



Assessment of Vineyard Contributions Plan

Hawkesbury City Council

**Final Report
Local Government**

November 2019

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1 Executive summary

Hawkesbury City Council (the council) submitted the *Vineyard Precinct Section 7.11 Draft Contributions Plan* (Vineyard CP) for IPART's assessment because the contributions for most types of residential development exceed the \$30,000 per lot/ dwelling review threshold which applies to the Vineyard Precinct under the Minister for Planning's *Local Infrastructure Contributions Further Amendment Direction 2018* (issued on 18 December 2018).¹

Vineyard Precinct Stage 1 was rezoned for urban development in December 2017 and the council has already received some development applications (DAs). An amendment to the *Environmental Planning and Assessment Regulation 2000* in January 2019 prevents the council determining DAs for the Vineyard Precinct until a section 7.11 plan is in effect.² This means that it is not able to approve any DAs for development within the Vineyard Precinct until it adopts the Vineyard CP.

We have completed this assessment in accordance with the *Local Infrastructure Contributions Practice Note*, January 2019 (the Practice Note).³

This Final Report sets out our findings and recommendations to the Minister for Planning and Public Spaces (the Minister) on the amendments required to ensure that the plan reflects the reasonable costs of providing the necessary local infrastructure to accommodate the development of the precinct. We have recommended amendments which would reduce the total cost of land, works and administration in the plan by \$11,319,686 from \$165,272,444 to \$153,952,757. This equates to a decrease in total costs of 6.8% relative to the plan submitted to us by the council. Our recommended amendments equate to a \$15.5 million reduction in land costs, and a \$4.2 million increase in works costs – resulting in the above-mentioned net reduction of \$11.32 million in costs in the plan.

We have provided our assessment to the Minister and the Minister will advise the council which of IPART's recommendations it must address. Once the council has made any changes requested by the Minister, the Vineyard CP will become an 'IPART reviewed plan' and the council can levy contributions in accordance with the adopted plan.

Until July 2020, contributions caps limit the amount some neighbouring councils can levy on residential development in certain precincts. These limits do not apply to development in the Vineyard Precinct. The application of caps is NSW Government policy and it is not within the scope of our assessments to review this policy.

¹ Ministerial Direction, cl 6(2) and Sch 2(15).

² The amendment applies to land that is subject to a precinct plan under the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006*.

³ See Department of Planning and Environment (DPE), *Local Infrastructure Contributions Practice Note*, January 2019 (Practice Note). We have also assessed whether CP17 contains information required by the *Environmental Planning and Assessment Regulation 2000*.

1.1 We published two draft assessments of the Vineyard CP

We published a Draft Report on our assessment of the Vineyard CP in May 2019 (First Draft Report) and received 10 submissions, including a submission from the council. The council's submission proposed revised cost estimates for land and works that would materially change the plan's total costs and contribution rates. These revised costs were \$25.16 million (15.2%) higher than in the plan it originally submitted to us for assessment. We found that the council's revised works costs are mostly reasonable, however its revised land costs are not reasonable.

Given the materiality of the council's proposals in response to our First Draft Report, we published a Second Draft Report that considered the council's new information and other stakeholder submissions. We received submissions from the council and seven other stakeholders on our Second Draft Report. The council's submission asked IPART to adopt some of the land costs and some transport works costs it proposed in its earlier submission.

We did not find any reason to change our findings and recommendations in response to submissions on our Second Draft Report. However, we asked the council for further information on the apportionment of some stormwater works costs and have included a new recommendation for the council to clarify its approach to demand credits for existing dwellings.

1.2 We recommend the council review the plan within three years

Although the council has provided IPART with updated estimates for many items following our First Draft Report, there is still considerable uncertainty about the cost of providing local infrastructure for new development in the Vineyard Precinct.

To help ensure that over time the costs in the plan are neither too high nor too low, IPART recommends the council regularly review the plan as development progresses and more detailed design and cost estimates are available. The council agreed to a review of the plan within three years in its response to a draft of IPART's assessment.

1.3 Overview of findings and recommendations

Our assessment of the Vineyard CP addresses the criteria in the Practice Note.

Criterion 1: Essential works

We are required to assess whether the public amenities and public services in the plan are on the essential works list in the Practice Note. We found that all of the land, works and administration costs in the Vineyard CP and those included in the council's revised cost estimates are consistent with the essential works list.

Criterion 2: Nexus

We are required to assess whether there is nexus between the demand arising from the new development and the public amenities and services to be provided in the plan. Nexus ensures that the infrastructure included in the contributions plan is sufficient to meet, but not exceed, the need generated by the increase in demand from the new development.

We found that nexus has been established for all the land in the plan, and generally for works for transport, stormwater and open space and plan administration costs. One exception is the plan's assumption that Boundary Road (and the accompanying intersection design and a bridge upgrade) would have a sub-arterial, rather than a collector road, classification. Our consideration of the reasonable cost of Boundary Road reflects our finding that it should have a collector road classification.

We also found that nexus is established for some stormwater land and works for channel stabilisation works that were omitted from the plan. We have recommended that the council add the cost of stormwater channel land and works that were omitted from the plan.

Criterion 3: Reasonable costs

We are required to assess whether the contribution rates in the plan are based on a reasonable estimate of the cost of the proposed public amenities and public services. We looked at how the costs of each item of infrastructure are derived and the method applied to calculate the contribution rates and escalate them over time.

In response to our First Draft Report, the council provided substantial new costing information for transport works and open space embellishment. It also updated the cost of land based on updated advice from its valuer.

Since we have considered the revised costs in this report, we consider the base period of the plan (March 2018) is no longer reasonable. Our recommended cost of land, works and plan administration is expressed in June 2019 dollars.

Cost of works

We found the council's estimated cost of stormwater works in the plan are mostly reasonable except for the contingency allowance. We have recommended the council reduce the contingency allowance consistent with advice from the cost consultant.

For transport infrastructure, we found that the council's approach in the Vineyard CP to estimating the cost of transport works is unreasonable in some circumstances. The council submitted revised cost estimates in response to our First Draft Report that are mostly reasonable. We recommend amendments to the costs of the Boundary Road upgrade, some collector roads, roundabouts and cycleway creek crossings to improve the accuracy and reasonableness of the estimates. These amendments result in an overall increase in transport works costs compared to the plan submitted to IPART

For open space embellishment, we found that the cost of embellishing open space land on which existing native vegetation (ENV) is located is not reasonable. We recommend that the

council use the revised cost estimates it obtained from a consultant in June 2019 to update the embellishment costs in the plan, with some adjustments.

We have also included recommendations to index the cost of remaining transport items to the revised base period of the plan, ie, June 2019. Indexation of the stormwater management items to June 2019 dollars is rolled into our recommendations for adjustments under the nexus and apportionment criteria.

Cost of land

We found that the council's estimated cost of acquiring commercial land for a community facility is reasonable, but the average values used to estimate the cost of acquiring flood constrained and unconstrained land for other infrastructure in the plan are not reasonable. This includes the cost of transmission line easement land that is flood constrained. We also found that the cost of some open space land is not reasonable because it does not account for the constraint on development arising from the presence of protected vegetation.

We recognise that there are different professional opinions and uncertainty about the value of land in the Vineyard Precinct at this time, before development has commenced. We have recommended adjustments to land costs across all infrastructure categories to share the risks associated with estimating land costs between the council and developers and to reflect more reasonable average values based on recent market evidence, and the constraint on developing land with protected vegetation.

The council's submission to the First Draft Report proposed a new allowance for 'other acquisition' costs associated with its acquisition of land in the plan. We found that it is reasonable for the council to include an 'other acquisition' cost allowance, however the 10% allowance proposed by the council is not reasonable. We have recommended that the council adopt a more reasonable allowance of 5%.

Cost of plan administration

We found the council's use of IPART's benchmark of 1.5% of the cost of works in the plan to estimate plan administration costs is reasonable.

Loan interest costs

The council's application for assessment of the plan explained that it intends to apply for a loan of \$16,789,468 to allow it to fund key stormwater infrastructure (including land and works) and transport design costs to help accelerate development in the precinct. The indexation of contribution rates may not adequately account for the opportunity cost of capital and therefore we consider it is reasonable that the plan also include the interest costs associated with the loan.

We found that interest rates have fallen since the plan was drafted and the rate used to estimate interest costs is no longer reasonable. Further, the council has based its loan amount on estimates of land and works costs for which we have recommended changes. We recommend that the council revise the interest costs in the plan to reflect the cost adjustments recommended for relevant transport and stormwater items, a more recent estimate of interest costs, and the 50% interest refund the council is expecting to receive.

Indexation of contribution rates

The Vineyard CP provides for contribution rates to be adjusted to reflect quarterly movements in the value of land and works. Since submitting the plan to IPART, the council has advised that it intends to index land contribution amounts using an index obtained from a third party property services provider rather than using the council's Land Value Index for the Vineyard Precinct.

We consider the council's approach for indexing works and its revised approach for indexing land contributions is reasonable. We recommend that the plan explains the council's revised approach for indexing contribution rates for land and includes a provision to index contribution rates for plan administration costs by CPI.

Criterion 4: Timing of infrastructure delivery

We are required to assess whether the public amenities and public services in the plan can be provided within a reasonable timeframe. We found prioritising infrastructure delivery within 5-year tranches to align with the expected timeframe of development within the precinct is reasonable.

Criterion 5: Apportionment

We are required to assess whether the contribution rates are based on a reasonable apportionment of costs. We found the approach in the Vineyard CP to apportioning the costs of all infrastructure categories is reasonable.

In relation to stormwater works, we considered whether it is reasonable for the council to apportion the full cost of channel stabilisation works DC2 to new development, given that consultants J Wyndham Prince identify this work as necessary to "restore the existing damage to the watercourse".⁴ We asked for stakeholder views on this in our Second Draft Report. The submissions did not provide us with additional information, so we asked the council for more information on its apportionment approach. Although it maintains that 100% of costs should be included in the plan it proposed that if an adjustment was made, it could be based on the proportion of the creek corridor with existing damage. Based on the council's estimate for the damage being 200 metres (12%) of a total corridor length of 1,700 metres, we have added a new recommendation in this report to apportion only 88% of the DC2 channel stabilisation works to the new development.⁵

We have also added a new recommendation for the council to clarify that existing development in the precinct is eligible for demand credits towards transport infrastructure contributions.

⁴ J. Wyndham Prince, *Advice to Hawkesbury City Council*, 24 June 2019, p 5.

⁵ Information from council, 6 November 2019.

Criterion 6: Community consultation

We are required to assess whether the council has conducted appropriate community liaison and publicity in preparing the contributions plan. We consider the council's process for consulting on the plan satisfies the consultation criterion.

The council's submission to our First Draft Report proposed changes that would materially change the plan's costs and contributions rates. The council did not consult on the proposed changes. While this is not ideal, we considered the council's new information and proposed changes in our Second Draft Report so that development in the precinct is not unnecessarily delayed and stakeholders had the opportunity to comment.

Criterion 7: Other matters

We are required to assess whether the plan complies with other matters we consider relevant.

We considered the need for timely review of the plan. The council has neither acquired land nor commenced any works for local infrastructure in the precinct. Our analysis suggests that for certain infrastructure items, the council made very basic assumptions on the scope of works required and their related costs. While the council's revised cost estimates, submitted in response to our First Draft Report, provide some further detail and specificity, regular review of the plan would allow the council to update the plan to include more accurate assumptions and further reduce uncertainties that apply to the current draft plan.

We have recommended that the council review the plan within the next three years.

1.4 Overview of recommendations

We have made 23 recommendations as a result of our assessment of the Vineyard CP. Most affect the total cost of land, works and plan administration.

Our recommendation for the council to review the plan within the next three years in order to include more accurate assumptions about the scope, cost and apportionment of works (see Recommendation 23) has no impact on the cost of land or works in the Vineyard CP at this stage. For its next review we have identified two specific issues the council should consider: cycleway creek crossing (see Recommendation 7) and approach to estimating the cost of open space embellishment (see Recommendation 14).

Overall, we estimate that the reasonable cost of land, works and administration in the Vineyard CP is \$153,952,757 which is a reduction of \$11,319,686 (6.8%).

1.4.1 Our recommendations recognise that land acquisition costs are too high

We have recommended adjustments to the land acquisition costs in the Vineyard CP that would result in a net reduction of \$15,541,808 (19.6%), comprising:

- ▼ A reduction of \$4,373,662 to reflect the lower cost of acquiring land which is flood constrained

-
- ▼ A reduction of \$6,480,541 to reflect the application of separate land values for unconstrained land with underlying zonings of R2 and R3
 - ▼ A reduction of \$7,877,655 to reflect the lower cost of acquiring land which is constrained by protected native vegetation
 - ▼ The addition of one site for channel stabilisation works (\$1,472,783)
 - ▼ A reduction of \$1,234,650 to reflect adjustments to interest costs for stormwater land acquisitions
 - ▼ An increase of \$2,951,918 to reflect the inclusion of a 5% allowance to cover the 'other acquisition' costs associated with acquisition of land in the plan.

Our recommended adjustments to land acquisition costs are summarised in Table 1.1.

Table 1.1 Summary of recommendations – Vineyard CP land costs

	Cost in Plan (\$Mar18)	IPART-recommended adjustment	IPART-assessed reasonable cost (\$Jun19)
Transport land	12,417,439		
Use a lower m ² value for flood liable land		-54,628	
Use adjusted m ² values for unconstrained R2 and R3 land		-1,651,556	
Include a 5% allowance for 'other acquisition' costs		535,563	
		-1,170,622	11,246,818
Stormwater land	21,132,209		
Include cost of land for DC1		1,472,783	
Use a lower m ² value for flood liable land		-1,753,179	
Use adjusted m ² values for unconstrained R2 and R3 land		-2,225,735	
Include a 5% allowance for 'other acquisition' costs		773,258	
Adjust interest costs		-1,234,650	
		-2,967,523	18,164,685
Open space land	44,408,700		
Use a lower m ² value for flood liable land		-2,565,855	
Use adjusted m ² values for unconstrained R2 and R3 land		-2,603,250	
Reduce cost of District Park 5 to reflect restricted development potential		-7,877,655	
Include a 5% allowance for 'other acquisition' costs		1,568,097	
		-11,478,663	32,930,037
Community services land	1,500,000		
Include a 5% allowance for 'other acquisition' costs		75,000	
		75,000	1,575,000
Total land	79,458,348	-15,541,808	63,916,540

Source: Vineyard CP Works Schedule and IPART analysis.

1.4.2 Our recommendations recognise the council's revised estimates for works costs are mostly reasonable

We recommend adjustments that would result in a net increase in the cost of works and plan administration of \$4,222,121 (4.9%), comprising:

- ▼ A net increase of \$2,727,961 in the cost of transport works, the major component being a \$2,178,367 increase for the cost of full width collector roads and an increase of \$1,617,160 for roundabout costs, which is offset by a \$1,902,642 reduction in the cost for the Boundary Road upgrade.
- ▼ A net reduction of \$1,415,489 for stormwater works

-
- ▼ An increase of \$2,847,253 for open space embellishment
 - ▼ An increase of \$62,396 in the cost of plan administration, corresponding to the higher cost of works.

The increase in transport and open space embellishment costs are driven by the council's revised cost estimates, which we have found to be mostly reasonable.

Further, our recommendation that the council update the base period of the plan from March 2018 to June 2019 required us to include an additional five quarters of indexation for some transport works and all stormwater management works. Over this period, the ABS Producer Price Index (Road and bridge construction New South Wales) increased by 4.3%.

The adjustments to works and plan administration costs in the Vineyard CP are summarised in Table 1.2.

Table 1.2 Summary of recommendations – Vineyard CP works and plan administration

	Cost in plan (\$Mar18)	IPART- recommended adjustment (\$Jun19)	IPART-assessed reasonable cost (\$Jun19)
Transport	36,764,244		
Use council's revised estimate with some adjustments		-1,902,642	
For new collector roads, adjust costs using council's revised estimate		426,822	
For Commercial Road, adjust unit rate to exclude roundabouts		-361,051	
For full-width commercial road upgrades, apply a unit rate derived from WTP's estimates		2,178,367	
For half-width commercial road upgrades, apply 50% of WTP derived unit rate for full-width collector roads (see recommendation above)		274,071	
Separately identify roundabout costs based on WTP estimates		1,617,160	
Remove double-counted contingency allowance for bus shelters		-44,257	
For cycleway creek crossing, increase cost using council's revised unit rate		540,113	
Index cost estimates for remaining items to \$Jun2019		134,786	
Adjust interest costs		-135,408	
		2,727,961	39,492,205
Stormwater management	19,364,957		
Add cost of works for DC1		646,357	
Reduce contingency allowance to 10%		-426,866	
Adjust interest costs		-1,016,629	
Apportion only 88% of DC2 costs to the plan		-618,351	
		-1,415,489	17,949,468
Open space	28,416,706		
Use council's revised estimate with some adjustments		2,847,253	
		2,847,253	31,263,959
Plan administration	1,268,189		
Calculate as 1.5% of revised costs of works		62,396	
		62,396	1,330,585
Total	85,814,096	4,222,121	90,036,217

Note: Where relevant our recommended adjustments include an additional five quarters of indexation, consistent with our recommendation to change the base period of the plan to June 2019, rather than March 2018.

Source: Vineyard CP Works Schedule and IPART analysis.

1.4.3 Our recommendations would reduce contribution rates

Our recommendations to reduce the cost of land and works in the Vineyard CP would also reduce the residential contribution rates under the plan. Our estimates of the impact on contribution rates and indicative contributions are shown in Table 1.3 and Table 1.4.

Table 1.3 Contribution rates by infrastructure category (\$Jun19)

Infrastructure category	Basis of contribution rate	Contribution rate Vineyard CP (\$Mar18)	Contribution rate IPART-adjusted contribution (\$Jun19)	Difference (IPART adjusted rate less Vineyard CP) \$
Transport	Per person	6,568	6,776	208 (3.2%)
Stormwater	Per hectare NDA	316,802	282,515	-34,288 (-10.8%)
Open space	Per person	9,725	8,572	-1,153 (-11.9%)
Community services	Per person	200	210	10 (5.0%)
Administration	Per hectare NDA	9,921	10,409	488 (4.9%)

Note: The council's 'summary of infrastructure schedule and contribution rates' table in section 2.7 of the plan shows the unindexed cost of land for open space and community facilities. We have calculated the "Contributions rates in the Vineyard CP" for our table using the unindexed costs.

Source: Vineyard CP Works Schedule and IPART calculations.

Table 1.4 Indicative contribution rates based on IPART-adjusted costs (\$Jun19)

Type of residential development	Number of dwellings	Occupancy rate per dwelling	Indicative contribution in Vineyard CP (\$Mar18)	IPART-adjusted contribution (\$Jun19)	Difference (IPART adjusted rate less Vineyard CP) \$
R2 Low density residential	1,825	3.18	\$70,598	\$65,748	-\$4,850 (-6.9%)
R3 Medium density residential	613	2.64	\$54,431	\$50,837	-\$3,594 (-6.6%)
E4 Environmental living	21	3.18	\$70,598	\$65,748	-\$4,850 (-6.9%)

Note: The council's 'summary of infrastructure schedule and contribution rates' table in section 2.7 of the plan shows the unindexed cost of land for open space and community facilities. We have calculated the "indicative contributions in the Vineyard CP" for our table using the unindexed costs.

Source: Vineyard CP Work Schedules and IPART calculations.

1.5 List of recommendations

Our recommendations (and the page number on which they appear) for the Vineyard CP are listed below. All but Recommendation 2, which is for the Department of Planning, Industry and Environment, require action by Hawkesbury City Council.

Transport

- 1 Reduce the cost of Boundary Road in the plan by \$1,902,642, using the council's revised cost estimate from Mitchell Brandtman with adjustments to: 36
 - The quantity of excavated material to be removed from the site (road segment)
 - Allowances for design costs (road segment, bridge and signalised intersection)
 - Contingency allowances (road segment).
- 2 The Department of Planning, Industry and Environment co-ordinate the planning and delivery of Boundary Road by establishing a working group that includes Hawkesbury City Council, The Hills Shire Council and RMS. The working group could consider matters such as: 36
 - Design requirements, standards and costs
 - Apportionment of costs (including any State Government funding)
 - Who will lead delivery and the timeframe for delivery.
- 3 Increase the cost of collector roads (other than Boundary Road) in the plan by \$2,518,209, comprising: 36
 - An increase of \$426,822 for new collector roads [items CR1, CR3 & CR7], based on the council's revised estimate from cost consultant Mitchell Brandtman.
 - A decrease of \$361,051 for Commercial Road [items CR4 & CR5], to remove the cost of roundabouts from the per linear metre rate used to estimate the cost of this road.
 - An increase of \$2,178,367 for full-width collector road upgrades [items CR2 & CR6], based on WTP's cost estimates for similar roads in the Vineyard CP.
 - An increase of \$274,071 for the half-width collector road upgrade [item CR8], based on a unit rate that is 50% of our recommended per linear metre rate for full-width collector road upgrades (see point above).
- 4 Separately account for the cost of three roundabouts on Commercial Road, which we estimate would increase the cost of transport works by \$1,617,160 (This is partially offset by the reduction in the per linear metre rate for Commercial Road – see recommendation above). 37
- 5 Remove the double-counting of the contingency allowance for bus shelters, which we estimate would reduce the cost of transport works by \$44,257 (\$3,688 per bus shelter). 37
- 6 Increase the cost of cycleway creek crossings in the plan by \$540,113. 37
- 7 For the next version of the plan, consult on and review the costs and benefits of the proposed number and location of cycleway creek crossings in the precinct. 37

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- 8 Index the cost of remaining transport works items (the Windsor Road/Otago Street intersection and the cycleway network) works to June 2019, which we estimate would increase the cost of transport works by \$134,786. 37

- 9 Clarify that existing development in the precinct is eligible for demand credits towards transport infrastructure contributions. 48

Stormwater

- 10 Add cost of channel stabilisation works on drainage corridor 1 (DC1), which we estimate would increase the cost of: 55

- Stormwater management land by an estimated \$1,472,783
- Stormwater management works by an estimated \$646,357.

- 11 Reduce the contingency allowance for basins, GPTs and raingardens to 10% of base costs, consistent with WT Partnership's recommendation, which we estimate would reduce the cost of stormwater management works by \$426,866. 59

- 12 Reduce the cost of channel stabilisation works DC2 by \$618,351, reflecting an approach that apportions 88% of the cost of works to new development. 61

Open space

- 13 Increase the open space embellishment costs by \$2,847,253, comprising: 69

- \$178,530 for sporting fields, riparian land and land with existing native vegetation (ENV), based on revised cost estimates from Mitchell Brandtman
- \$2,668,723 for local parks and district parks, based on revised cost estimates from Mitchell Brandtman with some adjustments. 70

- 14 For its next review of the plan, the council obtain more detailed designs, or at a minimum, scope works for hypothetical parks of a similar size to those in the Vineyard Precinct. 70

Plan administration

- 15 Calculate the cost of plan administration for the Vineyard CP based on 1.5% of the adjusted cost of works, which would increase the cost of plan administration by an estimated \$62,396. 76

Cross-category issues (land)

- 16 Use a value of \$85 per square metre for flood constrained land in the Vineyard Precinct, including for land where development is also constrained by a transmission line easement. 83

- 17 Use a value of \$250 per square metre for unconstrained land with an underlying zoning of R2 and \$400 per square metre for unconstrained land with an underlying zoning of R3, reflecting the different development yields and values associated with these zonings. 86

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- 18 Reduce the estimated cost of acquiring land for District Park 5 by \$7,877,655 to account for the constraint on development arising from the presence of protected vegetation. 90
- 19 Increase the cost of land by \$2,951,918 reflecting the inclusion of an allowance of 5% of land costs to cover the 'other acquisition' costs associated with acquisition of land in the plan. 97

Cross-category issues (other)

- 20 Revise the interest costs in the plan to reflect: 101
- IPART's recommended adjustments for transport and stormwater management costs
 - The latest available market interest rate, as advised by T-Corp
 - An interest rate buffer, as advised by T-Corp
 - The 50% refund of interest payments under the NSW Government's Low Cost Loan Initiative.
- 21 To reflect the council's intended approach to the indexation of contribution rates, ensure that the plan: 104
- Specifies that the land contribution rates will be indexed in accordance with movements in a third party provider's LGA-wide residential property sales index, explains whether the land contribution rates will be indexed quarterly or annually and states that the index will be published on the council's website.
 - Specifies that plan administration contribution rates will be indexed in accordance with quarterly movements in the Consumer Price Index (All Groups Index) for Sydney as published by the Australian Bureau of Statistics (ABS).
- 22 The council update the base period of the plan to June 2019 and, in doing so, update all the costs in the plan to June 2019 costs. 105
- 23 Review the plan within the next three years to include more accurate assumptions about the scope, cost and apportionment of works. 107

1.6 Structure of this Final Report

The following chapters provide our analysis of the Vineyard CP against the criteria in the Practice Note, and explain the recommendations we have made to Hawkesbury City Council for making adjustments to the plan.

- ▼ Chapter 2 outlines the context for our assessment of contributions plans and our approach to assessing the Vineyard CP
- ▼ Chapter 3 provides an overview of the Vineyard CP
- ▼ Chapter 4 presents our analysis of transport infrastructure
- ▼ Chapter 5 presents our analysis of stormwater infrastructure
- ▼ Chapter 6 presents our analysis of open space embellishment

-
- ▼ Chapter 7 presents our analysis of community services land
 - ▼ Chapter 8 presents our analysis of plan administration
 - ▼ Chapter 9 presents our analysis of land costs
 - ▼ Chapter 10 presents our analysis of other cross-category issues, ie, loan interest costs, base period of the plan and the indexing of contribution rates, timing of infrastructure delivery (Criterion 4), consultation (Criterion 6) and other matters (Criterion 7).

2 Context and approach for this assessment

The council submitted the Vineyard CP to IPART for assessment. We commenced our assessment of the plan on 14 December 2018. To provide context for our assessment, the sections below outline:

- ▼ What contributions plans are
- ▼ Why the council submitted the Vineyard CP for assessment
- ▼ The aim of our assessment
- ▼ Our approach and consultation process for the assessment
- ▼ What will happen next.

2.1 What are contributions plans?

In NSW, local councils are primarily responsible for providing local or community infrastructure required to meet the additional demand for services and facilities generated by new development in their local government area. Councils can levy developers for local infrastructure contributions to fund the costs of providing this infrastructure.

However, to do so, a council must prepare a contributions plan which sets out:

- ▼ The local infrastructure required to meet the demand associated with development in a specific area
- ▼ The estimated cost of the land, works and administration required to provide this infrastructure
- ▼ The contribution rates for different types of development, which the council proposes to levy on developers.⁶

2.2 Why has the council submitted the plan to IPART?

IPART assesses contributions plans from councils which propose to levy contributions above \$30,000 per residential lot or dwelling in identified greenfield areas and \$20,000 per residential lot or dwelling in other areas.⁷

An IPART-reviewed contributions plan entitles the council to levy:

⁶ A consent authority may impose a condition under section 7.11 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) only if it is in accordance with a contributions plan. The *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) makes provisions for or with respect to the preparation and approval of contributions plans, including the format, structure and subject-matter of plans.

⁷ Minister for Planning, Environmental Planning and Assessment (Local Infrastructure Contributions) Direction 2012 (last amended 18 December 2018) (Ministerial Direction).

- ▼ For specified transition areas, up to a capped amount (currently \$45,000 in specified greenfield areas and \$35,000 elsewhere) and apply for Local Infrastructure Growth Scheme (LIGS) funding for the amount of any contribution which is above the cap
- ▼ For other areas, the full contribution amount.

Hawkesbury City Council has submitted the draft plan for IPART's assessment because the contributions for most types of residential development exceed the \$30,000 per lot/dwelling review threshold which applies to the Vineyard Precinct under the Minister for Planning's *Local Infrastructure Contributions Further Amendment Direction 2018* (issued on 18 December 2018).⁸ This is the first time we have assessed the Vineyard CP. The council is not entitled to apply for LIGS funding for contributions under the Vineyard CP for the Vineyard Precinct. Accordingly, when the Vineyard CP becomes an IPART-reviewed plan, the council will be able to levy developers the full amount of contributions under the plan.

A number of those who made submissions to our draft reports consider that stakeholders associated with the Vineyard CP are disadvantaged compared with neighbouring precincts where LIGS funding is available.⁹ We note that the availability of LIGS funding is NSW Government policy and it is not within the scope of our assessment to review this policy. Further, LIGS funding will only be available for nominated areas until 30 June 2020. From 1 July 2020 developers will pay an uncapped contribution in all areas with an IPART-reviewed contributions plan in force.

2.3 What is the aim of our assessment?

Broadly, our assessments are intended to bring greater transparency and accountability to setting local development contributions. More specifically, in conducting the assessment and making our recommendations, we aim to ensure the plan reflects the reasonable costs of providing necessary local infrastructure to support the new development.

If costs in the plan are too high (ie, higher than the reasonable costs of infrastructure with a nexus to the development), developers or the NSW Government will pay too much for local infrastructure. On the other hand, if costs in the plan are too low (ie, lower than the reasonable costs of infrastructure with a nexus to the development), then the new development would effectively be subsidised by the council's ratepayers.

Contributions that reflect the reasonable costs of local infrastructure provision are important for reasons of both efficiency and equity. They are necessary to:

- ▼ Signal the costs of developing different areas – which, in turn, can assist in ensuring that development occurs where it should (ie, where the benefits of the development are greater than its costs)
- ▼ Ensure that other parties (such as a council's ratepayers) do not have to fund any shortfall between the actual costs of providing local infrastructure and the revenue received from development contributions.

⁸ Ministerial Direction, cl 6(2) and Sch 2(15).

⁹ Anonymous (individuals 3 and 7) and McVicar, C., submissions to IPART First Draft Report, 27 and 28 June, 2019.

In the context of the Vineyard CP, our assessment recognises that the precinct is only in the very early stages of development and that detailed design and cost estimates are not yet available.

