates for embellishment with rates we have considered reasonable in other plans. The average rate of embellishment is approximately \$280 per square metre across all passive open space in the plan. In similar plans we have assessed, the cost of embellishment of passive open space (including, but not limited to, local parks) has ranged from around \$50 to \$160 per square metre.

The rate in CP18 is high relative to these comparators, which partly reflects the high cost of embellishment for the urban plaza areas relative to parks. However, the urban plaza areas are relatively small, and we note that the rates of \$264 per square metre and \$244 per square metre, respectively, for the local parks and districts parks are still high relative to our other assessments.

However, recognising that the council has proposed higher levels of embellishment as a trade-off for relatively low provision of open space land, the higher rates may be reasonable. CP18 includes 8.1 hectares of passive open space, relative to benchmark provision of 20.9 hectares based on the expected population. If the proposed total cost of embellishment is applied to the benchmark area, this would result in a rate of \$108 per square metre, which is similar to rates we have seen in other plans.

Overall, we consider that the initial Landcom VPA offer rates for open space embellishment are reasonable given the land constraints in CP18 and that planning is still in its early stages. However, given these relatively high rates, the future residents of CP18 should expect a high level of embellishment in the passive open space in the Precincts.

4.5.3 Cost estimates for the sporting complex are reasonable

As discussed in section 4.5.1, the council has estimated the embellishment costs for the Caddies Creek Sporting Complex through a bottom-up estimate based on benchmark costs for expected inclusions. This results in a rate of embellishment of approximately \$218 per square metre.

This value is high relative to other sporting complexes we have assessed, where embellishment costs range from around \$120 to \$170 per square metre. Applying the same approach as used for local parks, we extrapolate the proposed cost of embellishment across the benchmark active open space provision for the expected population (16.6 hectares, compared with the 9.5 hectares provided in CP18). This results in a per square metre rate of embellishment of \$125 per square metre, which is within the range of costs we have previously assessed as reasonable.

As we consider this cost is reasonable, we have not scrutinised the individual embellishment items listed by the council in building its bottom-up estimate of the cost of embellishment at Caddies Creek Sporting Complex. We recognise that these items and estimated costs are indicative only, as the council is still preparing a revised master plan for the sporting complex.^j

As with passive open space in the Precincts, the future residents of CP18 should expect a high level of embellishment at Caddies Creek Sporting Complex as a trade-off for the limited area of open space in the plan.

4.5.4 Allowances are only applied to the cost of the sporting complex

The council has only applied allowances to its cost estimates for the sporting complex. We consider the proposed allowances (7.5% for project management, 7.5% for design and 20% contingency) are reasonable given the early stage of planning.

The council has not applied allowances to the estimates based on the initial Landcom VPA offer. This is appropriate as the values will be 'locked in' once the VPA is agreed. If the values change between now and the finalisation of the VPA, the council can update these values as actual costs in the next version of the plan.

^j The council has indicated that there have been amendments to the Caddies Creek Master Plan since the draft CP18 was submitted to IPART. While 4 playing fields are still proposed, site constraints have led to a revision to the amenities buildings (reducing from 2 buildings to 1). The council has clarified that the landscaping, clearance, earthworks and soil profile movements are required to deliver the facilities (i.e. they are not environmental works).

4.5.5 The initial Landcom VPA offer cost estimate for the rainwater re-use infrastructure within the district park is high, but reasonable

The council has relied on the initial Landcom VPA offer for the cost of the rainwater re-use infrastructure (DR7). This cost (approx. \$2.5 million) is high relative to the estimated cost of providing 3 re-use water tanks with pumps and 4 irrigation systems at Caddies Creek Sporting Complex (\$615,000).

However, consistent with our analysis in section 4.5.2 for other open space embellishment, we consider that Landcom's initial VPA offer estimates are likely to be the most appropriate for inclusion in the plan, pending updated QS estimates. As such, we consider the cost for the rainwater re-use infrastructure is high, but reasonable.

4.5.6 The council has indexed its cost estimates based on inflation assumptions

The council has indexed the proposed base cost of embellishment at Caddies Creek Sporting Complex assuming an increase of 2.5% per year from 2016-17 to 2020-21. Using this assumption, the council has increased its base cost of embellishment by 10.38%.

This inflation assumption is not consistent with the indexation approach specified in the draft plan and applied in the council's NPV model (Australian Bureau of Statistics' Producer Price Index (Non-Residential Building Construction, New South Wales)).

We recommend the council use the Australian Bureau of Statistics' estimates to index the base cost, estimated in June 2017 dollars, to the base period of the plan (June 2020). This is an increase of 6.1% to account for inflation over that time. This reduces the base cost of embellishment at the sporting complex by approximately \$267,496.

Draft recommendation

- 9. Use the Australian Bureau of Statistics' Producer Price Index to estimate inflation for the cost of Caddies Creek Sporting Complex (PF1). This would reduce the estimated cost of this complex by approximately \$360,000.

4.6 Criterion 5: Apportionment

CP18 apportions all open space land and embellishment costs to the updated residential population of the Precincts on a per person basis. The council assumes that demand for open space is generated only by the residential development in the Precincts. We consider this approach is reasonable given the nature of the embellishment proposed.

