

# Independent Pricing and Regulatory Tribunal (IPART)

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## Benchmark Costs for Local Infrastructure 'Draft'

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# 1 Definitions

The following Acronyms, Abbreviations and Definitions are used in the report:

*Table 1 – Definitions*

Reference	Definition
ABS	Australian Bureau of Statistics
Construction Cost	Construction Cost means the total of direct costs, indirect costs, overhead costs and profit
Contributions Plan	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	Council has the same meaning as it has in the Local Government Act 1993.
EPA	NSW Environmental Protection Authority
EP&A Act	Environmental Planning and Assessment Act
GA	Genus Advisory
IPART	Independent Pricing and Regulatory Tribunal
NDA	Net Developable Area means the land within a precinct available for development.
NSW	New South Wales
Practice Note	Practice Note for the assessment of Local Contributions Plans by IPART
Premier	Head of government in the state of New South Wales, Australia
Reviewable Contributions Plan	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.

## 2 Executive Summary

Genus Advisory has been engaged by the Independent Pricing and Regulatory Tribunal (IPART) to provide advice on the updating of IPART's cost benchmarks for local infrastructure items.

Genus Advisory has prepared this report (draft) based on the process summarised below:

1. Provide advice on the infrastructure types, subtypes and the allowances to be benchmarked for Contributions Plans which include items under transport, open space and stormwater categories;
2. Provide advice on the various costing methodologies for the infrastructure items;
3. Provide advice on the costs for infrastructure items based on the methodologies; and
4. Provide advice on the aggregate level benchmarks for each category of infrastructure i.e. transport, open space and stormwater.

This report (draft) captures work completed to date and the final report will be issued following feedback from stakeholders.

## 3 Background, Engagement Purpose and Approach

### 3.1 Background

The Environmental Planning and Assessment Act, 1979 (EP&A Act) establishes the infrastructure contributions system in NSW. It allows planning authorities to levy contributions to fund delivery of infrastructure (public amenities and services) to support development, through development contributions. Local infrastructure contributions (s7.11 and 7.12) fund the land purchase, works and council administration costs associated with providing development-contingent transport, stormwater management and open space infrastructure.

Infrastructure contributions are an efficient mechanism to fund local infrastructure, aligned with the 'impactor pays' principle and are the primary funding mechanism to deliver the infrastructure requirements of new development.

Since 2012, IPART has had an ongoing role under a term of reference issued by the Premier, to assess each "Reviewable Contributions Plan". These are plans prepared by Councils under s7.11 EP&A Act that propose contributions above:

1. \$30,000 per lot/dwelling in identified greenfield areas;
2. \$20,000 per lot/dwelling in all other areas.

or any other plan referred to IPART by the Minister. IPART's assessment considers whether the plan meets the criteria set out in a Practice Note<sup>1</sup> issued by the Department of Planning, Housing and Infrastructure.

### 3.2 Previous Reports

IPART has previously provided advice through the published document titled "Local Infrastructure Benchmark Costs: Costing infrastructure in Local Infrastructure Plans (April 2014)", which was supported by advice from Evans & Peck.

IPART has previously provided advice through the published document titled "Typical scopes and benchmark costs of local infrastructure (12 November 2021)", which was supported by advice from Cardno (ACT/NSW) Pty Ltd.

### 3.3 Engagement Purpose

The purpose of the Genus Advisory engagement is as follows:

*To update IPART's cost benchmarks for local infrastructure items by:*

- *developing standardised definitions of efficiently designed, development contingent, base level infrastructure*

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<sup>1</sup> DRAFT FOR EXHIBITION - Local infrastructure contributions system Practice note December 2023

- *developing cost benchmarks for stormwater, transport and open space, and advice on how these benchmarks vary by location (including at a minimum, greenfield vs infill, metropolitan vs regional)*
- *Advising on how the benchmark costs could be constructed to take into account variation in project specific conditions or project complexity, for example, difficult terrain.*
- *Advising on how often it is necessary to review benchmarks and how they should be updated in between reviews*
- *Preparing a costing methodology that councils could use to estimate the costs of infrastructure items for which benchmarks are not available or suitable*

*In addition, the review is required to develop potential aggregated level benchmarks for the delivery of stormwater, transport, and open space works for a greenfield or infill area.<sup>2</sup>*

Genus Advisory acknowledges that some of the above principles were established in the advice as noted in Section 3.2. This engagement reviews and updates the previous advice to reflect the current market conditions and industry practices.

## 3.4 Engagement Approach

Genus Advisory has prepared this report (draft) based on the process summarised below:

1. Provide advice on the infrastructure types, subtypes and the allowances to be benchmarked for Contributions Plans which include items under transport, open space and stormwater categories;
2. Provide advice on the various costing methodologies for the infrastructure items
3. Provide advice on the benchmark costs for infrastructure items based on the methodologies; and
4. Provide advice on the aggregate level benchmarks for each category of infrastructure i.e. transport, open space and stormwater.

This report (draft) captures work completed to date and the final report will be issued following feedback from stakeholders.

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<sup>2</sup> IPART Scope of Work Document for Procurement

## 4 Identification of Infrastructure Items

### 4.1 Approach and Findings

#### 4.1.1 Approach

Genus Advisory has undertaken a detailed review of the list of 2021 draft benchmarks and in addition, the IPART list that was provided as part of the procurement process for this engagement.

This process has comprised the following steps:

1. Creation of the Local Infrastructure Item Matrix capturing the following information:
  - The infrastructure items proposed by IPART during the procurement process for this engagement and the items included in the published 2021 draft benchmarks;
  - The unit of costing;
  - The development sector context have been categorised between residential, commercial, and industrial;
  - The development type context have been categorised between greenfield and brownfield (infill areas);
  - The development location have been categorised between metropolitan and regional;
  - The definition for each infrastructure item;
  - The applicable standards for each infrastructure item;
  - Whether design, project management, and contingency are applicable;
  - The potential site constraints.
2. Data sheets for each infrastructure item have been prepared based on the following structure:
  - Item name and reference;
  - Functional description;
  - Scope inclusions, and exclusions;
  - Potential risk items;
  - Potential sub items;
  - Applicable standards; and
  - Placeholder section included for future cost information.
3. Seeking feedback from IPART on the inclusion and the scope of specific items.

#### 4.1.2 Findings

Genus Advisory acknowledges that the findings and outputs of this process are represented in the Local Infrastructure Item Matrix (Appendix A) and the data sheets for the infrastructure items (Appendix B), with feedback from IPART incorporated.



## 5 Proposed Methodologies

### 5.1 Approach

This process has comprised the identification of the following:

1. Methodologies to establish Construction Costs;
2. Adjustment factors for site specifics, such as location, proximity to raw materials, and the disposal of waste;
3. Adjustment factors for council on costs, and contingency;
4. Period and process of regular updates and reviews;
5. Approach to prepare cost estimates for non-standard infrastructure items.

### 5.2 Findings

#### 5.2.1 Introduction

The following sections provide information on the proposed approach to the establishment of the costs for standard local infrastructure items, the provision of future updates of cost estimates, and the approach to establishing cost estimates for non-standard infrastructure items.

#### 5.2.2 Methodology (s) for Construction Costs

Genus Advisory advises that the Construction Costs for local infrastructure items should be developed by using either a bottom up (first principles) or top down (reference pricing) estimating process, each described below:

1. **Bottom up (first principles pricing)** - This process incorporates a detailed approach to estimating based on an analysis of the plant, labour, materials, and specialist subcontractor requirements for every work activity necessary to deliver the infrastructure item and relies upon productivity assumptions that reflect the specific circumstances of the infrastructure item project.
2. **Top down (reference pricing)** - This process relies on existing industry recognised costing references and in house data from completed projects in lieu of the development of new unit rate information from first principles. If and where such an approach is taken, the values drawn from the existing references would be applied in a structured and systematic way, to account for the specific issues that arise from the application of a unit rate outside of its normal context.

The Construction Costs are to include the following:

- **Direct Costs** - This captures the cost of plant, labour, materials, and specialist subcontractor requirements that are required to deliver the works;
- **Indirect Costs** - This captures the cost of items such as management, site supervision, insurances, site accommodation, and temporary services that are required to deliver the works;

- **Overhead Costs** - This captures the cost of operating a business which is typically allocated across a number of projects for items such as main office rental expenses, and core business costs such as accounting, tendering, and legal expenses;
- **Profit** - This equals the difference between the price paid to the contractor, and the cost of performing the works plus allocation of cost for operating the business to the project. It reflects a reasonable return on the assets and working capital of the business and can vary with market conditions.

The Construction Costs above represent the entire costs that will be charged to the client by a delivery contractor for the project. The Construction Costs for the local infrastructure items are included in Appendix B of this report for standard infrastructure item only.

The following sections of this report provide further information on how the Construction Costs should be adjusted to align with the development type, location of the works, site constraints, on costs, and allowances for contingency.

### 5.2.3 Methodology (s) to account for site location specific factors

Genus Advisory understands the importance of the site constraints for each infrastructure item and has provided guidance on the impact associated with infill (i.e. brownfield) work environments when compared to greenfield work environments.

The main site constraints for infill works are:

- Presence of existing utilities and the requirement to protect and/or relocate;
- Some or all works required outside of normal working hours;
- Significant traffic management;
- Complex construction phasing;
- Additional health and safety measures such as barriers and hoardings;
- Increased noise control measures;
- Reinstatement of existing and adjacent infrastructure;
- Limited site access points, and a limited ability to store materials, plant and equipment on site;
- Additional permits and licences to undertake the works.

The site constraints for greenfield works may include several of the above items, however the likelihood of encountering these issues is lower.

The main site constraints for greenfield works are:

- Environmental impact of the works in particular sites with ecological importance;
- Time frames involved with the planning approval process;
- Substantial distances to connect to existing utilities and services, to enable operation of the asset;
- Potential archaeological and heritage impacts.

The level of impact the site constraints for infill works could have on the infrastructure item Construction Cost values are displayed in Table 2 below and are provided as a percentage (%) range that should be added to the Construction Costs.

*Table 2 – Site constraint factors for infill works*

Likely Impact of Constraint	Description	Cost Factor Range
High	Highly constrained area with heavy traffic, high impact to existing utilities, reduced site access, working outside of normal working hours, and significant reinstatement of the existing and any adjacent infrastructure.	26% to 40%
Medium	Moderately constrained area with medium traffic levels, moderate impact to existing utilities, some requirements for out of hours working, and some reinstatement of the existing and any adjacent infrastructure.	15% to 25%
Low	Minimally constrained area with low traffic levels, minimal impact to utilities, working during normal hours, and minimal reinstatement of the existing and any adjacent infrastructure.	0%

In addition, Table 3 displays the impact the site constraints for greenfield works could have and should be added to the Construction Costs.

*Table 3 – Site constraint factors for greenfield works*

Likely Impact of Constraint	Description	Cost Factor Range
High	Impact to an area with significant environmental, archeological and heritage importance, high impact of planning approval process, and minimal availability of existing utilities and services at site boundary.	11% to 15%
Medium	Impact to an area with moderate environmental, archeological and heritage importance, moderate impact of planning approval process, and moderate availability of existing utilities and services at site boundary.	5% to 10%
Low	Impact to an area with low environmental, archeological and heritage importance, low impact of planning approval process, and high availability of existing utilities and services at site boundary.	0%

The site constraint factors are separate to other adjustment factors discussed in this report.

#### 5.2.4 Methodology (s) to account for the location

Genus Advisory understands the impact location can have on infrastructure item costs and this section provides guidance on the adjustment necessary to Construction Costs for regional areas relative to metropolitan areas. The main reason for increased costs in regional areas is due to the more limited availability of labour resources, plant, specialist subcontractors, the proximity of the materials to deliver the works, and transportation costs.

The Rawlinson’s Australian Construction Handbook can be used as a guide to establish the additional costs incurred when delivering infrastructure works in regional areas when compared to the metropolitan areas.

The Rawlinson’s regional indices consider the cost differences that are likely arise due to works occurring in areas outside major urban centres. Notably, certain types of work in regional locations may cost more or less than work in urban areas, however work in remote areas is likely to cost more than either regional or urban areas.

### 5.2.5 Proximity to raw materials

Genus Advisory understands that the local infrastructure categories of stormwater and transport are significantly affected by the haulage costs of raw materials required for construction, which is directly proportional to the distance from material supply sources.

Genus Advisory recommends that an adjustment is made to the Construction Costs to account for higher transportation and logistics costs for raw materials. Table 4 below provides a factor that should be applied to the Construction Costs to account for these additional costs.

*Table 4 – Factors to reflect proximity to raw materials*

Description	< 25km from raw material source	25 - 75km from raw material source	> 75km from raw material source
Transport	0%	5%	10%
Stormwater	0%	2.5%	5%

The factors in Table 4 need to be carefully considered alongside the regional indices discussed in Section 5.2.4 to ensure that there is no duplication.

### 5.2.6 Ground conditions

Genus Advisory understands the impact that ground conditions can have on the construction cost of infrastructure items.

The data sheets have assumptions regarding ground conditions. When the exact nature of site conditions are unknown, as they typically are during the development of Local Contribution Plans, there is a substantial risk that site conditions will be different to that described in the assumptions. Such risks are intended to be covered by the contingency allowances applied to each category of local infrastructure item. Conversely, unknown ground conditions are typically a significant contributor to the contingency required for infrastructure delivery and one of primary reasons why substantial contingency allowances are required during the planning phases of infrastructure projects.

However, if it is known with a high degree of certainty, that the ground conditions will fall outside of the assumptions specified in the data sheets, then the resulting scope variance should be dealt with as a non-standard item, as described in Section 5.2.12.

### 5.2.7 Disposal of waste materials

Genus Advisory recognises that the disposal of waste and excess spoil can have a significant impact on the construction cost of infrastructure items and have included a data sheet to capture waste disposal costs.

The data sheet captures unit rates (\$/tonne), which should be added to the Construction Costs to reflect any specific requirements for the infrastructure items. The unit rates include the EPA levy, waste facility fees, and haulage of the materials from the site to the waste facility.

### 5.2.8 Council on costs

Genus Advisory recognises that council on costs can represent a significant portion of the Total Project Cost and this needs to be carefully considered on infrastructure works.

The on costs incurred by the Council as the project owner when delivering local infrastructure items include:

- **Professional fees** including design, site investigations, project and contract management, and other specialist consultants;
- **Authority fees, levies, and other statutory charges;**
- **Internal staff costs** (for project oversight, project planning and definition, design review, contract preparation, tendering and contract administration);
- **Project specific insurance** costs which are taken out on behalf of the project owner.

Genus Advisory recommends the application of the following factors for council on costs. In addition, there may be further costs incurred on sites where there is potential for cultural heritage, and this has been shown in Table 5 below as an additional potential allowance.

*Table 5 - Council on costs*

Description	Council On Costs	Cultural Heritage
Small Project - \$ 250,000 to \$ 1M Construction Cost	25%	10%
Small/Medium Project - \$ 1M to \$ 2M Construction Cost	17.5%	5%
Medium Project - \$ 2M to \$ 5M Construction Cost	15%	3%
Large Project - \$ 5M Construction Cost	12.5%	2.5%

Genus Advisory confirms that the on-costs are to be applied to the total of the Construction Costs.

### 5.2.9 Contingency

Genus Advisory recognises that a contingency needs to be added to the total of the Construction Costs and the Council on costs to cover the risks that may occur during the implementation of the project.

The costs for local infrastructure items in Appendix B of this report have been determined excluding contingency. However, it is acknowledged that the uncertainty arising from risk is unavoidable in the delivery of infrastructure works.

Genus Advisory recommends that contingency is added to the costs for local infrastructure items, which are categorised as follows:

- **Planning Phase** – Provision for issues encountered during the planning phase;
- **Design Development** – For design development whilst the design is being undertaken;
- **Construction** – For risks encountered during the construction phase.

It must be noted that the above contingency categories do not cater for significant client instructed changes. Such significant changes should be treated as a change to the underlying scope of the standard infrastructure items and therefore to the item benchmark cost.

The proposed contingencies have been shown in Table 6 below.

*Table 6 – Recommendations for Contingency*

Description	Planning Phase	Design Development	Construction Phase
Transport	15%	15%	10%
Stormwater	15%	10%	10%
Open space embellishment	10%	10%	10%

Subject to the overall value and complexity of the project, a probabilistic risk assessment could be undertaken in lieu of a deterministic approach.

### 5.2.10 Examples of how to determine the Total Project Cost

Genus Advisory has provided examples of how to calculate the Total Project Cost in the tables below.

*Table 7 - Transport project example*

Item T-1.01 – New Local Road		Notes	
Unit rate	\$3,860/m		
Quantity	80m		
<b>Adjustment Factors</b>	<b>Description</b>	<b>Factors</b>	

Regional	Regional	+5%	
Raw materials	N/A	N/A	
Brownfield constraints	Low	0%	
Greenfield constraints	Medium	+5%	Greenfield (Medium)
Waste disposal	General Solid Waste	N/A	
<b>Construction Cost (Base)</b>		<b>\$ 308,800</b>	
Regional or raw materials	5%	\$ 15,440	
Site constraints	5%	\$ 15,440	Greenfield (Medium)
Waste disposal		N/A	
<b>Construction Cost (Adjusted)</b>		<b>\$ 339,680</b>	
On costs	25%	\$ 84,920	
Contingency	40%	\$ 169,840	
<b>Total Project Cost (excl GST)</b>		<b>\$ 594,440</b>	

Table 8 – Stormwater project example

Item ST-1.01 – Combined basin and raingarden facility			Notes
Unit rate	\$ 520/m2		
Quantity	50m2		
<b>Adjustment Factors</b>	<b>Description</b>	<b>Factors</b>	
Regional	Regional	0%	
Raw materials	N/A	N/A	
Brownfield constraints	Medium	25%	Brownfield (Medium)
Greenfield constraints	Low	0%	
Waste disposal	General Solid Waste	5 tonnes	
<b>Construction Cost (Base)</b>		<b>\$ 26,000</b>	
Regional or raw materials	0%	N/A	
Site constraints	25%	\$ 6,500	Brownfield (Medium)
Waste disposal		\$ 2,400	Based on \$480/tonne
<b>Construction Cost (Adjusted)</b>		<b>\$ 34,900</b>	
On costs	25%	\$ 8,725	
Contingency	35%	\$ 15,268	
<b>Total Project Cost (excl GST)</b>		<b>\$ 58,893</b>	

Table 9 - Open space embellishment project example

Item OSE-1.14 – Tennis Court			Notes
Unit rate	\$ 297,750		
Quantity	1 no.		
<b>Adjustment Factors</b>	<b>Description</b>	<b>Factors</b>	
Regional	Regional	0%	
Raw materials	N/A	N/A	
Brownfield constraints	Medium	25%	Brownfield (Medium)
Greenfield constraints	Low	0%	
Waste disposal	General Solid Waste	N/A	
<b>Construction Cost (Base)</b>		<b>\$ 297,750</b>	
Regional or raw materials	0%	N/A	
Site constraints	25%	\$ 74,437	Brownfield (Medium)
Waste disposal		\$ 0	
<b>Construction Cost (Adjusted)</b>		<b>\$ 372,187</b>	
On costs	25%	\$ 93,047	
Contingency	30%	\$ 139,570	
<b>Total Project Cost (excl GST)</b>		<b>\$ 604,804</b>	

### 5.2.11 Future reviews and updates

Genus Advisory recommends that the benchmark infrastructure costs are regularly reviewed to reflect the market conditions. Such reviews can either consist of:

- Simple updates that seek to maintain the currency of the existing cost estimate benchmarks formed by expert opinion, in an active construction market;
- More complex calibration techniques of the expert opinion benchmarks against actual completed project data, or possibly forecast costs where completed costs do not exist.