2.4 What approach did we use for this assessment?

In assessing the Vineyard CP we considered:

- ▼ The criteria set out in the *Local Infrastructure Contributions Practice Note* (Practice Note) issued by the Department of Planning, Industry and Environment (DPIE),¹⁰
- ▼ Information and further advice from the council and DPIE on various aspects of the plan
- ▼ The council's and other stakeholder's submissions on our First Draft Report, including the council's revised cost estimates for land and works in the plan.
- ▼ The council's and other stakeholders' submissions on our Second Draft Report.

2.4.1 We considered the assessment criteria in the Practice Note

IPART's assessment functions for local infrastructure contributions plans are based on terms of reference issued by the Premier under section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992* (see Appendix A).

As required by these terms of reference, we have assessed the Vineyard CP in accordance with the criteria set out in the Practice Note. The criteria require us to assess whether:

1. The public amenities and public services in the plan are on the essential works list.
2. The proposed public amenities and public services are reasonable in terms of nexus to the development.¹¹
3. The proposed development contribution is based on a reasonable estimate of the cost of the proposed public amenities and public services.
4. The proposed public amenities and public services can be provided within a reasonable timeframe.
5. The proposed development contribution is based on a reasonable apportionment of costs.
6. The council has conducted appropriate community liaison and publicity in preparing the contributions plan.
7. The plan complies with other matters we consider relevant.

¹⁰ Department of Planning and Environment, *Practice Note - Local infrastructure Contributions*, January 2019. The January 2019 Practice Note replaces the January 2018 *Practice Note - Local infrastructure Contributions*. The 2019 revision clarifies the timing of when a council can adopt a contributions plan (particularly where the draft plan proposes a rate above the maximum cap amount in the Direction). The assessment criteria for our review remain the same.

¹¹ Nexus ensures that there is a connection between the land and facilities in a contributions plan and the demand for them arising from the new development.

We also assessed whether the plan contains the information required by Clause 27 of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation). A summary of our assessment of the Vineyard CP against these requirements is provided in Appendix B.

2.4.2 We considered further information from the council and DPIE

As is common in our assessment of contributions plans, we consulted with DPIE on relevant planning and land-zoning matters and the underlying assumptions about proposed development in the precinct. We also sought information from the council to explain how it determined the infrastructure and its estimated costs to be included in the plan. We made further requests for information from the council in relation to the revised cost estimates it proposed in response to our First Draft Report, and on the portion of channel stabilisation works along DC2 that are required to address existing damage.

2.4.3 We consulted on our first and second draft assessments of the plan

We published our First Draft Report on our assessment on 31 May 2019 and invited interested parties to make written submissions for a four week period, by 28 June 2019. We received 10 submissions, including a submission from the council. The council proposed significant increases to plan costs.

In September 2019, we issued a Second Draft Report, which took into consideration the council's revised cost estimates and other submissions that were relevant to our assessment of the plan. We received eight submissions including the council submission. This Final Report has been prepared after considering the submissions to the Second Draft Report.

A list of submissions to our First and Second Draft Reports are at Appendix C.

2.5 What happens next?

We have delivered our Final Report to the Minister for Planning and Public Spaces and the council as required by the Ministerial Direction.

The Minister will consider our assessment and, if appropriate, ask the council to amend the contributions plan. Once the council has made any amendments requested by the Minister, the plan becomes an IPART-reviewed plan and the council may levy contributions in accordance with the adopted plan.

3 Overview of the Vineyard Contributions Plan

The Vineyard Precinct forms the northern-most border of the North West Growth Area. It is bordered by the Box Hill Precinct to the east and Riverstone and Riverstone East Precincts to the south. The Vineyard Precinct is the only precinct from the Hawkesbury City Council which forms part of the North West Growth Area.

The total cost of land, works and plan administration is \$165.27 million (\$Mar2018), comprising:

- ▼ \$79.46 million (48.1%) for the acquisition of land for local infrastructure
- ▼ \$84.55 million (51.2%) for local infrastructure works
- ▼ \$1.27 million (0.8%) for plan administration.

We published a First Draft Report on our assessment of the Vineyard CP in May 2019 and received submissions from the council and other stakeholders. The council's submission proposed to increase costs in the plan by \$25.16 million (an increase of 15.2% compared with costs in the plan as submitted to IPART).

After assessing the council's submission and other submissions, we published a Second Draft Report in September 2019. We received eight submissions, including a submission from Hawkesbury City Council, in response to our Second Draft Report. Our Final Report has considered submissions to the Second Draft Report in determining the final recommendations.

3.1 Status of the Vineyard CP

Hawkesbury City Council exhibited the draft plan between 18 May 2018 and 18 June 2018. The council has not yet adopted the plan.

Stage 1 of the Vineyard Precinct was rezoned for urban development in December 2017. The council has received some development applications, but to date, none have been approved. In January 2019, the EP&A Regulation was amended to prevent development applications (DAs) from being determined until a section 7.11 plan is in effect for land that is subject to a precinct plan under the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006*. This means that the council is not able to approve any DAs for development within the Vineyard Precinct until it adopts the Vineyard CP.

3.2 Development in the Vineyard Precinct

The Vineyard CP applies to Stage 1 of the development of the Vineyard Precinct. Development in Vineyard Stage 1 will primarily be residential (173.52 hectares), accommodating an anticipated population of 7,489 people in an estimated 2,459 dwellings. In addition, around 1.4 hectares of land is zoned for mixed use development

(B1 Neighbourhood Centre and B2 Local Centre). The council does not expect non-residential development in this area to generate material demand for public amenities and services to be funded under this plan, and therefore does not intend to levy contributions on non-residential development.

The Vineyard CP applies to the following development within the Vineyard Precinct:

- ▼ Development for residential accommodation (including subdivision) that would result in a net increase in dwellings
- ▼ Any other development that would create a net increase in demand for the public amenities and services to be provided under the plan.

For the purposes of calculating the net developable area (NDA) for the precinct, the plan:

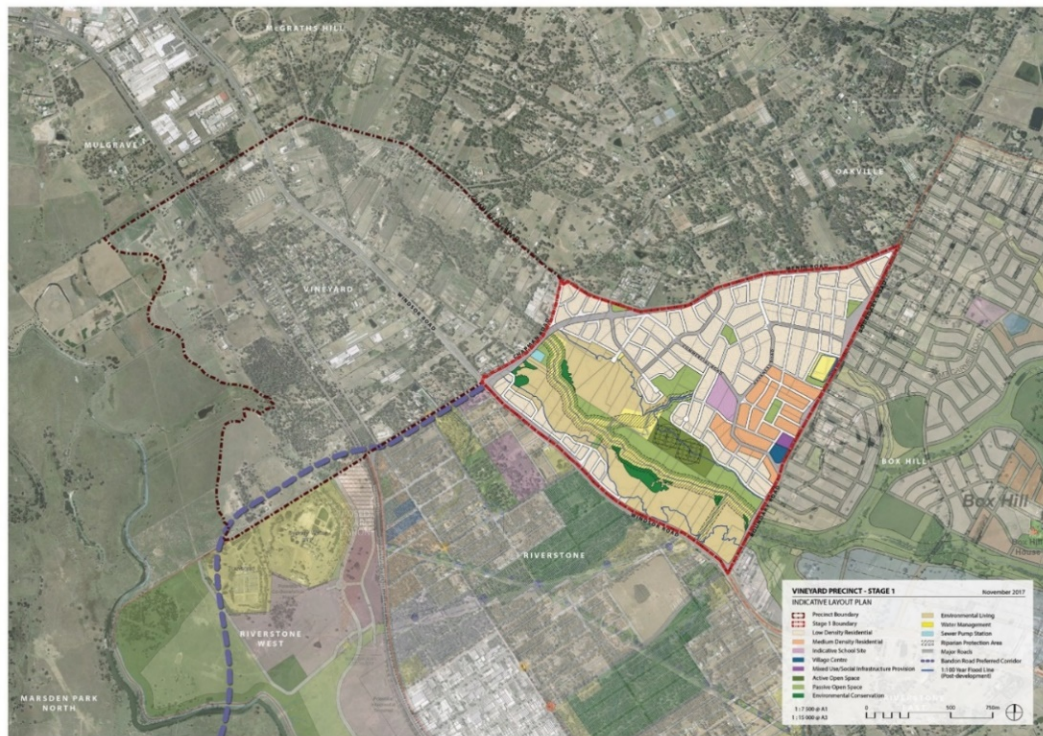
- ▼ Excludes 1.4 hectares of land zoned B1 Neighbourhood Centre and B2 Local Centre, as the plan assumes development on this land will not materially increase demand for public infrastructure.
- ▼ Adjusts the amount of residential land from 173.52 to 127.83 hectares by assuming land zoned E4 Environmental Living has a NDA equivalent to a resident lot in the R2 Low Density Residential zone (approximately 556 square metres). This is based on advice from DPIE, and has been done to reflect the proportionally lower demand for roads and other transport facilities and stormwater drainage infrastructure from these larger, low density lots.¹²

Figure 3.1 shows the boundaries of Vineyard Precinct Stage 1 and Figure 3.2 shows the indicative boundaries of the Vineyard Precinct Stage 2, which is yet to be rezoned. Rezoning of Stage 2 is likely to take place when there is more certainty around planning for the Outer Sydney Orbital Corridor, and will be subject to market demand.¹³

¹² Vineyard CP section 3.1.2 and Table 4.

¹³ DPE, *Vineyard Precinct Stage 1 – Planning Report*, pp 10 and 54.

Figure 3.1 Vineyard Precinct – Stage 1



Source: DPE, Vineyard Precinct Indicative Layout Plan – November 2017.

Figure 3.2 Vineyard Precinct – Stages 1 and 2



Source: DPIE, Vineyard Precinct Stage 1 Planning Report, 2016, p 11.

3.3 Cost of land and works in the plan, IPART's First Draft Report and the council's submission

Table 3.1 provides a breakdown of costs in the Vineyard CP by infrastructure category.

Table 3.1 Cost of land and works in the plan (\$Mar2018)

Infrastructure category	Land	Works	Administration	Total
Transport	12,417,439	36,764,244		49,181,683
Stormwater	21,132,209	19,364,957		40,497,166
Open space	44,408,700	28,416,706		72,825,406
Community services	1,500,000			1,500,000
Administration			1,268,189	1,268,189
Total	79,458,348	84,545,907	1,268,189	165,272,444

Note: Transport works costs include \$191,620 for interest expenses, stormwater land includes \$1,668,130, and stormwater works includes \$1,504,246 for interest expenses for which the council has applied for a low interest loan from the NSW Government.

Source: Vineyard CP, Tables 1 and 6 to 9.

Our First Draft Report recommended the council reduce the costs in the plan by \$35.48 million (21.5%), to \$129.80 million (\$Mar2018) and we flagged the need for the council to refine its forecasts and reduce uncertainties.

In response to our First Draft Report, the council provided revised cost estimates for transport and open space works and land costs in the plan. If adopted, the total revised plan costs would have increased to \$190.43 million (\$Jun2019), a 25.5% increase compared to costs in the plan originally submitted by the council. As the council provided revised estimates that were materially different to those included in the plan it originally submitted to us, we issued a Second Draft Report. Our Second Draft Report recommended the council reduce the costs in the plan by \$16.5 million (10.0%), to \$148.7 million.

The council supports most of our recommendations in the Second Draft Report, but raised concerns with our draft recommendations for some land values and transport works costs.

Table 3.2 compares the total costs in the Vineyard CP as submitted for our review, the council's submission to our First Draft Report and our Second Draft Report.

Table 3.2 Cost of land and works in the plan, draft assessments and final assessment

	Vineyard CP (\$Mar18)	Council's submission - First Draft Report (\$Jun19))	IPART's Second Draft Report (\$Jun19)	Difference (Second Draft Report less Vineyard CP)	Difference (Second Draft Report less Council submission)
	A	B	C	C-A	C-B
Transport land	12,417,439	16,193,780	9,314,902	-3,102,538	-6,878,878
Transport works	36,764,244	43,633,724	39,492,205	2,727,961	-4,141,519
Stormwater land	21,132,209	25,143,350	16,960,836	-4,171,373	-8,182,514
Stormwater works	19,364,957	20,187,006	18,906,940	-458,017	-1,280,067
Open space land	44,408,700	49,861,295	29,871,440	-14,537,261	-19,989,856
Open space works	28,416,706	32,318,759	31,263,959	2,847,253	-1,054,800
Community services land	1,500,000	1,650,000	1,575,000	75,000	-75,000
Administration	1,268,189	1,442,092	1,344,947	76,758	-97,145
Total	165,272,444	190,430,006	148,730,229	-16,542,215	-41,699,778

Source: Vineyard CP, Council submission to IPART's First Draft Report, IPART Second Draft Report and IPART analysis.

3.4 Contribution rates

The *Environmental Planning and Assessment (Local Infrastructure Contributions) Further Amendment Direction 2018* (issued on 18 December 2018) applies differential caps to residential contributions according to the area to which a plan applies.

Once IPART reviews the contributions plan and the council responds to any changes requested by the Minister, the council can levy the full contribution amount. Otherwise, the maximum that the council can charge is \$30,000 per residential lot or dwelling. The council will not be eligible for any LIGS funding.

3.4.1 Contributions are levied on a per person or net developable area basis

The Vineyard CP calculates contributions for residential development using either a per person or per NDA basis, depending on the infrastructure category.

Table 3.3 sets out the contribution rates per person or per hectare of NDA for each infrastructure category in the plan originally submitted by the council to IPART and what they would be if the council's submission to our First Draft Report was adopted.

Table 3.3 Contribution rates in Vineyard CP and council's submission to IPART's First Draft Report

Infrastructure category	Basis of contribution rate	Contribution rate Vineyard CP (\$Mar18)	Contribution rate Council submission to First Draft Report (\$Jun19)
Transport	Per person	6,568	7,793
Stormwater	Per hectare NDA	316,802	336,730
Open space	Per person	9,725	10,511
Community services	Per person	200	206
Administration	Per hectare NDA	9,921	11,281

Note: The council's 'summary of infrastructure schedule and contribution rates' table in section 2.7 of the plan shows the unindexed cost of land for open space and community facilities. We have calculated the "Contributions rates in the Vineyard CP" for our table using the unindexed costs.

Source: Vineyard CP, Table 1 and council submission to IPART First Draft Report.

3.4.2 Indicative contribution rates for residential development

Indicative contributions for residential development are based on the council's assumed household occupancy rates for various types of residential development. Table 3.4 sets out the indicative contributions for dwellings in the different residential land use zones.

Table 3.4 Indicative residential contributions per lot and dwelling sizes in the plan

Type of residential development	Number of dwellings	Occupancy rate per dwelling	Indicative contribution	
			Vineyard CP (\$Mar18)	Council submission to First Draft Report (\$Jun19)
R2 Low density residential	1,825	3.18	70,598	81,865
R3 Medium density residential	613	2.64	54,431	62,668
E4 Environmental living	21	3.18	70,598	81,865

Note: The council's 'summary of infrastructure schedule and contribution rates' table in section 2.7 of the plan shows the unindexed cost of land for open space and community facilities. We have calculated the "indicative contributions in the Vineyard CP" for our table using the unindexed costs.

Source: Vineyard CP Works Schedule, Application for assessment, p 5 and calculations based on council submission to IPART First Draft Report.

3.4.3 Indexation of contribution rates

The Vineyard CP provides for the contribution rates to be updated by reference to:

- ▼ A land value index for the precinct, to update land acquisition costs
- ▼ The quarterly Consumer Price Index – (All Groups Index) Sydney (CPI), to update the cost of works.¹⁴

We discuss indexation in detail in Chapter 10.

3.4.4 Exemptions from contributions

The Vineyard CP provides a list of developments that are to be exempt from contributions, including seniors' housing development, places of worship, public schools and hospitals, emergency services, development exempted by way of a direction made by the Minister, and any other development that does not directly and materially increase the demand for public infrastructure including the land zoned B2 Local Centre and B4 Mixed Use.¹⁵

No land is currently zoned for public infrastructure or the other types of development which will be exempt from contributions.

¹⁴ Vineyard CP, section 6.3.2.

¹⁵ See section 2.5 of Vineyard CP for a complete list of exemptions.

4 Transport

The total cost of transport infrastructure in the Vineyard CP is \$49.18 million (29.8% of total costs), comprising:

- ▼ \$12.42 million for land (15.6% of the total *land* costs in the Vineyard CP)
- ▼ \$36.76 million for transport works (43.5% of the total cost of *works* in the Vineyard CP).¹⁶

Our assessment of the transport land and works in the Vineyard CP is as follows:

- ▼ **Criterion 1: Essential works** – land and transport works are consistent with the essential works list.
- ▼ **Criterion 2: Nexus** – nexus has been established for all transport land and works in the plan, except for the sub-arterial road classification of Boundary Road.
- ▼ **Criterion 3: Reasonable cost** – the council’s approach to estimating the cost of transport works is unreasonable in some circumstances. In response to our First Draft Report the council submitted revised cost estimates which are mostly reasonable.

We have separately recommended that loan interest costs should be revised (see Chapter 10). This would result in an adjustment to the costs allocated to the transport infrastructure category.

- ▼ **Criterion 5: Apportionment** – the council’s method for apportioning the cost of all items of transport land and works to development within the plan, and between the Vineyard Precinct and precincts outside Vineyard, is reasonable.

Our assessment of land for transport infrastructure against **Criterion 3 (Reasonable cost)** is in Chapter 9.

Based on our findings, we recommend adjustments to the plan that would increase the cost of transport works by \$2,727,961 (7.4%).

Our findings and recommendations in relation to the transport infrastructure category to date are summarised in Table 4.1 below. These findings and recommendations are unchanged since our Second Draft Report.

¹⁶ The Vineyard CP includes interest costs of \$191,620 for the cost of funding the design of collector roads.

Table 4.1 IPART-recommended adjustments for transport infrastructure

Criterion	Finding	Recommendation	Land (\$)	Works (\$)
Total cost in plan (\$Mar2018)			12,417,439	36,764,244
Essential works	All land and works are consistent with the essential works list			
Nexus	Nexus is established for all transport land in the plan			
	Nexus is established for all works, except for the sub-arterial road status of Boundary Road	For adjustment see Reasonable Cost criterion		
Reasonable cost - Land	The cost of land is not reasonable (see Chapter 9)	Adjust land costs	-1,170,622	
Reasonable cost - Works	It is reasonable to use revised cost estimates obtained from Mitchell Brandtman for Boundary Road, with some adjustments	Use council's revised estimate with some adjustments		-1,902,642
	It is reasonable to use revised cost estimates obtained from Mitchell Brandtman for new collector roads	Adjust costs using council's revised estimate		426,822
	It is not reasonable to include roundabouts in the unit rate for the Commercial Road upgrade	Adjust unit rate to exclude roundabouts		-361,051
	It is not reasonable to use Camden CP unit rates for full-width collector road upgrades	Apply a unit rate derived from WTP's Vineyard CP estimates		2,178,367
	It is not reasonable to use Camden CP unit rates for half-width collector road upgrades	Apply 50% of WTP derived unit rate for full-width collector roads (see above)		274,071
	Roundabout costs are only partially accounted for in the unit rate for Commercial Road	Separately identify roundabout costs based on WTP estimates		1,617,160
	Bus shelter costs double-count a contingency allowance	Remove double-counted contingency allowance		-44,257
	The council's revised unit rate for cycleway bridges is reasonable, but not the length assumption	Increase cost using council's revised unit rate		540,113
	Cost estimates in the plan are in \$Mar2018	Index cost estimates for remaining items to \$Jun2019		134,786
	Loan interest costs do not reflect the IPART-adjusted cost of works or the latest estimated interest rate (see Chapter 10)	Adjust interest costs		-135,408
Apportionment	Approach is reasonable			
Total IPART-recommended cost adjustment			-1,170,622	2,727,961
Total IPART-assessed reasonable cost (\$Jun2019)			11,246,818	39,492,205

Note: Where relevant, our recommended adjustments include an additional five quarters of indexation, consistent with our recommendation to change the base period of the plan to June 2019, rather than March 2018.

Sources: Vineyard CP; Council submission to IPART First Draft Report; Council revised Works Schedule; IPART analysis.

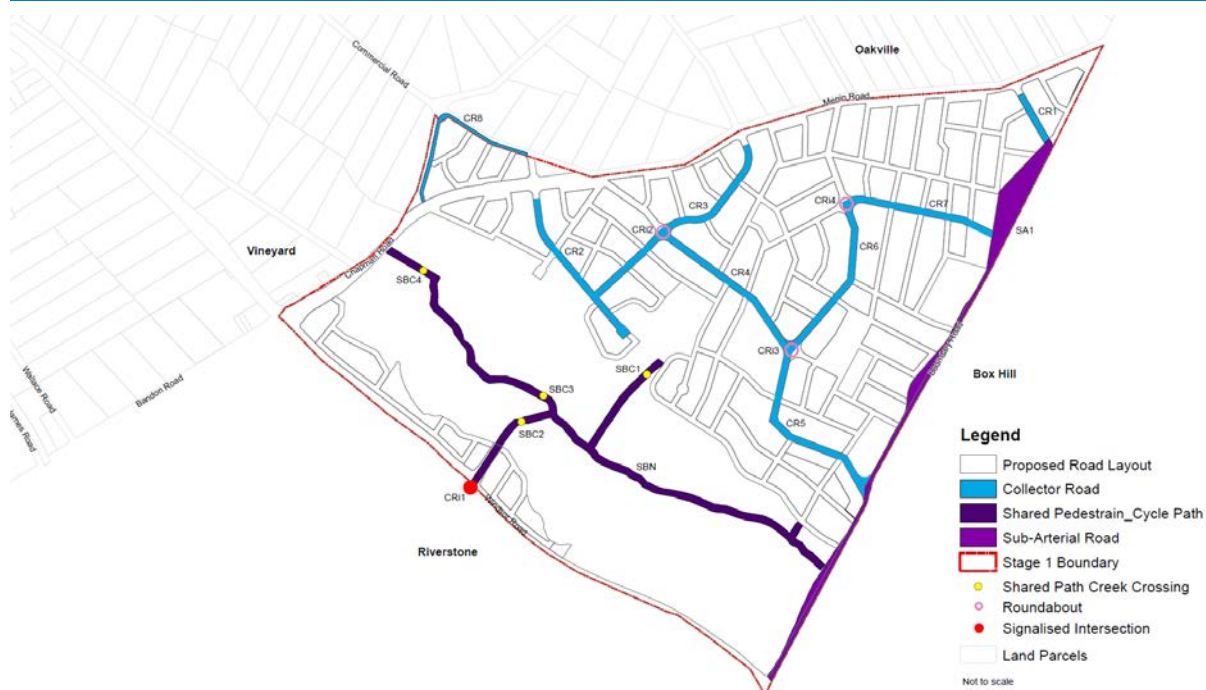
4.1 Overview of transport infrastructure

The Vineyard CP includes land and works for roads and other transport infrastructure. The Plan includes costs for new and upgraded collector roads, signalised intersections, roundabouts, cycleways (including cycleway bridges), and bus shelters.

The plan includes the cost of all collector roads in the Precinct and the council intends to deliver some of the collector road network in advance of most development to provide equitable access to development sites.

Figure 4.1 shows the location and of transport infrastructure in the Vineyard CP.

Figure 4.1 Location of transport infrastructure in Vineyard CP



Note: This map was provided by Hawkesbury City Council upon request. It is an update to Hawkesbury City Council, *Vineyard contributions plan*, Appendix A, Figure A1 Location of Transport Infrastructure, p 44. Update was requested to show the location of transport land and works.

Source: Hawkesbury City Council, 6 March 2019.

In relation to transport works, we recommended in our First Draft Report the council *increase* the cost of works:

- ▼ To correctly account for the three roundabouts in the collector road network
- ▼ By using more relevant costing sources for half-width and full-width collector road upgrades.

We also recommended the council *reduce* the cost of works:

- ▼ For Boundary Road, consistent with upgrade of the road to a collector road standard rather than an arterial road standard.

- ▼ To reduce the contingency allowance for new roads from 20% to 10%, in line with advice from WTP.
- ▼ To remove the double-counting of the contingency allowance for bus shelters.

Overall, our recommendations would have *decreased* the cost of transport works by \$8,139,029 (22.1%).

In response to our First Draft Report, the council submitted revised costs for most transport items. It accepted our recommended cost increases and proposed further increases based on advice it commissioned from a consultant, Mitchell Brandtman.¹⁷ Its total revised costs for transport works were \$15.53 million higher than the plan originally submitted by the council.

In our Second Draft Report, we recommended revised costs for the upgrade of Boundary Road, new collector roads and cycleway creek crossings based on the new information submitted by the council. Our recommended reasonable costs in the Second Draft Report were \$2.7 million higher than the plan originally submitted to us by the council.¹⁸

Table 4.2 compares the total cost for transport works in the Vineyard CP originally submitted by the council, the council's submission to our First Draft Report and our Second Draft Report.

Table 4.2 Comparison of transport works costs

	Vineyard CP (\$Mar18)	Council's submission - First Draft Report (\$Jun19)	IPART's Second Draft Report (\$Jun19)	Difference (\$)	Difference (\$)
	A	B	C	C-A	C-B
Collector roads, excluding Boundary Road	17,415,934	20,650,132	21,551,303	4,135,369	901,171
Boundary Road	15,473,035	15,586,081	13,570,393	-1,902,642	-2,015,687
Cycleway bridges	485,647	2,906,320	1,025,760	540,113	-1,880,560
Other transport items	3,389,627	5,008,804	3,344,748	-44,880	-1,664,056
Total	36,764,244	44,151,336	39,492,204	2,727,961	-4,659,132

Sources: Vineyard CP Works Schedule, Council revised Works Schedule; IPART analysis.

In response to our Second Draft Report, the council questioned our proposed reductions to its revised cost estimate for the upgrade of Boundary Road to a collector road standard. We discuss the council's response under Criterion 3: Reasonable cost in section 4.4 below.

4.2 Criterion 1: Essential works

The items of transport infrastructure in the Vineyard CP are set out in Table 4.3. A land component is included for most road construction, but not for the Commercial/Chapman Road (Corner) half-width upgrade, cycleways and cycleway creek crossings, or bus shelters.

¹⁷ Council submission to IPART First Draft Report.

¹⁸ IPART Second Draft Report, Assessment of Vineyard Contributions Plan, September 2019 Table 4.1 p 27.

All land and works for transport infrastructure in the Vineyard CP are consistent with the essential works list in the Practice Note.

Table 4.3 Transport infrastructure in the Vineyard CP

Items on the essential works list	
▼ New roads and road upgrades	▼ Bridge (on Boundary Road)
▼ Signalised intersections and turning lanes	▼ Bus shelters
▼ Roundabouts	▼ Cycleways

4.3 Criterion 2: Nexus

The council used the technical studies listed in Table 4.4, which were commissioned by DPE, to inform its decisions about the transport infrastructure in the plan.

Table 4.4 Technical studies for transport works in the Vineyard CP

Author	Title	Date
AECOM	Boundary Road Strategic Concept Design Study	February 2013
Arup	Vineyard Transport Study – Draft Report	August 2014
Arup	Vineyard Transport Study – Final Report	November 2017

Note: The technical studies were commissioned by the Department of Planning and Environment during precinct planning.

The final version of Arup's *Vineyard Transport Study* (November 2017) was completed after release of the draft Indicative Layout Plan for Stage 1 of the Precinct. Arup's draft and final reports are similar; the final version reflects a change to the collector road configuration and classification of Boundary Road, but relies on the same transport modelling.

In assessing nexus, we also had regard to:

- ▼ Hawkesbury City Council, *Growth Centres Precinct Development Control Plan, 2017*, (DCP)¹⁹, for classification of roads in the plan, inclusion of controlled intersections (roundabouts and signalised intersections), cycleways and the bridge on Boundary Road
- ▼ *Guidelines for Public Transport Capable Infrastructure in Greenfield Sites*,²⁰ in relation to bus shelters.


We found that nexus is established for all transport infrastructure in the plan. That is, we consider the transport infrastructure is required to meet the demand created by development of the Vineyard Precinct. However, nexus is not established for classification of Boundary Road as a sub-arterial road.

We also found that there is nexus for:

- ▼ **Roundabouts** at three intersections of collector roads, although they are not identified in the Vineyard CP Works Schedule and their location is not shown on the map of transport infrastructure in the plan.

¹⁹ Hawkesbury City Council, *Growth Centres Precinct Development Control Plan 2017*.

²⁰ Transport for NSW, *Guidelines for Public Transport Capable Infrastructure in Greenfield Sites*, July 2018.



We note that unlike some other plans we have assessed, the Vineyard CP includes works costs for all collector roads in the precinct. In other plans, councils assume that collector roads will be delivered wholly or partly through conditions of development consent rather than from developer contributions.

Excluded from the Vineyard CP are planned sub-arterial standard upgrades to Chapman Road and Menin Road, which run along the border of the precinct, and a new sub-arterial segment which will join into Chapman Road. We consider exclusion of these works from the plan is reasonable as Roads and Maritime Services (RMS) is responsible for delivering these roads.

4.3.1 Nexus is not established for upgrading Boundary Road to a sub-arterial road

Boundary Road forms the boundary between The Hills Local Government Area (LGA) and Hawkesbury LGA. The section of Boundary Road between Menin Road and Windsor Road divides the precincts of Box Hill and Vineyard Stage 1. The Vineyard CP refers to Boundary Road as a future sub-arterial road requiring an upgrade from two rural lanes to four lanes, suitable for speeds up to 80 km/hour, with intersection improvements.²¹

Classification of Boundary Road as a sub-arterial road was based on advice about its status in the early stages of precinct planning for the Vineyard Precinct. RMS has since revised its approach to the road network in the North West Growth Area (NWGA) and current plans show Boundary Road as a collector road. Box 4.1 explains the history of planning relevant to the status of Boundary Road.

The council used a cost estimate based on Boundary Road being constructed as a sub-arterial road. We do not consider this assumption is reasonable.

²¹ Vineyard CP, p. 21.

Box 4.1 History of status of Boundary Road

2011 – Transport studies for Box Hill and Box Hill Industrial precincts – Boundary Road to be a single continuous sub-arterial road from Windsor Road to Pitt Town Road.