5 Plan administration

CP18 includes \$0.97 million for plan preparation and administration. This amount is 1.5% of works costs, which is consistent with the benchmark we proposed in our *Local Infrastructure Benchmark Costs Report* (April 2014).

5.1 Overview of our assessment

- **Essential works** – Plan preparation and administration costs are consistent with the essential works list.
- **Nexus** – There is nexus between plan administration costs and development in the Bella Vista and Kellyville Stations Precincts.
- **Apportionment** – The council's approach to the apportionment of plan administration costs is reasonable. The calculation of apportionment should be updated to reflect our other recommendations which change the apportionment of transport and stormwater costs between residential and non-residential development.

We recommend that the council revise the cost of plan administration to ensure that it continues to reflect 1.5% of works costs based on the IPART-assessed reasonable cost of works. As the council apportions plan administration costs between residential and non-residential development based on its apportionment of the underlying works cost, this will also require the council to adjust its apportionment calculation to reflect our other recommendations to the apportionment of transport and stormwater costs.

Our findings and recommendation for plan administration costs are summarised in Table 5.1 and discussed in more detail below.

Table 5.1 IPART-recommended adjustments for plan administration

Criterion	Finding	Recommendation	Works (\$June2020)
Total costs in plan			966,138
Essential works	Plan administration is on the essential works list		
Nexus	Nexus is established		
Reasonable cost	Calculating costs using IPART's benchmark of 1.5% of works costs is reasonable	Revise plan administration costs to be 1.5% of the revised cost of works	946,482
Apportionment	Approach is reasonable		
	The council's approach reflects the apportionment of costs in the underlying infrastructure categories	Adjust apportionment recommendation to reflect IPART's other recommendations to revise the apportionment of transport and stormwater works costs between residential and non-residential development	n/a
Total IPART-recommended cost adjustment			-19,656
Total IPART-assessed reasonable cost			946,482

Note: The apportionment recommendation does not affect total costs in the plan.

Source: The Hills Shire Council, Works Schedule, February 2021 and IPART calculations.

5.2 Criterion 1: Essential works

Plan preparation and administration costs are on the essential works list. The Practice Note explains:

Plan administration costs are those costs directly associated with the preparation and administration of the contributions plan. These costs represent the costs to a council of project managing the plan in much the same way as the project management costs are incorporated into the cost estimates for individual infrastructure items within a plan.

Plan administration costs may include:

- Background studies, concept plans and cost estimates that are required to prepare the plan
- Project management costs for preparing and implementing the plan (e.g. employment of someone to co-ordinate the plan).¹⁸

5.3 Criterion 2: Nexus

We consider there is nexus between plan preparation and administration activities and the expected development in the Bella Vista and Kellyville Stations Precincts.

5.4 Criterion 3: Reasonable cost

CP18 includes a cost of \$0.97 million for plan administration, which is 1.5% of the total cost of works in the plan. The amount of 1.5% is consistent with the benchmark we proposed in IPART's *Local Infrastructure Benchmark Cost Report* (April 2014), and we consider this is a reasonable estimate.

Given that we have recommended the council revise the cost of works, we therefore recommend the council calculate the cost of plan administration for CP18 to be 1.5% of our recommended cost of works.

Draft recommendation

- 10. Recalculate the cost of plan administration (1.5% of the cost of works) based on the adjusted costs we have recommended.

5.5 Criterion 5: Apportionment

In CP18, the council apportions plan administration costs between residential and non-residential development based on its apportionment of the underlying works cost. This approach broadly reflects the demand for infrastructure from residential and non-residential development.

However, we have recommended that the council adjust the apportionment of costs for transport and stormwater management infrastructure. We therefore recommend that the council adjust the apportionment of plan administration costs to residential and non-residential development to reflect our recommended apportionment of the underlying works costs for transport and stormwater management infrastructure.

This change will affect contributions rates for residential and non-residential development but does not change the total costs in the plan.

Draft recommendation

- 11. Adjust the apportionment of plan administration costs to residential and non-residential development to reflect our recommended apportionment of the underlying works costs for transport and stormwater management infrastructure.

6 Land costs

CP18 includes \$84.2 million for land acquisition. This represents 56.3% of total costs.

6.1 Overview of our assessment

We found that the estimated cost of land in the plan is mostly reasonable, however it is not reasonable to apply an acquisition allowance to the cost of land in this plan.

6.2 Land costs included in CP18

Land costs in CP18 represent the cost of acquiring land for open space and community facilities only. There are no land costs associated with provision of transport and stormwater management infrastructure because any land required for these infrastructure categories will be dedicated by developers. The council has not acquired any of the land for local infrastructure in the plan.

Table 6.1 Land costs in CP18 (\$Jun2020)

Category	Total area (ha)	Total cost
Transport	-	-
Stormwater	-	-
Open space	9.69	\$77.6 million
Community services	0.16	\$6.6 million
Total	9.85	\$84.2 million

Source: CP18 Works Schedule and IPART analysis.