Genus Advisory recommends IPART undertakes the following process on an annual basis:

- Escalate the rates based on published industry data such as the ABS indices;
- Compare the updated rates against market data from current and/or completed projects;
- Compare the updated rates against any feedback that has been received from local councils for e.g. whether the Councils see the rates as adequate, wholly inadequate.



This approach will ensure that current market feedback is being considered and captured as part of the annual review in addition to the ABS indices. In periods of significant price increases, it is important to capture industry sectors and geographical locations where there are higher levels of activity when compared to the NSW average which are available in the industry published data.

In addition, there should be a forecast on the potential impacts of escalation in the next 12 month period. This can be based on a consensus of industry publications such as the Australian Institute of Quantity Surveyors, and other organisations who provide their best estimate of the prices increases in the next 12 month period.

Genus Advisory recommends that the infrastructure list is re-evaluated every two years to review if new items are required to be added or omitted, to incorporate feedback from local councils and because of the changing nature of Contribution Plans, evaluate the definitions, standards and costs, and the appropriateness of the adjustment factors.

### 5.2.12 Methodology (s) for non-standard items

Genus Advisory understand that there may be infrastructure works that are outside of the proposed scope of works and definitions contained in each of the data sheets in Appendix B. This could arise from a variance in scope, more complexity than envisaged, or from economies of scale when compared to the standard benchmark items.

In this instance, it is recommended that an appropriately qualified quantity surveyor who is a member of a relevant professional body, such as the Australian Institute of Quantity Surveyors (AIQS) or Royal Institution of Chartered Surveyors (RICS), prepare these cost estimates via a bottom up (first principles) or top down (reference pricing) approach using their professional expertise and cognisant of the level of documentation available.

## 6 Preparation of the Item Data Sheets

### 6.1 Approach

This process has comprised of the following:

- Establishment of the Construction Costs for each item and sub item (where applicable) for Financial Year 2024/2025;
- Application of escalation to the Construction Costs for Financial Year 2025/2026.

### 6.2 Findings

Genus Advisory acknowledges that the findings and outputs of this process are represented in the Local Infrastructure Item Matrix (Appendix A) and the data sheets for the infrastructure items (Appendix B).

## 7 Aggregate Level Benchmarks

### 7.1 Approach

Genus Advisory has been requested to review and provide advice on the potential establishment of aggregate level benchmarks for each category of infrastructure i.e. transport, open space, and stormwater.

This process has comprised of the following:

- Review of the aggregate Construction Costs from Contribution Plans from 2018 to 2024 based on data provided by IPART;
- Delineation of the Construction Costs between greenfield works and infill works;
- Application of an escalation factor to the Construction Costs to ensure a base date in Financial Year 2024/2025;
- Calculation of the cost per m2 NDA and cost per person for each infrastructure category based on the NDA and population data provided by IPART;
- Definition of a lower and upper band for each infrastructure category based on Financial Year 2024/2025;
- Definition of a lower and upper band for each infrastructure category based on Financial Year 2025/2026.

### 7.2 Findings

#### 7.2.1 Range of aggregate Construction Costs

Genus Advisory has undertaken a review of the Construction Costs from a sample of Contribution Plans from 2018 to 2024 to establish an indicative range of aggregate Construction Costs for each category of infrastructure.

This period from 2018 to 2024 has been chosen as it is reflective of a range of economic circumstances, which existed before, during, and after the COVID-19 pandemic, and considers the recent periods of significant escalation.

The indicative range for aggregate Construction Costs derived from the above process are displayed in Table 10 and Table 11.

*Table 10 - Range for aggregate Construction Costs based on NDA (\$ / m2 NDA)*

Description	Financial Year 2024/2025		Financial Year 2025/2026	
	Lower	Upper	Lower	Upper
Transport	\$ 14.50	\$ 41.50	\$ 15.50	\$ 43.50
Stormwater	\$ 8.50	\$ 16.00	\$ 9.00	\$ 17.00
Open space embellishment	\$ 10.50	\$ 20.00	\$ 11.00	\$ 21.00

Table 11 - Range for aggregate Construction Costs based on population (\$ / person)

Description	Financial Year 2024/2025		Financial Year 2025/2026	
	Lower	Upper	Lower	Upper
Transport	\$ 3,350	\$ 6,685	\$ 3,520	\$ 7,020
Stormwater	\$ 2,020	\$ 4,180	\$ 2,120	\$ 4,390
Open space embellishment	\$ 2,255	\$ 3,745	\$ 2,370	\$ 3,930

Genus Advisory notes that the above range applies to Construction Costs, however the range excludes Council on costs, and contingency. The Council on costs, and contingency have been excluded to ensure an equitable comparison between each of the Contribution Plans.

Genus Advisory notes the following limitations of this process:

- Construction Costs are based on a top down approach only.
- Construction Costs are based on a greenfield scenario only.
- Construction Costs for infill works have been excluded to ensure an equitable comparison.
- The sample size for the infill works is limited therefore a range could not be established.
- Land acquisition costs have been excluded.
- No normalisation has been undertaken to consider work-in-kind agreements.
- Construction Costs are based on the Contribution Plans, and the actual costs of completed projects have not been included.
- The lower and upper bands reflect the central 50% spread of the data used to formulate the lower and upper bands. Therefore, it is reasonably anticipated that future Contribution Plans may be outside of the range.

Genus Advisory has explored the ability to create lower and upper bands based on the sizes of the development for e.g. based on incremental subcategories of NDA. However, the sample size of data in some of these subcategories was limited and it was determined that this would not provide a robust outcome.

The potential application of the derived lower and upper bands for the aggregate Construction Costs based on a greenfield scenario is highlighted in Section 7.2.2.

## 7.2.2 Examples of how the aggregate Construction Costs could be used

Genus Advisory has provided examples in the tables below of how the aggregate ranges for Construction Costs for a greenfield scenario could be used to enable the overall benchmarking of Contribution Plans.

*Table 12 - Transport aggregate Construction Costs Example*

Transport Aggregate Costs			Financial Year 2024/2025	
			Lower Band	Upper Band
Construction Costs	\$/m2		\$14.50	\$41.50
Greenfield site constraints	Factor	15%	\$2.18	\$6.23
Location	Factor	2%	\$0.33	\$0.95
<b>Construction Costs (Adjusted)</b>			<b>\$17.01</b>	<b>\$48.68</b>
Council on cost	Factor	12.5%	\$2.13	\$6.08
Contingency	Factor	40%	\$7.65	\$21.91
<b>Potential Band (\$/m2 NDA)</b>			<b>\$26.79</b>	<b>\$76.67</b>

*Table 13 - Stormwater aggregate Construction Costs example*

Stormwater Aggregate Costs			Financial Year 2024/2025	
			Lower Band	Upper Band
Construction Costs	\$/Person		\$2,020.00	\$4,180.00
Greenfield site constraints	Factor	10%	\$202.00	\$418.00
Location	Factor	2%	\$44.44	\$91.96
<b>Construction Costs (Adjusted)</b>			<b>\$2,266.44</b>	<b>\$4,689.96</b>
Council on cost	Factor	12.5%	\$283.31	\$586.25
Contingency	Factor	35%	\$892.41	\$1,846.67
<b>Potential Band (\$/Person)</b>			<b>\$3,442.16</b>	<b>\$7,122.88</b>

Genus Advisory notes that the above range currently excludes disposal of waste and excess spoil costs and this needs to be reviewed in isolation on each Contribution Plan.

Whilst Genus Advisory has endeavoured to create an indicative range for aggregate Construction Costs, there are limitations that must be carefully reviewed and considered before this range could be utilised.

### 7.2.3 Future reviews and updates

Genus Advisory notes that there are limitations with the indicative range for aggregate Construction Costs. However, suggest that the following could be undertaken on an ongoing basis to provide a more robust outcome:

- Review the relevance and reliability of the sample data;
- Incorporate recent data from the work schedules of Contribution Plans;
- Incorporate actual costs of completed projects;
- Explore whether incremental subcategories can be established due to larger sample sizes becoming available;
- Undertake a bottom up approach based on work schedule data provided from Councils, and utilising the costs in this report;
- Escalate the costs of all data to ensure an equitable comparison.

In addition, there should be a forecast on the potential impacts of escalation in the next 12 month period. This can be based on a consensus of industry publications such as the Australian Institute of Quantity Surveyors, and other organisations who provide their best estimate of the prices increases in the next 12 month period.

## 8 Conclusion

This report (draft) captures work completed to date and the final report will be issued following feedback from stakeholders.

## 9 Information Used

Genus Advisory has reviewed the following information when preparing this report:

- Scope of Work, Benchmark costs for local infrastructure - Procurement, document reference CM9 Ref: D24/5579, Date: March 2024, prepared by IPART;
- Draft Benchmarking Items and Costing Methodology, Benchmark Costs for Local Infrastructure, document reference 360900, Date: 27 October 2021, prepared by Cardno;
- Typical scopes and benchmark costs of local infrastructure, Date: 12 November 2021, prepared by IPART.
- CP Base construction costs database 2018-2024 for Genus Advisory.xlsx, not dated, prepared by IPART.
- D24 6197 GP3 and OHN works costs per person, sqm, ha of NDA.xlsx, not dated, prepared by IPART.

## Appendix A – Local Infrastructure Item Matrix (Draft)



# Independent Pricing and Regulatory Pricing Tribunal (IPART)

## Local Infrastructure Item Matrix 'Draft'



Item category	Reference	Item	Included in IPART Tender List	Relevant (to be used in 2024)	Notes	Unit	Development Sector (Applicability)			Development Type		Location		Scope		Inclusions			Potential Site Constraints
							Residential	Commercial	Industrial	Greenfield	Infill / Brownfield	Metropolitan	Regional	Definition Available	Standards Available	Design	Project Management	Contingency	
Transport	T-1.01	New local road	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.02	New local road (half-width)	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Contamination, utilities, night works, traffic management
	T-1.03	New collector road	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.04	New collector road (half-width)	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.05	New sub-arterial road	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.06	New industrial road	Yes	Yes		metre	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.07	New rural road	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.08	Upgrade to local road	Yes	Yes		metre	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Contamination, utilities, night works, traffic management
	T-1.09	Upgrade existing local road half-width	Yes	No - Included in T-1.08		metre	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Contamination, utilities, night works, traffic management
	T-1.10	Upgrade to collector road	Yes	Yes		metre	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Contamination, utilities, night works, traffic management
	T-1.11	Upgrade existing collector road half-width	Yes	No - Included in T-1.10		metre	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Contamination, utilities, night works, traffic management
	T-1.12	Upgrade to sub-arterial road	Yes	Yes		metre	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Contamination, utilities, night works, traffic management
	T-1.13	Signalised intersection (single lane)	Yes	Yes	T' and 4 way	each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.14	Signalised intersection (2 lane)	Yes	Yes	T' and 4 way	each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.15	Signalised intersection and 1 turning lane	Yes	Yes		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.16	Signalised intersection and 2 turning lanes	Yes	Yes		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.17	Priority controlled/unsignalised intersection	Yes	Yes	T' and 4 way	each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.18	Roundabout (Single Lane)	Yes	Yes	single lane	each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.19	Roundabout (Two Lane)	Yes	Yes	2 lane	each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.20	Concrete pathway / footpath / shareway / cycleway	Yes	Yes		square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, traffic management
	T-1.21	Bridge/bridge crossing	Yes	No - Included in T-1.22-T1.23		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.22	Road bridge (including over railways, waterways, grade separation)	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.23	Rail bridge	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.24	Cycleway bridge	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.25	Pedestrian bridge	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	T-1.26	Bus stop (signage only)	Yes	Yes		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Utilities, night works, traffic management
	T-1.27	Bus shelter	Yes	Yes		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.28	Bus shelter and kiosk	Yes	Yes		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.29	Pedestrian crossing	Yes	Yes		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Night works, traffic management
	T-1.30	Signals/traffic signals	Yes	No - Included in T1.14-T1.16		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.31	Street lighting	Yes	Yes		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities, night works, traffic management
	T-1.32	Waste disposal	Yes	Yes	Various sub items	tonne	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	Not applicable
Stormwater / Transport	ST/T-1.01	Box culvert and headwall	Yes	Yes	single cell, twin cell, differing sizes	metre/each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
Stormwater	ST-1.01	Combined basin and raingarden facility	Yes	Yes		square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.02	Stormwater headwalls	Yes	Yes	to suit differing sized pipes	each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.03	Single raingarden facility	Yes	Yes		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.04	Bio-retention basin	Yes	Yes	swale, trench, basin	metre/square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.05	Bio-retention filter	Yes	Yes		square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.06	Bio retention area	Yes	No - Included in ST1.04		square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.07	Bio-retention system	Yes	No - Included in ST1.05		square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.08	Wetland basin	Yes	No - Included in ST1.09		square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.09	Constructed wetland	Yes	Yes		square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.10	Detention basin	Yes	Yes		square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.11	Gross pollutant trap	Yes	Yes	differing outlet diameters	each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological

# Independent Pricing and Regulatory Pricing Tribunal (IPART)

## Local Infrastructure Item Matrix 'Draft'



Item category	Reference	Item	Included in IPART Tender List	Relevant (to be used in 2024)	Notes	Unit	Development Sector (Applicability)			Development Type		Location		Scope		Inclusions			Potential Site Constraints
							Residential	Commercial	Industrial	Greenfield	Infill / Brownfield	Metropolitan	Regional	Definition Available	Standards Available	Design	Project Management	Contingency	
	ST-1.12	Enhanced storage area	Yes	Yes		square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.13	Stormwater pipe	Yes	Yes	differing RCP sizes	metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.14	Stormwater pit	Yes	Yes	to suit differing sized pipes	each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.15	Stormwater channel/open channel	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	ST-1.16	Stormwater channel stabilisation	Yes	Yes		metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
Plan administration	PL-1.01	Plan preparation and administration	Yes	No - Included in Council On costs			Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	Not applicable
Open space embellishment	OSE-1.01	Amenities building	Yes	Yes	to suit 1, 2 or 3+ playing fields	square metre	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.02	BBQ area	Yes	Yes	single, double plate	each	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Minimal constraints
	OSE-1.03	Boundary fencing	Yes	Yes		metre	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Minimal constraints
	OSE-1.04	Playground fencing	Yes	Included in OSE 1.25	extra over for gate	metre	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Minimal constraints
	OSE-1.05	Car park	Yes	Yes		each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.06	Cricket wicket	Yes	Yes	practice cricket nets (3-bay)	item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Contamination, utilities
	OSE-1.07	Cricket wicket only	Yes	Yes	synthetic cricket pitch	item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Minimal constraints
	OSE-1.08	Demolition	Yes	Yes	concrete, paving, structures	square metre	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Contamination, utilities, ecological
	OSE-1.09	Double playing fields	Yes	Yes	soccer, rugby league/union	item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.10	Combined field	Yes	Yes		item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.11	Soccer field	Yes	Included in OSE 1.09		item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.12	Rugby league/union field	Yes	Included in OSE 1.09		item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.13	Cricket pitch and field	Yes	Included in OSE 1.10		item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.14	Tennis court (outdoor)	Yes	Yes		item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.15	Netball court (outdoor)	Yes	Yes		item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.16	Netball courts/6 no. (6 court netball court)	Yes	Yes		item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.17	Basketball court (outdoor)	Yes	Yes		item	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.18	Playing lighting	Yes	Yes		per field, pitch, court	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities
	OSE-1.19	Double/combined playing lighting	Yes	Yes		per double /combined field	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.20	Basic landscaping	Yes	Yes	planting, mulching, edging	each, square metre, metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Minimal constraints
	OSE-1.21	Park (security) lighting	Yes	Yes		each	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Utilities
	OSE-1.22	Paved area (hard surfaces)	Yes	Yes	asphalt, concrete, sandstone, brick	square metre	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Utilities
	OSE-1.23	Picnic area	Yes	Yes	table, extra over for shade	each	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Utilities
	OSE-1.24	Playground / exercise equipment	Yes	Yes	of differing fixtures, all-abilities	each	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Utilities
	OSE-1.25	Seating area	Yes	Yes	aluminium/timber, no/back support	each	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Utilities
	OSE-1.26	Shade sail	Yes	Yes		square metre	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Utilities
	OSE-1.27	Spectator seat	Yes	Yes	differing widths	each	Yes	No	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Utilities
	OSE-1.28	Turfing	Yes	Yes	rolled, hydro seeding	square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Minimal constraints
	OSE-1.29	Retaining wall	Yes	Yes	concrete, keystone	square metre	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Ground conditions, contamination, utilities, ecological
	OSE-1.30	Site clearance	Yes	Yes	vegetation, tree removal	square metre/each	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Utilities, ecological
	OSE-1.31	Synthetic playing surfaces/artificial grass	Yes	Yes		square metre	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Minimal constraints
	OSE-1.32	Softfall under play equipment	Yes	Included in OSE 1.24		square metre	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Minimal constraints
	OSE-1.33	Play equipment installation	Yes	Included in OSE 1.25	of differing values	each	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Minimal constraints

## Appendix B – Infrastructure Item Data Sheets (Draft)

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.01

Item Name: New local road

Component	Description			
<b>Technical Information</b>				
Item Name	New Local Road			
Item Reference	T-1.01			
Functional Description	New, 2 Lane, flexible pavement local access road			
Inclusions	<ul style="list-style-type: none"> <li>Pavement structure: 275mm subbase, 150mm base, primer seal, 50mm AC 10 (2 x 25mm layers)</li> <li>Road corridor: 2 x 4.5m lanes, 9m wide carriageway, road reserve 16m</li> <li>Roll-top gutter</li> <li>Signage</li> <li>Linemarking</li> <li>Stormwater drainage</li> <li>Subsoil drainage - 100mm diameter corrugated perforated plastic pipe with sock, including drainage filter backfill</li> <li>1 x 1.5m reinforced concrete footpath - 1500mm wide x 125mm thick concrete on 125mm thick DGS20</li> <li>1 x 3500mm and 1 x 2000m wide turfed grass nature strip</li> <li>Street trees - semi mature 45L every 15m both sides</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Nominal 500mm cut/fill balance</li> <li>Clearing and grubbing of light to medium vegetation</li> <li>Minor traffic control allowance for construction vehicles/pedestrian and around tie-in point with trafficked road (includes installation and removal of signage and barriers)</li> <li>Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Street lighting (Separate item T-1.31)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>Guardrails and guide post</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Relocation and diversion of existing utilities</li> <li>Contaminated materials</li> <li>Surplus excavated material requiring disposal off-site</li> <li>Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>Not applicable for this item</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>Austrroads                             <ul style="list-style-type: none"> <li>&gt; Guide to Traffic Engineering Practice</li> <li>&gt; Guide to Asset Management Part 5: Pavement Performance</li> <li>&gt; Guide to Pavement Technology Part 2: Pavement Structural Design</li> <li>&gt; Guide to Road Design Part 3: Geometric Design</li> </ul> </li> <li>Roads and Maritime Services - Road Design Guide</li> <li>Council's relevant work specification - Civil</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.01	New Local Road	m	3,860
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.01	New Local Road	m	4,050
Minimum quantity	80m			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.02

Item Name: New local road (Half width)