2013 – AECOM, Boundary Road Strategic Concept Design Study – early concept designs and costings for road upgrade to sub-arterial standard (at RMS request).

2014 – Arup, Draft Vineyard Precinct Transport Study – Boundary and Windsor Roads form the key arterial road network for the region, Menin and Commercial Roads classified as collector roads (p 26).

2016 – RMS, Bandon Road Upgrade Options Report – RMS preferred option for an extra connection between Richmond Road and Windsor Road to follow the existing Bandon Road corridor (p 8).

2017 – Arup, Vineyard Precinct Transport Study (Rev B) – Boundary Road to be upgraded to collector status between Windsor Road and Menin Road and northern section realigned to safely connect with the Bandon Road sub-arterial link (p 38)

2017 – DPE, Vineyard Finalisation Report – Boundary Road upgrade to be funded through s7.11 contributions, and does not have sub-arterial status. (Chapman, Commercial and Menin Roads to be upgraded to sub-arterial status as part of Bandon Road corridor, with RMS to deliver (p 23)

2017 – Vineyard Precinct DCP – Boundary Road between Menin and Windsor Roads is a collector road (Figure 4-11). This is consistent with the Box Hill Growth Centres Precincts DCP – Boundary Road not designated as a sub-arterial road (Figure 14, p 70).

2018 – Draft Vineyard CP – Boundary Road identified as a future sub-arterial road requiring an upgrade from two rural lanes to four lanes, suitable for speeds up to 80 km/hour, with intersection improvements, and costed at upgrade to a sub-arterial status (section 3.2.1).

Sources: AECOM, *Boundary Road Strategic Concept Design Study*, February 2013; Arup, *Vineyard Precinct Transport Study – Draft Report*, August 2014; RMS, *Bandon Road Upgrade Options Report*, June 2016; Arup, *Vineyard Precinct Transport Study 2017*; DPE, *Vineyard Precinct – Finalisation Report Stage 1*, November 2017; DPE, Hawkesbury City Council, *Growth Centres Precinct Development Control Plan*, 2017, DPE, *Box Hill Growth Centres Precincts Development Control Plan*, March 2018.

In response to both our First and Second Draft Report, the council has maintained that Boundary Road should be upgraded to a sub-arterial standard. In its submissions, the council cites a submission from The Hills Shire Council to DPIE on the draft Special Infrastructure Contributions (SIC), which also calls for recognition of Boundary Road as a sub-arterial road.²² We sought clarification from DPIE about the status of the road in relation to the SIC. It advised that no decision has been made.²³

4.3.2 It is reasonable to include all collector roads in the plan

The plan includes all collector roads in the precinct. Where possible, the collector road network in the plan relies on existing road reserves (such as Commercial Road and Harkness Road) to reduce land acquisition and works costs.²⁴

²² See for example, council submission to IPART Second Draft Report, pp 3-4.

²³ Information from DPIE, 30 October 2019.

²⁴ Vineyard CP, p 21.

The collector road network will include:

- ▼ Three new collector roads (CR1, CR3, CR7) totalling 1,349 metres.
- ▼ Upgrade of three existing local roads to collector road standard (CR2, CR4/5 CR6) totalling 2,142 metres.

The decision to include all collector roads in the plan was made by the council and is not based on the technical studies. The council advised that the collector road network will need to be delivered in advance of development due to the fragmented ownership pattern in the precinct and the need to deliver some trunk infrastructure (including collector roads) to provide equitable access to development sites.

Unlike some other precincts in the NWGA, Vineyard is not ‘anchored’ by a major developer who could coordinate delivery of the collector road network. The council intends to deliver the collector road network in advance of most development and recover the costs through the plan rather than requiring delivery of collector roads as a condition of development consent.²⁵

In April 2019 we held a workshop with stakeholders where we asked under which circumstances it may be reasonable to include roads in contributions plans.²⁶ Stakeholders broadly agreed that, although councils’ default position should be delivery of roads through conditions of development consent, under some circumstances a council may be better placed to deliver particular roads.

Two submissions, one in response to our First Draft Report and one in response to our Second Draft Report, commented on the importance of the collector road network and supported the use of council borrowing to facilitate its development (we discuss the use of a council loan in section 10.1).²⁷

In the context of the Vineyard Precinct Stage 1 we consider it is reasonable for the plan to include all collector roads, given the council’s explanation.

In a submission to our First Draft Report, Urbis (for Balintore Developments) questioned whether there is nexus for the Commercial/Chapman Roads half-width collector road upgrade, because it is not identified as a collector road in the DCP.²⁸ We identified this issue in the early stages of our assessment and found that:

- ▼ The segment along Commercial Road is shown as a collector road in the 2017 Arup study. We consider this study establishes nexus for the collector status of the road.²⁹
- ▼ While the segment along Chapman Road is not shown as a collector road in the 2017 Arup study, DPE asked Hawkesbury City Council to consider including the upgrade in the plan.³⁰

²⁵ Information from Hawkesbury City Council, 13 March 2019. Council has included design costs for some collector roads in the costs to be funded by the low interest loan it is seeking from the NSW Government.

²⁶ IPART, *Inclusion of roads in contributions plans* – Fact Sheet, April 2019.

²⁷ Anonymous submission to IPART First Draft Report, 26 June 2019, p1; Anonymous submission to IPART Second Draft Report, 17 October 2019, p 1.

²⁸ Urbis submission to IPART First Draft Report, p 2.

²⁹ Arup, *Vineyard Transport Study – Final Report*, November 2017, p 36.

³⁰ Information from Department of Planning and Environment, 25 March 2019.

4.3.3 Nexus is established for roundabouts, although they are not separately identified in the plan

We consider nexus is established for three single-lane roundabouts on collector roads in the Vineyard CP. Their cost is not separately identified in the Works Schedule, although the Commercial Road upgrade cost estimate in the plan partially accounts for the cost of two of the three roundabouts. Estimated costs for the roundabouts are considered in section 4.4.3 in relation to Criterion 3 (Reasonable costs).

4.4 Criterion 3: Reasonable costs

The total cost of transport works in the Vineyard CP is \$36.76 million, including contingency allowances for all items and \$191,620 of interest expenses.³¹

In assessing the reasonableness of these costs, we have considered the council's approach to estimating costs and the assumptions it has used.³² The council has not commenced construction of any works so there are no actual costs in the plan.

In 2015 GLN Planning, on behalf of DPE, engaged WT Partnership (WTP) to provide cost estimates for infrastructure in the Vineyard CP. WTP's estimates were based on an understanding of future infrastructure needs at that time.

The council used the WTP cost estimate for Boundary Road and unit rates derived from the WTP estimates for the cost of some roads and the cycleway network (excluding cycleway creek crossings). For the remaining roads and most other transport infrastructure items, the council used unit rates derived from Camden Council's *Camden Growth Areas Contributions Plan* (Camden CP) and from IPART's Benchmark Report.³³ It used an estimate from Arup for the Windsor Road/Otago Street intersection.

In calculating contingencies in the plan, the council has calculated a 'pooled' total by applying the IPART benchmark of 20%. The pooled total excludes the Boundary Road upgrade and Windsor Road/Otago Street intersection because contingencies were included in the specific estimates for these items.

Our assessment of the cost of transport works in the Vineyard CP and the council's revised cost estimates (where relevant) is that:

- ▼ **For the Boundary Road upgrade**, the cost in the plan, which is based on the road's upgrade to a sub-arterial road standard, is not reasonable because nexus is only established for its upgrade to a collector road standard. The council's revised cost estimate (based on advice from Mitchell Brandtman) for upgrade of the road to a collector road standard is mostly reasonable.
- ▼ **For all other collector roads:**
 - The council's revised cost estimate from cost consultants Mitchell Brandtman for **new full-width collector roads** is reasonable.

³¹ The interest expenses are associated with a loan for collector road design costs.

³² Our assessment of the loan costs is included in Chapter 10.

³³ Camden Growth Areas Contributions Plan, Leppington North Works Schedule; IPART, *Local Infrastructure Benchmark Costs* – Final Report, April 2014.

- For the **full-width upgrade of Commercial Road**, using cost estimates based on WTP's report is reasonable except for the inclusion of roundabouts in the per linear metre rate.
- For **half-width and other full-width collector road upgrades**, using a unit rate from the Camden CP is not reasonable.
- ▼ **Roundabout** costs are only partially accounted for in the per linear metre rate for Commercial Road.
- ▼ **Bus shelter** costs based on IPART benchmark costs are reasonable, but the council double counts contingency allowances.
- ▼ **Cycleway network** costs based on WTP's cost estimates are reasonable.
- ▼ **Cycleway creek crossings** – the council's revised costs are reasonable on a per linear metre basis, however the assumptions used to inform the strategic estimate are not reasonable given the lack of consultation and investigation of alternative options.
- ▼ **Windsor Road/Otago Street intersection upgrade** costs are reasonable.

We also note that while the cost estimates are indexed to the base period of the plan (March 2018), we have recommended that the council update the base period of the plan to June 2019 (see Chapter 10). This means that the estimates in the plan need to include an additional five quarters of indexation.

Recommendations

- 1 Reduce the cost of Boundary Road in the plan by \$1,902,642, using the council's revised cost estimate from Mitchell Brandtman with adjustments to:
 - The quantity of excavated material to be removed from the site (road segment)
 - Allowances for design costs (road segment, bridge and signalised intersection)
 - Contingency allowances (road segment).
- 2 The Department of Planning, Industry and Environment co-ordinate the planning and delivery of Boundary Road by establishing a working group that includes Hawkesbury City Council, The Hills Shire Council and RMS. The working group could consider matters such as:
 - Design requirements, standards and costs
 - Apportionment of costs (including any State Government funding)
 - Who will lead delivery and the timeframe for delivery.
- 3 Increase the cost of collector roads (other than Boundary Road) in the plan by \$2,518,209, comprising:
 - An increase of \$426,822 for new collector roads [items CR1, CR3 & CR7], based on the council's revised estimate from cost consultant Mitchell Brandtman.
 - A decrease of \$361,051 for Commercial Road [items CR4 & CR5], to remove the cost of roundabouts from the per linear metre rate used to estimate the cost of this road.
 - An increase of \$2,178,367 for full-width collector road upgrades [items CR2 & CR6], based on WTP's cost estimates for similar roads in the Vineyard CP.

- An increase of \$274,071 for the half-width collector road upgrade [item CR8], based on a unit rate that is 50% of our recommended per linear metre rate for full-width collector road upgrades (see point above).
- 4 Separately account for the cost of three roundabouts on Commercial Road, which we estimate would increase the cost of transport works by \$1,617,160 (This is partially offset by the reduction in the per linear metre rate for Commercial Road – see recommendation above).
- 5 Remove the double-counting of the contingency allowance for bus shelters, which we estimate would reduce the cost of transport works by \$44,257 (\$3,688 per bus shelter).
- 6 Increase the cost of cycleway creek crossings in the plan by \$540,113.
- 7 For the next version of the plan, consult on and review the costs and benefits of the proposed number and location of cycleway creek crossings in the precinct.
- 8 Index the cost of remaining transport works items (the Windsor Road/Otago Street intersection and the cycleway network) works to June 2019, which we estimate would increase the cost of transport works by \$134,786.

4.4.1 The council's revised collector road cost for Boundary Road is mostly reasonable

The estimated cost of Boundary Road has varied significantly between the plan submitted by the council, our First Draft Report and the council's submission to our First Draft Report:

- ▼ In the plan submitted to IPART, the council estimated that the cost of upgrading Boundary Road to a sub-arterial standard was \$35,983,802 (\$March2018), of which \$15,473,035 (43%) would be apportioned to the Vineyard CP.
- ▼ Our First Draft Report included a recommendation to reduce the apportioned cost of Boundary Road by \$10,565,316 to \$4,907,719 because we found that it was not reasonable for the plan to contain a cost estimate based on upgrading the road to a sub-arterial road standard.³⁴ Our revised estimate was based on the unit rate for collector roads elsewhere in the Vineyard Precinct Stage 1 that we found reasonable. This was intended as an interim solution until the council obtains a detailed, site-specific cost estimate for the upgrade of Boundary Road to a collector road standard.
- ▼ In response to our First Draft Report, the council obtained a revised cost estimate from a cost consultant, Mitchell Brandtman. The revised cost is based on the road being upgraded to a 2-lane suburban collector road. The total revised cost (after apportionment and including additional works from The Hills Shire Council's Box Hill Contributions Plan (CP15)) is \$15,585,221 (\$June2019). This is \$112,186 higher than the cost apportioned to the plan submitted to IPART.

The total Mitchell Brandtman cost estimate comprises three components:

- ▼ Upgrade of the road segment to a collector-road standard (\$21,462,978)
- ▼ Replacement of the existing bridge across the Killarney Chain of Ponds Creek (\$10,429,073)

³⁴ IPART, *Assessment of Vineyard Contributions Plan (First Draft Report)*, May 2019, p 32.

- ▼ Upgrade of the signalised intersection at the corner of Windsor and Boundary Roads (\$1,169,625).

The cost of each component is higher than what was in the plan, despite the estimate being for a narrower road. We recommend some adjustments that would bring the estimate to an amount that we consider is reasonable. Our estimate is closer to the cost the council included in the plan originally submitted to IPART.

The plan also includes a share of \$3,057,933 for other works along Boundary Road which are identified in CP15.³⁵ We consider the inclusion of these additional costs is reasonable.

Because the council double counted the cost of the bridge upgrade in the plan submitted to us and we have corrected this error, our overall recommendation for Boundary Road would reduce the cost in the plan by \$1,902,642.

Table 4.5 compares the cost estimate in the plan, the council's revised cost and our recommended cost based on the Mitchell Brandtman estimate.

Table 4.5 Comparison of Boundary Road upgrade costs

	Vineyard CP, based on WTP (\$Mar2018)	Council revised estimated, based on Mitchell Brandtman (\$Jun2019)	IPART recommendation (\$Jun2019)
Road segment upgrade	15,980,847	21,462,978	18,210,897
Bridge upgrade	8,458,391	10,429,073	9,881,442
Signalised intersection upgrade	752,017	1,169,625	1,119,842
Additional road costs	3,057,933	3,185,023	3,185,023
Double-counting of bridge costs	7,734,614	-	-
Total cost	35,983,802	36,246,699	32,395,205
Plan cost (after apportionment)	15,473,035	15,585,221	13,929,938

Source: Vineyard CP; Mitchell Brandtman, *Vineyard Precinct Local Infrastructure Section 7.11 Contributions Estimates*, June 2019, Upgrade of road segment; IPART analysis.

The Mitchell Brandtman cost estimate is for a 20.8 metre typical collector road, as outlined in the DCP.³⁶ However, despite the change in road design (from sub-arterial to collector standard), the estimate assumes the same road reserve outlined in AECOM's concept design for the upgrade of Boundary Road to a sub-arterial standard. The AECOM technical drawings highlight the need for significant road re-alignment, both vertically and horizontally, to allow traffic to flow at up-to 80km per hour and the road to function as a key sub-arterial link.

We have identified the following factors as contributing to the comparatively high cost of Boundary Road, as estimated by Mitchell Brandtman:

³⁵ The additional costs include \$891,966 for 2 roundabouts, \$1,038,290 for Menin Road and Pitt Town Road Crest improvements and \$1,127,677 for road resurfacing. The additional costs and apportionment were agreed between the councils and DPE in 2015.

³⁶ Hawkesbury City Council, *Growth Centres Precinct Development Control Plan 2017*, Figure 4-12, p 64

- ▼ The need for significant vertical and horizontal re-alignment of the road reserve
- ▼ Conservative assumptions about the removal of excavated materials
- ▼ The proximity of the road to a waterway, which requires temporary works to prevent contamination from construction activity
- ▼ Elevation of the road for flood evacuation purposes
- ▼ The need for existing service relocation, including undergrounding overhead powerlines due to the rise in the roads level
- ▼ Separately identified strategic, concept and detailed designs
- ▼ A high contingency allowance, given conservative assumptions about the extent of vertical and horizontal re-alignment required for a collector road.

We consider most aspects of the consultant's estimate are reasonable but we propose the following adjustments:

- ▼ Reduce the cost of removing excavated material from the site by \$1,099,000. The consultant assumed that 90% of excavated material needs to be removed from the site. We consider this is a conservative assumption. While the consultant has assumed a reduced road width, the updated estimate for Boundary Road is still based on a road reserve for a sub-arterial road. We question the need for the extent of road re-levelling and the assumption that 90% of excavated material needs to be removed. While we consider that the assumption is conservative, we do not have expert advice on a more reasonable assumption at this stage. For our recommended adjustment we have assumed that only 50% of the excavated material would need to be taken off-site. We consider this is a more reasonable assumption until more detailed design work is complete.
- ▼ Reducing the allowance for *strategic* and *concept* designs, which would reduce the cost by \$734,348. The allowances for design and professional fees are too high given there are previous concept designs which the consultant has used to estimate costs for Boundary Road's upgrade to a collector standard, even though the drawings were for a sub-arterial road. After removing these allowances, the cost estimate would still include \$760,992 for a *detailed* design of the road segment.
- ▼ Reducing the contingency allowance from 15% to 10%, which would reduce the cost by \$1,129,749. The revised cost estimate from Mitchell Brandtman is more detailed than previous estimates, with consideration of the site specific requirements for the road upgrade. Further, we consider the estimate is based on a number of conservative assumptions, which suggests the need for a lower contingency allowance.

After correcting for the council's double-counting of the bridge upgrade, the impact of our recommendation is an increase in the cost of the road segment of the upgrade relative to the plan submitted of \$2,386,619.

The council submission to the Second Draft Report objected to our proposed adjustments. In its view:

...the reduction in earthworks costs recommended by IPART is considered inappropriate. The Vineyard Precinct is highly fragmented and is likely to be developed by multiple developers as opposed to other areas of the North West Growth Area. Put simply there isn't sufficient area within

individual development sites within the Precinct to accommodate the volume of fill material as a consequence of earthworks associated with constructing Boundary Road on an appropriate vertical and horizontal alignment.

The Precinct already has a series of existing road corridors throughout which will have to remain open during construction in order to permit access to existing residents. The Precinct cannot be viewed as one development site and treated as such. Earthworks within the Precinct and particularly along existing road corridors will be vastly different to development of a single larger development site. For these reasons the cost estimates of works and contingencies associated with Boundary Road is considered to be justified.³⁷

The council did not address our observations about the generally conservative nature of the Mitchell Brandtman cost estimate and we do not consider the additional arguments it submitted support a change to our recommendation. While the Vineyard Precinct is currently fragmented, developers will likely amalgamate sites as development progresses. Further, we expect that most of Boundary Road will be constructed at the same time, which would allow for cut and fill.

Bridge and signalised intersection costs

The Boundary Road cost estimate includes separate costs for a bridge and intersection upgrade, totalling:

- ▼ \$10,429,073 for the bridge upgrade
- ▼ \$1,169,625 for the upgrade of the Windsor Road and Boundary Road intersection.

The total bridge cost includes \$1,548,800 to construct a temporary bridge or culvert to allow local traffic to continue accessing Boundary Road while the new bridge is being built. This cost was not identified in previous estimates, and we consider the identified cost is reasonable given the need to allow local traffic to access Windsor Road via Boundary Road during construction.

The bridge costs provided by Mitchell Brandtman are similar to the WTP estimate of the bridge cost in the plan submitted by the council. Regardless of the road standard, the bridge will need to be built to a similar length and design given its path over the existing watercourse.

The intersection upgrades are also similar to the previous WTP estimates for the sub-arterial upgrade to the road. There is likely to be little variation in the design and cost of the intersection, regardless of the road standard.

We consider the estimates from Mitchell Brandtman are mostly reasonable, except that allowances for design and professional fees are too high given there are previous concept designs which the consultant has used to estimate costs for Boundary Road's upgrade to a collector standard, even though the drawings were for a sub-arterial road.

Table 4.6 outlines the allowances in the cost estimate for professional fees for design, and our recommended adjustment which is based on including the cost of detailed design only.

³⁷ Council submission to IPART Second Draft Report, 18 October 2019, p4.

Table 4.6 Design and professional fees (\$Jun2019)

	Council submission, based on Mitchell Brandtman			IPART recommendation (Detailed design only)	
	Strategic design	Concept design	Detailed design	Total	Total
Bridge upgrade	\$219,052 (1.5%)	\$328,578 (3.0%)	\$474,613 (5.0%)	\$1,022,243	\$474,613
Signalised intersection upgrade	\$16,594 (3.0%)	\$33,189 (4.5%)	\$53,932 (6.5%)	\$103,714	\$53,932

Sources: Mitchell Brandtman, *Vineyard Precinct Local Infrastructure Section 7.11 Contributions Estimates*, June 2019; IPART analysis

4.4.2 Collector road cost estimates vary unnecessarily, and some are not reasonable

The total cost of new and upgraded collector roads in the Vineyard CP is \$17,415,934 (including a 20% contingency allowance for all items).³⁸ This comprises:

- ▼ \$5,013,695 for new collector roads
- ▼ \$10,815,784 for full-width collector road upgrades (including the upgrade of Commercial Road)
- ▼ \$1,586,455 for half-width collector road upgrades.

Our First Draft Report included recommendations to address:

- ▼ The use of unit rates from another council's contributions plan for roads where WTP had provided cost estimates for the Vineyard Precinct.
- ▼ A deviation from WTP's recommended contingency allowances for new collector roads, which we found to be unreasonable.
- ▼ The inclusion of roundabouts in the unit rate for upgrading Commercial Road.

In its submission to our First Draft Report the council supported our recommendations that would increase costs in the plan. In addition, it submitted revised costings for new collector roads based on advice from Mitchell Brandtman. These revised estimates are higher than what the council had included in the plan but we consider it is reasonable for the council to use the revised estimates in the Vineyard CP.

We maintain the position in our First Draft Report that the use of unit rates from another council's contributions plan is unreasonable because Hawkesbury City Council has estimates that were prepared by a consultant for the Vineyard Precinct. UDIA NSW raised concerns with this recommendation given it would increase the cost of collector road upgrades. It argued that IPART should not recommend increases when the council provides its estimate

³⁸ The works schedule incorrectly applies indexation for the cost of new roads based on the 'Camden' rate and undercounts the cost of collector roads by \$112,959. However, because we have recommended a different unit rate which corrects for this issue, there is no need to separately address indexation. This applies to the collector roads identified by council and excludes Boundary Road.

of the cost of infrastructure.³⁹ Our recommendation is for the council to use the advice prepared for the specific contributions plan. We consider this is likely to more accurately reflect the costs of providing the roads than an estimate from a plan prepared for a different context.

We also maintain the position in our First Draft Report on the need to remove the cost of roundabouts from the unit rate for upgrading Commercial Road.

New full-width collector road estimates

The cost of new full-width collector roads in the plan [items CR1, CR3 & CR7] is based on WTP's detailed costing for a generic collector road, which results in a unit rate of \$3,097 per linear metre when indexed to the base period of the plan (March 2018).⁴⁰ To this, the council added a 20% contingency allowance, taking the unit rate to \$3,717 per linear metre.

In our First Draft Report we found that:

- ▼ The WTP estimate is reasonable because it is similar to the costs for new full-width collector roads we have considered reasonable in other contributions plans and because it was commissioned by GLN Planning on behalf of DPE, specifically for use in the Vineyard CP.⁴¹
- ▼ The 20% contingency allowance applied by the council was not reasonable. We recommended the council reduce the contingency allowance for these items to 10%, consistent with WTP's advice.⁴²

Submissions to our First Draft Report from Urbis (for Balintore Developments Pty Ltd) and UDIA NSW endorsed our recommendation to reduce the contingency rates for new roads in the plan in line with the advice from WTP.⁴³

However, the council's submission to our First Draft Report contends that the WTP estimate for new collector roads is insufficient and provides revised costs for new collector roads based on advice from cost consultant Mitchell Brandtman. The revised costs use a per linear metre rate of \$4,033 (\$Jun2019), inclusive of a 7.5% contingency allowance.

In support of the revised cost, the council submitted that:

There are also questions about delivery scale between Blacktown City Council and Hawkesbury City Council in delivering new collector roads in greenfield sites, which if anything, would suggest Hawkesbury rates might be higher, particularly in a highly fragmented area like Vineyard.⁴⁴

This revised cost is still within the range of costs we have seen in other plans we have assessed and we consider it is reasonable for the council to use this estimate in the Vineyard CP.

³⁹ UDIA NSW submission to IPART First Draft Report, June 2019, pp 1-2.

⁴⁰ The rate includes a 5% allowance for design costs.

⁴¹ For example, we assessed a rate of \$3,679 per metre (\$Mar2018) as reasonable in Blacktown City Council's CP22 for Rouse Hill.

⁴² WTP, *Vineyard Precinct Stage 1 – Section 94 – Contribution Construction Cost Estimates*, September 2015. WTP did not include a contingency allowance within its estimates but assumed a rate of 10% would be reasonable for new roads.

⁴³ Urbis submission to IPART First Draft Report, June 2019, p 2; UDIA NSW submission to IPART First Draft Report, June 2019, p 2.

⁴⁴ Council submission to IPART First Draft Report, p 19.

Table 4.7 Cost of new full-width collector roads

	Unit rate (\$ per metre)	Total cost (\$)
Cost in plan (WTP rate + 20% contingency) (\$Mar2018)	3,717	5,013,695
IPART recommended cost (based on revised council cost estimate, including 7.5% contingency) (\$Jun2019)	4,033	5,440,517
Difference	316	426,822

Source: Vineyard CP Works Schedule and Council revised Works Schedule; IPART analysis.

Full width upgrade of Commercial Road

The council estimated the cost of the full-width upgrade of Commercial Road in the plan using the average cost (on a per linear metre basis) from WTP's estimate for this specific road upgrade (which includes costs for two roundabouts) applied to the updated estimate of road lengths. It then indexed the cost to the base period of the plan and added a 20% contingency allowance.

We do not consider it is reasonable to apply an average cost which includes roundabouts because roundabouts are a fixed cost, not variable by road length.⁴⁵ We therefore recommend that the council reduce the cost of Commercial Road by applying a unit rate which excludes the cost of any roundabouts (see section 4.4.3 for our recommendation to separately account for the roundabouts). For consistency with our recommendation to change the base period of the plan, we also recommend that the council index the cost estimate to June 2019 (see Table 4.8).

Table 4.8 Cost of Commercial Road (full-width collector road upgrade)

	Unit rate (\$ per metre)	Total cost (\$)
Cost in plan (includes roundabouts and 20% contingency) (\$Mar2018)	6,224	6,721,521
IPART recommended cost (excludes roundabouts, includes 20% contingency) (\$June2019)	5,889	6,360,470
Difference	-334	-361,051

Source: Vineyard CP Works Schedule; IPART analysis.

Full-width upgrades of other collector roads

For the cost of other full-width collector road upgrades [items CR2 & CR6], the council has used a unit rate from the Camden CP, which was based on a 2011 report by Davis Langdon.⁴⁶

We consider that this approach is not reasonable because WTP provided estimates for full-width upgrades of collector roads in the Vineyard Precinct. Although the estimates are for roads that were ultimately not all included in the plan submitted to IPART, we consider they provided a more suitable basis for an estimate than the Davis Langdon report prepared for Camden Council.

⁴⁵ Further, the plan only partially includes two of the three roundabouts in the plan.

⁴⁶ Davis Langdon Australia Pty Ltd (2011), *Austral and Leppington North (ALN) Precincts Transport Assessment*, prepared for NSW Department of Planning and Infrastructure, July 2011.

We recommend the council use a weighted average per linear metre unit rate derived from WTP's estimated costs for three site-specific collector road upgrades (excluding roundabout costs where applicable), including a 20% contingency allowance, as shown in Table 4.9. This rate is \$5,906 (\$Jun2019).

Applying the unit rate of \$5,906 to the length of the collector road network would increase the total cost of collector road upgrades in the Vineyard CP by \$2,178,367 (or 53.2%) to \$6,272,630 (see Table 4.10).

Table 4.9 WTP unit rates for collector road upgrades (\$Jun2019)

Collector road	Source	Unit rate (\$ per metre)
Chapman Road (not in plan)	WTP advice, indexed to June 2019	6,112
Commercial Road	WTP advice, indexed to June 2019	5,889
Menin Road (not in plan)	WTP advice, indexed to June 2019	5,827
Weighted average		5,906

Note: Excludes roundabouts.

Source: Vineyard CP Works Schedule; IPART analysis.

Table 4.10 Full-width upgrade of other collector roads

	Unit rate (\$ per metre)	Total cost (\$)
Cost in plan (\$Mar2018)	3,896	4,094,262
IPART recommended cost (\$June2019)	5,907	6,272,630
Difference	2,011	2,178,367

Source: IPART based on Vineyard CP Works Schedule.

Half-width upgrade of collector road (corner of Commercial and Chapman Roads)

For the half-width upgrade to the corner of Commercial and Chapman Roads, the council also used a unit rate from the Camden CP.

The council's submission to our First Draft Report noted that the convention for costing half-width road upgrades is to include 60% of the full-width cost.⁴⁷ We have not followed this convention because the council intends to deliver the full-width road when it has secured funding from other sources.

Instead, we consider it is reasonable for the road to be costed using a rate that is 50% of the rate we have recommended for full-width collector road upgrades (ie, \$2,953 per linear metre). Applying this unit rate to the relevant segments of Commercial and Chapman Roads, and maintaining the contingency allowance of 20%, increases the total cost of half-width collector road upgrades by \$274,071 to \$1,860,526 (see Table 4.11).

⁴⁷ Council submission to IPART First Draft Report p 10.

Table 4.11 Cost of half-width upgrade of Commercial and Chapman Roads

	Unit rate (\$ per metre)	Total cost (\$)
Cost in plan (\$Mar2018)	2,544	1,586,455
IPART recommended cost (\$June2019)	2,953	1,860,526
Difference	409	274,071

Source: Vineyard CP Works Schedule; IPART analysis.