The council has relied on different sources to estimate the value of:

1. land required for open space and community services within the Precincts
2. land required for open space at Caddies Creek, which is outside the Precincts.

6.2.1 The cost of land to be acquired within the Precincts is reasonable

For open space and community services land within the Precincts, the council estimated the cost by applying average market values (dollars per square metre) derived from site-specific valuations undertaken by Landcom's qualified valuer in 2019. These valuations are based on the valuer's assumptions about the underlying zonings, Floor Space Ratios, Height of Building controls and achievable Gross Floor Area for the parcels of land to be acquired and any relevant constraints.

The average land values applied by the council in CP18 for open space and community services land within the Precincts are shown in Table 6.2.

Table 6.2 Average market values for land in CP18 (2020) (\$/m²)

Infrastructure item and type	Underlying zoning	Constrained (Y or N)	Average value (\$/m ²)
OSE1 – Riparian open space	B2 – Local centre	Y	135
OSE2 – Riparian open space	B2 – Local centre	Y	135
OSE4 – Local park under viaduct	R4 – High density residential	Y	135
OSE5 – Neighbourhood park	R1 – General residential (Floor Space Ratio 4:1)	N	2,760
OSE8 – District open space	R1 – General residential (Floor Space Ratio 1:1)	N	690
OSE9 – Local park	R1 – General residential (Floor Space Ratio 1.5:1)	N	1,035
OSE10 – Local park	B2 – Local centre	N	2,955
OSE11 – Urban plaza	B7 – Business park	N	4,080
OSE12 – Riparian open space	R1 – General residential	Y	135
CF1 – Community facility	B7 – Business park	N	4,080

Source: Lunney Watt & Associates, pp 17-18; CP18 Works Schedule; and IPART analysis

We found that the council's application of the average market values is reasonable because it reflects the underlying zonings and constraints applying to land in the plan and Landcom's valuer's advice.

6.2.2 The cost of land to be acquired outside the Precincts is reasonable

For open space land at Caddies Creek (outside the Precincts), the council estimated the cost by applying the average per square metre value derived from the cost of adjoining land at Caddies Creek, that is owned by the Office of Strategic Lands (OSL) and included in the North West Special Infrastructure Contribution (SIC)

The OSL land at Caddies Creek was purchased over 10 years ago for the North West Rail Link corridor. The SIC team at DPIE have advised that, at that time, the land had a "Business" zoning and that it was later rezoned for open space (RE1 – public recreation) when the need for additional open space land was identified. The purchase price for this OSL land reflects the business zoning. The cost included in the North West Growth Area Special Infrastructure Contributions (North West SIC)^k reflects the indexed purchase price plus holding costs; it does not necessarily reflect the market value of the adjoining land the council will purchase at Caddies Creek for CP18. DPIE considers that the council or Landcom should obtain an up-to-date valuation to confirm the market value of this adjoining land. We understand that the council is expecting Landcom to provide an updated valuation when it submits its VPA offer.

^k A NSW Government levy towards providing state based infrastructure to support new residents within the North West Growth Area

Until this updated valuation is available, the cost of the OSL land from the North West SIC is the best available information from which to estimate the cost of the adjoining land in CP18. We consider, therefore that the cost of this land in the plan is reasonable at this time. We consider that the council should update the cost of this land when Landcom provides an updated valuation.

6.2.3 Application of an acquisition allowance is not reasonable for this plan

For both land within and outside the precinct the council proposed adding an allowance of 1.5% of the land value to cover the amount that the council may have to pay in association with land acquisition costs, such as: legal and conveyancing fees; survey fees; and/or compensation payments to land-owners for compulsory acquisition of their land.

The allowance applied to land costs in CP18 (1.5%) is the same as in other plans we have assessed recently from The Hills Shire Council.¹ However, unlike most land in these other plans, the land in CP18 will be transferred (sold) to the council by the developer (Landcom). This means that the heads of compensation under the *Land Acquisition (Just Terms Compensation) Act 1991* would not apply. The council will pay the developer only the agreed value of the land and not any costs associated with the transaction. The council's costs associated with the transfer of land are covered under plan administration costs. This is outlined in our Land Cost Information Paper.¹⁹

We therefore consider that application of a 1.5% acquisition allowance for land in CP18 is not reasonable. Removing this allowance would reduce the cost of land in the plan by \$1,244,811 (comprising \$1,146,891 relating to the cost of open space land, and \$97,920 for community facilities land).

Draft recommendation

- 12. Remove the 1.5% acquisition allowance from the cost of land for open space and community facilities. This would reduce the costs in the plan by around \$1.2 million.

¹ Including for CP12 – Balmoral Road, CP13 – North Kellyville, CP17 – Castle Hill North and CP15 – Box Hill.

7 Cross category issues

This Chapter discusses our analysis of issues that apply across infrastructure categories, including:

- Criterion 3: Reasonable cost (in relation to the council's financial model)
- Criterion 4: Timing of infrastructure delivery
- Criterion 6: Consultation
- Criterion 7: Other matters.

