

# CITY OF KWINANA DCP

## Cost Update 2024

March 25, 2025



## Document Details

<b>Client:</b>	City of Kwinana
<b>Rawlinson (W.A.) Project no:</b>	EST23-09
<b>Document title:</b>	Cost Update 2024

## Document Approval

Revision	Originator	Approved	Authorised	Date
2.01	Khaled Moukadem	Niall McAree Director		25-Mar-25

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## 1 Introduction

Rawlinsons (W.A) has been engaged by *City of Kwinana* via Mr Ruban Ganesha to provide updates to the Development Contribution Plan (DCP) costs relating to the infrastructure build and upgrades to seven Development Contribution Areas (DCA1-7). These cost updates are in relation the following infrastructure:

1. Roads and Utilities (12 assets total)
2. Open Drains (12 options/assets total)
3. Verge and Median Landscaping Treatment for Roads (12 assets total)
4. Public Open Spaces (43 assets over 4 DCA's)

## 2 Market Overview

Over the past year, the Western Australia market has seen a significant increase in construction costs among all industries. Specifically, in the Civil Construction Industry, these cost increases have been noteworthy due to the limited availability of skilled labour and plant, materials shortages and cost increases, freight cost increase, fuel price increases, state government's continuous investment in transport and infrastructure project (e.g. Metronet), and the number of additional construction projects in Western Australia.

All the above aspects have significantly increased the costs for constructing infrastructure projects around Western Australia. The following indices illustrate the Western Australia construction cost increases over the past year:

*Table 1 - Published Construction Cost Indices*

Index	March 2023 – December 2024 % Change
<b>Australian Bureau of Statistics (ABS)</b> - Table 17. Output of the Construction industries, subdivision and class index numbers - Index Number ; 3101 Road and Bridge Construction Western Australia	~ 3.0%
<b>Australian Institute of Quantity Surveyors (AIQS)</b> – CCIF Q4 2024	~ 9.6 %
<b>Rawlinsons Construction Handbook (RACH) 2025</b> – Building Price Index	~ 10.5%

The **ABS** index above shows the cost increase specifically in Road and Bridge construction projects in Western Australia over the past year. This index is based on data compiled, analysed, and prepared by the Australian Bureau of Statistics (Commonwealth of Australia) quarterly.

The **AIQS** index above shows the cost increase amongst all construction projects in Western Australia Metropolitan area with a value between \$10m and \$50m over the past year. This index is based on data compiled, analysed, and prepared by the Australian institute of Quantity Surveyors based on twelve of the leading quantity surveying firms (including Rawlinsons (W.A) in Western Australia on a quarterly basis.

The **RACH** index above shows the cost increase specifically in across all construction projects in Western Australia over the past year. This index is based on data compiled, analysed, and prepared by the Rawlinsons (W.A) publishing team quarterly.

In summary, the above indices indicate infrastructure project costs have increased between 3 and 11% over the past year. However, we note that these indices are averages across many projects of different scale.

Rawlinsons (W.A) have specifically witnessed on smaller scale infrastructure projects (say <\$2m) a disproportionate cost increase in some instances being up to 50% more than the escalation rate. Tender rates analysed have been largely spread amongst tenders with variances up to 200% amongst the different work items. We believe that the main driver for this is largely due to contractor appetite and availability with larger infrastructure projects in Perth currently utilising a large portion of the workforce.

Furthermore, Rawlinsons (W.A) have seen the cost distribution of escalation over the past year vary according to construction component. For instance, concrete costs have increased about ~20% over the past year, which would affect each project differently according to how much concrete is required in that project (e.g. kerbs and footpaths).

To surmise, even though the indices above indicate a range of 3-11% increase over the past year, cost escalations on each project may be more or less significant due to its own attributes.

### 3 Cost Plan Methodology

The cost plan has been prepared using a trade breakdown for each road section, including site works and services, within each development contribution area. Within each element composite work items have been quantified using iTwo Cost X software. Cost rates reflective of Q4 of 2024 for each work item have been applied to each individual work item. Pricing/cost data has generally been sourced from previous projects of similar nature.