4.4.3 Council's proposed roundabout costs are not reasonable

The Vineyard CP provides for the construction of three single-lane roundabouts on collector roads. Their cost is not separately identified in the Works Schedule, although the Commercial Road cost estimate in the plan partially accounts for costs of two of the three roundabouts. WTP's 2015 estimate for the cost of a single roundabout was \$400,000 (excluding design and contingency allowances).⁴⁸

During the course of our assessment, the council provided separate estimates for three roundabouts on the collector road network. The updated costs were based on a 5-way roundabout delivered by the council in Oakville (about 2.5 km north of Vineyard Stage 1) in 2007/08, which was \$708,154 (\$Mar 2018).⁴⁹

The council considers the 2007/08 Oakville cost to be more reasonable than the WTP estimate because it was based on works undertaken by the council on an existing uncontrolled intersection. Further, the council considers the higher estimate is reasonable for Vineyard, given the need to upgrade pavements and surrounds from a rural road standard to that of an urban collector road.

However, we prefer the WTP estimate because:

- ▼ The WTP costing is similar to, albeit higher than, the cost of single-lane roundabouts on collector roads in other plans we have recently assessed.
- ▼ The council intends to deliver the collector road network (including roundabouts) in advance of some precinct development. This method of delivering the network may result in cost efficiencies, as large parts are likely to be delivered together.
- ▼ The cost of upgrading pavements and surrounds is included in the WTP cost of collector road upgrades on which the roundabouts will be located.

We recommend the council separately account for the cost of three roundabouts and that the cost of each is derived using the WTP estimate, inclusive of a 20% contingency allowances, indexed to June 2019. The results in a cost of \$539,053 (\$Jun2019) for each roundabout and would increase the cost of transport works in the plan by \$1,617,160.⁵⁰

⁴⁸ WTP, *Vineyard Precinct Stage 1 – Section 94 Contribution Construction Cost Estimates*, Sep 2015.

⁴⁹ Information from council, 12 April 2019

⁵⁰ This is partially offset by our recommendation to remove the cost of roundabouts from the unit rate for estimating the cost of Commercial Road. See section 4.4.2.

4.4.4 The approach to costing cycleway creek crossings is not reasonable

The total cost of four cycleway creek crossings included in the plan is \$485,647 (1.3% of total transport works costs).

We asked the council to clarify the source for this cost estimate and for details about the design and span of the creek crossings. The council did not provide the requested information, but proposed to increase the costs in the plan to \$250,000 per crossing, based on the cost of recently delivering similar 20-30 metre span creek crossings. In the absence of sufficient supporting information for the proposed increases, we found in the First Draft Report that costs for cycleway creek crossings in the plan were reasonable in the short term.

In response to our First Draft Report, the council engaged J. Wyndham Prince (JWP) to provide revised cost estimates for the four cycleway creek crossings. These revised cost estimates total \$2,906,700 (\$June2019), an increase of \$2,421,053 or almost 500% from the costs in the plan. JWP assumed, in the absence of site specific designs and given the area is susceptible to flooding, that the proposed bridges should span the entire width of the riparian corridor (50-100 metres).⁵¹

Table 4.12 shows the council's revised cost estimates for cycleway creek crossings, compared with the costs in the plan.

Table 4.12 Cycleway creek crossing cost comparison

Cycleway creek crossing	Cost in plan (\$Mar2018)	Revised cost (\$Jun2019)	Revised length (m)
SBC1	121,412	427,500	50
SBC2	121,412	854,900	100
SBC3	121,412	854,900	100
SBC4	121,412	769,400	90
Total	485,647	2,906,700	340

Note: The cost estimate for the 4 bridges included in the plan did not specify the length of the bridges, but the estimate was based on a 3-12m design.

Source: Vineyard CP, Council submission to IPART Draft Report, June 2019.

Given the magnitude of the council's proposed increase in costs for cycleway creek crossings, we have considered whether it has given adequate consideration to the benefits of the proposed crossings for new development in the Vineyard Precinct.

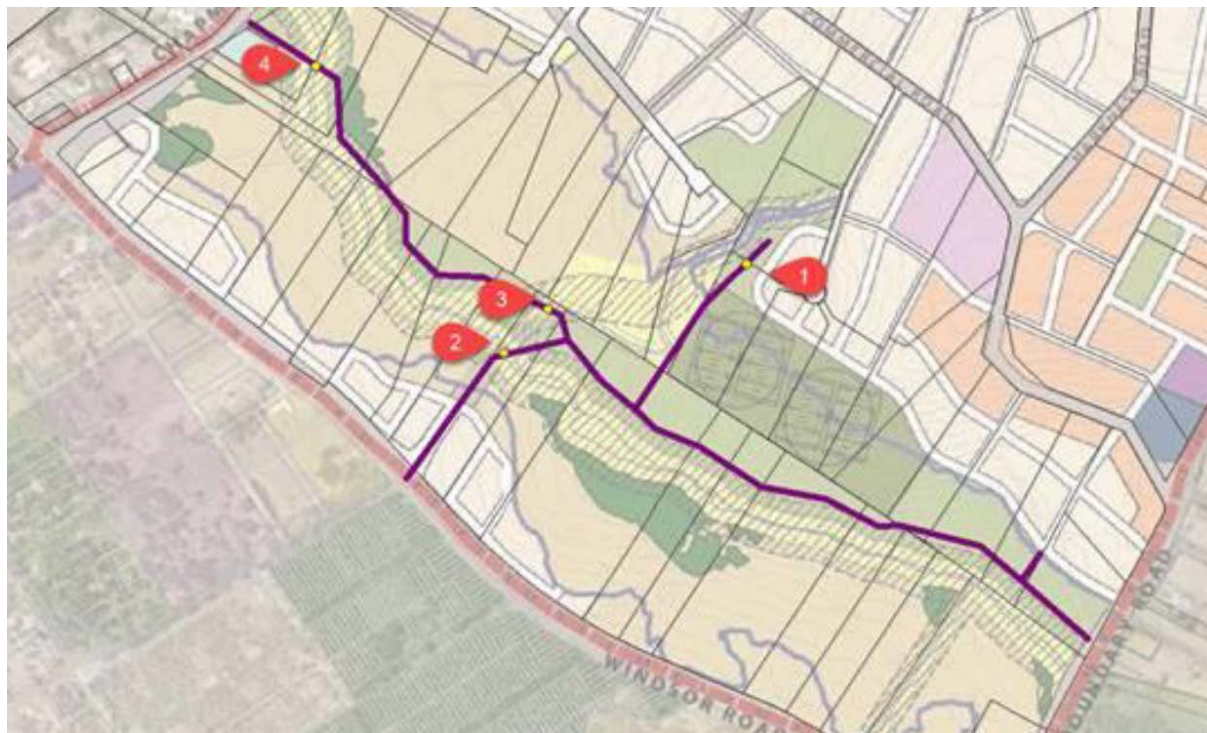
Stakeholders were consulted on the proposed layout of the cycleway path and location of cycleway creek crossings during precinct planning; and again when the Vineyard CP was exhibited by the council. Public exhibition of a contributions plan is the first and only stage of consultation during which interested parties can comment on *both* the estimated costs and benefits of infrastructure in a precinct's Indicative Layout Plan.

Figure 4.2 shows the location of cycleway creek crossings and the cycleway path in the Vineyard Precinct, based on the Indicative Layout Plan. We note that creek crossings SBC1

⁵¹ J. Wyndham Prince (JWP), *Advice to Hawkesbury City Council*, 24 June 2019, pp 9-11.

and SBC4 could be removed with changes to the layout of the cycleway path, or could be incorporated as culvert bridges adjoining existing or proposed roads in the precinct.

Figure 4.2 Cycleway crossings in the Vineyard CP



Source: J. Wyndham Prince, *Advice to Hawkesbury City Council*, June 2019, p 9.

We consider the council should consult on, and review the need for, the cycleway creek crossings and their locations when it next reviews the plan.

In the interim, we consider the reasonable cost for cycleway creek crossings should be estimated by applying JWP's unit rate to a bridge length of 30 metres, rather than 50-100 metres, as JWP proposed. A length of 30 metres reflects the council's previous proposal for each location, and JWP's comments about typical cycleway crossings.⁵²

We recommend the council:

- ▼ Increase the cost of cycleway creek crossings in the plan by \$540,113
- ▼ Consult on and review the costs and benefits of cycleway creek crossings in the plan, given the proposed significant cost increase and possible alternate solutions which may reduce the required number of creek crossings.

⁵² Council suggested the bridge lengths would need to be 20-30m long based on similar bridges it had built elsewhere. Information from Hawkesbury City Council, 12 April, 2019.

4.4.5 Bus shelter cost estimates are reasonable but the contingency allowance is double-counted

The cost of bus shelters in the Vineyard CP is \$340,428 (0.9% of total transport works costs) or \$28,369 per item (including a contingency allowance of 20%). The council states the cost of bus shelters is based on the rate derived from CP15. We note that the cost per bus shelter in CP15 is actually the IPART benchmark plus a 20% contingency.

We consider that, in the absence of site specific cost estimates, it is reasonable for the Vineyard CP to use the IPART benchmark cost for bus shelters, noting that the benchmark is similar to the rates we have recently assessed as reasonable in other plans.

However, after indexing the cost to the base period, the council adds a further 20% contingency, effectively double-counting the allowance.

We consider the cost of bus shelters in the Vineyard CP (based on the IPART benchmark) is reasonable, after correcting for the calculation error which double counts the contingency allowance. We estimate that correcting the error and indexing the resulting cost estimate to June 2019 would reduce the cost of transport works in the plan by \$44,257 (\$3,688 per bus shelter).

4.5 Criterion 5: Apportionment

We found that the council's approach to apportioning costs to and within the Vineyard CP is reasonable. In particular, we considered the apportionment of costs in relation to:

- ▼ Apportioning the cost of Boundary Road upgrade between the Vineyard and Box Hill precincts
- ▼ Apportioning the cost of the Windsor Road/Otago Street intersection between the Vineyard and Riverstone precincts
- ▼ Apportioning all transport land and works costs within the precinct to residential development on a per person basis.

However, the council's policy on offering demand credits for transport infrastructure is unclear.

Recommendation

- 9 Clarify that existing development in the precinct is eligible for demand credits towards transport infrastructure contributions.

4.5.1 Evidence for apportioning Boundary Road costs may be outdated

Boundary Road forms the boundary between The Hills LGA and Hawkesbury LGA. The section of Boundary Road between Menin Road and Windsor Road divides the Box Hill (to which CP15 applies) and Vineyard Stage 1 precincts. The council has included 43% of the total cost of Boundary Road in the plan.

Arup's Draft Vineyard Transport Study (2014) expected future traffic demand on Boundary Road would come 43% from Vineyard Stage 1, 48% from Box Hill and 9% from outside the precinct. DPE advised both councils accordingly.⁵³ The traffic modelling undertaken by Arup to inform this advice used different planning assumptions and an earlier road network hierarchy.

The notable differences are:

- ▼ The road network hierarchy has changed, changing the classification of Boundary and Menin Roads. Accordingly, traffic flows within the area are likely to change as vehicles use the sub-arterial Menin Road to access Windsor Road, instead of Boundary Road.
- ▼ The density of development in Box Hill has surpassed the expected dwelling yields which informed the original transport modelling. However, the expected density of development in the Vineyard Stage 1 Precinct has not changed because development is governed by density controls that will preclude higher densities being achieved.

With these changes, the apportionment of costs between the two precincts may not accurately reflect the likely traffic demand on Boundary Road. However, in the absence of more up-to-date information, we accept that the apportionment is reasonable. When the council obtains concept designs and costing for the road, it should also revisit the apportionment of the costs between the Vineyard and Box Hill precincts.

4.5.2 Approach to apportioning the cost of the Windsor Road/Otago Street intersection upgrade is reasonable

The intersection at the corner of Windsor Road and Otago Street is apportioned equally between the Vineyard Precinct Stage 1 and development in the Riverstone Precinct, (Blacktown City Council's *CP20 Riverstone and Alex Avenue*), and a local tie-in road is 100% apportioned to the Vineyard Precinct.

We consider this approach is reasonable because it is consistent with advice from DPE in the context of the precinct's strategic design.

4.5.3 Apportionment of transport costs within the precinct on a per person basis is reasonable

Within the Vineyard Precinct, all transport land and works costs are apportioned only to residential development, and then on a per person basis. This is consistent with the council's assumption that non-residential development will not generate demand for transport infrastructure; ie, any demand for transport infrastructure for non-residential development is primarily generated by the precinct's residents accessing the village centre.⁵⁴

We considered whether the cost of the Windsor Road/Otago Street intersection should be apportioned only to a sub-catchment of development located south of Killarney Chain of Ponds because the intersection will likely serve only residents within that area. A similar

⁵³ Email from Arup to DPE – Vineyard Precinct – Boundary Road Traffic Volumes

⁵⁴ Vineyard CP section 2.5.

approach could also be taken for other transport items.⁵⁵ In the interests of simplicity, we favour treating the entire Vineyard Precinct as one catchment for the purposes of apportioning transport costs.

With regard to apportioning all transport costs to residential development, we found that:

- ▼ Given non-residential land represents approximately 1% of total development area in the precinct, it may not warrant apportioning costs to this relatively small area.
- ▼ The council's assumption that traffic generated by the non-residential development will primarily come from the residential development within the precinct is reasonable.

We consider the council's approach of apportioning the cost of transport works in the plan to residential development on a per person basis is reasonable.

4.5.4 It is not clear whether existing development is eligible for demand credits.

The council's policy on offering demand credits for transport infrastructure is unclear.

Section 3.2.1 of the plan says that contributions for transport infrastructure "are calculated on the anticipated **net** increase in population on the development site" and that this "is considered reasonable as a credit is afforded to the population of existing lawful residential development".⁵⁶ The contribution rates in the plan for transport land and works are calculated on this basis and it is the council's intention to offer credits for existing development.⁵⁷

However, this is not consistent with section 4.4 of the plan which says that no allowance will be made for the demand for transport infrastructure that is attributable to any existing development present on the development site. It explains that "the existing road and drainage networks will not meet the needs of the anticipated development to any degree and entirely new road and drainage networks will need to be designed and built to meet those needs".⁵⁸

We recommend the council clarify that existing development in the precinct is eligible for demand credits towards transport infrastructure contributions.

⁵⁵ For example, whether residents who access Windsor Road from Otago Street should pay for collector roads in other areas of the precinct.

⁵⁶ Vineyard CP, section 3.2.1.

⁵⁷ Vineyard CP Works Schedule and information from council, 25 November 2019.

⁵⁸ Vineyard CP, section 4.4.

5 Stormwater management

The total cost of stormwater management infrastructure in the Vineyard CP is \$40.50 million (24.5% of total costs), comprising:

- ▼ \$21.13 million for land (26.6% of the total *land* costs in the Vineyard CP)
- ▼ \$19.36 million for stormwater works (\$22.9% of the total cost of *works* in the Vineyard CP).⁵⁹

Our assessment of the stormwater management land and works in the Vineyard CP is as follows:

- ▼ **Criterion 1: Essential works** – The land and works are consistent with the essential works list.
- ▼ **Criterion 2: Nexus** – Nexus is established for the provision of stormwater land and works, however, the council omitted the cost of land and works for channel stabilisation works item DC1.
- ▼ **Criterion 3: Reasonable costs** – The cost of works is reasonable except for the council's approach to applying a contingency allowance.
- ▼ **Criterion 5: Apportionment** – The council's approach to apportionment within the precinct is reasonable, but it is not reasonable to apportion 100% of the costs of channel stabilisation works along DC2 to the plan given the damage caused by existing development.

Our assessment of land for stormwater management against **Criterion 3 (Reasonable cost)** is in Chapter 9.

Based on our findings, we recommend adjustments to the plan that would reduce the cost of stormwater works by \$1,415,489 (7.3%).

Our findings and recommendations are summarised in Table 5.1. Since our Second Draft Report, we have added a new recommendation regarding the apportionment of costs for channel stabilisation works along DC2.⁶⁰

⁵⁹ The total cost of stormwater management includes interest costs of \$1,504,246 for stormwater works and \$1,688,130 for stormwater land associated with a loan to forward fund the acquisition of land and delivery of key works.

⁶⁰ Our recommendations for reasonable costs are expressed in June 2019 dollars. Because this Final Report includes an apportionment adjustment for DC2 works, we no longer make a separate recommendation to index the estimated cost of this item (This was recommendation 11 in our Second Draft Report).

Table 5.1 IPART-recommended adjustments for stormwater management

Criterion	Finding	Recommendation	Land (\$)	Works (\$)
Total cost in plan (\$Mar2018)			21,132,209	19,364,957
Essential works	All land and works are on the essential works list			
Nexus	Nexus is established for all land and works in the plan			
	The costs of land and works for item DC1 are not included in the Works Schedule	Add cost of item DC1	1,472,783 ^a	646,357 ^b
Reasonable cost – Land	The cost of land is not reasonable (see Chapter 9)	Adjust cost of land	-3,205,656	
	Loan interest costs do not reflect the IPART-adjusted cost of works or the latest estimated interest rate (see Chapter 10)	Adjust interest costs	-1,234,650	
Reasonable cost – Works	Costs of works are reasonable except that, a 20% contingency allowance is too high for items costed by WTP	Apply 10% contingency allowance consistent with WTP's advice		-426,866
	Loan interest costs do not reflect the IPART-adjusted cost of works or the latest estimated interest rate (see Chapter 10)	Adjust interest costs		-1,016,629
Apportionment	Approach is reasonable except that:			
	The plan does not recognise stabilisation works are partly required to repair existing damage along DC2	Apportion 88% of the cost of channel stabilisation works (DC2) to the plan		-618,351
Total IPART-recommended cost adjustment			-2,967,523	-1,415,489
Total IPART-assessed reasonable cost (\$Jun2019)			18,164,685	17,949,468

^a Adjustment based on IPART revised average land values (\$85/sqm and \$200/sqm). Also includes 5% allowance for other acquisition costs

^b Adjustment includes indexation to June 2019.

Source: Vineyard CP Works Schedule and IPART analysis.

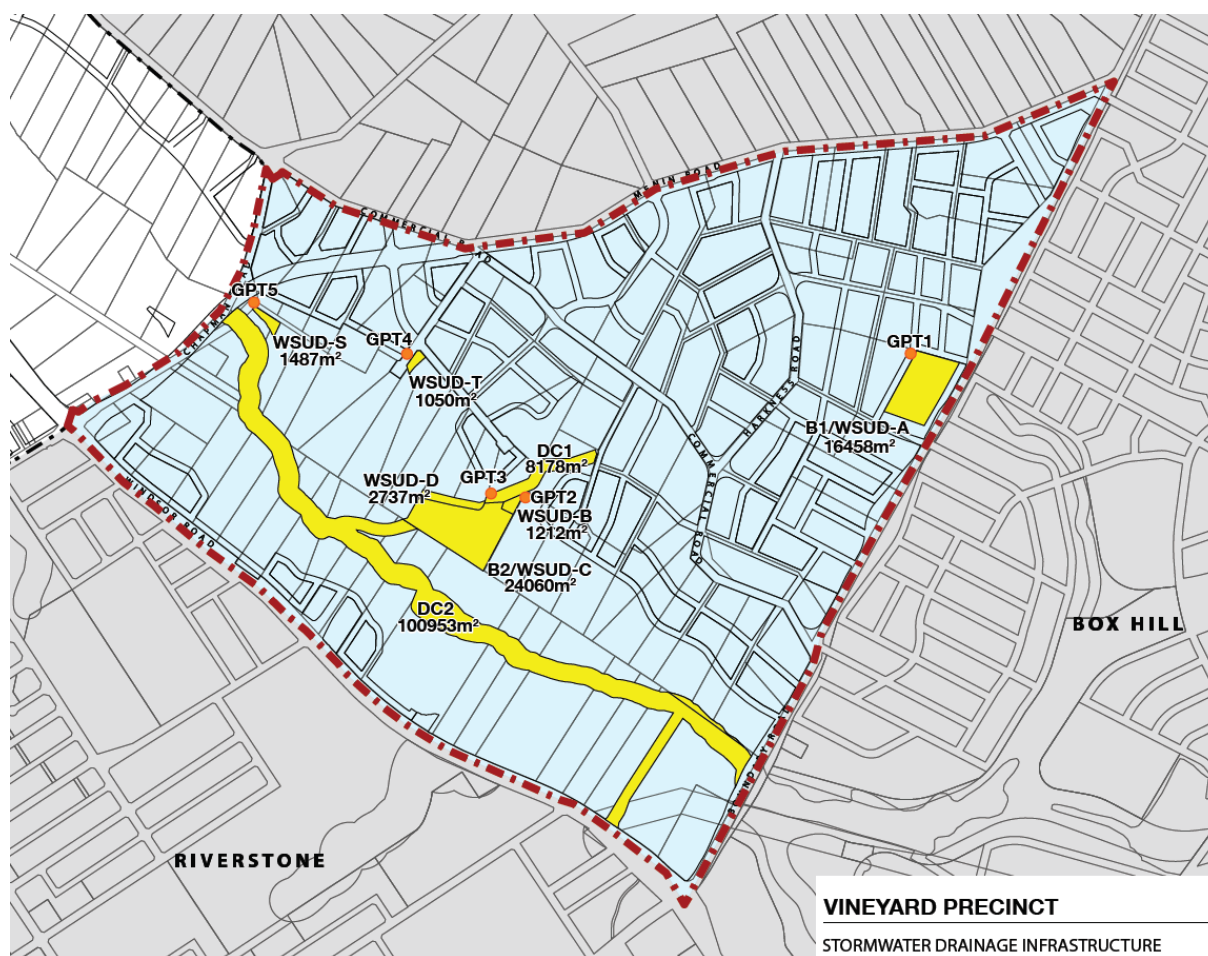
5.1 Overview of stormwater management in the Vineyard Precinct

The Vineyard Precinct is located within the South Creek sub-catchment of the Hawkesbury-Nepean River and includes a section of the Killarney Chain of Ponds. It is heavily flood affected, with 30-40% of the area flooded in a 100 year rainfall event.⁶¹

Figure 5.1 shows the location and size of stormwater infrastructure in the Vineyard CP.

⁶¹ Mott MacDonald, *Water Cycle Management Report, Vineyard Precinct*, October 2016, p 35 (Mott MacDonald report).

Figure 5.1 Location of stormwater infrastructure in Vineyard CP



Source: Cox Architecture, *Vineyard Stormwater Drainage Infrastructure Measurements*, January 2018

The plan submitted to IPART includes costs for detention basins and other water quality works. In addition, the plan includes significant costs for bank stabilisation works to mitigate flooding risk, post precinct development.

In relation to stormwater works, we recommended in our First Draft Report that:

- ▼ Channel stabilisation works DC2 be removed because nexus was not established
- ▼ The cost of channel stabilisation works DC1 be added to the plan
- ▼ The contingency allowance be reduced to 10%.

The council accepted our draft recommendation to add the cost of DC1 works. In response to the other draft recommendations, the council obtained advice on the need for DC2 works and proposed to use a higher contingency allowance of 20%.

Table 5.2 compares the total cost for stormwater works in the Vineyard CP originally submitted by the council, the council's submission to IPART's First Draft Report and our Second Draft Report.

Table 5.2 Comparison of stormwater works costs

	Vineyard CP (\$Mar18)	Council's submission - First Draft Report (\$Jun19)	IPART's Second Draft Report (\$Jun19)	Difference (\$)	Difference (\$)
	A	B	C	C-A	C-B
Basins 1 and 2	7,521,808	7,862,909	7,207,667	-314,141	-655,242
WSUD facilities	2,699,089	2,821,488	2,586,364	-112,725	-235,124
Drainage corridor 1	-	646,357	646,357	646,357	0
Drainage corridor 2	7,639,814	7,978,935	7,978,935	339,121	0
Loan interest costs	1,504,246	877,317	487,617	-1,016,629	-389,700
Total	19,364,957	20,187,006	18,906,940	-458,017	-1,280,066

Source: Vineyard CP, IPART's First Draft Report, Council submission to IPART First Draft Report and IPART calculations

In our Second Draft Report, we asked stakeholders to provide feedback to inform whether it is reasonable for the council to apportion the full cost of channel stabilisation works along DC2 to new development, given that consultants J Wyndham Prince (JWP) identified this work as necessary to "restore the existing damage to the watercourse."⁶²

We received feedback from one stakeholder who did not support the full inclusion of the cost of DC2 in the contributions plan. We did not receive a response from the council, so we asked for additional information to inform our analysis. The council's response and our recommendation are discussed under Criterion 5: Apportionment (see section 5.5 below).

5.2 Criterion 1: Essential works

The items of stormwater infrastructure in the Vineyard CP are set out in Table 5.3. There is a land component for each of the stormwater infrastructure items.

All land and works for stormwater infrastructure in the Vineyard CP are consistent with the essential works list in the Practice Note.

Table 5.3 Stormwater management works in Vineyard CP

Items on the essential works list	
▼ Detention basins	▼ Gross pollutant traps (GPTs)
▼ Bio-retention filters	▼ Stormwater channel stabilisation

5.3 Criterion 2: Nexus

The council used the Mott MacDonald Report, commissioned by DPE, to determine the stormwater infrastructure to be included in the plan.⁶³

⁶² IPART Second Draft Report, Assessment of Vineyard Contributions Plan, September 2019 p 58.

⁶³ Mott MacDonald, *Water Cycle Management Report, Vineyard Precinct*, October 2016.

Based on this study, the stormwater management strategy proposed for the Vineyard Precinct involves a combination of measures to manage water quantity and quality impacts of the expected development in the precinct:

- ▼ **Water quantity measures:** detention basins and realignment and channelisation of first order streams
- ▼ **Water quality measures:** rainwater tanks for reuse of roof or rainwater runoff; gross pollutant traps to catch larger pollutants and sediments before discharge into the watercourse; and bio retention “rain gardens” to provide online treatment for removal of fine sediments and nutrients.

In our First Draft Report we considered that nexus was not established for channel stabilisation works (DC2), based on the available information in the Mott MacDonald technical study. In response to our First Draft Report the council engaged J. Wyndham Prince (JWP) to review the need for channel stabilisation works along the Killarney Chain of Ponds. JWP presents arguments to justify the inclusion of DC2 channel stabilisation works in the plan.⁶⁴

Further, while nexus is established for other channel stabilisation works (DC1), the council omitted the cost of land and works for this item from the Works Schedule (and consequentially from the calculation of contribution rates).

We now consider nexus is established for all stormwater works in the plan.

Recommendation

- 10 Add cost of channel stabilisation works on drainage corridor 1 (DC1), which we estimate would increase the cost of:
 - Stormwater management land by an estimated \$1,472,783
 - Stormwater management works by an estimated \$646,357.

5.3.1 Nexus is established for channel stabilisation works DC2

The proposed stormwater management strategy for the Vineyard Precinct includes use of the capacity of the existing creek system to manage stormwater flow.⁶⁵ Our First Draft Report explained that the stormwater technical study prepared by Mott MacDonald established nexus for some channel stabilisation works in the plan (DC1), but not for others (DC2).

The Vineyard Precinct Post Exhibition Water Cycle Management Report was prepared by Mott MacDonald for DPE to support the master planning of the Vineyard Precinct.

Mott MacDonald identified that the existing creek conditions in the precinct contribute to flooding and it proposed channel stabilisation works on first order streams to address this flooding.⁶⁶ The Vineyard CP includes channel stabilisation works on DC1, which is a first order stream, and DC2 which comprises sections of the Killarney Chain of Ponds that are

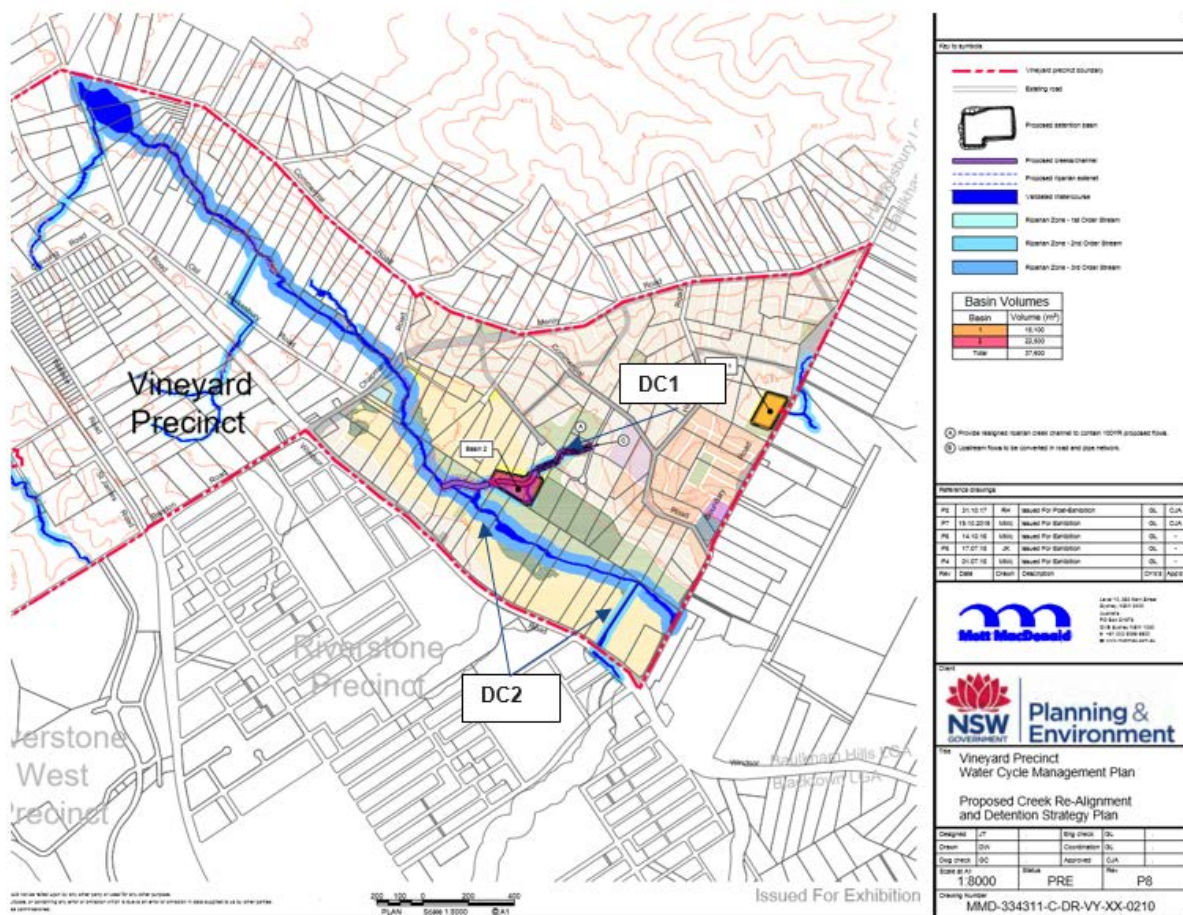
⁶⁴ J. Wyndham Prince (JWP), *Advice to Hawkesbury City Council*, 24 June 2019, pp 4-8.