7.1 Overview of our assessment

Our assessment is that the council's approach to modelling and the assumptions it uses are reasonable except that the council should update the discount rate in the model with the latest available information. The council should also update its residential and non-residential net present value (NPV) models to reflect its revised development path assumptions.^m

We found that the timing of infrastructure delivery and the council's consultation were both reasonable. We propose to recommend that the council review the plan within three years.

Our analysis of these issues is outlined below.

7.2 Criterion 3: Reasonable cost – the council's financial model

The council uses a net present value (NPV) approach to calculate the contributions rates in CP18. An NPV approach involves the use of a discounted cash flow model in which the contribution rates are calculated so that the present value of anticipated expenditure is equal to the present value of anticipated revenue.

In our Technical Paper, *Modelling local infrastructure contributions in a present value framework*, we set out some guidelines, but note that councils have discretion over the approach they adopt.²⁰

The council submitted two models which separately calculate developer contributions for residential and non-residential development. The assumptions in the models are the same (i.e., development path and escalation factors), but the models have different imputed costs, which reflect the council's approach to apportioning costs in the works schedule between residential and non-residential development.

^m The council revised its dwelling and yield projections following exhibition of the draft CP18 and has confirmed that the development path provided in the 'Post Exhibition - CP 18 Dwelling and Population projection (February 2021)' file should be relied upon for analysis.

The non-residential model derives a contribution rate based on gross floor area, while the residential model derives a per-person contribution rate. The models use the same parameters and our assessment applies to both.

7.2.1 Base year of the plan/model

The base period is the point at which the council calculates the contribution rates. For CP18, the base period of the plan and all works cost estimates is June 2020. This is the same as the base period of the model.

7.2.2 Future cash flows (revenues and expenditure)

A nominal NPV approach requires the council to make assumptions about:

- The timing of future expenditure and revenue receipts
- The increase in nominal costs over the forecast period
- The increase in nominal contributions rates (i.e., revenue) over the forecast period
- The council's cost of debt or opportunity cost of capital (i.e., the discount rate).

7.2.3 Timing of expenditure is based on the council's expected staging of infrastructure

The council's NPV model includes assumptions about the timing of expenditure, which are based on its forecasts of when infrastructure and associated land acquisitions are required in order to facilitate development of the precinct.

The council assumes development will occur over 25 years and reflects this assumption in the model. We consider that the council's approach to forecasting the timing of infrastructure delivery is reasonable.

7.2.4 Timing of revenue is determined by the council's assumed development path

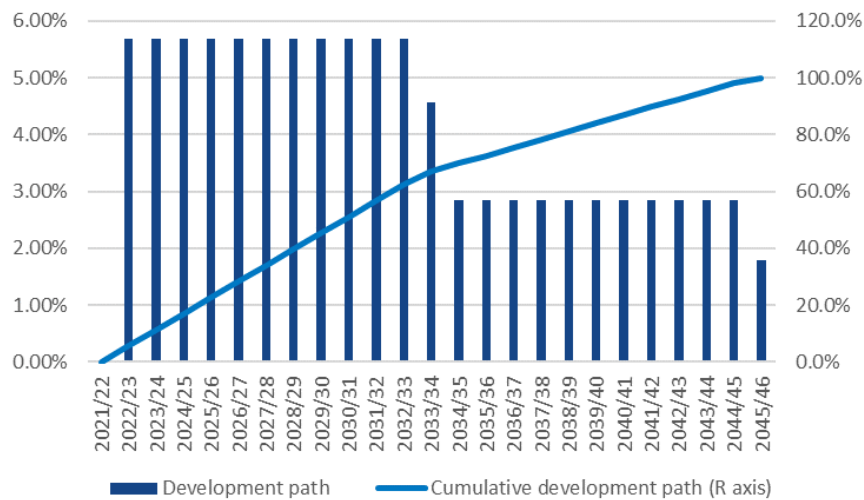
The council's assumed timing for receipt of contributions revenue is based on its expected profile of development over the duration of the plan. We refer to this as the 'development path.' The council has presented 3 different versions of the development path as some of the assumptions around this have changed over time.

The most recent development paths provided are presented in Figure 7.1 and Figure 7.2 below. These show that while residential development is expected to occur each year, non-residential development will occur in stages, with most occurring in the second half of the plan. We consider that these development paths are reasonable and recommend that the council update its NPV models to reflect the revised development paths.

Draft recommendation

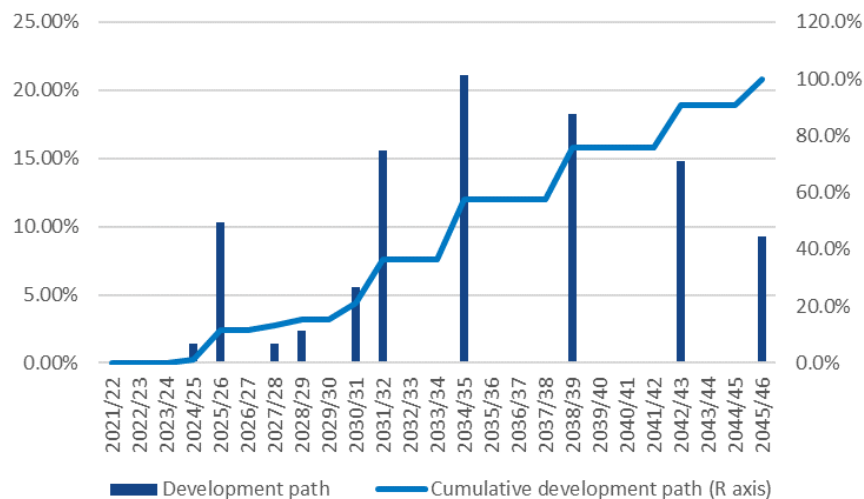
- 13. Update the development paths in the residential and non-residential NPV models, and in Table 1 of CP18, to reflect post-exhibition dwelling and yield amendments.