Component	Description			
<b>Technical Information</b>				
Item Name	New Local Road (Half width)			
Item Reference	T-1.02			
Functional Description	New, 1 Lane, flexible pavement local access road			
Inclusions	<ul style="list-style-type: none"> <li>• Pavement structure: 275mm subbase, 150mm base, primer seal, 50mm AC 10 (2 x 25mm layers)</li> <li>• Road corridor: 4.5m lane, road reserve 8m</li> <li>• Roll-top gutter</li> <li>• Signage</li> <li>• Linemarking</li> <li>• Stormwater drainage</li> <li>• Subsoil drainage - 100mm diameter corrugated perforated plastic pipe with sock, including drainage filter backfill</li> <li>• 1 x 1.5m reinforced concrete footpath - 1500mm wide x 125mm thick concrete on 125mm thick DGS20</li> <li>• 1 x 2000mm wide turfed grass nature strip</li> <li>• Street trees - semi mature 45L every 15m both sides</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm cut/fill balance</li> <li>• Clearing and grubbing of light to medium vegetation</li> <li>• Minor traffic control allowance for construction vehicles/pedestrian and around tie-in point with trafficked road (includes installation and removal of signage and barriers)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Street lighting (Separate item T-1.31)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Guardrails and guide post</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• Not applicable for this item</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads                             <ul style="list-style-type: none"> <li>&gt; Guide to Traffic Engineering Practice</li> <li>&gt; Guide to Asset Management Part 5: Pavement Performance</li> <li>&gt; Guide to Pavement Technology Part 2: Pavement Structural Design</li> <li>&gt; Guide to Road Design Part 3: Geometric Design</li> </ul> </li> <li>• Roads and Maritime Services - Road Design Guide</li> <li>• Council's relevant work specification - Civil</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.02	New Local Road (Half Width)	m	2,160
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.02	New Local Road (Half Width)	m	2,270
Minimum quantity	80m			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.03

Item Name: New collector road

Component	Description			
<b>Technical Information</b>				
Item Name	New collector road			
Item Reference	T-1.03			
Functional Description	New, 2 travel lanes + 2 parking lanes, flexible pavement collector road			
Inclusions	<ul style="list-style-type: none"> <li>• Pavement structure: 410mm subbase, 150mm base, primer seal, 50mm AC 10 (2 x 25mm layers)</li> <li>• Lime Stabilisation (150mm, 3%)</li> <li>• Road corridor: 12m wide carriageway, road reserve 20m</li> <li>• 150mm high Kerb &amp; Gutter</li> <li>• Line marking</li> <li>• Signage</li> <li>• Stormwater drainage</li> <li>• Subsoil drainage - 100mm diameter corrugated perforated plastic pipe with sock, including drainage filter backfill</li> <li>• 1 x 1.5m reinforced concrete footpath - 1500mm wide x 125mm thick concrete on 125mm thick DGS20</li> <li>• 1 x 2.5 reinforced concrete shareway – 2500mm wide x 150mm thick concrete on 125mm thick DGS20</li> <li>• 1 x 1500mm and 1 x 2500mm wide turfed grass nature strip</li> <li>• Street trees - semi mature 45L every 25m both sides</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm cut/fill balance</li> <li>• Clearing and grubbing of light to medium vegetation</li> <li>• Minor traffic control allowance for construction vehicles/pedestrian and around tie-in point with trafficked road (includes installation and removal of signage and barriers)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Street lighting (Separate item T-1.31)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Guardrails and guide post</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads                             <ul style="list-style-type: none"> <li>&gt; Guide to Traffic Engineering Practice</li> <li>&gt; Guide to Asset Management Part 5: Pavement Performance</li> <li>&gt; Guide to Pavement Technology Part 2: Pavement Structural Design</li> <li>&gt; Guide to Road Design Part 3: Geometric Design</li> </ul> </li> <li>• Roads and Maritime Services - Road Design Guide</li> <li>• Council's relevant work specification - Civil</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.03	New collector road	m	4,990
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.03	New collector road	m	5,240
Minimum quantity	1,000m			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.04

Item Name: New collector road (Half width)

Component	Description			
<b>Technical Information</b>				
Item Name	New collector road (Half width)			
Item Reference	T-1.04			
Functional Description	New, 1 travel lane + 1 parking lanes, flexible pavement collector road			
Inclusions	<ul style="list-style-type: none"> <li>• Pavement structure: 410mm subbase, 150mm base, primer seal, 50mm AC 10 (2 x 25mm layers)</li> <li>• Lime Stabilisation (150mm, 3%).</li> <li>• Road corridor: 6m wide carriageway, road reserve 10m</li> <li>• 150mm high Kerb &amp; Gutter</li> <li>• Line marking</li> <li>• Signage</li> <li>• Stormwater drainage</li> <li>• Subsoil drainage - 100mm diameter corrugated perforated plastic pipe with sock, including drainage filter backfill</li> <li>• 1 x 2.5 reinforced concrete shareway – 2500mm wide x 150mm thick concrete on 125mm thick DGS20</li> <li>• 1 x 1500mm wide turfed grass nature strip</li> <li>• Street trees - semi mature 45L every 25m both sides</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm cut/fill balance</li> <li>• Clearing and grubbing of light to medium vegetation</li> <li>• Minor traffic control allowance for construction vehicles/pedestrian and around tie-in point with trafficked road (includes installation and removal of signage and barriers)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Street lighting (Separate item T-1.31)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Guardrails and guide post</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads                             <ul style="list-style-type: none"> <li>&gt; Guide to Traffic Engineering Practice</li> <li>&gt; Guide to Asset Management Part 5: Pavement Performance</li> <li>&gt; Guide to Pavement Technology Part 2: Pavement Structural Design</li> <li>&gt; Guide to Road Design Part 3: Geometric Design</li> </ul> </li> <li>• Roads and Maritime Services - Road Design Guide</li> <li>• Council's relevant work specification - Civil</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.04	New collector road (Half width)	m	3,150
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.04	New collector road (Half width)	m	3,310
Minimum quantity	1,000m			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.05

Item Name: New sub-arterial road

Component	Description			
<b>Technical Information</b>				
Item Name	New sub-arterial road			
Item Reference	T-1.05			
Functional Description	New, 2 travel lanes + 2 parking lanes (with restrictions during peak times) flexible pavement sub-arterial road.			
Inclusions	<ul style="list-style-type: none"> <li>• Pavement structure: Subgrade improvement layer 300mm, 150mm Subbase, 150mm Basecourse, Primer Seal, Asphalt Base 210mm, 2 x 25mm AC10.</li> <li>• Lime Stabilisation (150mm, 3%).</li> <li>• Road corridor: 13.4m wide carriageway, road reserve 23.4m</li> <li>• 150mm high kerb and gutter</li> <li>• Linemarking</li> <li>• Signage</li> <li>• Stormwater drainage</li> <li>• Subsoil drainage - 100mm diameter corrugated perforated plastic pipe with sock, including drainage filter backfill</li> <li>• 2 x 2.5m reinforced concrete footpath - 2500mm wide x 125mm thick concrete on 125mm thick DGS20</li> <li>• 2 x 2500mm wide turfed grass nature strip</li> <li>• Typical signage - 1 small to medium sized sign (e.g., speed limit sign) every 50 - 60m</li> <li>• Tie-in works to existing lane</li> <li>• Street Trees – semi mature 45L every 50m both sides</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Clearing and grubbing of light to medium vegetation</li> <li>• Minor traffic control allowance for construction vehicles/pedestrian and around tie- in point with trafficked road (includes installation and removal of signage and barriers)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Street lighting (Separate item T-1.31)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Guardrails and guide post</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Payment of waste levy for general solid waste or restricted special waste</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads                             <ul style="list-style-type: none"> <li>&gt; Guide to Traffic Engineering Practice</li> <li>&gt; Guide to Asset Management Part 5: Pavement Performance</li> <li>&gt; Guide to Pavement Technology Part 2: Pavement Structural Design</li> <li>&gt; Guide to Road Design Part 3: Geometric Design</li> </ul> </li> <li>• Roads and Maritime Services - Road Design Guide</li> <li>• Council's relevant work specification - Civil</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.05	New sub-arterial road	m	6,870
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.05	New sub-arterial road	m	7,210
Minimum quantity	1,000m			



# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.06

Item Name: New industrial road

Component	Description			
<b>Technical Information</b>				
Item Name	New industrial road			
Item Reference	T-1.06			
Functional Description	New, 2 lane, flexible pavement Industrial road, covering a range of pavement structures			
Inclusions	<ul style="list-style-type: none"> <li>• Pavement structure: Subbase 420mm, basecourse 140mm, Primer Seal, 2 x 25mm AC10</li> <li>• Road corridor: 2 lanes x 11m wide carriageway, road reserve 17m</li> <li>• 200mm high kerb and gutter</li> <li>• Linemarking</li> <li>• Signage</li> <li>• Stormwater drainage</li> <li>• Subsoil drainage - 100mm diameter corrugated perforated plastic pipe with sock, including drainage filter backfill</li> <li>• 2 x 3000mm wide turfed grass nature strip</li> <li>• Line-marking</li> <li>• Street Trees – semi mature 45L every 25m both sides</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm cut/fill balance</li> <li>• Clearing and grubbing of light to medium vegetation</li> <li>• Minor traffic control allowance for construction vehicles/pedestrian and around tie-in point with trafficked road (includes installation and removal of signage and barriers)</li> <li>• Installation works.</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Street lighting (Separate item T-1.31)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Guardrails and guide post</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads                             <ul style="list-style-type: none"> <li>&gt; Guide to Traffic Engineering Practice</li> <li>&gt; Guide to Asset Management Part 5: Pavement Performance</li> <li>&gt; Guide to Pavement Technology Part 2: Pavement Structural Design</li> <li>&gt; Guide to Road Design Part 3: Geometric Design</li> </ul> </li> <li>• Roads and Maritime Services - Road Design Guide</li> <li>• Council's relevant work specification - Civil</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.06	New industrial road	m	4,470
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.06	New industrial road	m	4,690
Minimum quantity	100m			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.07

Item Name: New rural road

Component	Description			
<b>Technical Information</b>				
Item Name	New rural road			
Item Reference	T-1.07			
Functional Description	New, 2 lane, flexible pavement rural road			
Inclusions	<ul style="list-style-type: none"> <li>• Pavement structure: 300mm subbase, 260mm basecourse, primer seal, two coat seal</li> <li>• Road corridor: 2 x 3.5m lanes, 2 x 2.5m shoulders (min 1.5m sealed), road reserve 14m and carriageway width 7m</li> <li>• Swales on each side</li> <li>• Typical signage - 1 small to medium sized sign (e.g., speed limit sign) every 200m</li> <li>• Line-marking</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm cut/fill balance</li> <li>• Clearing and grubbing of light to medium vegetation</li> <li>• Minor traffic control allowance for construction vehicles/pedestrian and around tie-in point with trafficked road (includes installation and removal of signage and barriers)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Guardrails and guide post</li> <li>• Street lighting (Separate item T1.31)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Kerb &amp; gutter</li> <li>• Footpath (Separate item T-1.20)</li> <li>• Stormwater drainage</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads                             <ul style="list-style-type: none"> <li>&gt; Guide to Traffic Engineering Practice</li> <li>&gt; Guide to Asset Management Part 5: Pavement Performance</li> <li>&gt; Guide to Pavement Technology Part 2: Pavement Structural Design</li> <li>&gt; Guide to Road Design Part 3: Geometric Design</li> </ul> </li> <li>• Roads and Maritime Services - Road Design Guide</li> <li>• Council's relevant work specification - Civil</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.07	New rural road	m	2,730
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.07	New rural road	m	2,870
Minimum quantity	1,000m			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.08

Item Name: Upgrade to local road (Widening)

Component	Description			
<b>Technical Information</b>				
Item Name	Upgrade to local road			
Item Reference	T-1.08			
Functional Description	New, 1 Lane, flexible pavement local access road			
Inclusions	<ul style="list-style-type: none"> <li>• Pavement structure: 275mm subbase, 150mm base, primer seal, 50mm AC 10 (2 x 25mm layers)</li> <li>• Road corridor: 4.5m lane, road reserve 8m</li> <li>• Roll-top gutter</li> <li>• Signage</li> <li>• Linemarking</li> <li>• Stormwater drainage</li> <li>• Subsoil drainage - 100mm diameter corrugated perforated plastic pipe with sock, including drainage filter backfill</li> <li>• 1 x 1.5m reinforced concrete footpath - 1500mm wide x 125mm thick concrete on 125mm thick DGS20</li> <li>• 1 x 2000mm wide turfed grass nature strip</li> <li>• Street trees - semi mature 45L every 15m both sides</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm cut/fill balance</li> <li>• Clearing and grubbing of light to medium vegetation</li> <li>• Minor traffic control allowance for construction vehicles/pedestrian and around tie-in point with trafficked road (includes installation and removal of signage and barriers)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Street lighting (Separate item T-1.31)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Upgrades to utilities such as stormwater</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads                             <ul style="list-style-type: none"> <li>&gt; Guide to Traffic Engineering Practice</li> <li>&gt; Guide to Asset Management Part 5: Pavement Performance</li> <li>&gt; Guide to Pavement Technology Part 2: Pavement Structural Design</li> <li>&gt; Guide to Road Design Part 3: Geometric Design</li> </ul> </li> <li>• Roads and Maritime Services - Road Design Guide</li> <li>• Council's relevant work specification - Civil</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.08	Upgrade to local road	m	2,160
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.08	Upgrade to local road	m	2,270
Minimum quantity	80m			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.10

Item Name: Upgrade to collector road

Component	Description			
<b>Technical Information</b>				
Item Name	Upgrade to collector road			
Item Reference	T-1.10			
Functional Description	Widening of a sub-arterial road adjacent to traffic by 1 lane, flexible pavement			
Inclusions	<ul style="list-style-type: none"> <li>• Road corridor: additional 1 x 3.2m wide lane</li> <li>• Pavement structure: 200mm base, 1 x 100mm asphalt AC20HD, 2 x 75mm asphalt AC20HD, 50mm AC14HD A15E Binder</li> <li>• Kerb and gutter</li> <li>• Stormwater drainage</li> <li>• Subsoil drainage - 100mm diameter corrugated perforated plastic pipe with sock, including drainage filter backfill</li> <li>• 1 x 2.5m reinforced concrete footpath - 2500mm wide x 125mm thick concrete on 125mm thick DGS20</li> <li>• 1 x 500mm wide turfed grass nature strip</li> <li>• Typical signage - 1 small to medium sized sign (e.g., speed limit sign) every 50 - 60m</li> <li>• Tie-in works to existing lane</li> <li>• Line-marking</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm of excavation</li> <li>• Clearing and grubbing of light to medium vegetation</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Street lighting (Separate item T-1.31)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Guardrails and guide post</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Payment of full waste levy for general solid waste or restricted special waste</li> <li>• Additional excavated material (over and above that stated in the basis of cost) requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads                             <ul style="list-style-type: none"> <li>&gt; Guide to Traffic Engineering Practice</li> <li>&gt; Guide to Asset Management Part 5: Pavement Performance</li> <li>&gt; Guide to Pavement Technology Part 2: Pavement Structural Design</li> <li>&gt; Guide to Road Design Part 3: Geometric Design</li> </ul> </li> <li>• Roads and Maritime Services - Road Design Guide</li> <li>• Council's relevant work specification - Civil</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.10	Upgrade to collector road	m	2,380
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.10	Upgrade to collector road	m	2,500
Minimum quantity	1,000m			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.12

Item Name: Upgrade to sub-arterial road

Component	Description			
<b>Technical Information</b>				
Item Name	Upgrade to sub-arterial road			
Item Reference	T-1.12			
Functional Description	Widening of a sub-arterial road adjacent to traffic by 1 lane, flexible pavement			
Inclusions	<ul style="list-style-type: none"> <li>• Road corridor: additional 1 x 3.2m wide lane</li> <li>• Pavement structure: Subgrade improvement layer 300mm, 150mm Subbase, 150mm Basecourse, Primer Seal, Asphalt Base 210mm, 2 x 25mm AC10.</li> <li>• Lime Stabilisation (150mm, 3%).</li> <li>• Kerb and gutter</li> <li>• Stormwater drainage</li> <li>• Subsoil drainage - 100mm diameter corrugated perforated plastic pipe with sock, including drainage filter backfill</li> <li>• 1 x 2.5m reinforced concrete footpath - 2500mm wide x 125mm thick concrete on 125mm thick DGS20</li> <li>• 1 x 500mm wide turfed grass nature strip</li> <li>• Typical signage - 1 small to medium sized sign (e.g., speed limit sign) every 50 - 60m</li> <li>• Tie-in works to existing lane</li> <li>• Line-marking</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm of excavation</li> <li>• Clearing and grubbing of light to medium vegetation</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Guardrails and guide post</li> <li>• Street lighting (Separate item T-1.31)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Payment of full waste levy for general solid waste or restricted special waste</li> <li>• Additional excavated material (over and above that stated in the basis of cost) requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• Street lighting (Separate item T-1.31)</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• Guardrails and guide post</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads                             <ul style="list-style-type: none"> <li>&gt; Guide to Traffic Engineering Practice</li> <li>&gt; Guide to Asset Management Part 5: Pavement Performance</li> <li>&gt; Guide to Pavement Technology Part 2: Pavement Structural Design</li> <li>&gt; Guide to Road Design Part 3: Geometric Design</li> </ul> </li> <li>• Roads and Maritime Services - Road Design Guide</li> <li>• Council's relevant work specification - Civil</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.12	Upgrade to sub-arterial road	m	2,690
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.12	Upgrade to sub-arterial road	m	2,820
Minimum quantity	1,000m			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.13

Item Name: Signalised intersection (single lane)

Component	Description			
<b>Technical Information</b>				
Item Name	Signalised intersection (single lane)			
Item Reference	T-1.13			
Functional Description	Signalised intersection installations – single lane			
Inclusions	<ul style="list-style-type: none"> <li>• Standard traffic signals with standard out reach</li> <li>• Splays</li> <li>• Kerb returns</li> <li>• Pram ramp crossings</li> <li>• Median pedestrian refuge</li> <li>• Typical traffic signal configuration including pedestrian crossing to all legs and EZY loops and typical signage</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Road construction (Separate Item T-1.01)</li> <li>• Traffic control</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• T-1.13.1 - "T" intersection</li> <li>• T-1.13.2 - 4 way intersection</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads</li> <li>&gt; Guide to Traffic Management, Part 4, 6, 9 &amp; 10</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.13	Signalised intersection (single lane)	Each	<ul style="list-style-type: none"> <li>• T-1.13.1 - \$338,630 ("T" intersection)</li> <li>• T-1.13.2 - \$384,880 (4 way intersection)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.13	Signalised intersection (single lane)	Each	<ul style="list-style-type: none"> <li>• T-1.13.1 - \$355,560/Each ("T" intersection)</li> <li>• T-1.13.2 - \$404,120/Each (4 way intersection)</li> </ul>
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.14

Item Name: Signalised intersection (2 lane)

Component	Description			
<b>Technical Information</b>				
Item Name	Signalised intersection (2 lane)			
Item Reference	T-1.14			
Functional Description	Signalised intersection installations			
Inclusions	<ul style="list-style-type: none"> <li>• Standard traffic signals with standard outreach sufficient to service 2 lanes</li> <li>• Splays</li> <li>• Kerb returns</li> <li>• Pram ramp crossings</li> <li>• Median pedestrian refuge</li> <li>• Typical traffic signal configuration including pedestrian crossing to all legs and EZY loops and typical signage</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Road construction (Separate item T-1.06)</li> <li>• Traffic control</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• T-1.14.1 - "T" intersection</li> <li>• T-1.14.2 - 4 way intersection</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads</li> <li>&gt; Guide to Traffic Management, Part 4, 6, 9 &amp; 10</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.14	Signalised intersection (single lane)	Each	<ul style="list-style-type: none"> <li>• T-1.14.1 - \$414,780 ("T" intersection)</li> <li>• T-1.14.2 - \$543,850 (4 way intersection)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.14	Signalised intersection (single lane)	Each	<ul style="list-style-type: none"> <li>• T-1.14.1 - \$435,520/Each ("T" intersection)</li> <li>• T-1.14.2 - \$571,040/Each (4 way intersection)</li> </ul>
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.15

Item Name: Signalised intersection and 1 turning lane

Component	Description			
<b>Technical Information</b>				
Item Name	Signalised intersection and 1 turning lane			
Item Reference	T-1.15			
Functional Description	Signalised intersection installations			
Inclusions	<ul style="list-style-type: none"> <li>• Standard traffic signals with standard outreach sufficient to service 2 lanes</li> <li>• Splays</li> <li>• Kerb returns</li> <li>• Pram ramp crossings</li> <li>• Median pedestrian refuge</li> <li>• Typical traffic signal configuration including pedestrian crossing to all legs and EZY loops and typical signage</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Road construction</li> <li>• Traffic control</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• T-1.13.1 - "T" intersection</li> <li>• T-1.13.2 - 4 way intersection</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads</li> <li>&gt; Guide to Traffic Management, Part 4, 6, 9 &amp; 10</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.15	Signalised intersection and 1 turning lane	Each	713,850
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.15	Signalised intersection and 1 turning lane	Each	749,540
Minimum quantity	1 no.			



# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.16

Item Name: Signalised intersection and 2 turning lane

Component	Description			
<b>Technical Information</b>				
Item Name	Signalised intersection and 2 turning lane			
Item Reference	T-1.16			
Functional Description	Signalised intersection installations			
Inclusions	<ul style="list-style-type: none"> <li>• Standard traffic signals with standard outreach sufficient to service 3 lanes</li> <li>• Splays</li> <li>• Kerb returns</li> <li>• Pram ramp crossings</li> <li>• Median pedestrian refuge</li> <li>• Typical traffic signal configuration including pedestrian crossing to all legs and EZY loops and typical signage</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Road construction (Separate item T-1.06)</li> <li>• Traffic control</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• T-1.14.1 - "T" intersection</li> <li>• T-1.14.2 - 4 way intersection</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads</li> <li>&gt; Guide to Traffic Management, Part 4, 6, 9 &amp; 10</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.16	Signalised intersection and 2 turning lane	Each	928,005
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.16	Signalised intersection and 2 turning lane	Each	974,405
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.17

Item Name: Priority controlled/unsignalised intersection

Component	Description			
<b>Technical Information</b>				
Item Name	Priority controlled/unsignalised intersection			
Item Reference	T-1.17			
Functional Description	Unsignalised intersection installations			
Inclusions	<ul style="list-style-type: none"> <li>• Extra over cost for:</li> <li>• Splays</li> <li>• Kerb returns</li> <li>• Pram ramp crossings</li> <li>• Typical signage</li> <li>• Tie-in works</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Road construction</li> <li>• Traffic control</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• "T" intersection</li> <li>• 4 way intersection</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• T-1.13.1 - "T" intersection</li> <li>• T-1.13.2 - 4 way intersection</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads</li> <li>&gt; Guide to Traffic Management, Part 4, 6, 9 &amp; 10</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.17	Priority controlled/unsignalised intersection	Each	51,110
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.17	Priority controlled/unsignalised intersection	Each	53,670
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.18

Item Name: Roundabout (Single Lane)

Component	Description			
<b>Technical Information</b>				
Item Name	Roundabout (Single Lane)			
Item Reference	T-1.18			
Functional Description	Roundabout (single lane), Trafficable, 4 leg Roundabout with 1 approaching lane			
Inclusions	<ul style="list-style-type: none"> <li>• 6m diameter trafficable concrete roundabout</li> <li>• 3m wide trafficable annulus</li> <li>• 3m radius centre section with stencil finish</li> <li>• 4 leg Roundabout with a single approaching lane</li> <li>• Splays</li> <li>• Kerb returns</li> <li>• Typical signage</li> <li>• Raised triangular medians.</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Pedestrian refuges</li> <li>• Road construction (Separate item T-1.01)</li> <li>• Traffic Control</li> <li>• Landscaping (Separate item OSE-1.20)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads</li> <li>&gt; Guide to Traffic Management, Part 4, 6, 9 &amp; 10</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.18	Roundabout (Single Lane)	Each	49,500
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.18	Roundabout (Single Lane)	Each	51,980
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.19

Item Name: Roundabout (Two Lane)

Component	Description			
<b>Technical Information</b>				
Item Name	Roundabout (Two Lane)			
Item Reference	T-1.19			
Functional Description	Roundabout (2 lane), Trafficable, 4 leg Roundabout with 2 approaching lane			
Inclusions	<ul style="list-style-type: none"> <li>• 6m diameter trafficable concrete roundabout</li> <li>• 6m wide trafficable annulus</li> <li>• 6m radius centre section with stencil finish</li> <li>• 4 leg Roundabout with a single approaching lane</li> <li>• Splays</li> <li>• Kerb returns</li> <li>• Typical signage</li> <li>• Raised triangular medians.</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Pedestrian refuges</li> <li>• Road construction (Separate item T-1.06)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Austroads</li> <li>&gt; Guide to Traffic Management, Part 4, 6, 9 &amp; 10</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.19	Roundabout (Two Lane)	Each	72,280
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.19	Roundabout (Two Lane)	Each	75,890
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.20

Item Name: Concrete pathway / footpath / shareway / cycleway

Component	Description			
<b>Technical Information</b>				
Item Name	Concrete pathway / footpath / shareway / cycleway			
Item Reference	T-1.20			
Functional Description	Reinforced Concrete Path			
Inclusions	<ul style="list-style-type: none"> <li>• 125mm thick N25 concrete with non-slip finish</li> <li>• SL72 Mesh</li> <li>• 125mm thick compacted DGS 20</li> </ul>			
Key scope of work inclusions	• N/A			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	• N/A			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	• General Council standard			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.20	Concrete pathway / footpath / shareway / cycleway	m	220
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.20	Concrete pathway / footpath / shareway / cycleway	m	230
Minimum quantity	1m			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.22

Item Name: Road bridge (including over railways, waterways, grade separation)

Component	Description			
<b>Technical Information</b>				
Item Name	Road bridge (including over railways, waterways, grade separation)			
Item Reference	T-1.22			
Functional Description	Road bridge (including over railways, waterways, grade separation)			
Inclusions	<ul style="list-style-type: none"> <li>• Reinforced concrete works to bridge substructure</li> <li>• Wearing Surface</li> <li>• Road and path barriers</li> <li>• Anti-throw screens</li> <li>• Anti-graffiti paint protection</li> <li>• Lighting</li> <li>• Configuration based on a typical single or multi-span bridge</li> <li>• Also refer to specific sub item information</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Piled Foundations</li> <li>• Off-site fabrication of the bridge main girders</li> <li>• Constructed over an operating road/rail</li> <li>• Minor traffic control allowance within immediate proximity of work area (includes installation and removal of signage and barriers)</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Architectural embellishment</li> <li>• Utilities impacts</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Inefficient ramp configuration due to insufficient space</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>• AS5100-2017 and all standards</li> <li>• TfNSW Specifications</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.22	Road bridge (including over railways, waterways, grade separation)	m2	5,570
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.22	Road bridge (including over railways, waterways, grade separation)	m2	5,850
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.23

Item Name: Rail bridge

Component	Description				
<b>Technical Information</b>					
Item Name	Rail bridge				
Item Reference	T-1.23				
Functional Description	Rail bridge				
Inclusions	<ul style="list-style-type: none"> <li>• Reinforced concrete works to bridge substructure</li> <li>• Wearing Surface</li> <li>• Road and path barriers</li> <li>• Anti-throw screens</li> <li>• Anti-graffiti paint protection</li> <li>• Lighting</li> <li>• Configuration based on a typical single or multi-span bridge</li> <li>• Also refer to specific sub item information</li> </ul>				
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Piled Foundations</li> <li>• Off-site fabrication of the bridge main girders</li> <li>• Constructed over an operating road/rail</li> <li>• Minor traffic control allowance within immediate proximity of work area (includes installation and removal of signage and barriers)</li> </ul>				
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>				
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Architectural embellishment</li> <li>• Utilities impacts</li> </ul>				
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Inefficient ramp configuration due to insufficient space</li> </ul>				
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>				
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>				
Applicable standards	<ul style="list-style-type: none"> <li>• AS5100-2017 and all standards</li> <li>• TfNSW Specifications</li> </ul>				
<b>Cost Information</b>					
Methodology	First principles estimating				
Benchmark base unit rate FY24/25	#		Item/sub-item	Unit	\$/Unit
	T-1.23	Rail bridge		m2	8,340
Benchmark base unit rate FY25/26	#		Item/sub-item	Unit	\$/Unit
	T-1.23	Rail bridge		m2	8,760
Minimum quantity	1m2				

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.24

Item Name: Cycleway bridge

Component	Description			
<b>Technical Information</b>				
Item Name	Cycleway bridge			
Item Reference	T-1.24			
Functional Description	Cycle overpass with anti-throw screens and covered walkway			
Inclusions	<ul style="list-style-type: none"> <li>Reinforced concrete works to bridge substructure</li> <li>Non-slip surface on staircase</li> <li>Balustrades to stairs and bridge</li> <li>Anti-throw screens</li> <li>Anti-graffiti paint protection</li> <li>Lighting</li> <li>Configuration based on a pedestrian/ cycleway overpass</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Piled Foundations</li> <li>Off-site fabrication of the bridge element</li> <li>Constructed over an operating road</li> <li>Minor traffic control allowance within immediate proximity of work area (includes installation and removal of signage and barriers)</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>Architectural embellishment</li> <li>Utilities impacts</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Relocation and diversion of existing utilities</li> <li>Inefficient ramp configuration due to insufficient space</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>AS5100-2017 and all standards</li> <li>TfNSW Specifications</li> <li>AS2156 for Walking Tracks</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.24	Cycleway bridge	m2	10,780
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.24	Cycleway bridge	m2	11,320
Minimum quantity	1m2			



# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.25

Item Name: Pedestrian bridge

Component	Description			
<b>Technical Information</b>				
Item Name	Pedestrian bridge			
Item Reference	T-1.25			
Functional Description	Pedestrian overpass with anti-throw screens and covered walkway			
Inclusions	<ul style="list-style-type: none"> <li>Reinforced concrete works to bridge substructure</li> <li>Non-slip surface on staircase</li> <li>Balustrades to stairs and bridge</li> <li>Anti-throw screens</li> <li>Anti-graffiti paint protection</li> <li>Lighting</li> <li>Configuration based on a pedestrian/cycleway overpass</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Piled Foundations</li> <li>Off-site fabrication of the bridge element</li> <li>Constructed over an operating road</li> <li>Minor traffic control allowance within immediate proximity of work area (includes installation and removal of signage and barriers)</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>Architectural embellishment</li> <li>Utilities impacts</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Relocation and diversion of existing utilities</li> <li>Inefficient ramp configuration due to insufficient space</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>AS5100-2017 and all standards</li> <li>TfNSW Specifications</li> <li>AS2156 for Walking Tracks</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.25	Pedestrian bridge	m2	12,310
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.25	Pedestrian bridge	m2	12,930
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.26

Item Name: Bus stop (signage only)

Component	Description			
<b>Technical Information</b>				
Item Name	Bus stop (signage only)			
Item Reference	T-1.26			
Functional Description	Bus stop signage mounted on a steel post			
Inclusions	<ul style="list-style-type: none"> <li>• Bus stop signage</li> <li>• Steel post</li> <li>• Concrete footing</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Signage</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	• Relocation and diversion of existing utilities			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	• TfNSW Specifications			
<b>Cost Information</b>				
Methodology	Reference pricing			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.26	Bus stop (signage only)	Each	700
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.26	Bus stop (signage only)	Each	740
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.27

Item Name: Bus shelter

Component	Description			
<b>Technical Information</b>				
Item Name	Bus shelter			
Item Reference	T-1.27			
Functional Description	Bus stop including enclosure, seating and signage			
Inclusions	<ul style="list-style-type: none"> <li>• 4.5m x 1.8m covered shed (includes disabled passenger space allocation), open side access and concrete slab / foundations</li> <li>• 2 aluminium seats with seat height of 500mm (approximately)</li> <li>• Short (&lt;3m) connection to exiting footpath</li> <li>• Nonslip surface at boarding point (textured concrete)</li> <li>• Tactile ground surface indicators (TGSIs)</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal excavation with material retained on-site</li> <li>• Minor traffic control allowance within immediate proximity of work area (includes installation and removal of signage and barriers)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Lighting</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Bus lane / bus bay construction</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Disability Standards for Accessible Public Transport 2002 (Amended 2010)</li> <li>• Australian Human Rights Commission Accessible Bus Stops Guidelines 2010</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.27	Bus shelter	Each	60,270
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.27	Bus shelter	Each	63,280
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.28

Item Name: Bus shelter & kiosk

Component	Description			
<b>Technical Information</b>				
Item Name	Bus shelter & kiosk			
Item Reference	T-1.28			
Functional Description	Bus stop with adjoining kiosk unit including enclosure, seating and signage			
Inclusions	<ul style="list-style-type: none"> <li>• 4.5m x 1.8m covered shed (includes disabled passenger space allocation), open side access and concrete slab / foundations</li> <li>• 2 aluminium seats with seat height of 500mm (approximately)</li> <li>• Short (&lt;3m) connection to exiting footpath</li> <li>• Nonslip surface at boarding point (textured concrete)</li> <li>• Tactile ground surface indicators (TGSIs)</li> <li>• Kiosk structure, enclosure, and services connections.</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal excavation with material retained on-site</li> <li>• Minor traffic control allowance within immediate proximity of work area (includes installation and removal of signage and barriers)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Lighting</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Bus lane / bus bay construction</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• Disability Standards for Accessible Public Transport 2002 (Amended 2010)</li> <li>• Australian Human Rights Commission Accessible Bus Stops Guidelines 2010</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.28	Bus shelter & kiosk	Each	66,297
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.28	Bus shelter & kiosk	Each	69,611
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.29

Item Name: Pedestrian crossing

Component	Description			
<b>Technical Information</b>				
Item Name	Pedestrian crossing			
Item Reference	T-1.29			
Functional Description	Pedestrian crossing spanning 2 lanes (6.5m) including pedestrian refuge (Retrofit)			
Inclusions	<ul style="list-style-type: none"> <li>• Pedestrian laybacks</li> <li>• Surface markings applied at grade</li> <li>• Signage</li> <li>• Pedestrian refuge</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Preparations to existing road surface to receive markings</li> <li>• Traffic control allowance based on works performed adjacent to moving traffic (includes installation, modifications and removal of signage and barriers as well as attendance by traffic controllers)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Flat top road hump (separate item - 1.9.1)</li> <li>• Note: used in conjunction for elevated crossings</li> </ul>			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	• N/A			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.29	Pedestrian crossing	Each	23,140
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.29	Pedestrian crossing	Each	24,300
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.31

Item Name: Street lighting

Component	Description			
<b>Technical Information</b>				
Item Name	Street lighting			
Item Reference	T-1.31			
Functional Description	Street Lighting			
Inclusions	<ul style="list-style-type: none"> <li>• 6.5m Slimline 3m outreach 25W LED (General subdivision street)</li> <li>• Cable pits</li> <li>• Concrete plinth</li> <li>• Control cabinet</li> <li>• Cabling for underground connection</li> <li>• Conduits</li> </ul>			
Key scope of work inclusions	• Installation			
Exclusions (may be reasonably required)	• Substation			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	• N/A			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	• AS 1158 Lighting for roads and public places			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.31	Street lighting	Each	24,120
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.31	Street lighting	Each	25,330
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: T-1.32

Item Name: Waste disposal

Component	Description			
<b>Technical Information</b>				
Item Name	Waste disposal			
Item Reference	T-1.32			
Functional Description	Disposal of typical waster/contamination materials			
Inclusions	• N/A			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• EPA Levy</li> <li>• Tip Fees</li> <li>• Haulage of material</li> </ul>			
Exclusions (may be reasonably required)	• Hazardous waste			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	<ul style="list-style-type: none"> <li>• The need for sorting and stockpiling prior to transporting to registered tip facility.</li> <li>• Location of the registered tip facility.</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• T1.32.1 - Concrete</li> <li>• T1.32.2 -Asphalt</li> <li>• T1.32.3 -Demolition of mixed waste</li> <li>• T1.32.4 -General Solid Waste (GSW) Recyclable</li> <li>• T1.32.5 -GSW Landfill</li> <li>• T1.32.6 -GSW Asbestos (in soil)</li> <li>• T1.32.7 -Restricted Solid Waste (RSW)</li> <li>• T1.32.8 -Asbestos only (Sheets etc.)</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	• NSW EPA Requirements			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	T-1.32	Waste disposal	Tonne	<ul style="list-style-type: none"> <li>• T1.32.1 - \$470/t (Concrete - Waste Disposal)</li> <li>• T1.32.2 - \$390/t (Asphalt - Waste Disposal)</li> <li>• T1.32.3 - \$510/t (Demolition of mixed waste - Waste Disposal)</li> <li>• T1.32.4 - \$470/t (GSW Recyclable - Waste Disposal)</li> <li>• T1.32.5 - \$480/t (GSW Landfill - Waste Disposal)</li> <li>• T1.32.6 - \$540/t (GSW Asbestos - Waste Disposal)</li> <li>• T1.32.7 - \$1,250/t (RSW - Waste Disposal)</li> <li>• T1.32.8 - \$1,250/t (Asbestos ONLY - Waste Disposal)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	T-1.32	Waste disposal	Tonne	<ul style="list-style-type: none"> <li>• T1.32.1 -\$490/t (Concrete - Waste Disposal)</li> <li>• T1.32.2 -\$410/t (Asphalt - Waste Disposal)</li> <li>• T1.32.3 -\$540/t (Demolition of mixed waste - Waste Disposal)</li> <li>• T1.32.4 -\$490/t (GSW Recyclable - Waste Disposal)</li> <li>• T1.32.5 -\$500/t (GSW Landfill - Waste Disposal)</li> <li>• T1.32.6 -\$570/t (GSW Asbestos - Waste Disposal)</li> <li>• T1.32.7 -\$1,310/t (RSW - Waste Disposal)</li> <li>• T1.32.8 -\$1,310/t (Asbestos ONLY - Waste Disposal)</li> </ul>
Minimum quantity	1 Tonne			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST/T-1.01