⁶⁵ Vineyard CP, section 3.2.2

⁶⁶ Mott MacDonald, *Water Cycle Management Report, Vineyard Precinct*, October 2016.

second and third order streams. These sections of channel stabilisation works are shown at Figure 5.2.

Figure 5.2 Stream orders for sections of Killarney Chain of Ponds within the Vineyard Precinct



Source: Mott MacDonald, Appendix A, Map 0210

Prior to our First Draft Report we asked the council to explain why Vineyard CP includes channel stabilisation works DC2. It acknowledged that these channel works were not recommended by Mott MacDonald but they were proposed by GLN, then consultants to DPE,⁶⁷ and the council as a result of the surrounding development. The council said that:

Without the stabilisation works, it is expected that the banks will fail leading to considerable levels of complaint from adjoining urban development, and a higher level of maintenance costs to ensure ongoing stabilisation.⁶⁸

Anecdotally, it seems reasonable to expect that stabilisation works are required as a result of the significant amount of soil excavation and movement occurring around the riparian corridor as a result of the surrounding development.⁶⁹

⁶⁷ These are the same consultants engaged by the council to update the plan and prepare an application for IPART assessment.

⁶⁸ Information from Hawkesbury City Council, 17 February 2019.

⁶⁹ Information from GLN consultants for Hawkesbury City Council, 28 February 2019.

We considered that this explanation did not establish nexus. Although we did not explicitly address it in our First Draft Report, we also compared the development surrounding the proposed DC2 channel works with development in the Leppington and Leppington North Precincts when Camden Council had proposed similar works. We found that the flooding of land adjoining the riparian corridor in the Vineyard Precinct has been recognised and reflected in the planning for that area, distinguishing the Vineyard scenario from Leppington and Leppington North.⁷⁰

Our First Draft Report included a recommendation that item DC2 (\$7,639,814) be removed from the plan because the council had not established the need for these channel stabilisation works.

The council engaged JWP to review the need for DC2 channel stabilisation works in response to our draft recommendation. JWP's advice to the council identifies that there are areas of the Killarney Chain of Ponds watercourse receiving un-managed stormwater runoff that need stabilisation work to reduce the risk of erosion due to increased stream forming flows.⁷¹ It notes:

While un-attenuated catchments may not necessarily result in an increase in peak flow rates, the frequency of stream forming flows from unmanaged catchments is much greater and can lead to destabilisation of existing watercourses. Given that the existing rural/semi-rural catchment and watercourse is already under pressure due to development in the broader upstream catchment, DC2 channel stabilisation works would be justified in order to not only rectify existing channel degradation (which council considers necessary to facilitate new development), but also to protect the watercourse from degradation due to the further urbanisation of the catchment.⁷²

JWP also reviewed the relevant controls in the Hawkesbury City Council Growth Centres Development Control Plan (DCP 2017) and confirmed that DC2 channel stabilisation works are consistent with these controls.

Based on the new advice from JWP, we consider the council has established nexus for DC2 channel stabilisation works. However, we have made a recommendation to reduce the cost of the works so that developers are only paying for the proportion required to address the impact of new development in the precinct (see section 5.5.1).

5.3.2 Nexus is established for channel stabilisation works (DC1) but the cost was omitted from the works schedule

In the course of analysing the council's work schedules for our assessment against Criterion 3 (Reasonable costs), we found that the council had unintentionally omitted both the cost of land acquisition, and the cost of the channel stabilisation works for DC1.

⁷⁰ The land adjoining the Killarney Chain of Ponds corridor on either side is zoned E4, Environmental Living. The Finalisation report for the Vineyard Precinct Stage 1 notes that this zoning recognises the constrained nature of the land due to potential flooding and that the pattern of subdivision reflects flooding constraints. The most heavily flood constrained area has a minimum lot size of 20,000m² and the Finalisation report notes that this land does not have subdivision potential: *Vineyard Precinct Stage 1, Finalisation Report*, November 2017, p 21.

⁷¹ JWP, *Advice to Hawkesbury City Council*, 24 June 2019, p 6.

⁷² JWP *Advice to Hawkesbury City Council*, 24 June 2019, p 12.

As the Mott MacDonald report clearly establishes nexus for these works, we recommend that the cost of the works and the land on which they are located be added to the Vineyard CP, at an estimated cost of \$1,247,663 for land and \$646,357 for works.⁷³

5.4 Criterion 3: Reasonable costs

The total cost of stormwater management works in the Vineyard CP is \$19.36 million, comprising:

- ▼ \$14.88 million for the cost of works
- ▼ \$2.98 million for cost contingencies
- ▼ \$1.50 million of interest expenses associated with a loan for the design costs of some items.

The stormwater management works in the Vineyard CP have not been constructed, so there are no actual costs in the plan. In assessing whether the estimated costs of stormwater works in the plan are reasonable, we considered the basis for these estimates, including the on-costs and the contingency allowances applied. We consider interest expenses as a cross category issue in Chapter 10.

For most stormwater management works items in the plan, the council has used cost estimates from the 2015 report by WT Partnership (WTP),⁷⁴ and indexed the figures to the base year of the plan (March 2018). The WTP report contains specific costs for all basins and raingardens (including gross pollutant traps) in the plan and includes an allowance of 5% for project on-costs (described in the costing sheets as “design, investigation & fees”).

For the cost of drainage corridor bank stabilisation, the council has used the rate derived from cost estimates for similar work in the Leppington North Precinct contained in Camden Council’s *Camden Growth Areas Contributions Plan*. This rate was based on a square metre rate provided to Camden Council by Cardno in September 2012.⁷⁵

The council includes a 20% contingency allowance in the cost of all stormwater management items.

We found that:

⁷³ The addition of costs for DC1 includes a 20% contingency allowance.

⁷⁴ WTP, *Vineyard Precinct Stage 1 – Section 94 Contribution Construction Cost Estimate*, September 2015. The council also used this report for some transport and all open space embellishment costs. For stormwater management works, WTP peer reviewed earlier cost estimates prepared by Mott MacDonald (Mott MacDonald, *Water Cycle Management Report, Vineyard Precinct*, Draft, July 2015). Both the Mott MacDonald and WTP reports were commissioned by DPE.

⁷⁵ Cardno, Austral & Leppington North Precincts Water Cycle Management WSUD Report, prepared for NSW Department of Planning and Infrastructure, plus Responses to Exhibition Submissions, December 2012

- ▼ The use of site specific cost estimates for basins, Gross Pollutant Traps (GPTs) and raingardens, provided by WTP and based on Mott MacDonald's technical study for the Vineyard CP,⁷⁶ is reasonable.
- ▼ The contingency allowances for basins, GPTs and raingardens should be reduced from 20% to 10%, in line with the recommendation from WTP.
- ▼ For the cost of drainage corridor bank stabilisation works, using the unit rate derived from Camden Council's *Camden Growth Areas Contributions Plan* (CGA-CP) for works in the Leppington North Precinct and a contingency allowance of 20% is reasonable.⁷⁷

Recommendation

- 11 Reduce the contingency allowance for basins, GPTs and raingardens to 10% of base costs, consistent with WT Partnership's recommendation, which we estimate would reduce the cost of stormwater management works by \$426,866.

5.4.1 Contingency allowance for items costed by WTP is not reasonable

The council has applied a contingency allowance equal to 20% of the total base cost of all stormwater works in the plan.

However, in its report to DPE in 2015 providing specific costings for stormwater works in the Vineyard Precinct, WTP states:

WTP have not included contingency within the estimates but would assume a rate of 10% would be reasonable for new works. The IPART contingency benchmark of 20% is generally considered high for works of this nature.⁷⁸

In our First Draft Report we recommended that the council reduce the contingency allowance to 10% of the base cost of stormwater works, consistent with the advice from WTP.

In response to our First Draft Report the council argued for a higher contingency allowance of 20% for all stormwater works in the plan. We have considered all of the arguments the council makes in its submission and maintain that a 10% contingency allowance for basins, GPTs and raingardens is reasonable given WTP's advice.

WTP provided advice to DPE in 2015 on a reasonable contingency allowance in the context of the stormwater works in the Vineyard CP. While we have accepted a 20% contingency allowance in other plans we have recently assessed, we have also considered contingency allowances lower than 10% to also be reasonable, within the context of the estimate provided. In this instance we find no reason for the council to deviate from the consultant's advice.

For the cost of drainage corridor bank stabilisation works we accept that a contingency allowance of 20% is reasonable. Although Camden Council only applied a contingency

⁷⁶ WTP's cost estimates were based on Mott MacDonald's July 2015 technical study: Mott MacDonald, *Water Cycle Management Report, Vineyard Precinct*, Draft, July 2015

⁷⁷ IPART's assessment of the unit rate for drainage corridor bank stabilisation works in CGA-CP were considered reasonable and the nature of these works are unlikely to vary significantly.

⁷⁸ WTP, *Vineyard Precinct Stage 1 – Section 94 Contribution Construction Cost Estimate*, September 2015, p 3.

allowance of 7% it also included an allowance for professional fees that has not been factored in to Hawkesbury City Council's estimate.

5.5 Criterion 5: Apportionment

The council apportions the cost of stormwater management land and works to all residential development in the Vineyard CP on a per hectare of NDA basis.

The NDA of the Vineyard Precinct has been calculated after adjusting the total developable area by:

- ▼ Reducing the area of land zoned E4 Environmental Living from its expected average lot size (more than 9,000 square metres) to the NDA associated with a single dwelling in the R2 Low Density Residential zone (approximately 556 square metres)
- ▼ Removing the area of land zoned B2 Local Centre or B4 Mixed Use (which accounts for about 0.4% of the developable land in the plan's area), which the council assumes will not directly and materially increase the demand for the categories of public amenities or public services in the plan.⁷⁹

In the context of the Vineyard CP, non-residential development will be minimal, and not subject to contributions, and residential development will predominantly be low density.

We consider the council's approach to apportioning stormwater land and works costs on a per hectare of NDA basis is reasonable.

5.5.1 Approach to apportioning costs for channel stabilisation works along DC2 is not reasonable

In our Second Draft Report we asked stakeholders to provide feedback on whether it is reasonable for the council to apportion the full cost of channel stabilisation works along DC2 to new development, given that JWP identifies this work as necessary to "restore the existing damage to the watercourse".⁸⁰ We note the council considers that DC2 channel stabilisation works are necessary to facilitate new development in the precinct.


We received feedback from one stakeholder in response to our Second Draft Report, who did not support the full inclusion of the cost of DC2 in the contributions plan.⁸¹ We did not receive a response from the council, so we asked for additional information to support its position to apportion all costs to the plan. The council's subsequent response supported an approach that apportioned 100% of the cost of the works to the new development. The council also provided an alternative approach if its approach to apportionment was not supported. Its response noted:

Should IPART not be of the same view, it should also be noted that the Vineyard Stage 1 reach of Killarney Chain of Ponds Creek between Boundary Road and Chapman Road is approximately 1,700 m. Therefore, conservatively adopting 200 m of existing damage within the 1,700 m, Council

⁷⁹ Vineyard CP, section 3.1.2, Note 2 to Table 4 and section 2.5.

⁸⁰ JWP, *Advice to Hawkesbury City Council*, 24 June 2019, p 5.

⁸¹ Anonymous (individual 1), submissions to IPART Second Draft Report, 16 October 2019, p 4.



suggests that the apportionment of channel stabilisation costs for existing damage should be no more than 11.76%.⁸²

We consider the council's alternative approach to better account for existing damage to DC2, and consider it reasonable to apportion 88% of the cost of works to new development in the precinct.

Recommendation

- 12 Reduce the cost of channel stabilisation works DC2 by \$618,351, reflecting an approach that apportions 88% of the cost of works to new development.

⁸² Information from council, 6 November 2019.

6 Open space

The total cost of open space land and embellishment in the Vineyard CP is \$72.83 million (44.06% of total costs), comprising:

- ▼ \$44.41 million for land (55.9% of the total *land* costs in the Vineyard CP)
- ▼ \$28.42 million for open space embellishment (33.61% of the total cost of *works* in the Vineyard CP).

Our assessment of the open space land and works in the Vineyard CP is as follows:

- ▼ **Criterion 1: Essential works** – Open space land and its embellishment is consistent with the essential works list.
- ▼ **Criterion 2: Nexus** – Nexus is established for the provision of open space land and its embellishment, except for amenities blocks in local parks.
- ▼ **Criterion 4: Reasonable costs (works)** – The cost estimates for open space embellishment are not reasonable because:
 - For two district parks the council has included the cost of embellishing land containing existing native vegetation (ENV) which must be retained, and on which potential work is very restricted
 - The contingency allowance applied to base costs is not reasonable.

In the short term, it is reasonable for the council to use the revised cost estimates it obtained from Mitchell Brandtman in June 2019 to update the embellishment costs in the plan, with some adjustments.

- ▼ **Criterion 5: Apportionment** –Apportioning open space costs on a per person basis is reasonable.

Our assessment of land for open space against **Criterion 3 (Reasonable cost)** is in Chapter 9.

Based on our findings, we recommend adjustments to the plan that would increase the cost of open space embellishment (ie, works) by \$2,847,253.

Our findings and (short-term) recommendations for open space in the Vineyard CP are summarised in Table 6.1. These findings and recommendations are unchanged since our Second Draft Report. We also recommend that for its next review of the plan, the council obtain more detailed designs, or at a minimum, scope works for hypothetical parks of a similar size to those in the Vineyard Precinct.

Table 6.1 IPART-recommended adjustments for open space

Criterion	Finding	Recommendation	Land	Works
Total cost in plan (\$Mar2018)			44,408,700	28,416,706
Essential works	All open space land and embellishment is consistent with the essential works list			
Nexus	Nexus is established for the open space land and embellishment in the plan			
Reasonable cost - Land	The cost of land is not reasonable (see Chapter 9)	Adjust cost of land	-11,478,663	
Reasonable cost - Works	It is reasonable to use revised cost estimates obtained from Mitchell Brandtman for most parks.	Use Mitchell Brandtman cost estimates to update costs for sporting field, riparian land with play and ENV land in parks		178,530
		Use Mitchell Brandtman cost estimates with some adjustments to update costs for local parks and district parks.		2,668,723
Apportionment	Approach is reasonable			
Total IPART-recommended cost adjustment			-11,478,663	2,847,253
Total IPART-assessed reasonable cost (\$June2019)			32,930,037	31,263,959

Source: Vineyard CP; Council revised Works Schedule and IPART calculations.

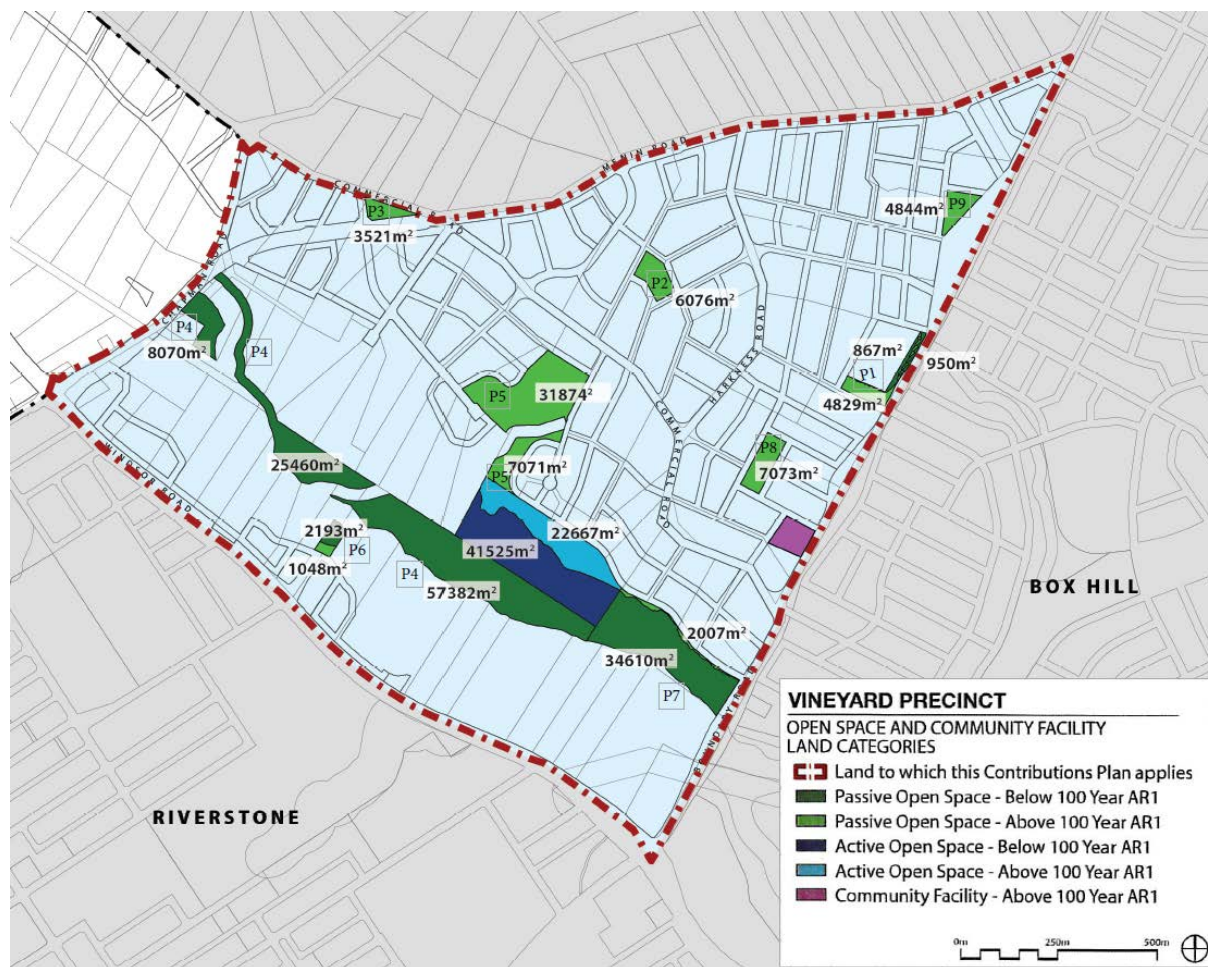
6.1 Overview of open space embellishment in Vineyard Precinct

The Vineyard CP includes a total of 26.21 hectares of open space, comprising:

- ▼ 6.42 hectares for active open space (playing fields)
- ▼ 16.65 hectares for district open space (three larger areas of passive open space, along Killarney Chain of Ponds and in the centre of the precinct – P4, P5 and P7)
- ▼ 3.14 hectares for local open space (smaller local parks scattered through the precinct – P1, P2, P3, P6, P8 and P9).

Figure 6.1 is a map showing the location and size of designated open space areas in the Vineyard CP (P1 to P9). The playing fields are “Active Open Space”.

Figure 6.1 Location of open space areas in Vineyard CP



Source: Created by IPART from Hawkesbury City Council's maps and open space measurements: see Hawkesbury City Council Application.

To estimate the cost of open space embellishment, the council used unit rates (\$ per square metre) for each type of park based on advice from cost consultant WTP. The advice was commissioned by DPE.

Our First Draft Report found that District Park 4 and District Park 5 had significant levels of existing native vegetation (ENV) and that it is not reasonable to estimate the cost of embellishing these parks using the district park embellishment rate given there are restrictions on how ENV land can be treated. We also found the contingency allowance of 15% applied to all open space works is not reasonable.

In response to our First Draft Report, the council provided revised cost estimates for embellishing open space obtained from its consultant, Mitchell Brandtman. The new cost estimates include more items of embellishment than what was in the initial estimate of costs used in the plan.

Our Second Draft Report recommended the council revise costs for open space works based on the Mitchell Brandtman estimates it had obtained with some adjustments.

Table 6.2 compares the total cost for open space works in the Vineyard CP, the council's submission to our First Draft Report and our Second Draft Report.

Table 6.2 Comparison of open space embellishment costs

	Vineyard CP (\$Mar18)	Council's submission - First Draft Report (\$Jun19))	IPART's Second Draft Report (\$Jun19)	<i>Difference (Second Draft Report less Vineyard CP)</i>	<i>Difference (Second Draft Report less Council submission)</i>
	A	B	C	C-A	C-B
Local parks	3,208,588	6,311,601	4,966,133	1,757,524	-1,345,488
District parks including riparian and constrained land	16,447,123	14,003,254	14,293,943	-2,153,180	290,689
– District park only land	N/A	1,684,768	1,975,457	911,199	290,689
– Riparian land with play area	N/A	10,051,230	10,051,230	N/A	-
– ENV land	N/A	2,267,256	2,267,256	N/A	-
Sporting field	8,760,995	12,003,904	12,003,904	3,242,909	-
Total	28,416,706	32,318,759	31,263,959	2,847,253	-1,054,800

Source: Vineyard CP, Council submission to IPART First Draft Report and IPART Second Draft Report

6.2 Criterion 1: Essential works

In our First Draft Report, we found that all open space land and items of embellishment in the Vineyard CP are consistent with the essential works list for open space in the Practice Note.

The plan includes land with ENV, which the UDIA NSW considers would be better funded through a funding process of the Office of Environment and Heritage (OEH). UDIA NSW recommends that IPART makes a policy recommendation for a funding mechanism for native vegetation to be protected.⁸³

For ENV land within parks, we consider bush regeneration and integration of paths is essential works as these works would be necessary to 'bring the open space up to a level where the site is secure and suitable' for passive recreation.⁸⁴ We do not consider these embellishments are solely for environmental purposes and therefore see no need to recommend an alternative funding mechanism.

The council's revised cost estimates in response to our Second Draft Report include additional embellishment items within parks and new categories of open space within district parks. We consider these are consistent with the essential works list. The types of embellishment in the Vineyard CP and the council's revised cost estimates are set out in Table 6.3.

⁸³ UDIA NSW submission to IPART First Draft Report, p 1.

⁸⁴ The Practice Note's definition of base level embellishment under essential works.

Table 6.3 Open space embellishment in Vineyard CP

Vineyard CP	Additional items included in the council's revised cost estimates
Local open space Site preparation and earthworks, paving, playground, picnic tables, shelter, BBQ, lighting, signage, bins, landscaping (turfing, mass planting), maintenance and establishment of soft landscaping	Local open space Male, female and accessible amenities (amenities blocks), shade sail and soft fall to play area, bench seats, bike racks, stormwater to park space (allowed to paved and rubber soft fall areas) and water bubblers
District open space Site preparation and earthworks, paving, parking, playground, picnic tables, shelter, BBQ, lighting, signage, bins, landscaping, maintenance and establishment of soft landscaping	District open space (unconstrained land) Male, female and accessible amenities (amenities blocks), shade sail and soft fall to play area, bench seats, bike racks and water bubblers Riparian land with play area within district parks Site preparation and earthworks, playground (small equipment only), picnic tables, shelter, BBQ, lighting, signage, bins, landscaping (turfing, mass planting) and fitness equipment ENV land within district parks Bush regeneration including weeding, propagating seeds, planting and maintenance, and integration of paths
Playing fields Site preparation and earthworks, playing fields, amenities building, parking, spectator seating, practice nets, paved areas, lighting, irrigation and drainage, landscaping (turfing, mass planting), maintenance and establishment of soft landscaping and irrigation	Playing fields Bench seats, bike racks, fitness equipment and water bubblers

Source: Vineyard Works Schedule and council submission to First Draft Report.

6.3 Criterion 2: Nexus

DPE commissioned a technical study on open space when preparing the planning proposal to rezone the Vineyard Precinct:

- ▼ Elton Consulting, *Social Infrastructure Assessment for Vineyard Precinct Stage 1*, November 2016 (Elton Study).

In assessing whether nexus is established, we consider both the amount of land available for open space and recreation purposes, and the number and types of facilities which are to be provided for active and passive recreation. Our assessment was informed by the Elton Study and the precinct finalisation report for Vineyard.⁸⁵

The Vineyard CP does not include a list of embellishments for open space. We have assessed the proposed embellishment against the nexus criterion by looking at the types of facilities included in the cost estimates. For our First Draft Report, we considered the WTP cost

⁸⁵ DPE, *Vineyard Precinct Stage 1, Finalisation Report*, November 2017, p 7, pp 13-17

estimates. For the Second Draft Report and this Final Report, we have considered the embellishments in the Mitchell Brandtman cost estimates, which are in June 2019 dollars.

We found that nexus is established for the open space land and works in the plan and that:

- ▼ The overall rate of provision of land (3.50 hectares per 1,000 residents) is reasonable
- ▼ The recreational facilities included in the Mitchell Brandtman cost estimates are generally appropriate to meet the needs of the expected residential population, except for the amenities blocks within local parks.

The impact of our recommendation to remove amenities blocks from local parks is costed in section 6.4.2 below.

6.3.1 Overall rate of land provision is reasonable

The Elton Study recommended a minimum of 21 hectares of open space. The draft Vineyard Precinct (Stage 1) Planning Report provided for 24.1 hectares of open space.⁸⁶ Post exhibition, as a result of refining land area measurements and integrating a further 3.72 hectares of open space in the form of ENV, the total area zoned RE1 in the Vineyard CP increased to 26.21 hectares. This results in an overall rate of provision of open space of 3.50 hectares per 1,000 residents, based on an estimated population of 7,489 new residents.

Although the rate is somewhat higher than the Growth Centres Development Code standard (2.83 hectares per 1,000 residents) and the rate of provision in several other plans we have seen for precincts in the North West Growth Area, we consider that nexus has been established, taking into account:

- ▼ The *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* nominates the council as the acquisition authority for all land in the precinct zoned RE1. This means it has a statutory obligation to acquire the land, regardless of whether it is included in the contributions plan or not.
- ▼ Accessibility of the land for recreation purposes.⁸⁷
- ▼ The recommendations in the Elton Study.

6.3.2 The type of recreational facilities in the council's revised cost estimates are reasonable, except for amenities blocks for local parks

The Elton Study for the Vineyard Precinct identified the need for:

- ▼ Two double playing fields with an associated amenities building and parking.

⁸⁶ DPE, *Vineyard Precinct Stage 1, Planning Report*, 2016, pp 17-18.

⁸⁷ The final planning report for the precinct explains that zoning of additional land with ENV for open space was required to meet the target of the Biodiversity Certification Order for the North West Growth Area. (DPE, *Vineyard Precinct Stage 1, Finalisation Report*, November 2017, p 14.) Nevertheless, it is intended to be available for passive recreation and we agree that it is reasonable to include the cost of the land in the plan.

- ▼ Embellishment of passive open spaces (ie, district and local parks), as directed by Hawkesbury Regional Open Space Strategy.⁸⁸

It also recommended linear open space in the extensive riparian corridor should be appropriately vegetated to create the amenity of a natural bushland setting and include embellishments to establish valuable, usable open space for passive recreation, but located outside of any core conservation areas. Proposed embellishment in the Elton Study included pathways and cycleways, fitness equipment, playgrounds, seating, barbeque and picnic facilities, signage and lighting.

Our First Draft Report found that the proposed facilities in the Vineyard CP are consistent with the recommendations in the Elton Study. The Mitchell Brandtman revised cost estimates include additional items, as listed in Table 6.3 above.

We consider that the range of facilities in the Mitchell Brandtman cost estimates remains generally consistent with the Elton Study, but that nexus is not established for amenities buildings in local parks. The Hawkesbury Regional Open Space Strategy suggests there would be minimal buildings and structures in local parks. In particular, amenities and toilets are not included for local parklands in the council's design guidelines.⁸⁹ The Mitchell Brandtman cost estimates include amenities block for local parks, each costed at \$250,000. We recommend these costs be removed, as further discussed in section 6.4.

6.4 Criterion 3: Reasonable costs

In 2015, GLN planning, on behalf of DPE, engaged WT Partnership (WTP) to provide estimates of the costs of embellishing a typical local park, district park and sporting field.

WTP used the estimates of the cost of a range of facilities, landscaping treatments and site preparation to derive a rate per square metre for embellishing a typical local park, district park and sporting field.⁹⁰ The council applied the relevant WTP square metre rate to the total area of each park and the sporting fields in the plan, and indexed the cost of each to the base period of the plan (March 2018). The council then applied a 15% contingency allowance to the total base construction costs to arrive at the total embellishment cost.

The cost estimates provided by WTP were high level estimates only. Our First Draft Report finding was that the estimates, both for specific items of embellishment as well as average square metre rates, were reasonable in most cases because they were provided by a consultant to DPE, and are within the range we have considered to be reasonable in other plans we have assessed. However, we found that it was not reasonable to:

⁸⁸ Clouston Associates and OneEighty Sport & Leisure Solutions, *Hawkesbury Regional Open Space Strategy*, May 2013; Elton Consulting, *Social Infrastructure Assessment for Vineyard Precinct Stage 1*, November 2016, pp 64, 66-67, and Table 6.

⁸⁹ Clouston Associates, *Hawkesbury Regional Open Space Strategy: Planning and Design Guidelines*, May 2013, p 21.

⁹⁰ WTP, *Vineyard Precinct Stage 1 – Section 94 Contribution Cost Estimate, Estimate for GLN Planning*, September 2015 (WTP Report). Note: The WTP estimates include a 5% allowance for "investigation and design" costs.

- ▼ Estimate the cost of embellishing extensive areas of ENV in two district parks using the district park embellishment rate, given there are restrictions on how ENV land can be treated.
- ▼ Apply a contingency allowance of 15% rather than 10% as recommended in the WTP advice.

Our First Draft Report included recommendations that addressed these two issues.