Figure 7.1 Assumed residential development path for CP18



Data source: The Hills Shire Council, CP18 residential NPV Model; IPART Analysis.

Figure 7.2 Assumed non-residential development path for CP18



Data source: The Hills Shire Council, CP18 non-residential NPV Model; IPART Analysis.

7.2.5 The council escalates the costs of land and works from June 2020 onwards

The council derives escalation factors from all land and works costs by calculating average annual growth over a 15-year period (June 2005 to June 2020) of several representative Australian Bureau of Statistics (ABS) indices. For administration costs, the council assumes an escalation factor of 2.5%, which represents the midpoint of the Reserve Bank of Australia's inflation target of 2-3%.

The council uses a geometric average accounting for compound annual average growth when calculating the escalation factors for land and works. This approach is consistent with recommendations we have made in recent assessments (for CP15, CP12, CP13 and CP17).

We consider the council's approach to escalating costs is reasonable for land, works and administration costs.

7.2.6 The council's revenue escalation factor of 2.5% is reasonable

The council uses a rate of 2.5% to escalate future revenues, which represents the midpoint of the Reserve Bank of Australia's inflation target of 2-3%. The future value of revenues is then discounted to present values using the discount rate in the model (see section 7.2).

We consider the council's method of escalating revenues and the use of a 2.5% factor is reasonable and is consistent with guidance in our 2018 Technical Paper.²¹

7.2.7 The council should use the latest available discount rate

The council uses IPART's local government discount rate of 3.2% (published in August 2020) to discount all the escalated cash flows to their present values at the base period. This was consistent with our recommendation in our Technical Paper to use the IPART calculated discount rate, at the time the council exhibited the plan.²²

We consider the council should update the model to use the latest available information on the discount rate. In August 2021, the nominal rate is 2.9%. The next update to the Local Government Cost Index will occur in February 2022.

Councils should adopt the latest available information on the discount rate when implementing recommendations and when reviewing a contributions plan.

Draft recommendation

- 14. Update the discount rate in the financial model to reflect the latest available Local Government discount rate published by IPART. Currently that nominal rate is 2.9%

7.3 Criterion 5: Timing of infrastructure delivery

The provision of facilities in CP18 is dependent on the development timeframe, assumed to be 25 years. The council intends to monitor the plan, which will allow for review and adjustment of population projections, and the works schedule, as required.

We consider that the council's timing of infrastructure is reasonable.

7.4 Criterion 6: Consultation

We must assess whether the council has conducted appropriate community liaison and publicity in preparing the contributions plan. We consider the council's process for CP18 satisfies the consultation criterion.

The council publicly exhibited the draft plan from 10 December 2020 to 29 January 2021 and received 7 submissions. The submissions were from:

- Landcom (on behalf of Sydney Metro)
- Sydney Water Corporation
- Cricket NSW
- Property Council of NSW
- 3 nearby landowners.

The issues raised in submissions and the council's response, including post-exhibition amendments, are outlined in Table 7.1.

Table 7.1 Issues raised during public exhibition and the council's response

Submittor	Comment	Council response
Landcom	Increase the dwelling/population projections in the plan because higher projected residential yields can be achieved on non-SSDA land	Plan amended to reflect higher dwelling/population projections, although not to the extent suggested by Landcom
	Include collector roads in the plan	No change – the council considers it will be able to require developers to deliver collector roads as a condition of consent
	Include land for a community facility – Landcom will dedicate through VPA	Plan amended to include 1,600m ² of land for a community facility
	Several intersection upgrades require further refinement	No amendment – relevant agencies to refine for future plan revisions
	Update value of land at Caddies Creek based on Landcom valuation	No amendment as Landcom did not provide updated valuation – update when this is provided
	Update cost estimates for works items based on updated Landcom QS estimates	No amendment as Landcom did not provide updated estimates – update when they are provided
Sydney Water	Request to be informed of any changes to population, dwelling and employment data that affects delivery of SW services	No amendment – will inform SW as part of regular meetings
Cricket NSW	Requests 2 additional cricket fields and practice nets at the Caddies Creek playing fields	No amendment – revised master plan for Caddies Creek is being prepared for consultation. Cricket NSW's comments will be considered through this process