As for open drains, landscaping, and POS's, Rawlinsons (W.A) have updated previous rates to suit rates of Q4 of 2024.

Rawlinsons (W.A) have incorporated actual costs of construction where provided by the City of Kwinana.

### 4 Basis of Estimate

This estimate is based on the documentation and information provided in the Table below:

*Table 2 – Table of Documents*

Document File Name	Author	Date Received
<b>General</b>		
RFC 01 22 - Attachment B - Specifications - Provision and Review of Infrastructure Cost Estimates for DCP Areas	City of Kwinana	6/11/2022
DCA Area Maps	City of Kwinana	15/11/2022
City of Kwinana Ordinary Council Meeting Agenda 23/11/23	City of Kwinana	2/3/2023
<b>Roads</b>		
DCA 1 – BERTRAM ROAD UPGRADE	BPA Engineering	22/11/2022
DCA 1 – WELLARD ROAD UPGRADE	City of Kwinana	22/11/2022
DCA 2 – MILLAR ROAD	Porter Consulting Engineers	22/11/2022
DCA 2- MORTIMER ROAD	BPA Engineering	22/11/2022
DCA 2 – SUNRISE BLVD	BPA Engineering	22/11/2022
DCA 3 – PEEL SUB	BPA Engineering	22/11/2022

DCA 3 4 – THOMAS ROAD	BPA Engineering	22/11/2022
DCA 4 5 – ANKETELL ROAD	BPA Engineering	22/11/2022
DCA 5 – HONEYWOOD AVE CORDATA AVE	Peritas Group	22/11/2022
DCA 5 – LYON ROAD	Peritas Group	22/11/2022
DCA 6 – HAMMOND ROAD	Porter Consulting Engineers	22/11/2022
LOT 611 670 COLVERT CROSSING	BPA Engineering	22/11/2022
<b>Open Drains, Landscape, and POS</b>		
Copy of DCP scope sheets_RV 2	-	22/11/2022

We note that minimal design documents have been provided; consequentially, assumptions on design and scope of works have been made as outlined in the subsequent sections.

## 5 Summary of Cost Estimates

The following tables represent the summary of costs associated with each Development Contribution Area and the associated scope of works:

*Table 3: Roads*

Code	Description	Cost \$
1.1	DCA 1 Bertram Road Upgrade	\$ 6,615,040
1.2	DCA 1 Wellard Road Upgrade	\$ 23,906,470
1.3	DCA 2 Millar Road Upgrade	\$ 1,027,416
1.4	DCA 2 Mortimer Road upgrade	\$ 7,309,935
1.5	DCA 2 Sunrise Boulevard 15.4m wide***	\$ 1,977,962
1.6	DCA 3 Thomas Road Upgrade	\$ 9,264,930
1.7	DCA 4 Anketell Road Upgrade	\$ 12,934,529
1.8	DCA 5 Honeywood Avenue (Cordata Avenue)	\$ 2,680,816
1.9	DCA 5 Lyon Road Upgrade	\$ 4,343,010
1.10	DCA 6 Hammond Road	\$ 2,264,460
1.11	DCA 6 Connector Road (Hammond Road Extension)	\$ 2,412,660
1.12	DCA 1 Culvert and Road Crossing over Peel Main Drain in Bertram	\$ 943,278
<b>TOTAL ROADS COST (excl. GST)</b>		<b>\$ 75,680,506</b>
GST		\$ 7,568,051
<b>TOTAL ROADS COST (incl. GST)</b>		<b>\$ 83,248,557</b>