Following our First Draft Report, the council commissioned revised cost estimates from Mitchell Brandtman. Its submission proposes that these costs, inclusive of the consultant's recommended contingency allowance, replace the cost estimates in the Vineyard CP that was submitted to IPART.

The revised estimates:

- ▼ Include two extra categories of embellishment ("riparian land with play space" and "bushland regeneration") which the council intends to use in estimating the cost of embellishing land with ENV.
- ▼ For local parks, district parks and sporting fields:
 - Include more items but are not based on more detailed designs
 - Are much higher than the WTP estimates.
- ▼ For all parks, include a contingency allowance of 10% or less and other allowances.

Table 6.4 lists the embellishment rates used in the Vineyard CP and the revised rates provided by the consultant.

Table 6.4 Open space types and embellishment per square metre (including allowances)

	Local parks	District parks	Sporting field	Riparian land with play area	Bushland regeneration
Vineyard CP					
Embellishment rate/m ² (\$March 2018)	\$102.2	\$98.8	\$136.5	N/A	N/A
Updated QS estimates					
Embellishment rate/m ² (\$June 2019)	\$201.0	\$136.0	\$187.0	\$115.0	\$34.0

Note: The Vineyard CP per square metre costs were obtained in September 2015 and are indexed to March 2018. We have added the contingency costs to individual rates provided in Vineyard CP.

Source: Vineyard CP and Council submission to IPART First Draft Report.

We found that the assumed size of hypothetical parks is not reasonable and that the costs of some sub-items within the estimates for local and district parks are not reasonable.

Recommendations

- 13 Increase the open space embellishment costs by \$2,847,253, comprising:
 - \$178,530 for sporting fields, riparian land and land with existing native vegetation (ENV), based on revised cost estimates from Mitchell Brandtman

- \$2,668,723 for local parks and district parks, based on revised cost estimates from Mitchell Brandtman with some adjustments.
- 14 For its next review of the plan, the council obtain more detailed designs, or at a minimum, scope works for hypothetical parks of a similar size to those in the Vineyard Precinct.

6.4.1 The assumed size of hypothetical parks is not reasonable

Mitchell Brandtman assumes a standard size for each type of park in the Vineyard Precinct. The assumed park sizes are not representative of the parks in the Vineyard CP, particularly for local parks and district parks:

- ▼ The ‘standard’ local park is 1.3 hectares. The local parks in Vineyard are between 0.3 and 0.7 hectares.
- ▼ The ‘standard’ district park is 6.5 hectares. The size of the district park to which this rate is applied is 1.2 hectares (District Park 5, excluding land with ENV).

This is a problem because the standard parks costed by Mitchell Brandtman include fixed costs, which are not likely to be scalable. For example, local parks would typically have similar sized playgrounds, even if the total area for the parks varies. Because the parks in the Vineyard Precinct are smaller than the “standard” local and district parks, we would expect the averaging approach to underestimate the total cost of embellishment. This may also be an issue for sporting fields.

The opposite is true of the cost estimates for “riparian open space with play space”. For this type of embellishment, the cost estimates are based on a 1 hectare park. The areas to which this rate is applied are 5.1 hectares (within District Park 4) and 3.7 hectares (District Park 7), so we would expect the averaging approach to overestimate the total cost of embellishment.

To address this in the short term we have recommended adjustments to the cost of local and district parks, as outlined in section 6.4.2.⁹¹

For the next review of the plan, we recommend the council obtain more detailed designs and costings for each park. If this is not possible, at a minimum, the council should consider scoping the embellishment for parks that are similar in size to those in the Vineyard Precinct.

6.4.2 The fixed cost assumptions within local and district parks are not reasonable

Although we expected the averaging approach to underestimate the total cost of embellishment for local and district parks, we found that the council’s revised costs for embellishing these parks are at the higher end compared to embellishment rates we have assessed as being reasonable in other contributions plans.

We also note that the Mitchell Brandtman estimates were high compared to the WTP estimates, particularly for local parks (see Table 6.4).

⁹¹ Our overall adjustment is for a reduction in costs because we found that Mitchell Brandtman’s estimates of some fixed costs are not reasonable.

We found that this is due to:

- ▼ The inclusion of an amenities building in each local park.
- ▼ Comparably high costs for “play spaces”, particularly the cost of soft fall and shade structures in local and district parks.

For local parks and district parks, we recommend the council:

- ▼ Calculate a per square metre embellishment rate for local parks and district parks using the Mitchell Brandtman cost estimates, excluding fixed costs (play equipment, shade sail, fencing and an amenities block).
- ▼ Calculate the total variable cost for each park by applying the variable rate calculated above to the land area for each park (less 500 square metres for a play area).
- ▼ Add the IPART-revised fixed costs⁹² to the variable cost.
- ▼ Add allowances for preliminaries, margins, Long Service Levy, design fees, contingency and environment approvals at the rates recommended by Mitchell Brandtman for local parks and district parks.

This approach is set out in Table 6.5 and Table 6.6. These tables also show the overall cost on a per square metre basis for each park. For all local parks the costs are higher than what the council included in the plan originally submitted to IPART but less than what the council proposed following our First Draft Report. For the district park, the rate is higher than what the council included in the plan originally submitted and its revised estimate.

Table 6.5 IPART revised embellishment costs – local parks

Park	Variable costs (\$ per m ²)	Area (m ²)	Total variable costs (\$) ^a	Fixed costs for play area (\$) ^b	Total cost before allowances (\$) ^c	Total costs with allowances (\$) ^b	Total costs with allowances (\$ per m ²) ^c
Park 1	82	6,646	501,027	211,424	712,451	987,247	149
Park 2	82	6,076	454,560	211,424	665,984	922,857	152
Park 3	82	3,521	246,274	211,424	457,699	634,235	186
Park 6	82	3,241	223,448	211,424	434,873	602,605	146
Park 8	82	7,073	535,836	211,424	747,260	1,035,482	162
Park 9	82	4,844	354,126	211,424	565,550	783,686	187
Total cost					3,583,817	4,966,112	

Variable costs are applied to the total area of the park, less 500 square metres for the play area.

Fixed costs are the cost of a playground \$124,566, shade sail \$45,000 and fencing \$40,000.

Includes allowances for preliminaries, margins, Long Service Levy, design fees, contingency and environment approvals at the rates recommended by Mitchell Brandtman.

Source: Mitchell Brandtman estimates; IPART analysis.

⁹² Our estimate of fixed costs for a local park comprises a playground (\$124,566), shade sail (\$45,000) and fencing (\$40,000). For the district park we also include an amenities block (\$350,000). These costs are based on those recommended by our consultant during our 2018 assessment of Blacktown City Council's Contributions Plan 22 for Rouse Hill (CP22W).

Table 6.6 IPART revised embellishment costs – District Park 5 (unconstrained land)

Park	Variable costs (\$ per m ²)	Area (m ²)	Total variable costs (\$) ^a	IPART revised fixed costs for play area (\$) ^b	Total IPART revised cost before on costs (\$)	IPART revised costs with on-costs (\$) ^c	IPART revised costs with on-costs (\$ per m ²) ^c
Park 5	73	12,388	864,173	561,424	1,425,597	1,975,457	159

a Variable costs are applied to the total area of the park, less 500 square metres for the play area.

b Fixed costs are the cost of a playground \$124,566, shade sail \$45,000 and fencing \$40,000 and amenities block of \$350,000.

Includes allowances for preliminaries, margins, Long Service Levy, design fees, contingency and environment approvals at the rates recommended by Mitchell Brandtman.

Source: Mitchell Brandtman estimates; IPART analysis.

6.5 Criterion 4: Apportionment

The Vineyard CP apportions all open space land and embellishment costs to the new residential population of Stage 1 of the Vineyard Precinct on a per person basis. We consider it is reasonable to assume that the demand for open space is generated only by the new residential development in the precinct and apportion costs on this basis.

7 Community services

The Vineyard CP includes \$1.50 million for acquiring land to accommodate a community centre that will serve the needs of new residents in the Vineyard Precinct. The centre will ultimately provide services for Stages 1 and 2 of development in the Vineyard Precinct. The total area to be acquired is 0.6 hectares, at a total cost of \$3.03 million and 50% of the cost was apportioned in the plan to development within the Vineyard Precinct Stage 1.

Our assessment of the provision for community services in the Vineyard CP is as follows:

- ▼ **Criterion: Essential works** – Land for the community services facility is consistent with the essential works list.
- ▼ **Criterion 2: Nexus** – Nexus is demonstrated for the land for the community services facility for residents of the Vineyard Precinct.
- ▼ **Criterion 5: Apportionment** – The council's approach to apportioning the costs between development in the two precincts is reasonable.

Our assessment of **Criterion 3 (Reasonable cost)** is in chapter 9. We are satisfied that the cost of land for the community services facility is reasonable and we recommend a 5% allowance for other acquisition costs be added to the land costs.

Our findings and recommendations for community services are summarised in Table 7.1. These findings and recommendations are unchanged since our Second Draft Report.

Table 7.1 IPART-recommended adjustments for community services

Criterion	Finding	Recommendation	Cost of land (\$)
Total cost in plan (\$Mar2018)			1,500,000
Essential works	Land for the community services facility is consistent with the essential works list		
Nexus	Nexus is established		
Reasonable cost	The cost of land in the plan is reasonable and it is also reasonable to include an allowance for 'other acquisition' costs (Chapter 9)	Include a 5% allowance for 'other acquisition' costs	75,000
Apportionment	Approach to apportionment between development in Vineyard Precinct Stages 1 and 2 is reasonable		
Total IPART-recommended cost adjustment			75,000
Total IPART-assessed reasonable cost (\$June2019)			1,575,000

Note: In our First Draft Report we recommended the council index the land costs. This recommendation is no longer needed.

Source: Vineyard CP Works Schedule and IPART analysis.

7.1 Criterion 1: Essential works

The Vineyard CP includes 50% of the cost of acquiring a site of 0.6 hectares, which will accommodate a community centre with a gross floor area of 800 square metres.⁹³ The centre will provide multi-purpose facilities, with a range of flexible spaces capable of meeting multiple needs and delivering a range of community activities and services. It will ultimately be shared with the residents of Vineyard West (Vineyard Stage 2) when that precinct is developed.

The council's inclusion of land where community services facilities will be located is consistent with the essential works list.

7.2 Criterion 2: Nexus

The council has included 50% of the cost of land for the community centre in accordance with the recommendations in the report, *Social Infrastructure Assessment for Vineyard Precinct Stage 1*, which DPE commissioned from Elton Consulting (Elton Study).

The Elton Study noted that although details of a Stage 2 Indicative Layout Plan (ILP) design, population size and timing were all then unknown, residents of Stage 2 would need access to a community centre and the population may be insufficient to justify another small stand-alone facility. It recommended that a facility of around 500-600 square metres would be suitable for the Stage 1 population, and a facility of this size will require a site area of up to 0.3 hectares to allow for parking, setbacks and some outdoor space.⁹⁴

The Elton Study establishes nexus for the land in the plan (0.3 hectares) for community services.

7.3 Criterion 5: Apportionment

As the site of 0.6 hectares is for a community services facility which is intended to serve both Stages 1 and 2 of development in the Vineyard Precinct, as recommended by the Elton Study, it is reasonable to apportion the cost between the Vineyard CP, which applies to Stage 1, and a contributions plan which will apply to development in Stage 2.

The specific recommendations in the Elton Study presumed services for residents of Stages 1 and 2 would be provided on the same site. In the absence of any land use proposals for Stage 2 on which the council could project the residential population of Stage 2, it is reasonable in these circumstances for the council to apportion an equal share of the land costs to each stage.

⁹³ Vineyard CP, section 3.2.3.

⁹⁴ Elton Consulting, *Social Infrastructure Assessment for Vineyard Precinct Stage 1*, November 2016, p 41.

8 Plan administration

Vineyard CP includes \$1.27 million for plan preparation and administration costs. Our assessment of this cost is as follows:

- ▼ **Criterion 1: Essential works** – plan administration costs are consistent with the essential works list.
- ▼ **Criterion 2: Nexus** – nexus is established for the inclusion of plan administration costs.
- ▼ **Criterion 3: Reasonable cost** – estimating plan administration costs based on 1.5% of the cost of works is reasonable.
- ▼ **Criterion 5: Apportionment** – apportioning plan administration costs on the basis of per hectare of NDA in the Vineyard Precinct is reasonable.

Based on our findings and recommendations to adjust the total costs of works in the Vineyard CP, we estimate the cost of plan administration would increase by \$62,396.

Our findings and recommendations for plan administration costs in the Vineyard CP are summarised in Table 8.1.

Table 8.1 IPART-recommended adjustments for plan administration

Criterion	Finding	Recommendation	Cost (\$)
Total cost in plan (\$Mar2018)			1,268,189
Essential works	Plan administration is on the essential works list		
Nexus	Nexus is established		
	Calculate costs using IPART's benchmark of 1.5% of works costs is reasonable	Reduce administration costs to be 1.5% of the revised cost of works	62,396
Apportionment	Approach is reasonable		
Total IPART-recommended cost adjustment			62,396
Total IPART-assessed reasonable cost (\$June2019)			1,330,585

Source: Vineyard Works Schedule and IPART calculations.

8.1.1 Criterion 1: Essential works

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

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 that 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. the employment of someone to co-ordinate the plan).⁹⁵

8.1.2 Criterion 2: Nexus

We consider there is nexus between plan preparation and administration activities and the expected development in the Vineyard Precinct.

8.1.3 Criterion 3: Reasonable cost

The Vineyard CP includes a cost of \$1.27 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 Costs Report* (April, 2014), and we consider that in the context of the Vineyard CP it is a reasonable estimate.

Given that we have recommended the council revise the cost of works in each infrastructure category, we therefore recommend the council calculate the cost of plan administration for the Vineyard CP based on 1.5% of the adjusted cost of works.

We estimate that the adjusted cost of works based on our recommendations in this Final Report is \$88,705,632 and therefore reasonable administration costs are \$1,330,585, compared to the administration costs of \$1,268,189 currently in the Vineyard CP.

Consequently, we estimate plan administration costs in the Vineyard CP should be increased by \$62,396.

Recommendation

- 15 Calculate the cost of plan administration for the Vineyard CP based on 1.5% of the adjusted cost of works, which would increase the cost of plan administration by an estimated \$62,396.

8.1.4 Criterion 5: Apportionment

The council apportions the cost of plan administration to all residential development in the Vineyard CP on a per hectare of NDA basis.

⁹⁵ Department of Planning and Environment, *Local infrastructure Contributions Practice Note*, January 2019, p 15.

The NDA of the Vineyard Precinct has been calculated after adjusting the total developable area by:

- ▼ Reducing the area of land zoned E4 Environmental Living from its expected average lot size (more than 9,000 square metres) to the NDA associated with a single dwelling in the R2 Low Density Residential zone (approximately 556 square metres)
- ▼ Removing the area of land zoned B2 Local Centre or B4 Mixed Use (which accounts for about 0.4% of the developable land in the plan's area), which the council assumes will not directly and materially increase the demand for the categories of public amenities or public services in the plan.⁹⁶

In the context of the Vineyard CP, non-residential development will be minimal, and not subject to contributions, and residential development will predominantly be low density.

We consider the council's approach to apportioning administration costs on a per hectare of NDA basis is reasonable.

⁹⁶ Vineyard CP, section 3.1.2, Note 2 to Table 4 and section 2.5.

9 Land costs

This chapter presents our assessment of the reasonable cost of land across all infrastructure categories. The Vineyard CP includes \$79.46 million for land acquisition. This represents 48.1% of the total costs in the plan. The council has not acquired any of this land. Of the total 45.6 hectares of land in the plan, 30.0 hectares are constrained because they are flood-labile.⁹⁷

Our assessment found that the cost of land in the Vineyard CP is not reasonable. We considered the cost of land arising from revised land values and allowances proposed by the council and found that these are also not reasonable.

We found that:

- ▼ The average values used to estimate the cost of acquiring flood constrained and unconstrained land in the plan are not reasonable.
- ▼ Transmission line easement land in the plan is flood constrained and its cost should reflect the flooding constraint.
- ▼ It is not reasonable for the council to estimate the cost of unconstrained land with underlying zonings of R2 and R3 using a blended single average land value for the two zonings.
- ▼ The cost estimate for District Park 5 (DP5) is not reasonable because it does not account for the constraint on development arising from the presence of protected vegetation.
- ▼ It is reasonable for the council to include an allowance for 'other acquisition' costs associated with land acquisitions, however the 10% allowance proposed by the council is not reasonable.

Based on our findings, we recommend adjustments to the plan we estimate would reduce the cost of land by \$15.54 million (-19.6%). Our recommended adjustments are summarised in Table 9.1. While our findings are unchanged from our Second Draft Report, we have revised our recommendation about the average value of land with an underlying zoning of R2.

⁹⁷ Some flood-labile land in the plan is also subject to a transmission line easement.

Table 9.1 IPART-recommended adjustments for land costs

	Cost in Plan (\$Mar18)	IPART- recommended adjustment (\$Jun19)	IPART- assessed reasonable cost (\$Jun19)
Transport land	12,417,439		
Use a lower m ² value for flood liable land		-54,628	
Use adjusted m ² values for unconstrained R2 and R3 land		-1,651,556	
Include a 5% allowance for 'other acquisition' costs		535,563	
		-1,170,622	11,246,818
Stormwater land	21,132,209		
Include cost of land for DC1 (see Chapter 5)		1,472,783	
Use a lower m ² value for flood liable land		-1,753,179	
Use adjusted m ² values for unconstrained R2 and R3 land		-2,225,735	
Include a 5% allowance for 'other acquisition' costs		773,258	
Adjust interest costs (see Chapter 10)		-1,234,650	
		-2,967,523	18,164,685
Open space land	44,408,700		
Use a lower m ² value for flood liable land		-2,565,855	
Use adjusted m ² values for unconstrained R2 and R3 land		-2,603,250	
Reduce cost of District Park 5 to reflect restricted development potential		-7,877,655	
Include a 5% allowance for 'other acquisition' costs		1,568,097	
		-11,478,663	32,930,037
Community services land	1,500,000		
Include a 5% allowance for 'other acquisition' costs		75,000	
		75,000	1,575,000
Total land	79,458,348	-15,541,808	63,916,540

Note: Includes cost of interest on a loan that the council will use to fund the acquisition of land for stormwater management.

Source: Vineyard CP Works Schedule and IPART analysis.

9.1 Overview of land costs in Vineyard CP

The Vineyard CP includes \$79.46 million for acquiring 45.6 hectares of land for transport and stormwater infrastructure, open space and community services facilities in the precinct.

The council estimated the cost of all constrained and unconstrained land yet to be acquired in the plan by:

- ▼ Engaging a qualified valuer to provide advice on average market values (dollars per square metre) for different categories of land in the precinct.⁹⁸
- ▼ Applying the average values recommended by the qualified valuer to the land in the plan based on its assumptions about:
 - The underlying zoning for each parcel of land
 - The area of any encumbrance (or constraint).

In our First Draft Report we recommended the council:

- ▼ Use an average value of \$85 per square metre for flood constrained land and \$120 per square metre for transmission easement land.
- ▼ Reduce the cost of acquiring land for District Park 5 to account for the constraint on development arising from the presence of protected vegetation.
- ▼ Index the estimated cost of open space and community services land to the base period of the plan.

In response to the First Draft Report, the council proposed increased land costs arising from:

- ▼ Revised average land values, based on updated valuation advice.
- ▼ An allowance for 'other acquisition' costs associated with the acquisition of land in the plan.

The total cost of land arising from the council's revised land cost estimate is \$92.85 million, representing an increase of 16.9% compared with the plan that was submitted to IPART for assessment.

We engaged Access Valuations Pty Ltd (Access) to peer review the council's valuer's advice on average land values in the Vineyard Precinct.⁹⁹ Access's advice informed our draft recommendations on average land values in the Second Draft Report, in which we recommended the council:

- ▼ Use separate average values for unconstrained land with underlying zonings of R2 (\$200 per square metre) and R3 (\$400 per square metre)
- ▼ Use an average value of \$85 per square metre for flood constrained land
- ▼ Reduce the cost of acquiring land for District Park 5 to account for the constraint on development arising from the presence of protected vegetation
- ▼ Include an allowance of 5% for 'other acquisition' costs associated with the acquisition of land in the plan.¹⁰⁰

Table 9.2 compares the cost of land in the Vineyard CP originally submitted by the council, the council's submission to IPART's First Draft Report and our Second Draft Report.

⁹⁸ KD Wood, *Vineyard Sec 94 Contribution Plan – North West Growth Area*, 27 October 2017

⁹⁹ Access Valuations Pty Ltd, *Peer Review of valuation advice for Vineyard CP and advice on flood constrained land in CPs*, 23 August 2019.

¹⁰⁰ IPART Second Draft Report, *Assessment of Vineyard Contributions Plan*, September 2019, Chapter 9 – Land Costs.

Table 9.2 Comparison of land costs

Category	Total area (ha)	Vineyard CP (\$Mar18)	Council's submission to First Draft Report (\$Jun19)	IPART Second Draft Report (\$Jun19)	Difference (\$Jun19)	Difference (\$Jun19)
		A	B	C	C-A	C-B
Transport	4.33	12,417,439	16,193,780	9,314,902	-3,102,537	-6,878,878
Stormwater	14.80	21,132,209	25,143,350 ^b	16,960,836	-4,171,373	-8,182,514
Open space	26.21	44,408,700 ^a	49,861,295	29,871,440	-14,537,261	-19,989,856
Community services	0.30	1,500,000 ^a	1,650,000	1,575,000	75,000	-75,000
Total	45.63	79,458,348	92,848,425	57,722,177	-21,736,171	-35,126,248

^a The costs in the Vineyard CP for open space and community services land are based on 2017 land values. We made a recommendation in our First Draft Report that these costs be indexed to the base year of the plan. This is no longer relevant for open space land as our recommendations are based on 2019 land values. For community services land, we no longer consider it is necessary to index land costs. See section 9.5.

^b These costs include the cost of land for DC1 that was omitted from the Vineyard CP. Inclusion of land for DC1 brings the total area of land in the plan to 46.45 hectares.

Note: The costs include interest costs for stormwater land acquisitions.

Source: Vineyard CP Works Schedule; Council revised Works Schedule; and IPART analysis.

The council's submission to the Second Draft Report reiterated its arguments for higher average values for flood constrained land and land with an underlying zoning of R2 and for a 10% 'other acquisition' cost allowance.¹⁰¹

9.2 Stakeholders and valuers have different opinions about average land values

The council and some landholder submissions to our Second Draft Report propose higher values for flood constrained land and land with an underlying zoning of R2 than the average values we recommended.¹⁰² The council's submission to the Second Draft Report includes a response from its valuer, KD Wood, to the peer review we commissioned of KD Wood's earlier valuation advice, from Access. KD Wood and Access agree on the average value of land with an underlying zoning of R3, but disagree on the average value of R2 and flood constrained land. This disagreement arises from different analysis and interpretation of relevant comparison sales.

In contrast to the other responses, Urbis's submission to our Second Draft Report suggests that the land values proposed by the council are too high and do not take into account the cumulative impact of proposed local and state contributions and the costs of subdivision and associated infrastructure delivery.¹⁰³

¹⁰¹ Council submission to IPART Second Draft Report, pp 1-3.

¹⁰² Submissions to IPART Second Draft Report from Hawkesbury City Council, Individual 2 (Anonymous), Individual 3 (P Bond), Individual 4 (Anonymous), Individual 5 (C McVicar) and Individual 6 (Anonymous), October 2019.

¹⁰³ Urbis submission to IPART Second Draft Report, October 2019.

There are a range of factors that may contribute to uncertainty and differences in opinion about the value of land in the Vineyard Precinct at this stage of development:

- ▼ High council rates (reflecting the increased value of land since rezoning) may be a financial burden for some landholders that could motivate them to sell quickly and from a weakened negotiating position.
- ▼ The absence of LIGS funding for the Vineyard Precinct means that contribution rates paid by developers are higher than in neighbouring precincts. This reduces the developers' margins and therefore the prices they may be prepared to pay for land.
- ▼ There is uncertainty about the level of contribution rates until the council adopts a contributions plan:
 - Lower contribution rates may make development more attractive for developers and increase the value of land
 - Higher contribution rates may have the opposite effect.

Given the differences in the professional opinions of valuers and uncertainty about the value of land in the Vineyard Precinct before development has commenced, we consider it is appropriate that the risks associated with estimating land values are fairly allocated between the council and developers.

We do not agree with the council's claim that our recommendations on land values would result in a significant shortfall in contributions.¹⁰⁴ This would only occur if the council does not review the plan to include actual costs and updated estimates based on established sales evidence when development commences in the precinct. We have recommended that the council review the plan within three years, at which point it should update land values.

We also note the concerns of individual land holders about the impact of our recommendations on average land values in the Vineyard Precinct on the value of their individual land holdings. Our recommended average values for the plan do not determine the market value that the council or a developer will pay for any individual land holding – this is determined through separate negotiations that take account of the site-specific aspects and value of the land.

Our assessment provides recommendations to the Minister on the reasonableness of the costs the council has included in the plan, including the reasonableness of the council's estimates of land costs. The Minister will consider our recommendations and provide advice to the council on changes it should make to its contributions plan before it is adopted. Therefore, our recommendations on land values may influence the total cost of land in the plan and the resulting contribution rates, but they will not determine the value of any particular land holding in the precinct.

9.3 The proposed value for flood constrained land is not reasonable

Based on a valuer's advice, the Vineyard CP includes an average value for flood constrained land of \$100 per square metre.

¹⁰⁴ Council submission to IPART Second Draft Report, October 2019, p 2.

Our First and Second Draft Reports included a recommendation that the council use a value of \$85 per square metre for flood constrained land. We noted that:

- ▼ The proposed value for flood constrained land appeared high compared with the value of constrained land we have found to be reasonable in other plans, for areas of the North West Growth Area (NWGA).
- ▼ The council's valuer did not provide sales evidence or analysis to justify these rates.
- ▼ The council's valuer advised that unconstrained land values in Vineyard are lower than other NWGA precincts, reflecting the early stage of development and location of the precinct.

In this context we considered it was not reasonable to apply a value for constrained land with limited potential that is higher than in other precincts.

The council's submissions to our First and Second Draft Reports included updated and further valuation advice that retains an average value for flood constrained land of \$100 per square metre.¹⁰⁵ The council considers it has demonstrated that the average value of constrained land in the plan is reasonable.

We have considered all information and opinions submitted by the council about the value of flood constrained land in the Vineyard Precinct. We also considered advice we obtained from Access Valuations Pty Ltd (Access).¹⁰⁶ We note that there are differences in the professional opinions of the council's valuer and Access in relation to the average value of flood constrained land in the Vineyard Precinct.

We maintain our draft recommendation that the council use a value of \$85 per square metre for flood constrained land. We note that this value is consistent with the value of flood constrained land we have recommended for other precincts in the NWGA and that has been proposed and adopted by other councils.

Recommendation

- 16 Use a value of \$85 per square metre for flood constrained land in the Vineyard Precinct, including for land where development is also constrained by a transmission line easement.

9.3.1 Our valuer supports an average value of \$85 per square metre for flood constrained land

There are differences in the professional opinions of the council's valuer, KD Wood, and our consultant valuer, Access, in relation to the average value of flood constrained land in the Vineyard Precinct. The council's further valuation advice from KD Wood (dated June 2019), provided in response to our First Draft Report, outlines a sample of comparable sales to justify the council's proposed average value of \$100 per square metre.

¹⁰⁵ See for example, council submission to IPART Second Draft Report, pp 1-3.

¹⁰⁶ Access reviewed KD Wood's reports to the council dated 27 October 2017 and 24 June 2019. See: Access Valuations Pty Ltd, *Peer Review of valuation advice for Vineyard CP and advice on flood constrained land in CPs*, 23 August 2019: <https://www.ipart.nsw.gov.au/CP-Vineyard>

We requested advice from Access Valuations Pty Ltd (Access) on the average value of constrained land in the Vineyard CP, including a peer review of KD Wood's advice to the council.¹⁰⁷

Access identifies that, in justifying an average value of \$100 per square metre for flood constrained land, KD Wood does not:

- ▼ include the most relevant sales (considering dates of sales and location of land)
- ▼ appear to take account of the infrastructure already existing in precincts outside Vineyard and the associated increased value of land in these precincts
- ▼ accurately analyse the zonings, constraints, improvements and other factors that influence the comparable unimproved land rates.¹⁰⁸

Access analysed recent relevant sales of flood constrained land within the Vineyard Precinct and in surrounding precincts between May 2017 and August 2019 and noted that these sales do not support an average value of \$100 per square metre. Access advises that, based on its sales comparison, an average value of \$80-\$85 per square metre for flood constrained land in the Vineyard Precinct is more realistic.

The council's submission to our Second Draft Report includes a response from KD Wood to Access's peer review, providing sales evidence and analysis to support KD Wood's arguments for an average value of \$100 per square metre for flood constrained land. Two other submissions to our Second Draft Report from individual land holders in Vineyard also do not support our recommended average value of \$85 per square metre for flood constrained land, arguing that this value is too low.¹⁰⁹

We have considered the council and land holder submissions and maintain our recommendation that the council use an average value of \$85 per square metre in the contributions plan, based on Access's advice.

9.3.2 A single acquisition may not represent an average value across the precinct

The council also provided the following reports from the valuer appointed by the Valuer-General in relation to the council's acquisition of 5 O'Dell St, Vineyard under the hardship provisions of the *Land Acquisition (Just Terms Compensation) Act 1991* (the Act):

1. Preliminary Report, under letter dated 16 April 2019
2. Revised Preliminary Report, under letter dated 9 August 2019
3. Final Determination, under letter dated 12 November 2019.

The council considers that the determination for 5 O'Dell St provides an indicative basis for the value of constrained land in the precinct. The council is partially acquiring this lot and

¹⁰⁷ Access reviewed KD Wood's reports to the council dated 27 October 2017 and 24 June 2019. See: <https://www.ipart.nsw.gov.au/CP-Vineyard>.

¹⁰⁸ Access Valuations Pty Ltd, *Peer Review of valuation advice for Vineyard CP and advice on flood constrained land in CPs*, 23 August 2019, pp 2-4.