Submittor	Comment	Council response
Property Council of NSW	Concern about development feasibility – ensure there is no overlap between the CP and the SIC	No amendment – CP18 does not levy for any regional infrastructure covered by the SIC
	Plan should provide greater flexibility for developers to undertake works-in-kind	No amendment – CP18 enables the council to consider applications for WIK agreements that meet certain criteria
	Plan should allow for payments to be made before issue of Occupation Cert, rather than before Construction or Subdivision Cert	No amendment – Direction to defer payment until Occupation Cert was a response to the COVID-19 pandemic. The council does not support continuation of this approach
Individuals	Objection to expansion of Caddies Creek Sports Complex because of potential impacts to existing vegetation, wildlife and on flooding	No amendment. DPIE rezoned the land for public recreation in 2017. The preliminary master plan for this site has positioned facilities to minimise impacts. The council has also commissioned an ecological impact assessment
	Existing facilities in LGA are sufficient to meet needs of new development and facilities are located a significant distance from new development	No amendment – there is currently limited availability at existing facilities at peak times, therefore clear demand for new facilities. An additional 4 playing fields at Caddies Creek meets the benchmark level of service established by the council's recreation strategy. Distance from development – it has not been possible to secure land for more playing fields within the precinct because of the desire to achieve the highest and best use of this land and its high cost. New playing fields at Caddies Creek adjoin existing facilities and, being within 2km from development, they are within the rule of thumb catchment identified by the Recreation and Open Space Guidelines for Local Government
	Concern about impact of playing fields on character of neighbourhood, noise, traffic and property values	No amendment - proposed expansion of Caddies Creek Sports Complex is consistent with existing use, therefore impact will be minimal. Noise and traffic impacts will be assessed further through development assessment and approval. Green spaces make a positive contribution to the quality of life of residents within the surrounding community.
	Concerns about maintenance of future green space	No amendment – CPs fund infrastructure costs, not ongoing maintenance
	Concerns about access to properties north of Memorial Ave with removal of an existing access road	No amendment – the subject properties are not part of the SSDA. The council is preparing draft development controls to apply to this land to ensure properties have adequate access to the public road network. These will be reflected in amendments to the council's DCP

Source: The Hills Shire Council, *Post Exhibition Council Report and Minute, 9 March 2021*, pp 24-30

We consider the council has adequately considered the submissions in detail. It made the following post-exhibition amendments to the plan:

- Yield projections updated for non-SSDA land within the Precincts from 857 dwellings (1,684 people) to 1,333 dwellings (2,621 people). This increased the overall projected yield within the corridor from 6,571 dwellings (12,910 people) to 7,047 dwellings (13,848 people)
- In recognition of the increase in residential yield, the apportionment of costs between residential and non-residential development was adjusted to 39% (residential) and 61% (non-residential)
- Costs included for 1,600m² of land to the east of Bella Vista Station for a possible future community facility

- Consequential changes to the yield tables, contribution rate tables, work schedules and maps within the draft plan to reflect the above changes.

We note that the deferral of contributions payments until prior to issue of an Occupation Certificate, which was raised as an issue through public exhibition, has been extended until 31 March 2022.

7.5 Criterion 7: Other matters

We are required to assess whether the plan complies with any other matters we consider relevant. Our assessment of the CP18 to date has identified 2 relevant other matters:

- The need to review the plan within 3 years
- Timing of contributions payments

Draft recommendation



15. Review the plan within three years to include updated information on planning assumptions, and the scope and cost of land and works in the plan.

7.5.1 The council should review the plan within 3 years

Regular review of a contributions plan ensures that contribution rates most accurately reflect the council's actual costs in delivering the local infrastructure which is needed to meet the demand from the new development. In general, our preference is for councils to review their contributions plans every three to five years, depending on the stage and rate of development in the precinct to which plans apply.

CP18 is a new draft plan and no development has occurred in the Precincts. The council has advised that it is expecting Landcom to provide updated land and works cost information when it submits a full VPA offer. The council's application also indicates that further work is being undertaken or is required on various aspects of the plan that may impact the scope and cost of infrastructure, including:

- Changes to the development controls to apply to properties north of Memorial Avenue to ensure properties have adequate access to the public road network. These will be reflected in amendments to the council's DCP²³
- Ecological assessment of the potential impacts of the Caddies Creek Sports Complex Stage 2 Expansion to inform future detailed design work.²⁴

Councils are not formally obliged to amend contributions plans within a certain timeframe. However, regular review of the plan as development proceeds would allow the council to use more up-to-date information and refine the designs and cost estimates for infrastructure, thereby reducing the uncertainties in the current draft of the plan and ensuring that the plan is cost-reflective over the life of the plan. Accordingly, we recommend the council update the contributions plan within three years and every five years thereafter. Within three years, the council should have a better understanding of the scope and cost of land and works in the plan.

7.5.2 Ministerial direction for contributions payments deferred to Occupation Certificate stage

CP18 provides that contributions payments are payable prior to issue of a Subdivision or Construction Certificate. This is consistent with the current provisions of the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*²⁵.

However, the Minister for Planning and Public Spaces issued a direction in June 2020 that required councils to defer the levying of contributions until application for an Occupation Certificate²⁶. This direction was introduced as a temporary measure in response to the COVID-19 pandemic and it is due to expire in March 2022. In November 2020, the Productivity Commissioner recommended that this temporary measure be extended permanently²⁷. The NSW Government has endorsed this recommendation.