Item Name: Box culvert and headwall

Component	Description			
<b>Technical Information</b>				
Item Name	Box culvert and headwall			
Item Reference	ST/T-1.01			
Functional Description	Precast concrete box culverts, single and twin cell, and precast headwall to suit			
Inclusions	<ul style="list-style-type: none"> <li>• Precast concrete box culverts and precast headwall to suit for road crossings and detention/retention basin</li> <li>• Outlet structures</li> <li>• Refer to specific sub item information</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>• Excavation to total depth of culvert and headwall plus additional 100mm for bedding material</li> <li>• Imported stabilised fill material</li> <li>• Installation works</li> <li>• Bedding, laying and jointing</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	<ul style="list-style-type: none"> <li>• Removal of excess spoil</li> <li>• Waste levy allowances</li> <li>• Excavated material other than VENM</li> <li>• Encountering rock</li> <li>• Dewatering</li> <li>• Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• ST/T1.01.1 - Single Cell; size 300 x 225mm + headwall</li> <li>• ST/T1.01.2 - Single Cell; size 600 x 450mm + headwall</li> <li>• ST/T1.01.3 - Single Cell; size 1500 x 600mm + headwall</li> <li>• ST/T1.01.4 - Single Cell; size 2100 x 2100mm + headwall</li> <li>• ST/T1.01.5 - Twin Cell; size 300 x 225mm + headwall</li> <li>• ST/T1.01.6 - Twin Cell; size 600 x 450 mm + headwall</li> <li>• ST/T1.01.7 - Twin Cell; size 1500 x 600 mm + headwall</li> <li>• ST/T1.01.8 - Twin Cell; size 2100 x 2100 mm + headwall</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• Sub item - Headwalls</li> <li>• Excavation (minimal) and backfilling (minimal) but excluding reinstatement of any hard surfacing</li> <li>• Imported stabilised fill material</li> <li>• Connection into network</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• AUS-SPEC NSW Development Design Specification D5 Stormwater Drainage Design</li> <li>• AS1597 'Precast Reinforced Concrete Box Culverts'</li> <li>• Camden Council Engineering Design Specification (adopted 10 February 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST/T-1.01	Box culvert and headwall	m/each	<ul style="list-style-type: none"> <li>• ST/T1.01.1 - \$1,410/m (Single Cell; size 300 x 225mm)</li> <li>• ST/T1.01.1 - \$2,010/Each (Headwall; 300 x 225mml)</li> <li>• ST/T1.01.2 - \$1,620/m (Single Cell; size 600 x 450mm)</li> <li>• ST/T1.01.2 - \$2,510/Each (Headwall; 600 x 450mml)</li> <li>• ST/T1.01.3 - \$2,970/m (Single Cell; size 1500 x 600mm)</li> <li>• ST/T1.01.3 - \$9,280/Each (Headwall; 1500 x 600mml)</li> <li>• ST/T1.01.4 - \$5,560/m (Single Cell; size 2100 x 2100mm)</li> <li>• ST/T1.01.4 - \$11,550/Each (Headwall; 2100 x 2100mml)</li> <li>• ST/T1.01.5 - \$2,750/m (Twin Cell; size 300 x 225mm)</li> <li>• ST/T1.01.5 - \$2,920/Each (Headwall; 300 x 225mml)</li> <li>• ST/T1.01.6 - \$3,990/m (Twin Cell; size 600 x 450mm)</li> <li>• ST/T1.01.6 - \$3,730/Each (Headwall; 600 x 450mml)</li> <li>• ST/T1.01.7 - \$8,460/m (Twin Cell; size 1500 x 600mm)</li> <li>• ST/T1.01.7 - \$11,880/Each (Headwall; 1500 x 600mml)</li> <li>• ST/T1.01.8 - \$11,120/m (Twin Cell; 2100 x 2100mml)</li> <li>• ST/T1.01.8 - \$15,390/Each (Headwall; size 2100 x 2100mm)</li> </ul>



# IPART - Benchmark costs for local infrastructure



Item Reference: ST/T-1.01

Item Name: Box culvert and headwall

Component	Description			
	#	Item/sub-item	Unit	\$/Unit
Benchmark base unit rate FY25/26	ST/T-1.01	Box culvert and headwall	m/each	<ul style="list-style-type: none"> <li>• ST/T1.01.1 - \$1,480/m (Single Cell; size 300 x 225mm)</li> <li>• ST/T1.01.1 - \$2,110/Each (Headwall; 300 x 225mm)</li> <li>• ST/T1.01.2 - \$1,700/m (Single Cell; size 600 x 450mm)</li> <li>• ST/T1.01.2 - \$2,640/Each (Headwall; 600 x 450mm)</li> <li>• ST/T1.01.3 - \$3,120/m (Single Cell; size 1500 x 600mm)</li> <li>• ST/T1.01.3 - \$9,740/Each (Headwall; 1500 x 600mm)</li> <li>• ST/T1.01.4 - \$5,840/m (Single Cell; size 2100 x 2100mm)</li> <li>• ST/T1.01.4 - \$12,130/Each (Headwall; 2100 x 2100mm)</li> <li>• ST/T1.01.5 - \$2,890/m (Twin Cell; size 300 x 225mm)</li> <li>• ST/T1.01.5 - \$3,070/Each (Headwall; 300 x 225mm)</li> <li>• ST/T1.01.6 - \$4,190/m (Twin Cell; size 600 x 450mm)</li> <li>• ST/T1.01.6 - \$3,920/Each (Headwall; 600 x 450mm)</li> <li>• ST/T1.01.7 - \$8,880/m (Twin Cell; size 1500 x 600mm)</li> <li>• ST/T1.01.7 - \$12,470/Each (Headwall; 1500 x 600mm)</li> <li>• ST/T1.01.8 - \$11,680/m (Twin Cell; 2100 x 2100mm)</li> <li>• ST/T1.01.8 - \$16,160/Each (Headwall; size 2100 x 2100mm)</li> </ul>
Minimum quantity	1	no.		

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.01

Item Name: Combined basin and raingarden facility

Component	Description			
<b>Technical Information</b>				
Item Name	Combined basin and raingarden facility			
Item Reference	ST-1.01			
Functional Description	Secondary and tertiary pollution devices			
Inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Connection into network</li> <li>UPVC sewer class stormwater drain pipes</li> <li>HDPE liner</li> <li>Slotted pipe to underground stormwater drains</li> <li>Flush out riser standpipe</li> <li>Planting</li> <li>Filtration layer</li> <li>Transition Layer</li> <li>Drainage Layer</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Connection into network</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Maintenance</li> <li>Reinstatement of any hard surfacing</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Removal of excess spoil</li> <li>Waste levy allowances</li> <li>Excavated material other than VENM</li> <li>Encountering rock</li> <li>Dewatering</li> <li>Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>Australian Runoff Quality: A Guide to Runoff Quality (Engineers Australia, 2007)</li> <li>Urban Stormwater - Best Practice Environmental Management Guidelines. Prepared for the Victorian Stormwater Committee (CSIRO, 1999)</li> <li>Stormwater Treatment Framework and Stormwater Quality Improvement Device Guidelines, Adopted by Port Macquarie Council on 1 September 2003 (WBM, 2003)</li> <li>Facility for Advancing Water Biofiltration (FAWB) Guidelines</li> <li>WSUD Technical Guidelines for Western Sydney (URS, 2004)</li> <li>Structural Stormwater Quality Best Management Practice Cost / Size Relationship Information from the Literature (CRC for Catchment Hydrology, 2005)</li> <li>Water Sensitive Urban Design Book 1   Policy (Landcom, 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.01	Combined basin and raingarden facility	m2	520
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.01	Combined basin and raingarden facility	m2	550
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.02

Item Name: Stormwater headwalls

Component	Description			
<b>Technical Information</b>				
Item Name	Stormwater headwalls			
Item Reference	ST-1.02			
Functional Description	Primary pollution devices including proprietary devices			
Inclusions	<ul style="list-style-type: none"> <li>• Precast stormwater headwalls</li> <li>• Erosion protection at headwall outlet</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Excavation works (refer to specific sub items)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	<ul style="list-style-type: none"> <li>• Removal of excess spoil</li> <li>• Waste levy allowances</li> <li>• Excavated material other than VENM</li> <li>• Encountering rock</li> <li>• Dewatering</li> <li>• Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• ST-1.02.1 - Headwalls to suit 375mm pipe</li> <li>• ST-1.02.2 -Headwalls to suit 525mm pipe</li> <li>• ST-1.02.3 -Headwalls to suit 750mm pipe</li> <li>• ST-1.02.4 -Headwalls to suit 900mm pipe</li> <li>• ST-1.02.4 -Headwalls to suit 1200mm pipe</li> <li>• ST-1.02.5 -Headwalls to suit 1350mm pipe</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• Excavation (minimal) and backfilling (minimal) but excluding reinstatement of any hard surfacing</li> <li>• Imported stabilised fill material</li> <li>• Connection into network</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• AUS-SPEC NSW Development Design Specification D5 Stormwater Drainage Design</li> <li>• Camden Council Engineering Construction Specification (Feb 2009)</li> <li>• Camden Council Engineering Design Specification (Feb 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.02	Stormwater headwalls	Each	<ul style="list-style-type: none"> <li>• ST-1.02.1 -\$1,770/Each (Headwalls to suit 375mm pipe)</li> <li>• ST-1.02.2 -\$2,080/Each (Headwalls to suit 525mm pipe)</li> <li>• ST-1.02.3 -\$3,310/Each (Headwalls to suit 750mm pipe)</li> <li>• ST-1.02.4 -\$3,890/Each (Headwalls to suit 900mm pipe)</li> <li>• ST-1.02.5 -\$5,890/Each (Headwalls to suit 1200mm pipe)</li> <li>• ST-1.02.6 -\$7,290/Each (Headwalls to suit 1350mm pipe)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.02	Stormwater headwalls	Each	<ul style="list-style-type: none"> <li>• ST-1.02.1 -\$1,860/Each (Headwalls to suit 375mm pipe)</li> <li>• ST-1.02.2 -\$2,280/Each (Headwalls to suit 525mm pipe)</li> <li>• ST-1.02.3 -\$3,480/Each (Headwalls to suit 750mm pipe)</li> <li>• ST-1.02.4 -\$4,080/Each (Headwalls to suit 900mm pipe)</li> <li>• ST-1.02.5 -\$6,180/Each (Headwalls to suit 1200mm pipe)</li> <li>• ST-1.02.6 -\$7,650/Each (Headwalls to suit 1350mm pipe)</li> </ul>
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.03

Item Name: Single raingarden facility

Component	Description			
<b>Technical Information</b>				
Item Name	Single raingarden facility			
Item Reference	ST-1.03			
Functional Description	Secondary and tertiary pollution devices			
Inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Connection into network</li> <li>Advanced tree planting</li> <li>Precast concrete spike down kerb</li> <li>UPVC sewer class stormwater drain pipes</li> <li>Slotted pipe to underground stormwater drains</li> <li>Flush out riser standpipe</li> <li>galvanised steel edgings</li> <li>Filtration layer</li> <li>Transition Layer</li> <li>Drainage Layer</li> <li>Concrete kerb</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Connection into network</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	<ul style="list-style-type: none"> <li>Removal of excess spoil</li> <li>Waste levy allowances</li> <li>Excavated material other than VENM</li> <li>Encountering rock</li> <li>Dewatering</li> <li>Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>Australian Runoff Quality: A Guide to Runoff Quality (Engineers Australia, 2007)</li> <li>Urban Stormwater - Best Practice Environmental Management Guidelines. Prepared for the Victorian Stormwater Committee (CSIRO, 1999)</li> <li>Stormwater Treatment Framework and Stormwater Quality Improvement Device Guidelines, Adopted by Port Macquarie Council on 1 September 2003 (WBM, 2003)</li> <li>Facility for Advancing Water Biofiltration (FAWB) Guidelines</li> <li>WSUD Technical Guidelines for Western Sydney (URS, 2004)</li> <li>Structural Stormwater Quality Best Management Practice Cost / Size Relationship Information from the Literature (CRC for Catchment Hydrology, 2005)</li> <li>Water Sensitive Urban Design Book 1   Policy (Landcom, 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.03	Single raingarden facility	Each	9,060
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.03	Single raingarden facility	Each	9,510
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.04

Item Name: Bio-retention basin

Component	Description			
<b>Technical Information</b>				
Item Name	Bio-retention basin			
Item Reference	ST-1.04			
Functional Description	Secondary and tertiary pollution devices			
Inclusions	<ul style="list-style-type: none"> <li>Refer to specific sub item information</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>Excavation to total depth of culvert plus additional 100mm for bedding material</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Bedding, laying and jointing</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Forebay area (for basin)</li> <li>Access driveways and paths for maintenance</li> <li>Rock riprap for overflow</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Removal of excess spoil</li> <li>Waste levy allowances</li> <li>Excavated material other than VENM</li> <li>Encountering rock</li> <li>Dewatering</li> <li>Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>Grassed swale 1.5m total width</li> <li>Grassed swale 3.0m total width</li> <li>Grassed swale 5.0m total width</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>Maximum flow velocity adopted for grass swales is 2.0 m/s (1% AEP* flows) (where AEP = Annual Exceedance Probability)</li> <li>Minimum flow velocity adopted for grass swales is 0.6 m/s (100% AEP flows)</li> <li>Maximum batter slope adopted for grassed swales is 1(V):4(H)</li> <li>Planting (of grass and/or small native plants)</li> <li>Transition filter (100mm to 200mm depending on size), gravel, geo-fabric liner in central channel</li> <li>Sub item 2.04.4 - Bio retention trench</li> <li>Bio retention trench 3 m wide (W) by 1 m nominal depth (H)</li> <li>Geo-fabric liner</li> <li>Underdrainage pipe (100 mm diameter)</li> <li>Gravel drainage layer</li> <li>Filter media</li> <li>Sand</li> <li>Topsoil and vegetation cover</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>Australian Runoff Quality: A Guide to Runoff Quality (Engineers Australia, 2007)</li> <li>Water Sensitive Urban Design Book 1   Policy (Landcom, 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.04	Bio-retention basin	m	<ul style="list-style-type: none"> <li>\$190/m (Headwalls to suit 375mm pipe)</li> <li>\$380/m (Headwalls to suit 525mm pipe)</li> <li>\$630/m (Headwalls to suit 750mm pipe)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.04	Bio-retention basin	m	<ul style="list-style-type: none"> <li>\$200/m (Headwalls to suit 375mm pipe)</li> <li>\$400/m (Headwalls to suit 525mm pipe)</li> <li>\$660/m (Headwalls to suit 750mm pipe)</li> </ul>
Minimum quantity	1m			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.05

Item Name: Bio-retention filter

Component	Description			
<b>Technical Information</b>				
Item Name	Bio-retention filter			
Item Reference	ST-1.05			
Functional Description	Filter media maintenance			
Inclusions	<ul style="list-style-type: none"> <li>Remove and replace existing filter media on a bioretention system</li> <li>Protection of transition layer</li> <li>Protection of HDPE or clay liner</li> <li>Protection of drainage structures</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>Imported stabilised filter media material to specifications (450mm)</li> <li>Installation works</li> <li>Connection into network</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>Replacement of transition layer</li> <li>Replacement of HDPE/clay liner</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Removal of excess spoil</li> <li>Waste levy allowances</li> <li>Excavated material other than VENM</li> <li>Encountering rock</li> <li>Dewatering</li> <li>Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>Australian Runoff Quality: A Guide to Runoff Quality (Engineers Australia, 2007)</li> <li>Water Sensitive Urban Design Book 1   Policy (Landcom, 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.05	Bio-retention filter	m2	172
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.05	Bio-retention filter	m2	180
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.09

Item Name: Constructed wetland (Ephemeral)

Component	Description			
<b>Technical Information</b>				
Item Name	Constructed wetland (Ephemeral)			
Item Reference	ST-1.09			
Functional Description	Secondary and tertiary pollution devices			
Inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>Excavation to total depth of wetlands plus additional 300mm for clay liner</li> <li>Imported stabilised fill material</li> <li>Macrophyte planting bed 350mm thick</li> <li>300mm thick clay liner</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Connection into network</li> <li>Planting</li> <li>Inlet/Outlet structures</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Maintenance access road</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Removal of excess spoil</li> <li>Waste levy allowances</li> <li>Excavated material other than VENM</li> <li>Encountering rock</li> <li>Dewatering</li> <li>Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>Australian Runoff Quality: A Guide to Runoff Quality (Engineers Australia, 2007)</li> <li>WSUD Technical Guidelines for Western Sydney (URS, 2004)</li> <li>Water Sensitive Urban Design Book 1   Policy (Landcom, 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.09	Constructed wetland (Ephemeral)	m2	260
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.09	Constructed wetland (Ephemeral)	m2	270
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.10

Item Name: Detention basin

Component	Description			
<b>Technical Information</b>				
Item Name	Detention basin			
Item Reference	ST-1.10			
Functional Description	Permanent detention basin (350 m2 footprint 1m depth)			
Inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Connection into network</li> <li>UPVC sewer class stormwater drain pipes</li> <li>HDPE liner</li> <li>Slotted pipe to underground stormwater drains</li> <li>Flush out riser standpipe</li> <li>Planting</li> <li>Trash rack</li> <li>Emergency spillway (weir)</li> <li>Inflow energy dissipator</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling</li> <li>Clay liner</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Connection into network</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Riprap baffle</li> <li>Sediment forebay</li> <li>Disposal of excess material (Separate item T-1.32)</li> <li>Stormwater drainage structures other than overflow/trash rack (Separate item ST-1.11)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>Bio retention layers</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Removal of excess spoil</li> <li>Waste levy allowances</li> <li>Excavated material other than VENM</li> <li>Encountering rock</li> <li>Dewatering</li> <li>Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>Australian Runoff Quality: A Guide to Runoff Quality (Engineers Australia, 2007)</li> <li>Water Sensitive Urban Design Book 1   Policy (Landcom, 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.10	Detention basin	m2	310
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.10	Detention basin	m2	330
Minimum quantity	1m2			



# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.11

Item Name: Gross pollutant trap

Component	Description			
<b>Technical Information</b>				
Item Name	Gross pollutant trap			
Item Reference	ST-1.11			
Functional Description	Primary pollution devices including proprietary devices			
Inclusions	<ul style="list-style-type: none"> <li>As per manufacturers specifications</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Connection into network</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Removal of excess spoil</li> <li>Waste levy allowances</li> <li>Excavated material other than VENM</li> <li>Encountering rock</li> <li>Dewatering</li> <li>Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>ST-1.11.1 - Proprietary GPT system – outlet size 450mm diameter</li> <li>ST-1.11.2 - Proprietary GPT system – outlet size 750mm diameter</li> <li>ST-1.11.3 - Proprietary GPT system - -outlet size 1200mm diameter</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>Gross Pollutant Trap, proprietary system based on industry standard</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>Australian Runoff Quality: A Guide to Runoff Quality (Engineers Australia, 2007)</li> <li>WSUD Technical Guidelines for Western Sydney (URS, 2004)</li> <li>Water Sensitive Urban Design Book 1   Policy (Landcom, 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.11	Gross pollutant trap	Each	<ul style="list-style-type: none"> <li>ST-1.11.1 - \$60,600 (Outlet size 450mm dia)</li> <li>ST-1.11.2 - \$117,910 (Outlet size 750mm dia)</li> <li>ST-1.11.3 - \$207,440 (Outlet size 1200mm dia)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.11	Gross pollutant trap	Each	<ul style="list-style-type: none"> <li>ST-1.11.1 - \$63,630/Each (Outlet size 450mm dia)</li> <li>ST-1.11.2 - \$123,810/Each (Outlet size 750mm dia)</li> <li>ST-1.11.3 - \$217,810/Each (Outlet size 1200mm dia)</li> </ul>
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.12