¹⁰⁹ Submissions to IPART Second Draft Report from Individual 3 (P Bond) and Individual 4 (Anonymous), October 2019.

the land to be acquired is flood constrained. The Preliminary Report provided a valuation based on a value of constrained land of \$100 per square metre, which the council argues supports the average value for constrained land proposed by KD Wood and reflected in the plan. We considered this example in making our draft recommendation in the First Draft Report.

The Revised Preliminary Report and Final Determination adopt a higher market value that is based on a different interpretation of underlying zoning and the impact of flood constraints.¹¹⁰

The significant variation in the preliminary and final valuations for 5 O'Dell St highlights the difficulty in using a single valuation or acquisition to inform the average value of land in a contributions plan. A single valuation may reflect site specific factors and may not, therefore, be representative of the average value for all flood constrained land the council has to acquire in the plan.

9.3.3 Lunney Watt was not engaged to provide advice on average land values

The council also considers that the valuer engaged by IPART to provide advice on land constrained with native vegetation, Lunney Watt, has endorsed the proposed average value of constrained land in the Vineyard CP of \$100 per square metre.

We note that Lunney Watt was not asked to provide advice on the average value of constrained land in the Vineyard CP. It provided advice on the application of the Act and valuation principles to District Park 5, comprising land constrained by existing native vegetation.¹¹¹

In estimating the impact of its recommendation, Lunney Watt applied the average land values from the Vineyard CP and noted that the values in the plan are within acceptable market parameters for the different land categories. It also noted that Blacktown City Council (BCC), The Hills Shire Council (THSC), Hawkesbury City Council, Sydney Water Corporation and DPIE have demonstrated a preparedness to pay a price for constrained land ranging from \$50 to \$100 per square metre, depending upon the size, nature and location of the land. Our recommended value of \$85 per square metre for flood constrained land is also within this range.

9.4 Transmission line easement (TLE) land in the plan is flood constrained

The Vineyard CP includes an average value of \$150 per square metre for TLE land, based on a valuer's advice of an average value of \$120-150 per square metre.

Our First Draft Report included a recommendation that the council use a value of \$120 per square metre for flood constrained land. We noted that:

¹¹⁰ In particular, the revised valuation considers the development potential of the land. This was not considered in the earlier valuation. It also assumes a different underlying zoning from the zonings indicated in the Indicative Layout Plan.

¹¹¹ Lunney Watt & Associates Pty Ltd, *Valuation Consultancy Advice – Vineyard Release Precinct*, 18 June 2019. See: <https://www.ipart.nsw.gov.au/CP-Vineyard>

- ▼ The council's valuer recommended a range for TLE land of \$120-150 per square metre. This represented a discount on the average value of R2 land of 50-60%.
- ▼ The average value of TLE land in other plans assessed by IPART has consistently been 60% of the average value of R2 land. This is also consistent with guidance provided by the Land and Environment Court.¹¹²
- ▼ The council did not explain why the TLE land in Vineyard CP should attract the highest value in the valuer's range.

The council argues that our position was not justified and that we should remove the recommendation in relation to TLE land. It considers that the advice from its valuer provides reasonable justification for its proposed average value of \$150 per square metre for TLE land and that it was prudent to adopt the highest value given the council had been conservative in other respects.¹¹³

The relevant transmission line runs across the southern-most corner of the Vineyard Precinct, crossing Boundary Rd and Windsor Rd. The acquisition of TLE land is required for stormwater channel DC2, along the Killarney Chain of Ponds. We have reviewed the TLE land to be acquired for DC2 and found that it is flood constrained.

The council's valuer provided advice on the average value of TLE land, representing a discount on the underlying unconstrained land value. However, we no longer consider it is reasonable to use a value for TLE land because the more substantial constraint is the risk of flooding.

We therefore recommended that the council use the average value of flood constrained land (\$85 per square metre) for all TLE land in the Vineyard CP.

9.5 Unconstrained land in the plan

Unconstrained land to be acquired by the council in the Vineyard Precinct includes land with underlying zonings of R2 (Low Density Residential), R3 (Medium Density Residential) and B1 (Neighbourhood Centre).

We found that:

- ▼ It is not reasonable for the council to estimate the cost of unconstrained land with underlying zonings of R2 and R3 using a blended single average land value for the two zonings.
- ▼ The cost of land for community services, which assumes an underlying commercial land use zoning, is reasonable.

Recommendation

- 17 Use a value of \$250 per square metre for unconstrained land with an underlying zoning of R2 and \$400 per square metre for unconstrained land with an underlying zoning of R3, reflecting the different development yields and values associated with these zonings.

¹¹² See *Constantine v Blacktown City Council (No 2)* [2016] NSWLEC 81 (6 July 2016).

¹¹³ Council submission to IPART First Draft Report, p 34.

9.5.1 A blended average value for R2 and R3 is not reasonable

The Vineyard CP includes an average value for unconstrained land with an underlying zoning of R2 and R3 of \$300 per square metre, based on advice from a valuer.

In recommending an average value for unconstrained R2 and R3 land in the Vineyard CP of \$300 per square metre, the council's valuer compared the value of R2 and R3 zoned land in the Vineyard Precinct with the same zonings within Riverstone East, Marsden Park, Rouse Hill and Schofields. It noted:

We do not consider residential englobo land would attract as high a rate within the Vineyard precinct because of its further distance from both Parramatta and Sydney CBD's...¹¹⁴

In response to the First Draft Report, the council proposed that IPART increase the average value of unconstrained land with an underlying zoning of R2 or R3 from \$300 per square metre to \$350 per square metre based on updated advice from its valuer, KD Wood.¹¹⁵ KD Wood's June 2019 advice is based on analysis of comparison sales between February 2017 and September 2018 in Marsden Park, Box Hill, Riverstone, North Kellyville and small sized lots in Vineyard.

KD Wood presents the following argument for increasing the average value of R2 and R3 land:

Whilst IPART has recommended this rate [\$300/m²] be adopted in light of more recent sales evidence and the rates adopted in the neighbouring precincts of Marsden Park, Marsden Park North and Box Hill, we consider this rate should be revised to \$350/m². This would bring the rate in line with that adopted by Blacktown Council and the Department of Planning in these release precincts for land of similar topography and in close proximity to the subject, in fact, land within the Elara Estate, Stockland and New Park Estate, Winten was increased to \$385/m² for Voluntary Planning Agreement (VPA) purposes in line with market movements.¹¹⁶

The Stockland and Winten developments referred to by KD Wood are in Marsden Park, where development is well-progressed.

We engaged Access Valuations Pty Ltd (Access) to peer review KD Wood's valuation advice to the council. This review included a comparison of recent sales in Vineyard and surrounding precincts.

As with constrained land values, Access identifies that, in justifying an average value of \$350 per square metre for unconstrained R2 and R3 land, KD Wood does not:

- ▼ Include the most relevant sales (considering dates of sales and location of land)
- ▼ Appear to take account of the infrastructure already existing in precincts outside Vineyard and the associated increased value of land in these precincts
- ▼ Accurately analyse the zonings, constraints, improvements and other factors that influence the comparable unimproved land rates.¹¹⁷

¹¹⁴ KD Wood, *Vineyard Sec.94 Contributions Plan – North West Growth Area*, October 2017, p 14.

¹¹⁵ Council submission to IPART First Draft Report, pp 40-41.

¹¹⁶ KD Wood, *Advice to Hawkesbury City Council*, 24 June 2019, p 2.

¹¹⁷ Access Valuations Pty Ltd, *Peer Review of valuation advice for Vineyard CP and advice on flood constrained land in CPs*, 23 August 2019, pp 2-4.

Access advises that recent comparable sales show clear delineation between R2 and R3 zoned sites in the Vineyard Precinct and a difference in land values between the two zones. It considers that a reasonable average value for land with each of these underlying zonings is:

- ▼ \$200 per square metre for land zoned R2.
- ▼ \$400 per square metre for land zoned R3.

Access's advice reflects that the development yields achieved from land with R2 and R3 zonings are significantly different and are recognised by the market.

The council's submission to our Second Draft Report includes a response from KD Wood to Access's peer review. KD Wood does not object to using separate average values for R2 and R3 land. The valuer agrees with Access in relation to the average value of R3 land (\$400 per square metre) but disagrees with Access on the average value of R2 land. KD Wood provides sales evidence and analysis to justify its argument that land with an underlying zoning of R2 has an average value of \$300 per square metre, compared with \$200 per square metre recommended by Access.¹¹⁸ Other submissions to our Second Draft Report from individual land holders in Vineyard also do not support our recommended average value of \$200 per square metre for land with an underlying zoning of R2, arguing that this value is too low.¹¹⁹

We have considered the council and land holder submissions and noted their concerns about our draft recommendation that the council apply an average value of \$200 per square metre for land with an underlying zoning of R2. Given the differences in the professional opinions of the relevant valuers and uncertainty about the value of land in the Vineyard Precinct before development has commenced, we consider it is appropriate that the risks associated with estimating the value of this land are fairly allocated between the council and developers. We have recommended that the council review the plan within 3 years. At this time, the council should include any actual costs for land it has acquired and update its land cost estimates based on established sales evidence for land within the precinct.

We maintain our recommendation that the council apply separate values for land with an underlying zoning of R2 and an underlying zoning of R3. We made a similar recommendation to estimate land costs using separate R2 and R3 values for the Camden Growth Areas Contributions Plan.¹²⁰

We also maintain our recommendation that the council apply an average value of \$400 per square metre for land with an underlying zoning of R3, as advised by Access and agreed by the council and its valuer. For land with an underlying zoning of R2, we now recommend that the council apply an average value of \$250 per square metre. This is the mid-point between \$200 per square metre, as advised by Access and \$300 per square metre as proposed by the council and its valuer.

This value represents a sharing of the risks associated with estimating the cost of land with an underlying zoning of R2 until development commences and the council next reviews the plan.

¹¹⁸ KD Wood, *Advice to Hawkesbury City Council*, 10 October 2019, p 2.

¹¹⁹ Submissions to IPART Second Draft Report from Individual 2 (Anonymous), Individual 5 (C McVicar) and Individual 6 (Anonymous), October 2019.

¹²⁰ IPART, *Assessment of Camden Growth Areas Contributions Plan*, May 2018, pp 77-79.

Based on our review of the location and underlying zoning of land to be acquired in Vineyard CP, we estimate that this would reduce the cost of land in the plan by \$6,480,541.

9.5.2 The cost of commercial land for community services is reasonable

The Vineyard CP includes \$1,500,000 for acquiring commercial land for community services. As discussed in Chapter 7, this represents 50% of the total cost of the land, reflecting the apportionment to the Vineyard CP.

The cost estimate for this land is based on an average value recommended by the council's valuer in October 2017. We made a draft recommendation in the First Draft Report that the council index the cost of community services land to the base year of the plan. We no longer consider that it is necessary to index this land cost given land values in Sydney have fallen since the valuer's advice in October 2017.

We consider that the cost in Vineyard CP of \$1,500,000 for acquiring commercial land for community services is reasonable.

9.6 Land for District Park 5 (DP5) is constrained by protected vegetation

The cost of land for DP5 in Vineyard CP is \$11,683,500. This cost is based on the council's application of its valuer's recommended average values¹²¹ for:

- ▼ Unconstrained land zoned R2 or R3
- ▼ Flood constrained land.

Our First Draft Report included a recommendation that the council reduce the estimated cost of acquiring land for DP5 to account for the constraint on development arising from the presence of protected vegetation, comprising:

- ▼ 26,557 square metres with existing native vegetation (ENV),¹²² and
- ▼ 12,388 square metres within a native vegetation retention (NVR) area.

The council does not support this recommendation, disagreeing with:

- ▼ The classification of the land in the context of the rezoning process
- ▼ The interpretation of the *Land Acquisition (Just Terms Compensation) Act 1991* (the Act)
- ▼ Our recommended average value for flood constrained land of \$85 per square metre.¹²³

The council proposed a revised cost for DP5 of \$10,000,000, using the following average values:

¹²¹ These are the values at the time the council submitted Vineyard CP for assessment. In its submission to the First Draft Report, the council proposes to increase the average values for unconstrained land with underlying zonings of R2 and R3. See section 9.4

¹²² Information from DPIE, 25 March 2019.

¹²³ Council submission to IPART First Draft Report p 35.

- ▼ \$300 per square metre for unconstrained land (representing a discount of \$50 per square from its updated unconstrained R2 and R3 land value “for likely contingencies”¹²⁴), and
- ▼ \$100 per square metre for constrained land.

It estimates 9,000 square metres of DP5 is constrained by the riparian corridor and the remaining 29,945 square metres is unconstrained. This gives an estimated cost of \$9,883,500 that the council has rounded up to \$10,000,000.

We maintain that the cost estimate for District Park 5 (DP5) is not reasonable because it does not account for the constraint on development arising from the presence of protected vegetation.

Recommendation

- 18 Reduce the estimated cost of acquiring land for District Park 5 by \$7,877,655 to account for the constraint on development arising from the presence of protected vegetation.

9.6.1 We maintain our finding that land for District Park 5 is constrained

We maintain our finding from the First Draft Report that the land for DP5 is constrained by the presence of protected vegetation. This finding is based on the following considerations:

- ▼ The presence of native vegetation was recognised in the Biodiversity Conservation Order (BCO) in December 2007.
- ▼ The location and total area of vegetation to be retained and protected in Vineyard Precinct Stage 1 changed through the precinct planning process and was finally determined based on the conservation value of the vegetation and requirements of the BCO. This was reflected in the Finalisation Report and rezoning of land in Vineyard Precinct Stage 1 in November 2017.
- ▼ Expansion of DP5 to incorporate additional native vegetation facilitated its protection but was not related to a need for additional open space in the precinct.
- ▼ Section 56 of the Act provides that any increase or decrease in the value of land caused by the carrying out of, or the proposal to carry out, the public purpose for which the land was acquired, must be disregarded in determining its market value. For DP5, the relevant public purpose is the provision of land for public recreation
- ▼ There has been no reduction in the value of ENV land for DP5 caused by the provision of land for public recreation (the public purpose); the value of land reflects its inherent characteristics, conservation value, and the need to protect the land to meet the requirements of the BCO. Protection of land under the BCO is not a public purpose which should be disregarded under the Act.
- ▼ Disregarding the public purpose of NVR land to be acquired for DP5 in accordance with section 56 of the Act, the underlying zoning of the land is R2. However, the land is constrained by the restriction on clearing NVR under the *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* (Growth Centres SEPP). Some of the NVR land is also flood-constrained.

¹²⁴ KD Wood, Letter to Hawkesbury City Council, 24 June 2019, p 22.

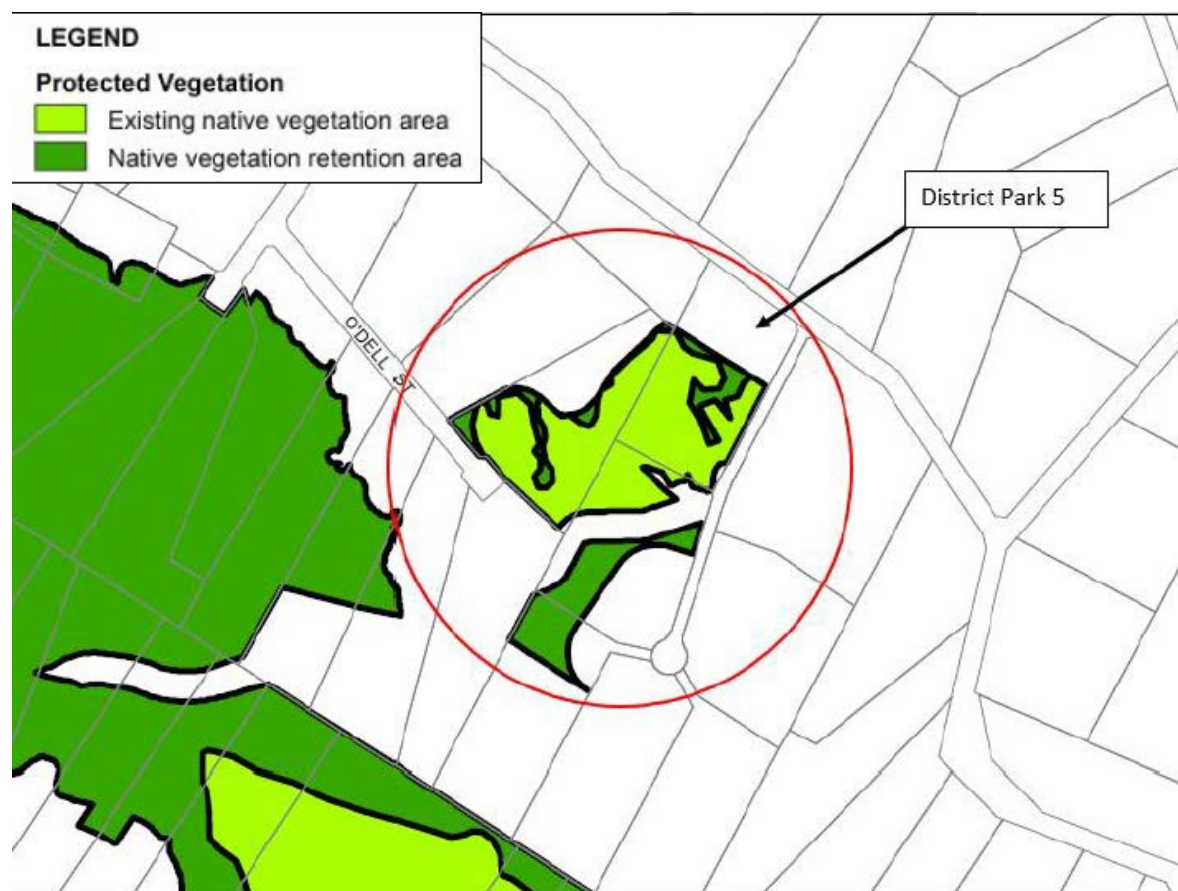
Our assessment is explained in further detail below.

DP5 is entirely within a “Non-certified Area” according to the relevant biodiversity conservation maps. The significance of certification is explained below.

Figure 9.1 is an extract of the Native Vegetation Protection Map in the Growth Centres SEPP, showing the distribution of ENV and NVR land for DP5.

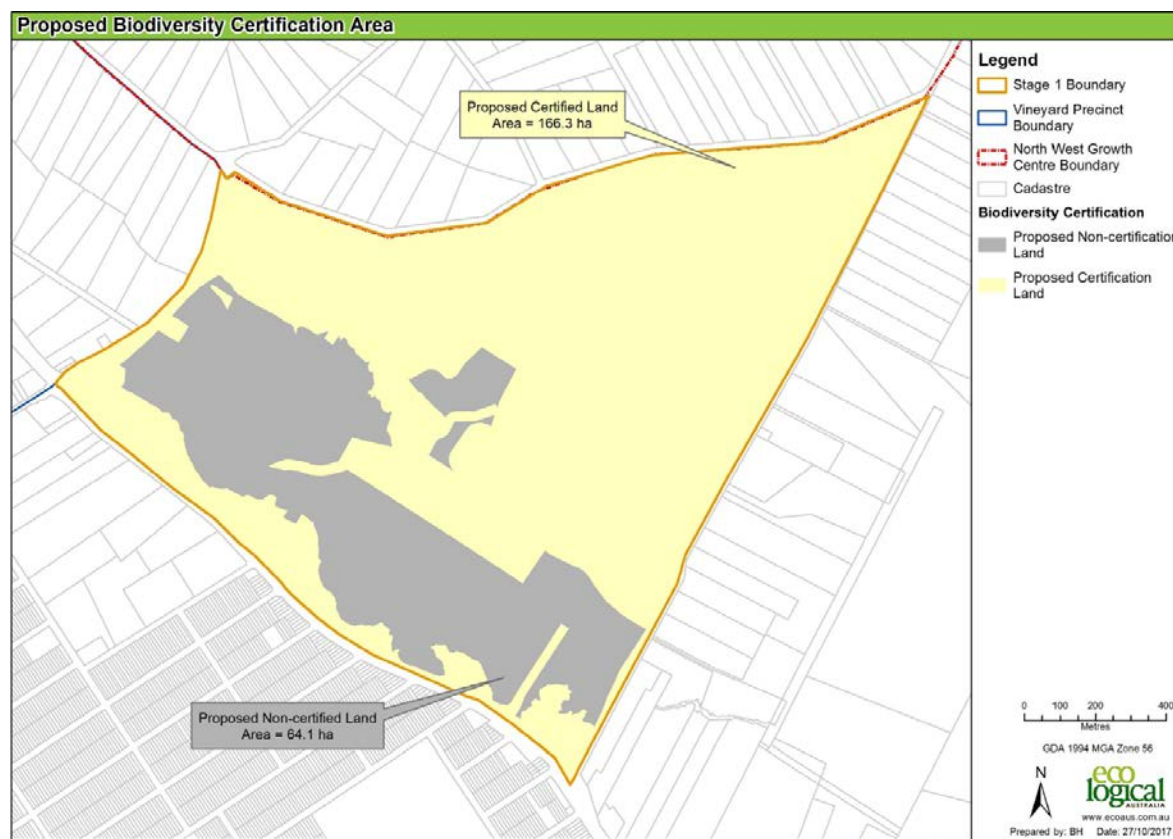
Figure 9.2 shows the distribution of non-certified and certified areas in the Vineyard Stage 1 Post-exhibition Consistency Report for Biodiversity Certification.

Figure 9.1 Distribution of ENV and NVRA land for District Park 5



Source: Growth Centres SEPP, North West Growth Centre Native Vegetation Protection Map Sheet NVP_004.

Figure 9.2 Biodiversity certification areas in Vineyard Precinct Stage 1



Source: Department of Planning and Environment, *Growth Centres Biodiversity Certification: Assessment of Consistency between the Relevant Biodiversity Measures of the Biodiversity Certification Order and Vineyard Precinct Stage 1*, October 2017, Update post-exhibition, p 26.

We have separately analysed the underlying zoning, possible constraints and therefore value of ENV land and NVR land for DP5, which all lies within non-certified Land.

ENV land for DP5

The relevant constraint relates to the classification of land containing ENV under the 2007 *Biodiversity Conservation Order (BCO)*.

Under the BCO, land is either classified as “certified” or “non-certified”, with biodiversity certification removing the requirement for impact assessment on threatened species under the *Environmental Planning and Assessment Act 1979*. Therefore:

- ▼ ENV on certified land – can potentially be cleared without further impact assessment
- ▼ ENV on non-certified land – is protected under the BCO and cannot be cleared.

For ENV land, the chronology of relevant decisions is important to establish the underlying zoning and constraint. This is outlined at Box 9.1. It shows that the need to reclassify the area of DP5 as ENV in **non-certified** land was related to:

- ▼ The conservation value of this particular land and its connection with the riparian corridor (initially identified in the BCO in December 2007)
- ▼ Achieving consistency with the BCO for the Vineyard Precinct Stage 1.

Box 9.1 Chronology of decisions related to the status of ENV land for DP5

1. The relevant area of DP5 was identified as ENV in certified land when the BCO was first made in December 2007.
2. The location and total area of ENV for protection (non-certified) in Vineyard Stage 1 changed during precinct planning from the locations identified in 2007 based on infrastructure (stormwater and road) needs and objection from OEH because there was insufficient ENV in non-certified land retained to satisfy the BCO:
 - a) From November 2016, DPE identified that there was insufficient ENV in non-certified land in Vineyard Stage 1 to satisfy the BCO. It identified the need to amend the classification of some land for DP5 from ENV-certified, to ENV-non-certified (Pre-exhibition Consistency Report for Biodiversity Certification).
 - b) The reclassification of DP5 to ENV-non-certified land was partially recognised in the Draft Precinct Planning Report of December 2016:
 - i Appendix D confirmed that additional areas of ENV to be protected in currently certified areas (1.6ha) will become non-certified land in an amended Biodiversity certification map (this includes an area of land for DP5), however
 - ii The draft Indicative Layout Plan (ILP) did not show an expansion of DP5 to include additional ENV.
 - c) The Post-exhibition Consistency Report and the Finalisation Report identify the need to retain even more ENV (including a total of 2.7ha in currently certified lands). The Finalisation Report and final ILP show this will be achieved through changes to open space (including DP5).
3. The final location of ENV in non-certified land (including ENV non-certified in DP5) was established with the Finalisation Report and rezoning of land in the precinct.
4. The Growth Centres SEPP was amended in December 2017 to provide that development consent cannot be granted on land with ENV (including the area of DP5) unless the development will not result in the clearing of ENV. This is also reflected in section 2.2.4(10) of the Hawkesbury City Council Growth Centres precinct DCP.

Sources: Biodiversity Conservation Order, 11 December 2007; DPE, *Growth Centres Biodiversity Certification Assessment*, November 2016; DPE, *Vineyard Precinct (Stage 1) Planning Report*, December 2016; DPE, *Growth Centres Biodiversity Certification Assessment*, October 2017; DPE, *Vineyard Precinct Stage 1 Finalisation Report*, November 2017.

The **need** to reclassify the land was not related to its zoning as RE1. Indeed, the additional land was not required for open space in the precinct. The RE1 zoning (to extend an existing park) gave effect to the intention to reclassify the land as ENV non-certified. The land use zonings available to protect ENV include E2 (Environmental Conservation), RE1 (Public Recreation) and SP2 (Infrastructure).¹²⁵ Regardless of the zoning of the area of DP5, the Growth Centres SEPP prevents the clearing of ENV, establishing the constraint that is necessary to comply with the BCO.

¹²⁵ DPE, *Growth Centres Biodiversity Certification: Assessment of Consistency between the Relevant Biodiversity Measures of the Biodiversity Certification Order and Vineyard Precinct Stage 1*, October 2017, p 4.

Even with the reclassification of ENV certified land, there is a 2.1ha deficit of ENV non-certified land in Vineyard Precinct Stage 1 that will have to be offset in Vineyard Precinct Stage 2 or elsewhere in the Growth Centres.¹²⁶

In relation to the chronology of events, IPART's valuer, Lunney Watt argues that:

If the fact were to be that the designation of the District Park 5 as "ENV" pursuant to the Native Vegetation Protection Map and/or the re-classification of District Park 5 to Non-Certified" land pursuant to the BCO was caused by the Council's proposal to acquire District Park 5 in the future for public recreation purposes, it would be necessary to ignore any restrictions or development constraints which are suffered as a result of these matters.

From my review of the...chronology, there does not appear to me to be a sufficient causal connection between the Council's (future) proposal to acquire District Park 5 and the ENV designation or the Non-certified land classification. In fact, there does not appear to be any nexus or causal connection at all.

The council disagrees with Lunney Watt's argument about the relationship between the zoning of the land as RE1 and the non-certification of the ENV land. It argues that the chronology of relevant events in the planning process suggests the opposite.

The council identifies that there are other areas of ENV on certified land that were not reclassified and are now zoned R2 Low Density Residential. However, these areas of ENV are disconnected from the riparian corridor (unlike DP5) and can therefore be distinguished from DP5. This was noted in the November 2017 Finalisation Report:

Consideration was also given to other areas of ENV elsewhere in the precinct, however, due to their disconnect to areas of open space and riparian corridors, did not offer an equal or similar ecological value to the identified areas.¹²⁷

The council also disagrees with our application of section 56 of the Act in assessing the reasonable cost of acquiring land for DP5.

The market value of land is defined in section 56 of the Act as follows:

market value of land at any time means the amount that would have been paid for the land if it had been sold at that time by a willing but not anxious seller to a willing but not anxious buyer, disregarding (for the purpose of determining the amount that would have been paid):

- Any increase or decrease in the value of the land caused by the carrying out of, or the proposal to carry out, the public purpose for which the land was acquired...

The council argues that the devaluation of the land for DP5 that was caused by the proposal to zone the land RE1 should therefore be disregarded under the Act.

It further argues that at around the same time the DP5 land was rezoned RE1, it was also deemed that much of the area would become 'non-certified' to protect more vegetation. It considers that this demonstrates how the non-certification of the land was itself part of the rezoning process.

¹²⁶ DPE, *Growth Centres Biodiversity Certification: Assessment of Consistency between the Relevant Biodiversity Measures of the Biodiversity Certification Order and Vineyard Precinct Stage 1*, October 2017, p 5.

¹²⁷ DPE, *Vineyard Precinct Stage 1: Finalisation Report*, November 2017, p 14.

The council disagrees with IPART's valuer, Lunney Watt, about the relationship between the ENV constraint and the proposal to acquire the land for public recreation. Lunney Watt argues:

The native vegetation which exists on District Park 5 is a physical characteristic and constraint of the land. The existence of this vegetation, and consequential constraint was not caused by any proposal of the Council to acquire District Park 5 in the future, for public recreation purposes.

The council's valuer, KD Wood, provided contrary advice on the appropriate underlying zoning and the consequence of ENV constraint for valuation purposes:

In my opinion, if land is re-classified to permit a usage as a public park for sporting and recreational uses, a Valuer in the determination of Market Value, section 56, must attribute an "alternative" or "underlying" zoning to the land. If the adjoining land use be 'R2' residential, then the value must be assessed on this basis.

In the determination of a rate per m² attributable to the land any physical constraints inherent in the composition of the land must be brought to account e.g. flooding. The vegetation on the land would only be an issue were the land "certified". The fact that it was certified before rezoning but has since been reclassified would surely negate this issue or require a developer to offset the area of native vegetation by the purchase of Bio-Credits through the Office of Environment and Heritage as a Condition of Development Consent.

We have considered the council's arguments about the application of section 56 to ENV land for DP5 and have found that:

- ▼ The physical characteristic of the land was recognised by the BCO in 2007. The constraint of ENV on non-certified land for DP5 relates to the conservation value of the land and ensures its protection to satisfy the BCO.
- ▼ Expansion of DP5 to incorporate additional native vegetation facilitated its protection but was not related to a need for additional open space in the precinct.
- ▼ For DP5, the relevant public purpose is provision of land for public recreation.
- ▼ There has been no reduction in the value of ENV land for DP5 caused by the provision of land for public recreation (the public purpose); the value of land reflects its inherent characteristics, conservation value, and the need to protect the land to meet the requirements of the BCO. Protection of ENV land under the BCO is not a public purpose which should be disregarded under the Act.