7.5.3 Inclusion of matters required in the Environmental Planning and Assessment Regulation

Clause 27 of the Environmental Planning and Assessment Regulation 2000 requires certain information to be included in a contributions plan. As part of our assessment we have checked that CP18 contains the required information. A summary of this analysis is provided in Table 7.2 below. We found that CP18 sets out the information required by the Regulation.

In the plan, council has expressly authorised contributions paid for different purposes to be pooled and applied progressively for those purposes. Council needs to set out priorities for the expenditure of pooled contributions,ⁿ and be satisfied that the pooling and progressive application of contributions will not unreasonably prejudice the completion of the projects for which the money was originally intended.^o

We note that the council has included priorities for expenditure in CP18 by referencing the work schedule but has not confirmed satisfaction with subclause (3) at this early stage of the plan. During the implementation of the plan, the council may acquire more specific information on how pooled contributions are to be prioritised and allocated. This information should be updated when the plan is reviewed every three years.

ⁿ under subclause 1(i) of the Regulation

^o under subclause (3) of the Regulation

Table 7.2 Assessment against the requirements in the EP&A regulation

Subclause		Location in CP
1(a)	Purpose of the plan.	Section 2.4
1(b)	Land to which the plan applies.	Section 2.3
1(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.	Sections 3.1, 3.2, 3.3, 3.4, 3.5 & 3.6.
1(d)	The formulas to be used for determining the section 7.11 contributions required for different categories of public amenities and services.	Section 2.19
1(e)	The section 7.11 contribution rates for different types of development, as specified in a schedule in the plan.	Section 1, Tables 2, 3 & 4.
1(g)	The council's policy concerning the timing of the payment of monetary section 7.11 contributions, section 7.12 levies and the imposition of section 7.11 conditions or section 7.12 conditions that allow deferred or periodic payment.	Section 2.11 & Section 2.12
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).	Section 3.7, Table 7 & Table 8, Figure 4 (Sheets 1 – 3)
1(i)	If the plan authorises monetary section 7.11 contributions or section 7.12 levies paid for different purposes to be pooled and applied progressively for those purposes, the priorities for the expenditure of the contributions or levies, particularised by reference to the works schedule.	Section 2.18
1A	Despite subclause (1) (g), a contributions plan made after the commencement of this subclause that makes provision for the imposition of conditions under section 7.11 or 7.12 of the Act in relation to the issue of a complying development certificate must provide that the payment of monetary section 7.11 contributions and section 7.12 levies in accordance with those conditions is to be made before the commencement of any building work or subdivision work authorised by the certificate.	Section 2.14
2	In determining the section 7.11 contribution rates or section 7.12 levy percentages for different types of development, the council must take into consideration the conditions that may be imposed under section 4.17 (6)(b) of the Act or section 97 (1)(b) of the <i>Local Government Act 1993</i> .	Section 2.5
3	A contributions plan must not contain a provision that authorises monetary section 7.11 contributions or section 7.12 levies paid for different purposes to be pooled and applied progressively for those purposes unless the council is satisfied that the pooling and progressive application of the money paid will not unreasonably prejudice the carrying into effect, within a reasonable time, of the purposes for which the money was originally paid.	Not mentioned