Item Name: Enhanced storage area

Component	Description			
<b>Technical Information</b>				
Item Name	Enhanced storage area			
Item Reference	ST-1.12			
Functional Description	Enhanced Storage Area (100 m2 footprint 1m depth)			
Inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Connection into network</li> <li>UPVC sewer class stormwater drain pipes</li> <li>HDPE liner</li> <li>Slotted pipe to underground stormwater drains</li> <li>Flush out riser standpipe</li> <li>Planting</li> <li>Trash rack</li> <li>Emergency spillway (weir)</li> <li>Inflow energy dissipator</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Excavation and backfilling</li> <li>Clay liner</li> <li>Imported stabilised fill material</li> <li>Installation works</li> <li>Connection into network</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Riprap baffle</li> <li>Sediment forebay</li> <li>Disposal of excess material (Separate item T-1.32)</li> <li>Stormwater drainage structures other than overflow/trash rack (Separate item ST-1.11)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>Bio retention layers</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Removal of excess spoil</li> <li>Waste levy allowances</li> <li>Excavated material other than VENM</li> <li>Encountering rock</li> <li>Dewatering</li> <li>Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>Australian Runoff Quality: A Guide to Runoff Quality (Engineers Australia, 2007)</li> <li>Water Sensitive Urban Design Book 1   Policy (Landcom, 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.12	Enhanced storage area	m2	450
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.12	Enhanced storage area	m2	470
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.13

Item Name: Stormwater pipe

Component	Description			
<b>Technical Information</b>				
Item Name	Stormwater pipe			
Item Reference	ST-1.13			
Functional Description	Reinforced concrete pipes			
Inclusions	<ul style="list-style-type: none"> <li>Reinforced Concrete Pipe (RCP) Class 2</li> <li>Bedding materials</li> <li>Type H1 support</li> <li>Type 1 backfill material</li> <li>Pipe depths are based on:                             <ul style="list-style-type: none"> <li>1.5m deep for pipes &lt; 600mm,</li> <li>1.9m deep for pipes between 600 &amp; 900mm</li> <li>2.5m deep for pipes between 900mm and 1.5m</li> </ul> </li> </ul>			
Key scope of work inclusions	• N/A			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	<ul style="list-style-type: none"> <li>Removal of excess spoil</li> <li>Waste levy allowances</li> <li>Excavated material other than VENM</li> <li>Encountering rock</li> <li>Dewatering</li> <li>Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>ST-1.13.1 - 375mm RCP</li> <li>ST-1.13.2 - 525mm RCP</li> <li>ST-1.13.3 - 750mm RCP</li> <li>ST-1.13.4 - 900mm RCP</li> <li>ST-1.13.5 - 1200mm RCP</li> <li>ST-1.13.6 - 1350mm RCP</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>AUS-SPEC NSW Development Design Specification D5 Stormwater Drainage Design</li> <li>AS 4058 'Precast Reinforced Concrete Pipes'</li> <li>AS 3725 'Loads on Buried Concrete Pipes'</li> <li>Camden Council Engineering Construction Specification (Feb 2009)</li> <li>Camden Council Engineering Design Specification (Feb 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.13	Stormwater pipe	m	<ul style="list-style-type: none"> <li>ST-1.13.1 - \$450/m (RCP 375mm pipe)</li> <li>ST-1.13.2 - \$530/m (RCP 525mm pipe)</li> <li>ST-1.13.3 - \$990/m (RCP 750mm pipe)</li> <li>ST-1.13.4 - \$1,460/m (RCP 900mm pipe)</li> <li>ST-1.13.5 - \$1,640/m (RCP 1200mm pipe)</li> <li>ST-1.13.6 - \$1,750/m (RCP 1350mm pipe)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.13	Stormwater pipe	m	<ul style="list-style-type: none"> <li>ST-1.13.1 - \$470/m (RCP 375mm pipe)</li> <li>ST-1.13.2 - \$560/m (RCP 525mm pipe)</li> <li>ST-1.13.3 - \$1,040/m (RCP 750mm pipe)</li> <li>ST-1.13.4 - \$1,530/m (RCP 900mm pipe)</li> <li>ST-1.13.5 - \$1,720/m (RCP 1200mm pipe)</li> <li>ST-1.13.6 - \$1,840/m (RCP 1350mm pipe)</li> </ul>
Minimum quantity	1m			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.14

Item Name: Stormwater pit

Component	Description			
<b>Technical Information</b>				
Item Name	Stormwater pit			
Item Reference	ST-1.14			
Functional Description	Precast reinforced concrete gully pit including heavy duty grates			
Inclusions	<ul style="list-style-type: none"> <li>• Precast gully pits type SA1 (trafficable)</li> <li>• Pits to suit pipes up to 600mm in size assumed to be 2.0m in depth</li> <li>• Pits to suit pipes above 600mm in size assumed to be 2.5m in depth</li> <li>• Bedding materials</li> <li>• Type 1 backfill material</li> <li>• Galvanised frame</li> <li>• Heavy duty grates</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Excavation (minimal) and backfilling (minimal) but excluding reinstatement of any hard surfacing</li> <li>• Imported stabilised fill material</li> <li>• Installation works</li> <li>• Connection into network</li> <li>• 1.8m lintel kerb inlet, up to 2m in depth</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	<ul style="list-style-type: none"> <li>• Removal of excess spoil</li> <li>• Waste levy allowances</li> <li>• Excavated material other than VENM</li> <li>• Encountering rock</li> <li>• Dewatering</li> <li>• Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• ST-1.14.1 - Precast pit to suit 375mm pipe</li> <li>• ST-1.14.2 - Precast pit to suit 525mm pipe</li> <li>• ST-1.14.3 - Precast pit to suit 750mm pipe</li> <li>• ST-1.14.4 - Precast pit to suit 900mm pipe</li> <li>• ST-1.14.5 - Precast pit to suit 1200mm pipe</li> <li>• ST-1.14.6 - Precast pit to suit 1350mm pipe</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	• AUS-SPEC NSW Development Design Specification D5 Stormwater Drainage Design			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.14	Stormwater pit	m	<ul style="list-style-type: none"> <li>• ST-1.14.1 - \$5,670/Each (RCP 375mm pipe)</li> <li>• ST-1.14.2 - \$5,670/Each (RCP 525mm pipe)</li> <li>• ST-1.14.3 - \$6,550/Each (RCP 750mm pipe)</li> <li>• ST-1.14.4 - \$8,670/Each (RCP 900mm pipe)</li> <li>• ST-1.14.5 - \$10,020/Each (RCP 1200mm pipe)</li> <li>• ST-1.14.6 - \$11,050/Each (RCP 1350mm pipe)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.14	Stormwater pit	m	<ul style="list-style-type: none"> <li>• ST-1.14.1 - \$5,950/Each (RCP 375mm pipe)</li> <li>• ST-1.14.2 - \$5,950/Each (RCP 525mm pipe)</li> <li>• ST-1.14.3 - \$6,880/Each (RCP 750mm pipe)</li> <li>• ST-1.14.4 - \$9,100/Each (RCP 900mm pipe)</li> <li>• ST-1.14.5 - \$10,520/Each (RCP 1200mm pipe)</li> <li>• ST-1.14.6 - \$11,600/Each (RCP 1350mm pipe)</li> </ul>
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.15

Item Name: Stormwater channel / open channel

Component	Description			
<b>Technical Information</b>				
Item Name	Stormwater channel / open channel			
Item Reference	ST-1.15			
Functional Description	Concrete lined open channels			
Inclusions	<ul style="list-style-type: none"> <li>• Cast in-situ base slab</li> <li>• 1.2m wide x 200mm thick x 300mm deep reinforced concrete channel including subgrade preparation</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>• Imported stabilised fill material</li> <li>• Installation works</li> <li>• Bedding, laying and jointing</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	<ul style="list-style-type: none"> <li>• Removal of excess spoil</li> <li>• Waste levy allowances</li> <li>• Excavated material other than VENM</li> <li>• Encountering rock</li> <li>• Dewatering</li> <li>• Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>• AUS-SPEC NSW Development Design Specification D5 Stormwater Drainage Design</li> <li>• Camden Council Engineering Construction Specification (Feb 2009)</li> <li>• Camden Council Engineering Design Specification (Feb 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.15	Stormwater channel / open channel	m	2,210
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.15	Stormwater channel / open channel	m	2,320
Minimum quantity	1m			

# IPART - Benchmark costs for local infrastructure



Item Reference: ST-1.16

Item Name: Stormwater channel stabilisation

Component	Description			
<b>Technical Information</b>				
Item Name	Stormwater channel stabilisation			
Item Reference	ST-1.16			
Functional Description	Rock field mattress open channels			
Inclusions	<ul style="list-style-type: none"> <li>• 1500mm wide x 1000mm deep Rock filled wire mattresses in 230mm deep</li> <li>• Minimum 150mm thick cushion layer with material D85 &lt; 75mm to form the channel including subgrade preparation</li> <li>• Supply and lay Geotextile with filtration Class 2, strength Class C to TfNSW R63</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Excavation and backfilling but excluding reinstatement of any hard surfacing</li> <li>• Imported stabilised fill material</li> <li>• Installation works</li> <li>• Bedding, laying and jointing</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Subsoil drainage</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Removal of excess spoil</li> <li>• Waste levy allowances</li> <li>• Excavated material other than VENM</li> <li>• Encountering rock</li> <li>• Dewatering</li> <li>• Stockpile location located further than 500m from site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• TfNSW QA specification R63</li> <li>• AUS-SPEC NSW Development Design Specification D5 Stormwater Drainage Design</li> <li>• Camden Council Engineering Construction Specification (Feb 2009)</li> <li>• Camden Council Engineering Design Specification (Feb 2009)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	ST-1.16	Stormwater channel stabilisation	m	2,540
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	ST-1.16	Stormwater channel stabilisation	m	2,670
Minimum quantity	1m			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.01

Item Name: Amenities Building

Component	Description			
<b>Technical Information</b>				
Item Name	Amenities building			
Item Reference	OSE-1.01			
Functional Description	General amenity block including a combination of toilets, change rooms, canteen and/or equipment storage			
Inclusions	<ul style="list-style-type: none"> <li>• Single storey structure</li> <li>• Male &amp; Female Toilets (as per sub-item descriptions below)</li> <li>• Change Rooms</li> <li>• Storage Areas</li> <li>• Canteen</li> <li>• First aid room</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Typical site preparations</li> <li>• Nominal excavation for foundations with material retained on-site</li> <li>• Service connections within 20m of facility</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• Security / CCTV installations			
Key identified risks	<ul style="list-style-type: none"> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> <li>• Relocation or diversion of existing utilities</li> </ul>			
Sub-item details	<p><b>OSE-1.01.1 - 1 playing field (220m2 amenities block)</b></p> <ul style="list-style-type: none"> <li>• 3 x female toilets, 2 x male toilets</li> <li>• 1 x Referee change room with shower and toilet</li> <li>• 1 x Home change room with 2 showers and 1 toilet</li> <li>• 1 x Away change room with 2 showers and 1 toilet</li> <li>• 2 x storage rooms</li> <li>• 1 x canteen</li> <li>• 1 x first aid room</li> </ul> <p><b>OSE-1.01.2 - 2 playing fields (260m2 amenities block)</b></p> <ul style="list-style-type: none"> <li>• 4 x female toilets, 3 x male toilets</li> <li>• 2 x Referee change room with shower and toilet</li> <li>• 1 x Home change room with 2 showers and 1 toilet</li> <li>• 1 x Away change room with 2 showers and 1 toilet</li> <li>• 2 x storage rooms</li> <li>• 1 x canteen</li> <li>• 1 x first aid room</li> </ul> <p><b>OSE-1.01.3 - 3+ playing fields (400m2 amenities block)</b></p> <ul style="list-style-type: none"> <li>• 5 x female toilets, 3 x male toilets</li> <li>• 2 x Referee change room with shower and toilet</li> <li>• 2 x Home change room with 2 showers and 1 toilet</li> <li>• 2 x Away change room with 2 showers and 1 toilet</li> <li>• 2 x storage rooms</li> <li>• 1 x canteen</li> <li>• 1 x first aid room</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	Reference pricing			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.01	Amenities building	m2	<ul style="list-style-type: none"> <li>• OSE-1.01.1 - \$7,880/m2 (220m2 amenities block)</li> <li>• OSE-1.01.2 - \$7,720/m2 (260m2 amenities block)</li> <li>• OSE-1.01.3 - \$7,410/m2 (400m2 amenities block)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.01	Amenities building	m2	<ul style="list-style-type: none"> <li>• OSE-1.01.1 - \$8,270/m2 (220m2 amenities block)</li> <li>• OSE-1.01.2 - \$8,110/m2 (260m2 amenities block)</li> <li>• OSE-1.01.3 - \$7,780/m2 (400m2 amenities block)</li> </ul>
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.02

Item Name: BBQ Area

Component	Description			
<b>Technical Information</b>				
Item Name	BBQ Area			
Item Reference	OSE-1.02			
Functional Description	Electric cooker BBQ with surrounds/bench top			
Inclusions	<ul style="list-style-type: none"> <li>• Basic electric cooker BBQ</li> <li>• Stainless steel surrounds/bench top</li> <li>• Concrete base</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal excavation for foundations with material retained on-site</li> <li>• Electrical connection (20m run)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• Sink units			
Key identified risks	• N/A			
Sub-item details	<ul style="list-style-type: none"> <li>• OSE-1.02.1 - BBQ Area - Single plate; uncovered</li> <li>• OSE-1.02.2 - BBQ Area - Double plate; uncovered</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.02	BBQ Area	Each	<ul style="list-style-type: none"> <li>• OSE-1.02.1 - \$16,390/Each</li> <li>• OSE-1.02.2 - \$21,000/Each</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.02	BBQ Area	Each	<ul style="list-style-type: none"> <li>• OSE-1.02.1 - \$17,210/Each</li> <li>• OSE-1.02.2 - \$22,050/Each</li> </ul>
Minimum quantity	1 no.			



# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.03

Item Name: Boundary fencing

Component	Description			
<b>Technical Information</b>				
Item Name	Boundary fencing			
Item Reference	OSE-1.03			
Functional Description	Perimeter fencing (fronting a road) and access gates including foundations			
Inclusions	<ul style="list-style-type: none"> <li>Fencing consisting of vertical steel posts, top and bottom rail, steel bars and powder-coated, steel galvanised finish</li> <li>Extra over for gate access</li> <li>Concrete footings</li> <li>Vandal resistant coating</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Nominal excavation for foundations with material retained on-site</li> <li>Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	• N/A			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	Reference pricing			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.03	Boundary fencing	m	240
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.03	Boundary fencing	m	250
Minimum quantity	1m			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.05

Item Name: Car park

Component	Description			
<b>Technical Information</b>				
Item Name	Car park			
Item Reference	OSE-1.05			
Functional Description	Carpark at grade, open access			
Inclusions	<ul style="list-style-type: none"> <li>• Bitumen paving</li> <li>• Linemarking</li> <li>• Stormwater drainage</li> <li>• Security lighting</li> <li>• Kerbing</li> <li>• Minimal landscaping, some planting</li> <li>• Notional 100 car spaces</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Typical site preparations</li> <li>• Excavated material retained on-site</li> <li>• Utilities connections</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Security fencing</li> <li>• Wheel stops</li> <li>• Security gate</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Roads other than entrance and exit paving</li> <li>• Loose equipment including ticket machines</li> <li>• CCTV</li> <li>• Retaining walls</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Allowance for rock excavation</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>• Building Code of Australia</li> <li>• Australian Standards</li> <li>• Disability Discrimination Act (DDA)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.05	Car park	Each	946,550
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.05	Car park	Each	993,880
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.06

Item Name: Cricket wicket

Component	Description			
<b>Technical Information</b>				
Item Name	Cricket wicket			
Item Reference	OSE-1.06			
Functional Description	Practice Cricket nets (3-bay)			
Inclusions	<ul style="list-style-type: none"> <li>• Synthetic cricket surface</li> <li>• Linemarking</li> <li>• Chain mesh enclosures</li> <li>• Steel structure (CHS members) + straining cables</li> <li>• Rubberised padding at the back and sides</li> <li>• 100mm concrete base with reinforcement on 100mm DGS20 compacted to 95%MMDD</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Site levelling (cut/fill neutral)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Drainage</li> <li>• Perimeter fencing (Separate item OSE-1.03)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Spectator seating (Separate item (OSE-1.27)</li> <li>• Equipment storage</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>• AS1725.4 – 2010: Chain link fabric fencing – Cricket net fencing enclosures</li> <li>• AS1725.1 – 2010: Chain link fabric fencing – Security fencing and gates – General requirements</li> </ul>			
<b>Cost Information</b>				
Methodology	Reference pricing			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.06	Cricket wicket	Each	153,100
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.06	Cricket wicket	Each	160,760
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.07

Item Name: Cricket Wicket only

Component	Description			
<b>Technical Information</b>				
Item Name	Cricket Wicket only			
Item Reference	OSE-1.07			
Functional Description	Synthetic cricket pitch			
Inclusions	<ul style="list-style-type: none"> <li>• Synthetic cricket pitch 28.0m x 3.05m</li> <li>• Linemarking</li> <li>• 100mm concrete base with reinforcement on 100mm DGS20 compacted to 95%MMDD</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Site levelling (cut/fill neutral)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Drainage</li> <li>• Perimeter fencing (Separate item OSE-1.03)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Spectator seating (Separate item OSE-1.27)</li> <li>• Equipment storage</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	Reference pricing			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.07	Cricket wicket only	Each	36,500
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.07	Cricket wicket only	Each	38,330
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.08

Item Name: Demolition

Component	Description			
<b>Technical Information</b>				
Item Name	Demolition			
Item Reference	OSE-1.08			
Functional Description	Demolition of various materials and structures			
Inclusions	• N/A			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Demolition of up to 200mm thick slabs</li> <li>• Demolition of concrete/masonry structure including foundations, sealing off services and removing all debris from site</li> <li>• Sealing off of existing services</li> <li>• Clearance works by heavy machinery</li> <li>• Disposal of all debris including haulage of up to 45km and tipping fees for general solid waste of \$60/Tn, inclusive of partial waste levy</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation or diversion of existing utilities</li> <li>• Payment of full waste levy for general solid waste or restricted special waste</li> <li>• Road/ footpath closures and detours</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• OSE-1.08.1 - Demolition; reinforced concrete slabs</li> <li>• OSE-1.08.2 - Demolition; unreinforced concrete slabs</li> <li>• OSE-1.08.3 - Demolition; bitumen paving including base course</li> <li>• OSE-1.08.4 - Demolition; concrete/masonry structure</li> <li>• OSE-1.08.5 - Demolition; light structure</li> <li>• OSE-1.08.6 - Demolition; double storey light structure</li> <li>• OSE-1.08.7 - Demolition; double storey concrete/masonry structure</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	• Building Code of Australia			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.08	Demolition	m2	<ul style="list-style-type: none"> <li>• OSE-1.08.1 - \$170/m2 (Demolition; reinforced concrete slab)</li> <li>• OSE-1.08.2 - \$100/m2 (Demolition; unreinforced concrete slab)</li> <li>• OSE-1.08.3 - \$140/m2 (Demolition; bitumen paving)</li> <li>• OSE-1.08.4 - \$210/m2 (Demolition; concrete/masonry structure)</li> <li>• OSE-1.08.5 - \$90/m2 (Demolition; light structure)</li> <li>• OSE-1.08.6 - \$180/m2 (Demolition; double storey light structure)</li> <li>• OSE-1.08.7 - \$220/m2 (Demolition; double storey concrete/masonry structure)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.08	Demolition	m2	<ul style="list-style-type: none"> <li>• OSE-1.08.1 - \$180/m2 (Demolition; reinforced concrete slab)</li> <li>• OSE-1.08.2 - \$110/m2 (Demolition; unreinforced concrete slab)</li> <li>• OSE-1.08.3 - \$150/m2 (Demolition; bitumen paving)</li> <li>• OSE-1.08.4 - \$220/m2 (Demolition; concrete/masonry structure)</li> <li>• OSE-1.08.5 - \$90/m2 (Demolition; light structure)</li> <li>• OSE-1.08.6 - \$190/m2 (Demolition; double storey light structure)</li> <li>• OSE-1.08.7 - \$230/m2 (Demolition; double storey concrete/masonry structure)</li> </ul>
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.09