\*\*\* DCA 2 Sunrise Boulevard 19.4m wide option is **\$2,121,461 + GST**

Table 4: Open Drains

Code	Description	Cost \$
2.1	DCA 1 Bertram Road Drainage Basin	\$ 375,215
2.2	Peel Sub N Drain Upgrade in Wellard	\$ 1,370,353
2.3	Peel Sub N1 Drain Upgrade in Wellard	\$ 274,274
2.4	Peel Sub N2 Drain Upgrade in Wellard	\$ 324,052
2.5	Peel Sub P Drain in Casuarina	Excl.
2.6	Peel Sub P1 Drain in Casuarina	\$ 1,260,263
2.7	Peel Sub P1A Drain in Casuarina	\$ 701,919
2.8	Peel Sub O Drain in Casuarina	\$ 1,595,270
2.9	Piping of the Sub P Drain in Casuarina	\$ 976,922
2.10	Piping of the Sub P1 Drain in Casuarina	\$ 480,332
2.11	Piping of the Sub P1A Drain in Casuarina	\$ 246,593
2.12	Piping of the Sub O Drain in Casuarina	\$ 1,595,270
<b>TOTAL OPEN DRAINS COST (excl. GST)</b>		<b>\$ 9,200,463</b>
GST		\$ 920,046
<b>TOTAL OPEN DRAINS COST (incl. GST)</b>		<b>\$ 10,120,509</b>

Table 5: Road Landscape

Code	Description	Cost \$
3.1	Bertram Road, Wellard	\$ 395,080
3.2	Wellard Road, Wellard	\$ 3,078,146
3.3	Millar Road	\$ 78,157
3.4	Mortimer Road, Wellard	\$ 339,819
3.5	Sunrise Boulevard, Wellard – 15.4m wide	\$ 175,311
3.6	Sunrise Boulevard, Wellard – 19.4m wide	\$ 241,623
3.7	Thomas Road, Wellard	\$ 1,552,103
3.8	Anketell Road, Wellard	\$ 1,038,122
3.9	Hammond Road Extension	\$ 1,242,745
3.10	Hammond Road Connector Road	\$ 896,942
3.11	Lyon Road	\$ 496,070
3.12	Cordata Ave, Wandii	\$ 434,896
<b>TOTAL ROAD LANDSCAPE COST (excl. GST)</b>		<b>\$ 9,969,014</b>
GST		\$ 996,901
<b>TOTAL ROAD LANDSCAPE COST (incl. GST)</b>		<b>\$ 10,965,915</b>

Table 6: Public Open Space

Code	Description	Cost \$
4.1	DCA 3 Casuarina Public Open Space	\$ 53,389,388
4.2	DCA 4 Anketell North Public Open Space	\$ 12,672,787
4.3	DCA 5 Wandi North and South Open Space	\$ 4,956,331
4.4	DCA 6 Mandogalup Public Open Space	\$ 15,569,784
4.5	DCA 2-7 District Sporting Ground (excluding building)	NOT INCLUDED
<b>TOTAL PUBLIC OPEN SPACE COST (excl. GST)</b>		<b>\$ 86,588,290</b>
GST		\$ 8,658,829
<b>TOTAL PUBLIC OPEN SPACE COST (incl. GST)</b>		<b>\$ 95,247,119</b>

## 6 Limitations

The following items have not been included in our estimate:

- Land acquisition
- Escalation
- Public Art
- Environmental Costs and Offsets
- Maintenance Costs to the Road Infrastructure (e.g. linemarking, street signs replacement, light pole luminaire replacements, etc.)
- Rectifying existing non-compliant issues not identified
- Asbestos Contaminated Materials and Hazardous Building Materials
- Excavation in adverse ground conditions including rock, clay, ASS etc.
- Noise walls
- Soil testing
- Dewatering
- Staging works
- Construction works outside of normal working hours
- Salvaging
- Statutory authority charges
- Legal fees
- GST
- Finance charges