8 Maps showing location of planned infrastructure

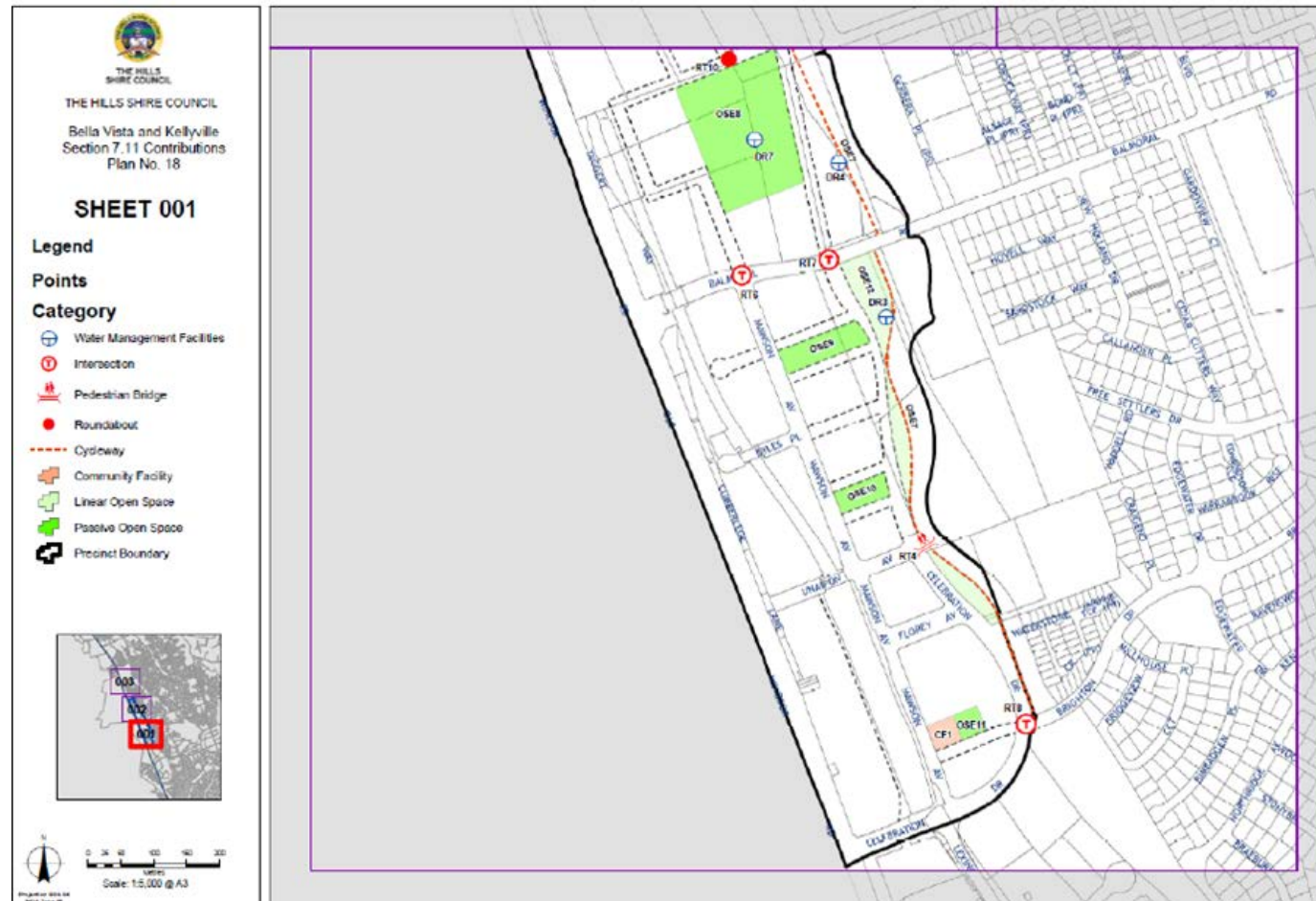
Note that these figures do not show the location of active open space at Caddies Creek, which is outside the precincts.

Figure 8.1 Location of proposed infrastructure in CP18



Source: The Hills Shire Council, *Draft CP18*

Figure 8.2 Location of proposed infrastructure in CP18



Source: The Hills Shire Council, *Draft CP18*

9 References

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- ¹ The Hills Shire Council. Draft CP18, p 28
 - ² Information from The Hills Shire Council, 10 June 2021
 - ³ Information from The Hills Shire Council, 10 June 2021
 - ⁴ Information from The Hills Shire Council, 10 June 2021
 - ⁵ Jacobs, *Traffic and Transport Assessment Report*, 29 June 2020, p 92
 - ⁶ Jacobs, *Traffic and Transport Assessment Report*, 29 June 2020, p 92
 - ⁷ Information from The Hills Shire Council, 10 June 2021
 - ⁸ Information from The Hills Shire Council, 10 June 2021
 - ⁹ Information from The Hills Shire Council, 10 June 2021
 - ¹⁰ IPART, *Local Infrastructure Benchmark Costs – Final Report*, April 2014 (IPART's Benchmark Report)
 - ¹¹ IPART, *CP18 - Council Responses to information request - June 2021*
 - ¹² IPART, *CP18 - Council Responses to information request - June 2021*
 - ¹³ Information from The Hills Shire Council, 10 June 2021
 - ¹⁴ Wood & Grieve Engineers, *Bella Vista Station Precinct Stormwater Management Plan*, 9 September 2019
 - ¹⁵ Information from The Hills Shire Council, 11 June 2021
 - ¹⁶ Recreation Strategy, The Hills Shire Council, October 2019
 - ¹⁷ See IPART, *Local Infrastructure Benchmark Costs – Final Report*, April 2014
 - ¹⁸ Department of Planning and Environment, *Local Infrastructure Contribution Practice Note*, January 2019, p 15.
 - ¹⁹ IPART, *Contributions plan assessment: land costs*, Information Paper, June 2020, p 1.
 - ²⁰ IPART, *Modelling for local infrastructure contributions in a present value framework*, August 2018, p 2
 - ²¹ IPART, *Modelling for local infrastructure contributions in a present value framework*, August 2018, p 11.
 - ²² IPART, *Modelling for local infrastructure contributions in a present value framework*, August 2018, p 5
 - ²³ The Hills Shire Council, *Post Exhibition Council Report and Minute, 9 March 2021*, pp 29-30
 - ²⁴ The Hills Shire Council, *Post Exhibition Council Report and Minute, 9 March 2021*, p 27
 - ²⁵ *Environmental Planning and Assessment Act 1979*, section 6.8 and *Environmental Planning and Assessment Regulation 2000*, clause 146
 - ²⁶ Environmental Planning and Assessment (Local Infrastructure Contributions – Timing of Payments) Direction 2020, 25 June 2020.
 - ²⁷ NSW Productivity Commissioner, *Review of Infrastructure Contributions in NSW*, Final Report, November 2020, p 71