Item Name: Double playing fields

Component	Description			
<b>Technical Information</b>				
Item Name	Double playing fields			
Item Reference	OSE-1.09			
Functional Description	Sports field including turfing, markings and posts as required			
Inclusions	<ul style="list-style-type: none"> <li>Refer to specific sub item information</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Site levelling (cut/fill neutral)</li> <li>Installation works</li> <li>Imported topsoil</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Drainage</li> <li>Sand slit drainage or subsurface drainage (subsoils)</li> <li>Perimeter fencing (Separate item OSE-1.03)</li> <li>Floodlighting</li> <li>Amenity block (Separate item OSE-1.01)</li> <li>Car parking (Separate item OSE-1.05)</li> <li>Top soil amelioration (as an alternative to import)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>Spectator seating (Separate item (OSE-1.27)</li> <li>Irrigation sprinklers</li> <li>Equipment storage</li> <li>Practice nets - cricket (Separate item OSE-1.06)</li> <li>Turf maintenance</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Relocation or diversion of existing utilities</li> <li>Payment of full waste levy for general solid waste or restricted special waste</li> <li>Road/ footpath closures and detours</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>OSE-1.09.1 - Double Soccer field</li> <li>OSE-1.09.2 - Double Rugby League / Union field</li> </ul>			
Specific sub item information	<p><b>Soccer field</b></p> <ul style="list-style-type: none"> <li>Field size of approximately 17,200m2 including runoffs (2 no playing fields)</li> <li>Turf on 250mm imported topsoil, on 200mm ripped subgrade with application of gypsum (or similar treatment approved)</li> <li>Sockets for soccer posts.</li> </ul> <p><b>Rugby League / Union field</b></p> <ul style="list-style-type: none"> <li>Field size of approximately 21,000m2 including runoffs (2 no playing fields)</li> <li>Turf on 250mm imported topsoil, on 200mm ripped subgrade with application of gypsum (or similar treatment approved)</li> <li>Supply and install of rugby posts.</li> </ul>			
Applicable standards	NSW Cricket Association - Recommended Approach to Management of Turf Cricket Pitches and Outfield			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.09	Double playing fields	m2	<ul style="list-style-type: none"> <li>OSE-1.09.1 - \$1,054,680/Each (Double soccer field)</li> <li>OSE-1.09.2 - \$1,251,720/Each (Double rugby league / union field)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.09	Double playing fields	m2	<ul style="list-style-type: none"> <li>OSE-1.09.1 - \$1,107,410/Each (Double soccer field)</li> <li>OSE-1.09.2 - \$1,314,310/Each (Double rugby league / union field)</li> </ul>
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.10

Item Name: Combined field

Component	Description								
<b>Technical Information</b>									
Item Name	Combined field								
Item Reference	OSE-1.10								
Functional Description	Sports field including turfing, markings and posts as required								
Inclusions	<ul style="list-style-type: none"> <li>Refer to specific sub item information</li> </ul>								
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Site levelling (cut/fill neutral)</li> <li>Installation works</li> <li>Imported topsoil</li> </ul>								
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Drainage</li> <li>Sand slit drainage or subsurface drainage (subsoils)</li> <li>Perimeter fencing (Separate item (OSE-1.03))</li> <li>Floodlighting</li> <li>Amenity block (Separate item OSE-1.01)</li> <li>Car parking (Separate item OSE-1.05)</li> <li>Top soil amelioration (as an alternative to import)</li> </ul>								
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>Spectator seating (Separate item OSE-1.27)</li> <li>Irrigation sprinklers</li> <li>Equipment storage</li> <li>Practice nets - cricket (Separate Item OSE-1.06)</li> <li>Turf maintenance</li> </ul>								
Key identified risks	<ul style="list-style-type: none"> <li>Relocation and diversion of existing utilities</li> <li>Contaminated materials</li> <li>Surplus excavated material requiring disposal off-site</li> <li>Imported fill required for site levelling</li> </ul>								
Sub-item details	<ul style="list-style-type: none"> <li>OSE-1.10.1 - Combined Field Module (Soccer/Rugby League/Rugby Union/Cricket)</li> <li>OSE-1.10.2 - Cricket Pitch &amp; Field</li> </ul>								
Specific sub item information	<p><b>Combined field module</b></p> <ul style="list-style-type: none"> <li>Field size of approximately 21,000m<sup>2</sup> including runoffs (Combined field module)</li> <li>Turf on 250mm imported topsoil, on 200mm ripped subgrade with application of gypsum (or similar treatment approved)</li> <li>Combined rugby/soccer posts</li> </ul> <p><b>Soccer field</b></p> <ul style="list-style-type: none"> <li>Field size of approximately 17,200m<sup>2</sup> including runoffs (2 no playing fields)</li> <li>Turf on 250mm imported topsoil, on 200mm ripped subgrade with application of gypsum (or similar treatment approved)</li> <li>Sockets for soccer posts</li> </ul> <p><b>Rugby League / Union field</b></p> <ul style="list-style-type: none"> <li>Field size of approximately 21,000m<sup>2</sup> including runoffs (2 no playing fields)</li> <li>Turf on 250mm imported topsoil, on 200mm ripped subgrade with application of gypsum (or similar treatment approved)</li> <li>Supply and install of rugby posts</li> </ul> <p><b>Cricket pitch and field</b></p> <ul style="list-style-type: none"> <li>Overall field size (satisfies AFL requirements):</li> <li>Diameter (A) = 110m perimeter (50m field suitable for club level use + 5m runoff)</li> <li>Area = 9,500m<sup>2</sup></li> <li>Cricket pitch size:</li> <li>28m x 2.6m wide</li> <li>Synthetic pitch:</li> <li>Synthetic turf laid on concrete base</li> <li>Includes permanent line markings</li> <li>Outfield consists of turf on 250mm imported topsoil, on 200mm ripped subgrade with application of gypsum (or similar treatment approved)</li> </ul>								
Applicable standards	<ul style="list-style-type: none"> <li>NSW Cricket Association - Recommended Approach to Management of Turf Cricket Pitches and Outfield</li> </ul>								
<b>Cost Information</b>									
Methodology	First principles estimating								
Benchmark base unit rate	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">#</th> <th style="width: 50%;">Item/sub-item</th> <th style="width: 10%;">Unit</th> <th style="width: 30%;">\$/Unit</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	#	Item/sub-item	Unit	\$/Unit				
#	Item/sub-item	Unit	\$/Unit						

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.10

Item Name: Combined field

Component		Description		
FY24/25	OSE-1.10	Combined field	m2	<ul style="list-style-type: none"> <li>• OSE-1.10.1 - \$1,076,730/Each (Combined)</li> <li>• OSE-1.10.2 - \$522,430/Each (Cricket pitch and field)</li> </ul>
Benchmark base unit rate	#	Item/sub-item	Unit	\$/Unit
FY25/26	OSE-1.10	Combined field	m2	<ul style="list-style-type: none"> <li>• OSE-1.10.1 - \$1,130,570/Each (Combined)</li> <li>• OSE-1.10.2 - \$548,550/Each (Cricket pitch and field)</li> </ul>
Minimum quantity	1 no.			



# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.14

Item Name: Tennis court (outdoor)

Component	Description			
<b>Technical Information</b>				
Item Name	Tennis court (outdoor)			
Item Reference	OSE-1.14			
Functional Description	Single court outdoor tennis court, with 'Plexipave Tennis Court' Acrylic Surface, including court markings and net posts			
Inclusions	<ul style="list-style-type: none"> <li>• Court size of 593m<sup>2</sup>, inclusive of 5.48m clearance at back of court, 3.05 clearance at side of court.</li> <li>• 100mm thick subbase DGS 20</li> <li>• 50mm thick Base DGB 20</li> <li>• 30mm Fine Gap Graded Asphalt</li> <li>• 'Plexipave Tennis Court' Acrylic Surface Finish</li> <li>• Court markings and removable net posts</li> <li>• Perimeter fencing</li> <li>• Pedestrian gate (1.2m wide)</li> <li>• Double leaf Emergency gate (3.0m wide)</li> <li>• Floodlighting (typical 250 Lux for social play on 15m high pole)</li> <li>• Basic drainage</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Site levelling (cut/fill neutral)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• Spectator seating (Separate item OSE-1.27)			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	• Court size: International Tennis Federation Rules of Tennis, adopted by Tennis Australia			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.14	Tennis court (outdoor)	Court	297,750
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.14	Tennis court (outdoor)	Court	312,640
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.15

Item Name: Netball court (outdoor)

Component	Description			
<b>Technical Information</b>				
Item Name	Netball court (outdoor)			
Item Reference	OSE-1.15			
Functional Description	Single court outdoor netball court, with concrete surfacing, including court markings and ring installations			
Inclusions	<ul style="list-style-type: none"> <li>• Court size of 860m2 inclusive of clearance each side</li> <li>• 'Non-cushion' Netball Court Acrylic Surface Finish</li> <li>• Linemarking</li> <li>• Goal posts</li> <li>• 30mm fine gap graded Asphalt FGG07, C320</li> <li>• Primer</li> <li>• Base – DGB 20 Compacted to 98% MMDD</li> <li>• Subbase – DGS 20 Compacted to 95% MMDD</li> <li>• Subgrade CBR 5% compacted to 90% MMDD</li> <li>• Drainage (including perimeter trench drains)</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Site levelling (cut/fill neutral)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Perimeter fencing (Separate item OSE-1.03)</li> <li>• Floodlighting – 200lux for club level use</li> <li>• Amenity block (Separate item OSE-1.01)</li> <li>• Car parking (Separate item OSE-1.05)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Spectator seating (Separate item OSE-1.27)</li> <li>• Players/umpire enclosure and seating</li> <li>• Equipment storage</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>• Court size: International Federation of Netball Associations (IFNA) Official Rules, Rules of Tennis, adopted by Netball Australia</li> <li>• National Facilities Policy, Netball Australia (2016)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.15	Netball court (outdoor)	Court	210,380
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.15	Netball court (outdoor)	Court	220,790
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.16

Item Name: Netball court/ 6no. (6 court netball court)

Component	Description			
<b>Technical Information</b>				
Item Name	Netball court/ 6no. (6 court netball court)			
Item Reference	OSE-1.16			
Functional Description	Outdoor netball courts, with concrete surfacing, including court markings and ring installations			
Inclusions	<ul style="list-style-type: none"> <li>• Court size of 5,385m<sup>2</sup> inclusive of spectator areas</li> <li>• 'Non-cushion' Netball Court Acrylic Surface Finish</li> <li>• Linemarking</li> <li>• Goal posts</li> <li>• 30mm fine gap graded Asphalt FGG07, C320</li> <li>• Primer</li> <li>• Base – DGB 20 Compacted to 98% MMDD</li> <li>• Subbase – DGS 20 Compacted to 95% MMDD</li> <li>• Subgrade CBR 5% compacted to 90% MMDD</li> <li>• Drainage (including perimeter trench drains)</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Site levelling (cut/fill neutral)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Perimeter fencing (Separate item OSE-1.03)</li> <li>• Floodlighting – 200lux for club level use</li> <li>• Amenity block (Separate item OSE-1.01)</li> <li>• Car parking (Separate item OSE-1.05)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Spectator seating (Separate item OSE-1.27)</li> <li>• Players/umpire enclosure and seating</li> <li>• Equipment storage</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	<ul style="list-style-type: none"> <li>• Court size: International Federation of Netball Associations (IFNA) Official Rules, Rules of Tennis, adopted by Netball Australia</li> <li>• National Facilities Policy, Netball Australia (2016)</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.16	Netball court/ 6no. (6 court netball court)	Court	1,125,590
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.16	Netball court/ 6no. (6 court netball court)	Court	1,181,870
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.17

Item Name: Basketball court (outdoor)

Component	Description			
<b>Technical Information</b>				
Item Name	Basketball court (outdoor)			
Item Reference	OSE-1.17			
Functional Description	Single court outdoor basketball courts, with concrete surfacing, including court markings and ring installations			
Inclusions	<ul style="list-style-type: none"> <li>• Court size of 860m2 inclusive clearance each side</li> <li>• 'Non-cushion' Court Acrylic Surface Finish</li> <li>• Linemarking</li> <li>• Goal posts, hoops and backboards</li> <li>• 30mm fine gap graded Asphalt FGG07, C320</li> <li>• Primer</li> <li>• Base – DGB 20 Compacted to 98% MMDD</li> <li>• Subbase – DGS 20 Compacted to 95% MMDD</li> <li>• Subgrade CBR 5% compacted to 90% MMDD</li> <li>• Drainage (including perimeter trench drains)</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Site levelling (cut/fill neutral)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Perimeter fencing (Separate item OSE-1.03)</li> <li>• Floodlighting – 200lux for club level use</li> <li>• Amenity block (Separate item OSE-1.01)</li> <li>• Car parking (Separate item OSE1.05)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Spectator seating (Separate item OSE-1.27)</li> <li>• Players/umpire enclosure and seating</li> <li>• Equipment storage</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.17	Basketball court (outdoor)	Court	220,794
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.17	Basketball court (outdoor)	Court	231,830
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.18

Item Name: Playing lighting

Component	Description			
<b>Technical Information</b>				
Item Name	Playing lighting			
Item Reference	OSE-1.18			
Functional Description	Sports field floodlighting, column mounted			
Inclusions	<ul style="list-style-type: none"> <li>Columns, luminaries, accessories and wiring from nearby switchboard</li> <li>Connection into existing power supply</li> <li>Light column foundations</li> <li>Lighting control</li> <li>Poles per court / pitch:                             <ul style="list-style-type: none"> <li>Soccer (single playing field): 4 x 18m high poles, 4 x lights</li> <li>Tennis: single court, 2x12m high poles, 4 lights, 100lx</li> <li>Netball &amp; basketball: single court, 2x12m high poles, 4 lights, 100lx</li> </ul> </li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Excavation for floodlighting foundations retained on site</li> <li>Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Switchboards</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>Electrical substation</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Relocation and diversion of existing utilities</li> <li>Contaminated materials</li> <li>Surplus excavated material requiring disposal off-site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>OSE-1.18.1 - Floodlighting for football (all codes)</li> <li>OSE-1.18.2 - Floodlighting for tennis</li> <li>OSE-1.18.3 - Floodlighting for netball and basketball</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>AS/NZS2560 for sports lighting</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.18	Playing lighting	Court/Pitch	<ul style="list-style-type: none"> <li>OSE-1.18.1 - \$195,320/Pitch (Floodlighting for football)</li> <li>OSE-1.18.2 - \$67,520/Court (Floodlighting for tennis)</li> <li>OSE-1.18.3 - \$67,520/Court (Floodlighting for netball and basketball)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.18	Playing lighting	Court/Pitch	<ul style="list-style-type: none"> <li>OSE-1.18.1 - \$205,090/Pitch (Floodlighting for football)</li> <li>OSE-1.18.2 - \$70,900/Court (Floodlighting for tennis)</li> <li>OSE-1.18.3 - \$70,900/Court (Floodlighting for netball and basketball)</li> </ul>
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.19

Item Name: Double / combined playing lighting

Component	Description			
<b>Technical Information</b>				
Item Name	Double / combined playing lighting			
Item Reference	OSE-1.19			
Functional Description	Sports field floodlighting, column mounted			
Inclusions	<ul style="list-style-type: none"> <li>• Columns, luminaries, accessories and wiring from nearby switchboard</li> <li>• Connection into existing power supply</li> <li>• Light column foundations</li> <li>• Lighting control</li> <li>• Poles per court / pitch: 6 x 18m high poles, 6 x lights</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Excavation for floodlighting foundations retained on site</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Switchboards</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Electrical substation</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• AS/NZS2560 for sports lighting</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.19	Double / combined playing lighting	Pitch	292,980
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.19	Double / combined playing lighting	Pitch	307,635
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.20

Item Name: Basic landscaping

Component	Description			
<b>Technical Information</b>				
Item Name	Basic landscaping			
Item Reference	OSE-1.20			
Functional Description	Native trees and shrubs including mulching and edging			
Inclusions	<ul style="list-style-type: none"> <li>• Native sapling plant, semi mature trees, mature trees and shrubs</li> <li>• Imported topsoil</li> <li>• Mulching allows to cut and mulch trees (semi mature)</li> <li>• Insitu concrete edging, 300mm</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm cut/fill balance</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Planter box (no longer a separate item -may need to include)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Drainage system</li> <li>• Tree guard</li> <li>• Pine bark chips</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• OSE-1.20.1 - Planting; sapling</li> <li>• OSE-1.20.2 - Planting; semi mature tree (45ltr)</li> <li>• OSE-1.20.3 - Planting; mature tree (100ltr)</li> <li>• OSE-1.20.4 - Planting; shrubs</li> <li>• OSE-1.20.5 - Mulching</li> <li>• OSE-1.20.6 - Steel Edging</li> <li>• OSE-1.20.7 - Concrete Edging 150 x 150</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.20	Basic landscaping	As shown	<ul style="list-style-type: none"> <li>• OSE-1.20.1 - \$10/Each (Planting; sapling)</li> <li>• OSE-1.20.2 - \$330/Each (Planting; semi mature tree)</li> <li>• OSE-1.20.3 - \$590/Each (Planting; mature tree)</li> <li>• OSE-1.20.4 - \$60/m2 (Planting; shrubs)</li> <li>• OSE-1.20.5 - \$40/m2 (Mulching)</li> <li>• OSE-1.20.6 - \$90/m (Steel Edging)</li> <li>• OSE-1.20.7 - \$90/m (Concrete Edging)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.20	Basic landscaping	As shown	<ul style="list-style-type: none"> <li>• OSE-1.20.1 - \$10/Each (Planting; sapling)</li> <li>• OSE-1.20.2 - \$346/Each (Planting; semi mature tree)</li> <li>• OSE-1.20.3 - \$620/Each (Planting; mature tree)</li> <li>• OSE-1.20.4 - \$63/m2 (Planting; shrubs)</li> <li>• OSE-1.20.5 - \$42/m2 (Mulching)</li> <li>• OSE-1.20.6 - \$95/m (Steel Edging)</li> <li>• OSE-1.20.7 - \$95/m (Concrete Edging)</li> </ul>
Minimum quantity	1 unit			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.21

Item Name: Park (Security lighting)

Component	Description			
<b>Technical Information</b>				
Item Name	Park (Security lighting)			
Item Reference	OSE-1.21			
Functional Description	Security lighting including light column, luminaire and foundation			
Inclusions	<ul style="list-style-type: none"> <li>• 5.5m high tapered octagonal hot dipped galvanised steel column</li> <li>• Column foundations</li> <li>• Light fittings</li> <li>• Weatherproof lantern</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal excavation for foundations with material retained on-site</li> <li>• Connection into existing power supply within 20m</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• Feature lighting			
Key identified risks	• N/A			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	Reference pricing			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.21	Park (Security lighting)	Each	3,720
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.21	Park (Security lighting)	Each	3,910
Minimum quantity	1 no.			



# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.22

Item Name: Paved area (hard surfaces)

Component	Description			
<b>Technical Information</b>				
Item Name	Paved area (hard surfaces)			
Item Reference	OSE-1.22			
Functional Description	Hard surfacing with foundation layers and drainage			
Inclusions	<ul style="list-style-type: none"> <li>• Foundation layers</li> <li>• UPVC drainage pipework</li> <li>• Pavers laid to pattern</li> <li>• Basic line marking for asphalt surfaces</li> <li>• Grind and seal finish of concrete surfaces</li> <li>• Non-slip sealer for external polished concrete surfaces</li> <li>• Paver sizes:                             <ul style="list-style-type: none"> <li>• Precast concrete paver slabs 450x450x50mm</li> <li>• Sandstone paver slab 400x400x40mm</li> <li>• Brick paver 200x150x50mm</li> </ul> </li> <li>• Bitumen asphalt</li> <li>• Polished finished concrete including surface hardeners and sealing</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm cut/fill balance</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	<ul style="list-style-type: none"> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• OSE-1.22.1 - Asphalt; pedestrian access only</li> <li>• OSE-1.22.2 - Asphalt; shared pedestrian / vehicular access</li> <li>• OSE-1.22.3 - Paving; precast concrete</li> <li>• OSE-1.22.4 - Paving; sandstone</li> <li>• OSE-1.22.5 - Paving; brick</li> <li>• OSE-1.22.6 - Polished concrete</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.22	Paved area (hard surfaces)	m2	<ul style="list-style-type: none"> <li>• OSE-1.22.1 - \$150/m2 (Asphalt; pedestrian access only)</li> <li>• OSE-1.22.2 - \$350/m2 (Asphalt; shared pedestrian / vehicular access)</li> <li>• OSE-1.22.3 - \$170/m2 (Asphalt; precast concrete)</li> <li>• OSE-1.22.4 - \$380/m2 (Paving; sandstone)</li> <li>• OSE-1.22.5 - \$270,m2 (Paving; brick)</li> <li>• OSE-1.22.6 - \$260/m2 (Polished concrete)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.22	Paved area (hard surfaces)	m2	<ul style="list-style-type: none"> <li>• OSE-1.22.1 - \$160/m2 (Asphalt; pedestrian access only)</li> <li>• OSE-1.22.2 - \$370/m2 (Asphalt; shared pedestrian / vehicular access)</li> <li>• OSE-1.22.3 - \$180/m2 (Asphalt; precast concrete)</li> <li>• OSE-1.22.4 - \$400/m2 (Paving; sandstone)</li> <li>• OSE-1.22.5 - \$280,m2 (Paving; brick)</li> <li>• OSE-1.22.6 - \$270/m2 (Polished concrete)</li> </ul>
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.23

Item Name: Picnic area

Component	Description			
<b>Technical Information</b>				
Item Name	Picnic area			
Item Reference	OSE-1.23			
Functional Description	Hard surfacing with foundation layers and drainage			
Inclusions	<ul style="list-style-type: none"> <li>• Steel frame picnic set</li> <li>• Concrete base</li> <li>• Extra over provided for shade covering</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal excavation for foundations with material retained on site</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• Structural Engineering – assumed the street furniture is 'off the shelf' to Australian standards.			
Key identified risks	• N/A			
Sub-item details	<ul style="list-style-type: none"> <li>• OSE-1.23.1 - Fixed table; aluminium slats; back supported seats</li> <li>• OSE-1.23.2 - Extra over for shade covering</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.23	Picnic area	As shown	<ul style="list-style-type: none"> <li>• OSE-1.23.1 - \$8,650/Each (Fixed table; aluminium slats; back supported seats)</li> <li>• OSE-1.23.2 - \$220/m2 (E/O Shade covering)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.23	Picnic area	As shown	<ul style="list-style-type: none"> <li>• OSE-1.23.1 - \$9,080/Each (Fixed table; aluminium slats; back supported seats)</li> <li>• OSE-1.23.2 - \$230/m2 (E/O Shade covering)</li> </ul>
Minimum quantity	1 unit			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.24

Item Name: Playground / exercise equipment

Component	Description								
<b>Technical Information</b>									
Item Name	Playground / exercise equipment								
Item Reference	OSE-1.24								
Functional Description	<ul style="list-style-type: none"> <li>• Installation only of play equipment for children of a mixed age</li> <li>• Softfall under play equipment with foundation layers and drainage</li> <li>• Playground fencing and access gates including foundations</li> </ul>								
Inclusions	<ul style="list-style-type: none"> <li>• Concrete foundations</li> <li>• Supply of plant and labour for equipment install</li> <li>• EPDM Softfall, coloured rubber approximately 65mm depth with rubber top coat</li> <li>• 200mm loose fill material</li> <li>• Basic drainage</li> <li>• Timber edge treatment</li> <li>• Notional installation area of 400m2</li> <li>• Fencing consisting of vertical steel posts, top and bottom rail, mesh and powder- coated, steel galvanised finish</li> <li>• Extra over for gate access</li> <li>• Concrete footings</li> <li>• Vandal resistant coating</li> </ul>								
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal excavation for foundations with material retained on-site</li> <li>• Installation works (for varying Prime Cost (PC) Sums of playground equipment)</li> <li>• Nominal 500mm cut/fill balance</li> <li>• Installation works</li> <li>• Nominal excavation for foundations with material retained on-site</li> <li>• Installation works</li> </ul>								
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Security lighting</li> </ul>								
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Soft surfacing and associated site preparation</li> <li>• Line-markings</li> <li>• Motorised/ electrical gate access</li> </ul>								
Key identified risks	<ul style="list-style-type: none"> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off site</li> <li>• Imported fill required for site levelling</li> </ul>								
Sub-item details	<ul style="list-style-type: none"> <li>• OSE-1.24.1 - Playset/ exercise equipment with a 2-3 fixtures/play structures</li> <li>• OSE-1.24.2 - Playset/ exercise equipment with a 3-5 fixtures/play structures</li> <li>• OSE-1.24.3 - Playset/ exercise equipment with a 4-6 fixtures/play structures</li> <li>• OSE-1.24.4 - All-abilities equipment 3.18.5 Installation of playset equipment with a PC Sum value of up to \$10,000</li> <li>• OSE-1.24.5 - Installation of playset equipment with a PC Sum value of up to \$15,000</li> <li>• OSE-1.24.6 - Installation of playset equipment with a PC Sum value of up to \$20,000</li> <li>• OSE-1.24.7 - Soft fall (40mm thick rubber Softfall, 25mm cushion layer, 15mm colour layer)</li> <li>• OSE-1.24.8 - Fencing Steel posts and mesh: height 950mm 3.18.10 Extra over mesh access gate; single</li> </ul>								
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>								
Applicable standards	<ul style="list-style-type: none"> <li>• Australian Standard AS4685-2004: Playground Equipment</li> <li>• Australian Standard AS/NZS4422-1996: Playground Surfacing</li> </ul>								
<b>Cost Information</b>									
Methodology	First principles estimating								
Benchmark base unit rate FY24/25	<table border="1"> <thead> <tr> <th>#</th> <th>Item/sub-item</th> <th>Unit</th> <th>\$/Unit</th> </tr> </thead> <tbody> <tr> <td>OSE-1.24</td> <td>Playground / exercise equipment</td> <td>As shown</td> <td> <ul style="list-style-type: none"> <li>• OSE-1.24.1 - \$13,890/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.2 - \$20,530/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.3 - \$27,170/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.4 - \$40,450/Each (All abilities equipment)</li> <li>• OSE-1.24.5 - \$9,730/Each (Installation of playset equipment with PC Sum up to \$15K)</li> <li>• OSE-1.24.6 - \$12,780/Each (installation of playset equipment with PC Sum up to \$20K)</li> <li>• OSE-1.24.7 - \$420/m2 (Soft fall)</li> <li>• OSE-1.24.8 - \$130/m (Fencing Steel posts and mesh)</li> </ul> </td> </tr> </tbody> </table>	#	Item/sub-item	Unit	\$/Unit	OSE-1.24	Playground / exercise equipment	As shown	<ul style="list-style-type: none"> <li>• OSE-1.24.1 - \$13,890/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.2 - \$20,530/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.3 - \$27,170/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.4 - \$40,450/Each (All abilities equipment)</li> <li>• OSE-1.24.5 - \$9,730/Each (Installation of playset equipment with PC Sum up to \$15K)</li> <li>• OSE-1.24.6 - \$12,780/Each (installation of playset equipment with PC Sum up to \$20K)</li> <li>• OSE-1.24.7 - \$420/m2 (Soft fall)</li> <li>• OSE-1.24.8 - \$130/m (Fencing Steel posts and mesh)</li> </ul>
#	Item/sub-item	Unit	\$/Unit						
OSE-1.24	Playground / exercise equipment	As shown	<ul style="list-style-type: none"> <li>• OSE-1.24.1 - \$13,890/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.2 - \$20,530/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.3 - \$27,170/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.4 - \$40,450/Each (All abilities equipment)</li> <li>• OSE-1.24.5 - \$9,730/Each (Installation of playset equipment with PC Sum up to \$15K)</li> <li>• OSE-1.24.6 - \$12,780/Each (installation of playset equipment with PC Sum up to \$20K)</li> <li>• OSE-1.24.7 - \$420/m2 (Soft fall)</li> <li>• OSE-1.24.8 - \$130/m (Fencing Steel posts and mesh)</li> </ul>						

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.24

Item Name: Playground / exercise equipment

Component	Description			
	#	Item/sub-item	Unit	\$/Unit
Benchmark base unit rate FY25/26	OSE-1.24	Playground / exercise equipment	As shown	<ul style="list-style-type: none"> <li>• OSE-1.24.1 - \$14,580/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.2 - \$21,560/Each (Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.3 - \$28,530/Each Playset/ exercise equipment with a 2-3 fixtures/play structures)</li> <li>• OSE-1.24.4 - \$42,470/Each (All abilities equipment)</li> <li>• OSE-1.24.5 - \$10,220/Each(Installation of playset equipment with PC Sum up to \$15K)</li> <li>• OSE-1.24.6 - \$13,420/Each (installation of playset equipment with PC Sum up to \$20K)</li> <li>• OSE-1.24.7 - \$440/m2 (Soft fall)</li> <li>• OSE-1.24.8 - \$140/m (Fencing Steel posts and mesh)</li> </ul>
Minimum quantity	1 unit			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.25

Item Name: Seating area

Component	Description			
<b>Technical Information</b>				
Item Name	Seating area			
Item Reference	OSE-1.25			
Functional Description	Aluminium framed park bench			
Inclusions	<ul style="list-style-type: none"> <li>Aluminium park seating 2000-3000mm wide</li> <li>Concrete base</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Nominal excavation for foundations with material retained on site</li> <li>Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• Arm rests			
Key identified risks	• N/A			
Sub-item details	<ul style="list-style-type: none"> <li>OSE-1.25.1 - Aluminium frame; aluminium slats; back support</li> <li>OSE-1.25.2 - Aluminium frame; aluminium slats; no back support</li> <li>OSE-1.25.3 - Aluminium frame; timber slats; back support</li> <li>OSE-1.25.4 - Aluminium frame; timber slats; no back support</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	• Landcom: Open Space Design Guidelines (2008)			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.25	Seating area	Each	<ul style="list-style-type: none"> <li>OSE-1.25.1 - \$5,400/Each (Aluminium frame; aluminium slats; back support)</li> <li>OSE-1.25.2 - \$4,760/Each (Aluminium frame; aluminium slats; no back support)</li> <li>OSE-1.25.3 - \$3,750/Each (Aluminium frame; timber slats; back support)</li> <li>OSE-1.25.4 - \$3,240/Each (Aluminium frame; timber slats; no back support)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.25	Seating area	Each	<ul style="list-style-type: none"> <li>OSE-1.25.1 - \$5,670/Each (Aluminium frame; aluminium slats; back support)</li> <li>OSE-1.25.2 - \$5,000/Each (Aluminium frame; aluminium slats; no back support)</li> <li>OSE-1.25.3 - \$3,940/Each (Aluminium frame; timber slats; back support)</li> <li>OSE-1.25.4 - \$3,400/Each (Aluminium frame; timber slats; no back support)</li> </ul>
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.26

Item Name: Shade sail

Component	Description			
<b>Technical Information</b>				
Item Name	Shade sail			
Item Reference	OSE-1.26			
Functional Description	Free standing shade structure including shade cloth			
Inclusions	<ul style="list-style-type: none"> <li>• Standalone shade structure, galvanised steel, powder-coated posts with stainless steel fixings</li> <li>• Concrete foundations</li> <li>• Stitched shade sail with hipped roof based on 100m2 total cover</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal excavation for foundations with material retained on site</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• N/A			
Key identified risks	• N/A			
Sub-item details	• N/A			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	Reference pricing			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.26	Shade sail	m2	220
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.26	Shade sail	m2	230
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.27

Item Name: Spectator seat

Component	Description			
<b>Technical Information</b>				
Item Name	Spectator seat			
Item Reference	OSE-1.27			
Functional Description	Portable tiered seating (3 tiers)			
Inclusions	<ul style="list-style-type: none"> <li>Aluminium tiered seating 3000-5000mm wide x 1800mm deep</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Excavations for levelling of platform base</li> <li>Setout, supply, installation, preparation and cleaning of each component of the metal seating stands.</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Concrete/gravel base</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>OSE-1.27.1 - Aluminium tiered seating 3000mm wide</li> <li>OSE-1.27.2 - Aluminium tiered seating 3500mm wide</li> <li>OSE-1.27.3 - Aluminium tiered seating 4000mm wide</li> <li>OSE-1.27.4 - Aluminium tiered seating 5000mm wide</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.27	Spectator seat	Each	<ul style="list-style-type: none"> <li>OSE-1.27.1 - \$6,740/Each (Aluminium tiered seating 3000mm wide)</li> <li>OSE-1.27.2 - \$8,340/Each (Aluminium tiered seating 3500mm wide)</li> <li>OSE-1.27.3 - \$10,880/Each (Aluminium tiered seating 4000mm wide)</li> <li>OSE-1.27.4 - \$13,670/Each (Aluminium tiered seating 5000mm wide)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.27	Spectator seat	Each	<ul style="list-style-type: none"> <li>OSE-1.27.1 - \$7,080/Each (Aluminium tiered seating 3000mm wide)</li> <li>OSE-1.27.2 - \$8,760/Each (Aluminium tiered seating 3500mm wide)</li> <li>OSE-1.27.3 - \$11,420/Each (Aluminium tiered seating 4000mm wide)</li> <li>OSE-1.27.4 - \$14,350/Each (Aluminium tiered seating 5000mm wide)</li> </ul>
Minimum quantity	1 no.			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.28

Item Name: Turfing

Component	Description			
<b>Technical Information</b>				
Item Name	Turfing			
Item Reference	OSE-1.28			
Functional Description	Rolled turf on sand bed with irrigation			
Inclusions	<ul style="list-style-type: none"> <li>• Rolled buffalo turf or hydroseeding on 200mm-400mm sand bed</li> <li>• Water supply piping and tap connections for irrigation</li> <li>• Hose and portable sprinkler accessories</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal 500mm cut/fill balance</li> <li>• Re-use of topsoil from local stockpile</li> <li>• Water supply piping maximum run of 50m</li> <li>• Initial fertilisation</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	• N/A			
Exclusions (exceed minimum requirements)	• 6 months maintenance			
Key identified risks	<ul style="list-style-type: none"> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• OSE-1.28.1 - Rolled turf; buffalo</li> <li>• OSE-1.28.2 - Hydro seeding</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	• Landcom: Open Space Design Guidelines (2008)			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.28	Turfing	Each	<ul style="list-style-type: none"> <li>• OSE-1.28.1 - \$50/m2 (Rolled turf; buffalo)</li> <li>• OSE-1.28.2 - \$20/m2 (Hydroseeding)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.28	Turfing	Each	<ul style="list-style-type: none"> <li>• OSE-1.28.1 - \$52/m2 (Rolled turf; buffalo)</li> <li>• OSE-1.28.2 - \$21/m2 (Hydroseeding)</li> </ul>
Minimum quantity	1m2			



# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.29

Item Name: Retaining wall

Component	Description			
<b>Technical Information</b>				
Item Name	Retaining wall			
Item Reference	OSE-1.29			
Functional Description	Retaining wall less than 2m high for public open spaces			
Inclusions	<ul style="list-style-type: none"> <li>• Concrete sleeper retaining wall including footing</li> <li>• Keystone block retaining wall including footing / base preparation</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Nominal excavation for foundations with material retained on site</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Enhanced foundations and structural requirements for walls greater than 2m high.</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• Excavation in un-rippable rock</li> <li>• Relocation of utility services</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Allowance for rock excavation</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• OSE-1.29.1 - Concrete sleeper retaining wall</li> <li>• OSE-1.29.2 - Keystone block retaining wall</li> </ul>			
Specific sub item information	• N/A			
Applicable standards	• N/A			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.29	Retaining wall	m2	<ul style="list-style-type: none"> <li>• OSE-1.29.1 - \$500/m2 (Concrete sleeper)</li> <li>• OSE-1.29.2 - \$670/m2 (Keystone block)</li> </ul>
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.29	Retaining wall	m2	<ul style="list-style-type: none"> <li>• OSE-1.29.1 - \$530/m2 (Concrete sleeper)</li> <li>• OSE-1.29.2 - \$700/m2 (Keystone block)</li> </ul>
Minimum quantity	1m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.30

Item Name: Site clearance

Component	Description			
<b>Technical Information</b>				
Item Name	Site clearance			
Item Reference	OSE-1.30			
Functional Description	Site clearance of vegetation and topsoil			
Inclusions	<ul style="list-style-type: none"> <li>Removal of topsoil and existing vegetation</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>Top 150mm of vegetation and topsoil stripped back and stockpiled on site</li> <li>Tree removal</li> <li>Mulching of tree stumps and roots and carting away</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>Removal of contamination (Separate item T-1.32)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>Contaminated materials</li> <li>Surplus excavated material requiring disposal off-site</li> <li>Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>N/A</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.30	Site clearance	m2	20
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.30	Site clearance	m2	21
Minimum quantity	667m2			

# IPART - Benchmark costs for local infrastructure



Item Reference: OSE-1.31

Item Name: Synthetic playing surfaces / artificial grass

Component	Description			
<b>Technical Information</b>				
Item Name	Synthetic playing surfaces / artificial grass			
Item Reference	OSE-1.31			
Functional Description	Synthetic turf fixed to concrete base.			
Inclusions	<ul style="list-style-type: none"> <li>• Synthetic turf including base preparation and construction of the concrete base</li> </ul>			
Key scope of work inclusions	<ul style="list-style-type: none"> <li>• Site levelling (cut/fill neutral)</li> <li>• Installation works</li> </ul>			
Exclusions (may be reasonably required)	<ul style="list-style-type: none"> <li>• Drainage</li> <li>• Perimeter fencing (Separate item OSE-1.03)</li> </ul>			
Exclusions (exceed minimum requirements)	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Key identified risks	<ul style="list-style-type: none"> <li>• Relocation and diversion of existing utilities</li> <li>• Contaminated materials</li> <li>• Surplus excavated material requiring disposal off-site</li> <li>• Imported fill required for site levelling</li> </ul>			
Sub-item details	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Specific sub item information	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
Applicable standards	<ul style="list-style-type: none"> <li>• N/A</li> </ul>			
<b>Cost Information</b>				
Methodology	First principles estimating			
Benchmark base unit rate FY24/25	#	Item/sub-item	Unit	\$/Unit
	OSE-1.31	Synthetic playing surfaces / artificial grass	m2	220
Benchmark base unit rate FY25/26	#	Item/sub-item	Unit	\$/Unit
	OSE-1.31	Synthetic playing surfaces / artificial grass	m2	230
Minimum quantity	1m2			