## 7 Major Assumptions, Inclusions, and Exclusions

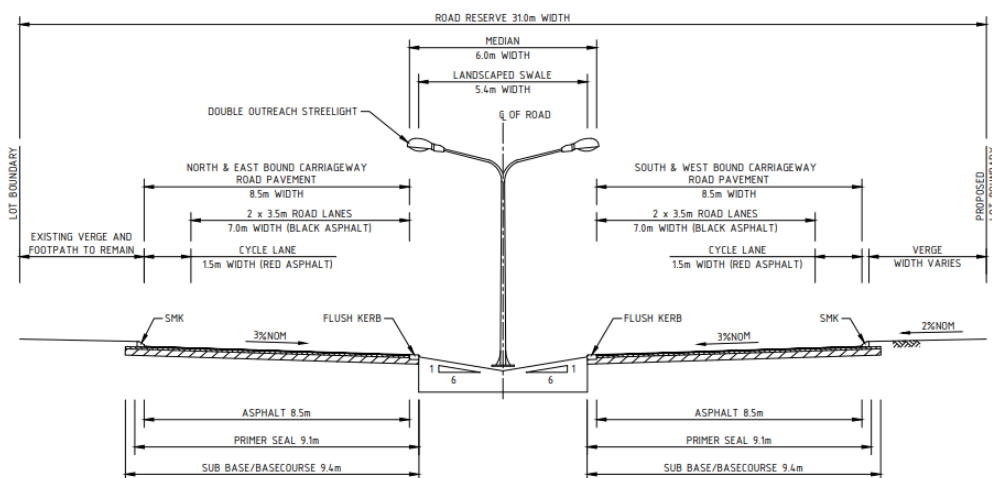
The following items have been assumed in our estimate:

### 7.1 General Assumptions

- Earthworks, unless noted otherwise
  - Cut to fill is taken as +/- 300mm
  - Cut to fill in swale medians taken as +/- 500mm
  - No allowance for dispersing top soil
- Landscaping to verge area is included
- Road reserve improvements including hard landscaping, public art and higher design standards of infrastructure are not included

### 7.2 Road

- DCA 1 Bertram Road Upgrade road build up generally consists of:
  - 200mm thick compacted limestone sub base
  - 150mm thick crushed rock base course
  - 40mm thick asphalt
  - Red asphalt to cycle way
  - Based on the figure below from drawing SK4 Rev A Concept Plan and Cross Section:



**TYPICAL CROSS SECTION - BERTRAM ROAD ULTIMATE DUAL CARRIAGEWAY**

*Figure 1: Bertram Road*

- Bertram Road Upgrade also assumes the following:
  - Footpath measured to southern side only
  - Existing kerb to northern side remains and footpath is made good where required
  - Allowed to extend footpath to existing bus stop past the Challenger Ave intersection
  - Existing chainlink fence remains
  - RAB at Wellard Road/Bertram Road is included with Wellard Road

- DCA 1 Wellard Road Upgrade road build up generally consists of:
  - 150mm thick compacted limestone sub base
  - 150mm thick crushed rock base course
  - 40mm thick asphalt
  - Based on the figure below from drawing 20-010-145 Rev B Typical Cross Section and Pavement Construction Detail:

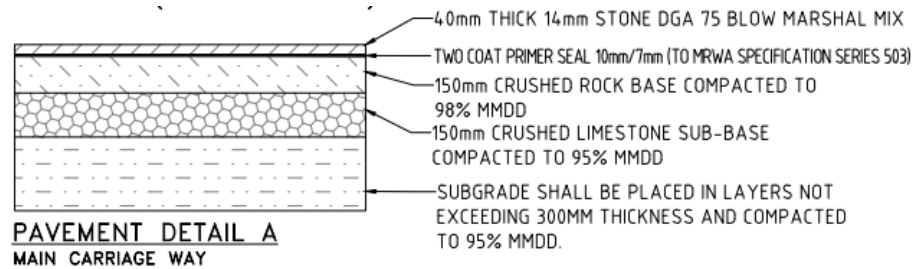


Figure 2: Wellard Road

- Wellard Road Upgrade also assumes the following:
  - Bus shelters (in No. 2) removed but not replaced
  - Safety barriers included
  - 3000mm wide limestone access track included
- DCA 2 Millar Road Upgrade road build up generally consists of:
  - Estimate is for CH470 to CH577 only and assumes that works up to CH470 are completed as per drawings received
  - Actual construction costs for CH36.7 to CH470 have been provided by the City of Kwinana
  - No allowance for removal of trees
  - No allowance for landscaping
  - Existing road base and sub base to remain
  - Assumed new road base and sub base under flush kerb
  - Assumed no works required to utilities services like gas services, water and sewer, Telstra/NBN as advised by City of Kwinana
- DCA 2 Mortimer Road Upgrade road build up generally consists of:
  - 200mm thick compacted limestone sub base
  - 150mm thick crushed rock base course
  - 40mm thick AC14 asphalt
  - Based on the figure below from drawing SK1 Rev A Concept Plan:

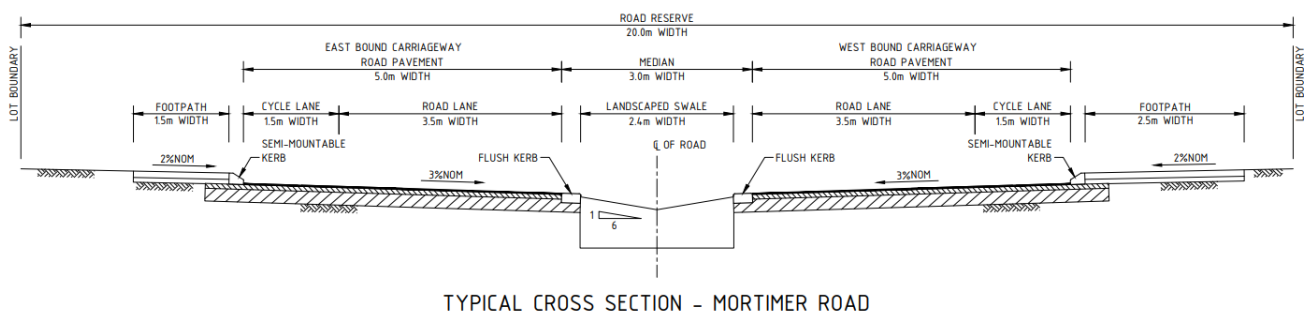
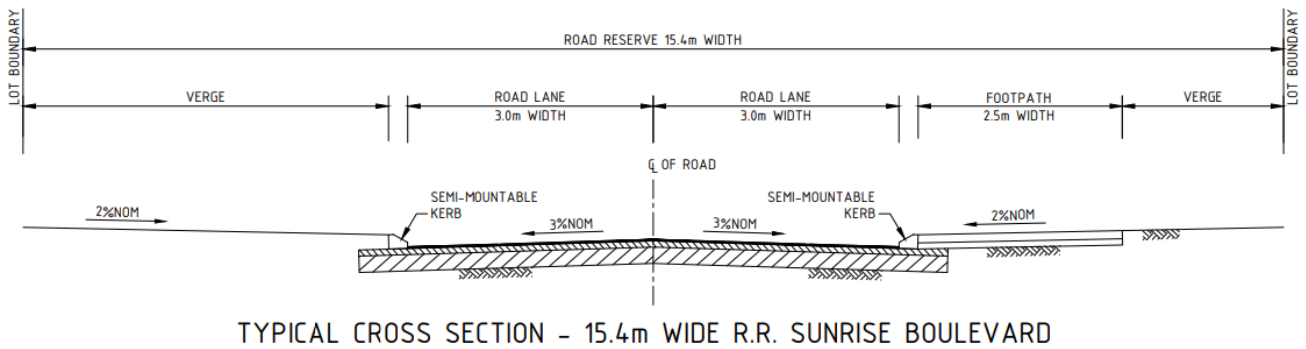