The impact of ENV constraint is equivalent to flood constraint in terms of land value.¹²⁸ We therefore consider that the council should estimate the cost of ENV land for DP5 using our recommended average value for flood constrained land of \$85 per square metre.

¹²⁸ This is because development is similarly restricted.

NVR land for DP5

NVR land has a different status from ENV land under the Growth Centres SEPP, however clearing NVR land is significantly restricted and requires development consent.¹²⁹

IPART's valuer, Lunney Watt, considers that although NVR land may be cleared with development consent, the associated costs should be reflected in the value of the land. The valuer notes that NVR land contains remnant native vegetation and is Non-certified land under the BCO:

...an intending purchaser of that land, even if it was assumed to have an *Underlying Zoning* of "R2 – Low Density Residential", would reasonably foresee that significant time, cost and risk would be encountered in realising any development potential. Onerous assessments are required in order to remove native vegetation from Non-Certified land and onerous conditions of any approval may be imposed by the relevant consent authorities, including the requirement to purchaser [sic] expensive Biobanking Ecosystem Credits, of a similar CPW profile."

On this basis, Lunney Watt recommended that the value of NVR land should reflect a 50% discount on the unconstrained R2 (underlying zoning) value, representing the identified ecology risk or cost associated with developing that land.

The council has not directly addressed the value of NVR land in its comments on the First Draft Report as its proposal adopts KD Wood's valuation advice for DP5. This is based on a split of constrained and unconstrained values only. KD Wood applies a discount of \$50 per square metre for all unconstrained land in DP5 (both ENV and NVR land, equally).

We have considered Lunney Watt's advice on the value of NVR land and the council's position on the overall value of land for DP5 and have found that:

- ▼ Disregarding the public purpose of NVR land to be acquired for DP5 in accordance with section 56 of the Act, the underlying zoning of the land is R2. However, the land is constrained by the restriction on clearing native vegetation under the Growth Centres SEPP. Some of the NVR land is also flood-constrained.
- ▼ Lunney Watt's recommendation that the value of NVR land should reflect a 50% discount on the unconstrained R2 (underlying zoning) value, representing the identified ecology risk or cost associated with developing that land, is reasonable.

We therefore consider that the council should estimate the cost of NVR land for DP5 by applying our recommended average value for unconstrained R2 land of \$250 per square metre, discounted by 50% for ecology risk/cost.

¹²⁹ The relevant controls on NVR land are included in most precinct plans under the Growth Centres SEPP. The *Hawkesbury Growth Centres Precinct Plan 2017* (HGC Precinct Plan) is Appendix 13 to the Growth Centres SEPP. DPIE explained that an error was made in drafting the HGC Precinct Plan in omitting the clause that restricts the clearing of NVR land. It advised that in effect, the council applies the NVR protections that have been included in other precinct plans (see, for example, clause 6.4 of the Blacktown Growth Centres Precinct Plan, Appendix 12 to the Growth Centres SEPP) and that the HGC Precinct Plan will be amended to include this protection.

9.7 A 10% allowance for other acquisition costs is not reasonable

The council proposes that IPART should incorporate an allowance of 10% for all land costs into the final recommendations to 'reduce compliance costs for Council and other stakeholders and delaying the plan adoption'.¹³⁰ It notes that it did not include these costs in the plan submitted to IPART because it considered the overall cost allowances in the plan were reasonable.

The council argues that a 10% allowance is:

- ▼ Consistent with its experience with its first acquisitions in the plan
- ▼ The advice of its valuer, KD Wood.

It also notes that IPART endorsed a 12% allowance for other acquisition costs in the Camden Growth Areas Contributions Plan in 2018 and that the Vineyard Precinct is similar in being in the very early stages of development.

We found that it is reasonable for the council to include an allowance for 'other acquisition' costs associated with land acquisitions, however the 10% allowance proposed by the council is not reasonable.

Recommendation

- 19 Increase the cost of land by \$2,951,918 reflecting the inclusion of an allowance of 5% of land costs to cover the 'other acquisition' costs associated with acquisition of land in the plan.

9.7.1 The council presented evidence to justify its proposed allowance

In justifying the proposed 10% allowance for other acquisition costs, the council notes that it is likely to incur additional costs of 10-12% of the land cost for its first acquisition of land in the Vineyard Precinct. It identifies that much of this cost is associated with high Valuer-General fees for valuation and compensation determination services.¹³¹ The council has provided a detailed breakdown of the costs it has already incurred and anticipates it will incur in association with land acquisitions to demonstrate the reasonableness of a 10% allowance.

We have reviewed the other acquisition costs proposed by the Valuer-General's valuer for the first council land acquisition in the Vineyard Precinct. These costs represent 2.47% of the cost of the land in the Final Determination. This acquisition process was commenced under the hardship provisions of the Act, therefore the land owner is not entitled to all heads of compensation.¹³² It is likely, therefore, that non-hardship acquisitions will involve higher 'other acquisition' costs.

¹³⁰ Council submission to IPART First Draft Report, p 42.

¹³¹ Council submission to IPART First Draft Report, p 41.

¹³² Under the hardship provisions, the council is required to acquire the land upon the Valuer-General's determination of land value and compensation, rather than the council acquiring the land based on the progress of development or its infrastructure planning needs. Section 26 of the Act provides that certain heads of compensation, such as relocation, are not available to a dispossessed owner who has initiated the acquisition because of hardship.

The council estimates that the potential landholder acquisition costs it may have to pay represent 15% of the total land costs we recommended in the Second Draft Report.¹³³ Its calculations are based on an unrepresentative example that includes the full suite and full extent of possible expenses that the council may have to pay to compensate a land owner. We consider that it is unlikely the council will have to pay the highest possible acquisition costs for all acquisitions, as some compensation or cost categories do not apply to all parcels of land.¹³⁴

The council's valuer, KD Wood, did not provide advice on the value of an allowance for 'other acquisition' costs to be applied precinct-wide. Its advice was related to the cost estimate for DP5, as follows:

These costs exclude any additional claims under Sec.55(b) Special Value, Sec. 55(c) Severance, Sec.55(d) Disturbance (legal and valuation fees), Sec.55(e) Relocation, Sec 55(f) Decrease in Value attributable to Council in acquiring the land which may increase the foregoing amount by an additional 10%.¹³⁵

We consider that this advice in relation to the cost of DP5 does not justify a precinct-wide allowance of 10%, as the valuer has not considered the issues and likely compensation associated with the parcels of land in the plan. This is important as:

- ▼ Partial acquisitions that do not include residences are not eligible for certain compensation
- ▼ Some acquisitions will be from developers and therefore limited to compensation for legal and valuation fees.

We also note that an allowance of 10% for DP5 is likely to be overstated as some of the land is already owned by a developer.

9.7.2 Other acquisition costs do not include administrative costs

Our Information Paper on the assessment of land costs, published in April 2018, outlines what land costs include. Land costs **do not** include administrative costs incurred by the councils in connection with land acquisitions, such as valuations and project management costs. These are recovered through the allowance for plan administration costs. Acceptable 'other' land acquisition costs include costs that a council may pay a dispossessed owner such as any just terms compensation or conveyancing costs associated with the land acquisitions.¹³⁶ Therefore, an allowance for other acquisition costs should not be used to recover the cost of valuation and other reports obtained by the council in association with land acquisitions.

¹³³ Council submission to IPART Second Draft Report, pp 2-3.

¹³⁴ This includes partial acquisitions that do not include residences and unconstrained land, for which hydrological advice to address development potential is not relevant.

¹³⁵ KD Wood, *Advice to Hawkesbury City Council*, 24 June 2019, p 23.

¹³⁶ IPART, *Contributions plan assessment: land costs*, April 2018, p 1.

9.7.3 We have considered other acquisition costs in recently-assessed contributions plans

We have considered allowances for 'other acquisition' costs reasonable in most recently-assessed contributions plans. These allowances have ranged from 1.5% in contributions plans from The Hills Shire Council to 12% in the Camden Growth Areas Contributions Plan (CGA-CP). We determined that a 12% allowance was reasonable in the CGA-CP based on the valuer's precinct-wide recommendation and the early stage of development in that plan. We also considered that some landholders in Leppington and Leppington North (subject to the CGA-CP) may be compensated for business relocation costs.

We consider the circumstances are different for the Vineyard CP: the council has not presented evidence to support a 10% allowance, precinct-wide; and business relocation costs are less likely to be paid to landholders in the Vineyard Precinct.

We consider that it is reasonable for the council to include an allowance of 5% for other acquisition costs, rather than the 10% it proposed. This is consistent with the allowance in Blacktown City Council's (BCC's) Contributions Plan 22 for Area 20 and Riverstone East (CP22), which we consider is the most reasonable reference point because:

- ▼ The fragmented nature of ownership in the Vineyard Precinct is similar to Area 20 and Riverstone East
- ▼ The 5% allowance in CP22 is based on the evidence of the actual costs incurred by BCC in acquiring land in that plan.

We note that we have recommended a higher (5%) 'other acquisition' cost allowance for the Vineyard CP than the 2% allowance recommended for CP24 (Schofields Precinct). This is because the pattern of land ownership is different in the two precincts: there are two major land owners in Schofields from which BCC will acquire land for local infrastructure, whereas land ownership in the Vineyard Precinct is fragmented. A council's other acquisition costs for transactions with developers are likely to be less than the potential other acquisition costs from non-developer landowners.

10 Other cross-category considerations

This chapter presents our assessment of criteria which apply across multiple infrastructure categories. It covers:

- ▼ Criterion 3: Reasonable cost (in relation to loan interest costs, the proposed indexing of contribution rates and the base period of plan)
- ▼ Criterion 4: Timing of infrastructure delivery
- ▼ Criterion 5: Apportionment (in relation to the council's calculation of NDA for the purpose of apportioning stormwater management and plan administration costs)
- ▼ Criterion 6: Consultation
- ▼ Criterion 7: Other matters.

We found that:

- ▼ It is reasonable for the council to include loan interest costs in the plan but the amount included is not reasonable.
- ▼ The council's proposal to index contributions for works by CPI is reasonable.
- ▼ The council's proposal to index contribution rates for land by a land value index is reasonable but is not consistent with the approach described in the plan.
- ▼ The council does not specify how it will index contribution rates for plan administration.
- ▼ The council's revised cost estimates, submitted following our First Draft Report, were current as at June 2019, which is later than the base period of the plan (March 2018).
- ▼ The proposed timing of infrastructure delivery is reasonable and satisfies the assessment criterion on timing of infrastructure delivery.
- ▼ The council's process for consulting on the plan satisfies the consultation criterion.

In response to our cross-category findings against Criterion 3 (Reasonable cost), we recommend that the council:

- ▼ Revise the interest costs in the plan to reflect the cost adjustments recommended for relevant transport and stormwater items, a more recent estimate of interest costs, and the 50% interest refund the council is expecting to receive.
- ▼ Provide more information on how the council proposes to index contribution rates for land and plan administration.
- ▼ Update the base period of the plan to end June 2019.

We identified one issue in regard to Criterion 7 (Other matters), which is that the plan is suitable for the early stages of development but should be reviewed within the next three years.

The findings and recommendations for cross category considerations are unchanged since our Second Draft Report.

10.1 Criterion 3: Reasonable cost – loan interest costs in the plan

The council's application for assessment of the plan explained that it intends to apply for a loan of \$16,789,468 to allow it to fund key stormwater infrastructure (including land and works) and transport design costs. It plans to deliver the infrastructure funded by the loan by 2023, which it anticipates will help accelerate development in the precinct.¹³⁷

The council will enter an agreement with TCorp for a 10-year fixed rate amortising loan with semi-annual payments. TCorp will determine the interest rate based on the market price of NSW government bonds at that time of issuance, plus a standardised administration fee of 55 basis points.¹³⁸

The council will receive a 50% refund of interest payments through the NSW Government's Low Cost Loans Initiative.¹³⁹

The indexation of contribution rates may not adequately account for the opportunity cost of capital and therefore we consider it reasonable that the plan also include interest costs.

We found that interest rates have fallen since the plan was drafted and the rate used to estimate interest cost is no longer reasonable. Further, the council has based its loan amount on estimates of land and works costs for which we have recommended changes (as outlined in Chapters 4 and 5). This means it will need to revise the associated interest costs in line with changes to land and works costs we have recommended (see Table 10.1).

Recommendation

20 Revise the interest costs in the plan to reflect:

- IPART's recommended adjustments for transport and stormwater management costs
- The latest available market interest rate, as advised by T-Corp
- An interest rate buffer, as advised by T-Corp
- The 50% refund of interest payments under the NSW Government's Low Cost Loan Initiative.

¹³⁷ Hawkesbury City Council's Application Form, p 27 and Vineyard CP, sections 3.2.1 and 3.2.2. Note: The remaining transport and stormwater infrastructure would be provided between 2023 and 2028.

¹³⁸ Information from T-Corp, 22 August 2019.

¹³⁹ Letter from DPE to Hawkesbury City Council, dated 8 October 2018. [D18/34215]

Table 10.1 Summary of loan and interest costs

	Loan amount in the plan (\$Mar2018)	Interest cost in plan (\$Mar2018)	IPART revised loan amount (\$Jun2019)	IPART revised interest cost (\$Jun2019)
Transport				
Design cost for collector roads	466,179	191,620	505,973	56,213
Stormwater				
Land acquisition costs (Basin 1&2, WSUD-D, DC1)	8,631,763	1,688,130	8,292,811	453,479
Construction and design costs (Basin 1&2, WSUD-D, DC1)	7,691,525	1,504,246	8,917,084	487,617
Total	16,789,468	3,383,996	16,626,703	997,309

Note: We calculated the 'IPART revised interest cost' assuming a 50% interest subsidy and an interest rate of 1.55% per annum over 10 years, plus a 50 basis point buffer.

Source: Vineyard CP Works Schedule; IPART analysis.

10.1.1 Interest rates have fallen since the plan was drafted and the rate used to estimate interest cost is no longer reasonable

For calculating interest costs in the Vineyard CP originally submitted by the council, the council assumed an interest rate of 3.43% per annum over 10 years, plus a 10 basis point buffer.¹⁴⁰ These assumptions were based on advice from TCorp when the plan was being prepared.¹⁴¹ After applying the 50% refund, this is effectively an interest rate of 1.77% per annum.

Since the plan was submitted to IPART, the market price of government bonds has declined significantly and there is significant volatility in the market. Given this, our recommendation is that the council use the latest available information from TCorp to calculate its interests costs.

For the purpose of our recommended adjustment, we have assumed an interest rate of 1.55% per annum over 10 years, plus a 50 basis point buffer. This is based on updated advice we sought from TCorp.¹⁴² After the 50% refund, this is effectively an interest rate of 1.03%.

10.1.2 It is reasonable to index interest costs

The submission from UDIA NSW raised concern with the plan including interest costs and indexing contribution rates:

We note that the NSW Government's Low Cost Loan Initiative is being used to assist with the forward funding delivery of development for works, for works that are forward funded we are concerned about the possible 'double dipping' that could occur if the funding is provided through the loan and then they are also indexed.¹⁴³

¹⁴⁰ The interest rate buffer is intended to represent a contingency to account for potential interest rate increases between when the contributions plan is submitted to IPART and when the council enters the loan agreement with TCorp.

¹⁴¹ Information from council, 3 May 2019.

¹⁴² Information from council, 27 August 2019

¹⁴³ UDIA NSW submission to IPART First Draft Report, p 1.

The council has prepared the contributions plans without discounting future cash flows to their present values. This means it may not adequately account for the opportunity cost arising from differences in time between when it incurs costs to provide infrastructure and when it receives contributions to recover the cost of this infrastructure. Indexing contribution rates might not overcome this problem, which is why we consider that it is reasonable to include interest costs.

We acknowledge that indexing the interest component of contributions may lead to the council over-recovering the cost of servicing the loan because the interest expenses are fixed for the duration of the loan. To avoid this, the council could estimate the present value of the interest costs and include this amount within each infrastructure category. This would introduce complexity in the calculation of rates with little impact on contribution rates. Alternatively, it could separate out the interest expense and not index this amount. This would mean that developers who are active in the earlier stages of development pay more in real terms than developers active in the later stages of development. On balance, we do not consider the benefit of making either adjustment warrants the additional complexity or introduction of inequity.

10.2 Criterion 3: Reasonable cost – indexation of contribution rates

To ensure that the value of contributions for the construction and delivery of infrastructure is not eroded over time by inflation or significant changes in land values, the Vineyard CP provides for contribution rates to be adjusted to reflect quarterly movements in the value of land and works. According to the plan:

- ▼ The works contribution amount will be indexed in accordance with quarterly movements in the Consumer Price Index (All Groups) for Sydney as published by the Australian Bureau of Statistics (ABS).
- ▼ The land contribution amount will be indexed quarterly in accordance with movements in the council's Land Value Index for the Vineyard Precinct and published on the Council's website.¹⁴⁴

The plan does not include provisions for the indexation of contributions for "plan administration".

The approach to indexing contributions rates for the works component is consistent with the *Environmental Planning and Assessment Regulation 2000* and is reasonable.

The plan explains that to calculate the Land Value Index (LVI) the council will:

- ▼ Engage a qualified valuer to prepare a valuation report with estimated average market values (\$/m²) for each category of land use in the precinct, at least annually.
- ▼ Recalculate the estimated average market values (\$/m²) for land acquisition costs in the plan, based on the valuer's advice.
- ▼ Compare the revised estimated average market values (\$/m²) to the estimates in the base period of the plan to calculate the LVI.

¹⁴⁴ Vineyard CP, section 6.3.

- ▼ The council will then publish updated LVIs with updated quarterly CPI figures on its website.

Since submitting the plan to IPART, the council has advised that it intends to index land contribution amounts using an index obtained from a third party property services provider. It explained that the index would be based on quarterly or annual changes to residential property prices for the Hawkesbury Local Government Area.¹⁴⁵

Our July 2019 Information Paper on the indexation of contribution rates provided guidance to councils preparing contributions plans. Of particular relevance, the Information Paper states:

- ▼ In our assessment, when councils deviate from CPI we will ask for evidence that the alternative method chosen is reflective of costs in the plan.¹⁴⁶
- ▼ An LVI that is based on a broader area has the advantage of being less volatile and susceptible to compositional bias, while still tracking the general direction and magnitude of change in the cost of land in a region.¹⁴⁷

The council's use of a LGA-wide residential property sales index is likely to be somewhat reflective of land costs in the plan. The position in our Information Paper favoured broad-based indexes because they are likely to be less volatile, with minimal compositional bias, but still reflective of land costs in the plan.

We consider the council's approach for indexing works and its revised approach for indexing land contributions to be reasonable and consistent with the guidance in our Information Paper. We recommend that the plan explains the council's revised approach for indexing contribution rates for land and provides for the indexation of contributions towards plan administration costs by CPI.

Recommendation

- 21 To reflect the council's intended approach to the indexation of contribution rates, ensure that the plan:
- Specifies that the land contribution rates will be indexed in accordance with movements in a third party provider's LGA-wide residential property sales index, explains whether the land contribution rates will be indexed quarterly or annually and states that the index will be published on the council's website.
 - Specifies that plan administration contribution rates will be indexed in accordance with quarterly movements in the Consumer Price Index (All Groups Index) for Sydney as published by the Australian Bureau of Statistics (ABS).

¹⁴⁵ Information from the council, 9 August 2019.

¹⁴⁶ IPART, Information Paper: Indexation of contribution rates, July 2019, p 5.

¹⁴⁷ IPART, Information Paper: Indexation of contribution rates, July 2019, p 7.

10.3 Criterion 3: Reasonable cost – base period of plan

The council provided revised cost estimates for land and works costs in the plan in support of its submission to our First Draft Report. These revised cost estimates were obtained by the council at the end of June 2019.

As we are considering most of the updated estimates in our recommendations, we consider it is appropriate for the council update the base period in the plan from March 2018 to June 2019.

Recommendation

- 22 The council update the base period of the plan to June 2019 and, in doing so, update all the costs in the plan to June 2019 costs.

10.4 Criterion 4: Timing of infrastructure delivery

The Practice Note requires IPART to assess whether the proposed public amenities and services can be provided within a reasonable timeframe. In practice, we examine whether the proposed timing of infrastructure delivery appears realistic and gives stakeholders enough information for them to understand the council's priorities.

The council proposes to acquire land and provide works within a 15-year period – from 2018 to 2033. The Vineyard CP prioritises infrastructure within 5-year tranches to align with expected timeframes for development within the precinct. As discussed in section 10.1, the council expects to fund some of the key infrastructure through a low-cost loan; the expected delivery of which falls within the first 5-year tranche of 2019-2023. Table 10.2 summarises the expected timing for delivery of infrastructure in the plan.

Table 10.2 Summary of infrastructure delivery timelines in the plan

Infrastructure type	2019-2023	2024-2028	2029-2033
Transport	<ul style="list-style-type: none"> ▼ New collector roads CR1, CR7 ▼ Collector road upgrades of Commercial and Harkness Roads ▼ Windsor/Otago intersection (land) ▼ Boundary Road widening (land) 	<ul style="list-style-type: none"> ▼ New collector road CR3 ▼ Collector road upgrade of O'Dell Street ▼ Windsor/Otago intersection (works) ▼ Boundary road widening (works) ▼ Cycle way networks (works only) ▼ Cycleway creek crossings (works only) ▼ Bus shelters (works only) 	<ul style="list-style-type: none"> ▼ Commercial/Chapman half width road upgrade (works only)
Stormwater	<ul style="list-style-type: none"> ▼ Basins 1 and 2 ▼ Water sensitive urban design facility WSUD D ▼ Drainage corridor 1 	<ul style="list-style-type: none"> ▼ Water sensitive urban design facilities WSUD S, WSUD T ▼ Drainage corridor 2 	
Open space	<ul style="list-style-type: none"> ▼ Local parks 1,8 and 9 ▼ District parks 5 and 7 ▼ Sporting field (land) 	<ul style="list-style-type: none"> ▼ Local parks 2 and 6 	<ul style="list-style-type: none"> ▼ Local park 3 ▼ District park 4 ▼ Sporting field (works)
Community facility	<ul style="list-style-type: none"> ▼ Community facility (land) 		

Note: The Works Schedule states the time periods as 2018-2023, 2023-2028 and 2028-2033. To avoid confusion with overlapping years we have restated the 5-year tranches as in the table above.

Source: Vineyard CP Works Schedule.

We consider the Vineyard CP satisfies the assessment criterion on timing of infrastructure delivery.

10.5 Criterion 6: Consultation

We must assess whether the council has conducted appropriate community liaison and publicity in preparing the contributions plan.

The council publicly exhibited the draft plan from 18 May 2018 to 18 June 2018, and received four submissions, one on behalf of several landowners, as well as feedback in telephone calls.¹⁴⁸

The main concerns in submissions were:

- ▼ The quantum of contributions, which had the potential for a negative impact on land values and development progress
- ▼ The delay in rezoning, which precluded access to Local Government Infrastructure Scheme (LIGS) funding for development in the precinct
- ▼ Whether the council had considered alternative funding sources, ie, obtaining a low-cost loan from the NSW Government

¹⁴⁸ Hawkesbury City Council, Application for assessment, pp 35-36.

- ▼ Lower contribution rates in neighbouring precincts eligible for LIGS funding¹⁴⁹
- ▼ Difficulty in determining/calculating contributions in the draft plan, which would apply to a typical development.

In response, the council noted that the NSW Government determined the rezoning timetable, but addressed other issues raised in submissions by:

- ▼ Obtaining a loan with a 50% interest subsidy from the NSW Government¹⁵⁰
- ▼ Including in the plan a sample calculation of contributions and information about how the Land Value Index would be derived and applied.¹⁵¹

We consider the council's process for consulting on the plan satisfies the consultation criterion.

As noted in earlier in this report, the council's submission to our First Draft Report proposed changes that would materially change the contributions rates. The council did not consult on the proposed changes. While this is not ideal, we have considered the council's new information and proposed changes in this assessment so that development in the precinct is not unnecessarily delayed. Stakeholders have an opportunity to provide comment on the council's proposed changes and our assessment of them, through submissions on this Second Draft Report. We consider the council met its statutory exhibition requirements when it exhibited the plan before submitting it to IPART for assessment.

10.6 Criterion 7: Other matters

We are required to assess whether the plan complies with other matters we consider relevant. Our assessment of the Vineyard CP identified one other relevant matter: the need to update the contributions plan within the first three years of development.

The council has neither acquired land nor commenced any works for local infrastructure in the precinct. Our analysis to date suggests that for certain infrastructure items, the council has made very basic assumptions on the scope of works and related costs.

Regular review of the plan would allow the council to include more realistic assumptions and reduce the uncertainties that apply to the current draft plan.

Recommendation

- 23 Review the plan within the next three years to include more accurate assumptions about the scope, cost and apportionment of works.

¹⁴⁹ Vineyard CP is the only plan from the North West Growth Area where the council is not eligible for LIGS funding, which means that once the plan is an "IPART-reviewed plan", council can levy developers the full (uncapped) contributions. From July 2020 onwards LIGS funding will cease for all councils.

¹⁵⁰ DPE, Letter to Hawkesbury City Council, 8 October 2018.

¹⁵¹ Hawkesbury City Council, Application for assessment – Attachments 3, 4 and 5.

A Terms of reference

INDEPENDENT PRICING AND REGULATORY TRIBUNAL ACT 1992 TERMS OF REFERENCE

Reviewable Contributions Plans - *Environmental Planning and Assessment Act 1979*

I, GLADYS BEREJIKLIAN MP, Premier, under section 9 of the *Independent Pricing and Regulatory Tribunal Act 1992* approve provision, by the Independent Pricing and Regulatory Tribunal (**IPART**), of services to the Minister for Planning with respect to reviewing Reviewable Contributions Plans, in accordance with the following terms of reference.


Premier
Dated: 15/11/15

Background

The Environmental Planning and Assessment (Local Infrastructure Contributions) Direction 2012 contemplates that a Council may submit a Contributions Plan to IPART for review, where the Plan would (but for the Direction) authorise a contribution under section 7.11 of the EP&A Act that exceeds the maximum amount that the Direction allows to be imposed as a contribution in relation to residential development.

The Minister for Planning may also refer any contributions plan to IPART for review where the Minister considers there is merit in having an independent assessment.

Services

On and from the date that these terms of reference are issued to IPART, IPART is to review each Reviewable Contributions Plan submitted to it and provide the Minister for Planning and the relevant Council with a report on its review.

In providing the services, IPART must:

- (a) review the relevant Reviewable Contributions Plan in accordance with the assessment criteria set out in the Practice Note, including whether the public amenities and services to which the Contributions Plan relates are on the essential works list (if any) set out in the Practice Note;
- (b) consider, in its review of the Reviewable Contributions Plan, whether the estimate of the costs of providing those public amenities and services, as set out in the Plan, are reasonable;
- (c) publish a report of its review on its website; and
- (d) provide a copy of the report to the Minister for Planning and the relevant Council.

Consultation

In conducting a review under these terms of reference, IPART must:

- (a) consult with the Department of Planning and Environment (NSW);
- (b) consult with the relevant Council and any other person IPART considers appropriate; and
- (c) consider any criteria set out in the Practice Note (in addition to any other matters IPART considers relevant).

Definitions

Contributions Plan means a contributions plan or draft contributions plan prepared by the relevant Council for the purposes of imposing conditions under section 7.11 of the EP&A Act.

Council has the same meaning as it has in the *Local Government Act 1993*.

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

Practice Note means the "Revised Local Development Contributions Practice Note: For the assessment of Local Contributions Plans by IPART" issued by the Department of Planning and Environment and dated January 2018, as amended or replaced from time to time.

Reviewable Contributions Plan means a Contributions Plan submitted to IPART as contemplated by the *Environmental Planning and Assessment (Local Infrastructure Contributions) Direction 2012* or referred to it by the Minister for Planning.

B Assessment against information requirements in the EP&A 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 *Vineyard CP (2018)* contains the information required by this clause of the Regulation. A summary of this analysis is provided in the table below.

Table B.1 Assessment against information requirements in the EP&A Regulation

Sub clause		Location in Vineyard CP
1(a)	Purpose of the plan.	Section 2.3
1(b)	Land to which the plan applies.	Section 2.4
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 3.1.5 and 3.2
1(d)	The formulas to be used for determining the section 7.11 contributions required for different categories of public amenities and services.	Section 3.2
1(e)	The section 7.11 contribution rates for different types of development, as specified in a schedule in the plan.	Section 2.7
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.	Sections 5.1, 5.2
(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).	Appendices A to D
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 6.4
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 4.6
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> .	No such conditions mentioned in the plan
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.	The plan does not contain such a provision

C List of submissions to our draft reports

We received 10 submissions in response to our First Draft Report. Our First Draft Report and non-confidential submissions are available on our website (www.ipart.nsw.gov.au). A list of the submissions we received is provided in the table below.

Table C.1 Submissions to our assessment of Vineyard CP First Draft Report

No.	Individual/ Entity	Date received
1	Individual –anonymous and confidential	18 June 2019
2	Individual -anonymous	26 June 2019
3	Individual -anonymous	27 June 2019
4	Organisation–anonymous and confidential	28 June 2019
5	Individual – P. Bond	28 June 2019
6	Individual – C. McVicar	28 June 2019
7	Individual -anonymous	28 June 2019
8	Hawkesbury City Council	28 June 2019
9	Urbis	28 June 2019
10	UDIA NSW	1 July 2019

We received eight submissions in response to our Second Draft Report. These submissions are listed in the table below and are available on our website (www.ipart.nsw.gov.au).

Table C.2 Submissions to our assessment of Vineyard CP Second Draft Report

No.	Individual/ Entity	Date received
1	Individual -anonymous	16 October 2019
2	Individual -anonymous	17 October 2019
3	Individual – P. Bond	17 October 2019
4	Individual -anonymous	18 October 2019
5	Individual – C. McVicar	18 October 2019
6	Urbis (developer)	18 October 2019
7	Hawkesbury City Council	18 October 2019
8	Individual -anonymous	18 October 2019