Figure 3: Mortimer Road

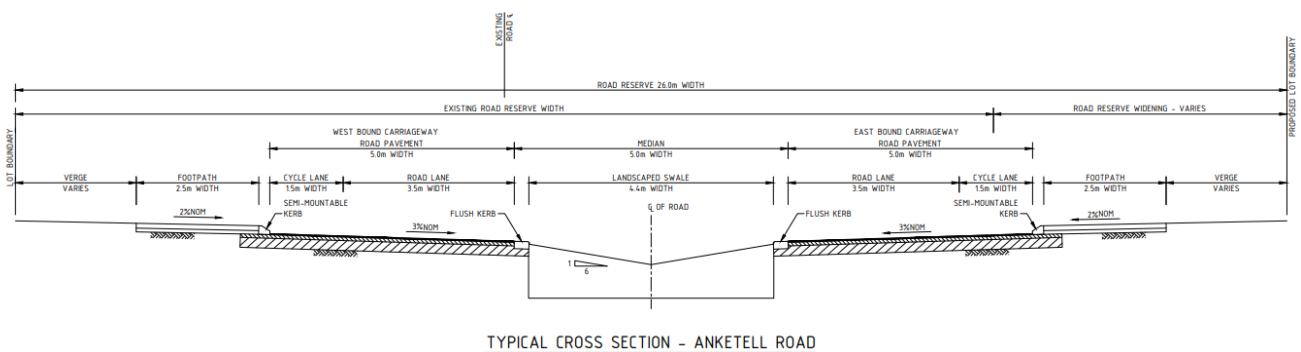
- Mortimer Road Upgrade also assumes the following:
  - Wake Way removal has been included but no new alignment allowed for
  - Allowed for removal of existing road paving
  - Assumed concrete infill to medians

- DCA 2 Sunrise Boulevard road build up generally consists of:
  - 200mm thick compacted limestone sub base
  - 150mm thick crushed rock base course
  - 40mm thick asphalt
  - Based on the figure below from drawing SK5 Rev B Concept Plan 15.4m Wide Road Reserve:



*Figure 4: Sunrise Boulevard*

- Sunrise Boulevard works also assumes the following:
  - Allowed for removal of existing road paving
  - Allowed for new drainage culvert to basin
- DCA 3 Thomas Road Upgrade:
  - Works are complete
  - We have utilised the costs provided by the City of Kwinana in this update
- DCA 4 Anketell Road Upgrade road build up generally consists of:
  - 200mm thick compacted limestone sub base
  - 150mm thick crushed rock base course
  - 40mm thick asphalt
  - Based on the figure below from drawing SK4 Rev C Typical Road Cross Sections:



*Figure 5: Anketell Road*

- Anketell Road Upgrade also assumes the following:
  - New bus shelter excluded
  - Allowed for removal of existing paving
  - Traffic signals at 4-way intersection are included

- DCA 5 Honeywood Avenue/Cordata Avenue road build up generally consists of:
  - 200mm thick compacted limestone sub base
  - 150mm thick crushed rock base course
  - 40mm thick asphalt
  - Based on the figure below from drawing SK1 Rev B:

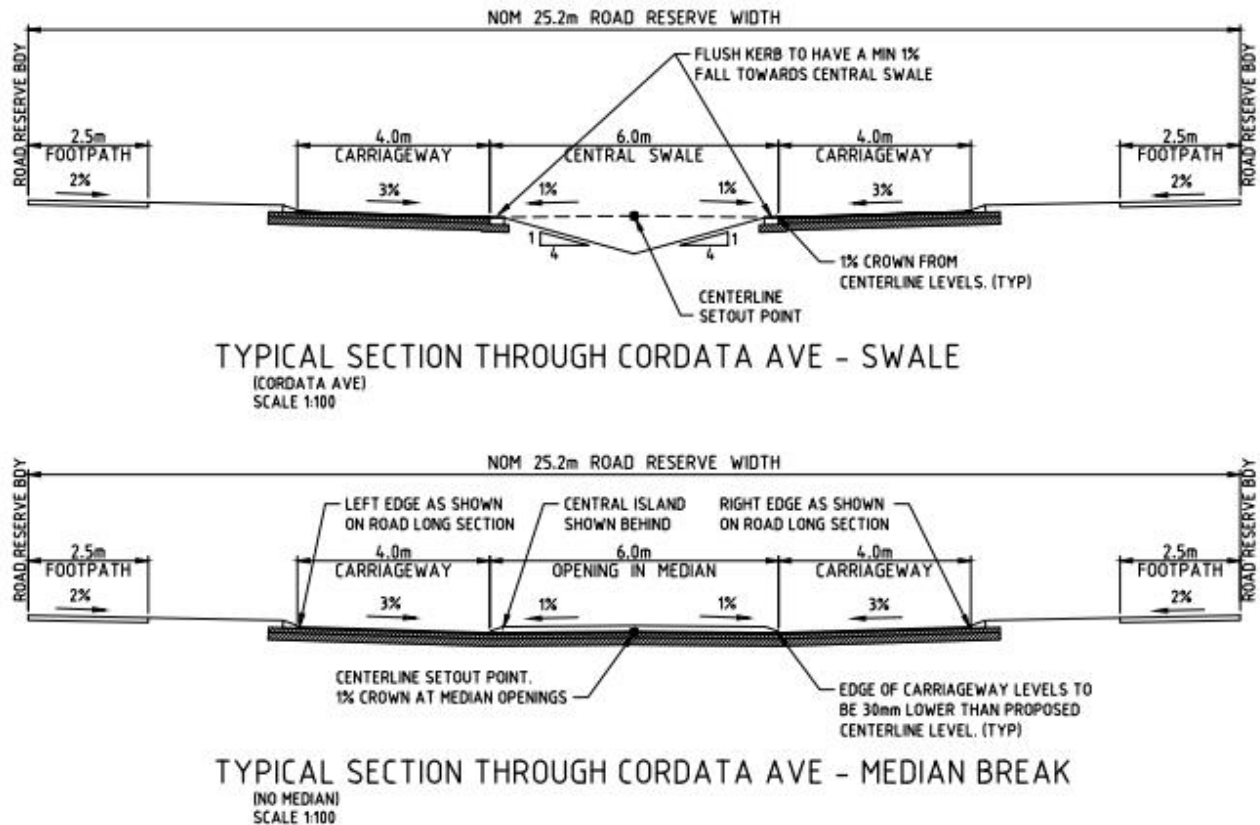
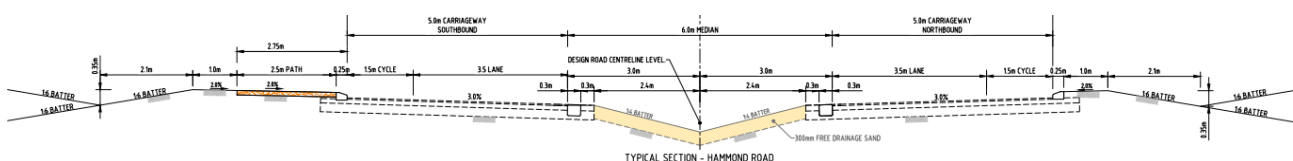


Figure 6: Cordata Road

- Honeywood Ave/ Cordata Ave Upgrade also assumes the following:
  - Demolition of existing structures is excluded
  - Intersection at Anketell Road included with Anketell Road costs
- DCA 5 Lyon Road South Section:
  - Works are complete
  - We have utilised the costs provided in the DCP of 2022 to reflect these costs in this update
- DCA 6 Hammond Road Extension road build up generally consists of:
  - 200mm thick compacted limestone sub base
  - 150mm thick crushed rock base course
  - 40mm thick asphalt
  - Based on the figure below from drawing 17-5-59/400 Rev B Concept Plan:



*Figure 7: Hammond Road Extension*

- Hammond Road Extension also assumes the following:
  - Rowley Road upgrade has not occurred
  - On ramp/ off ramp to Rowley Road is not included
  - Concrete footpaths
  - Future nature strip is excluded
- DCA 6 Hammond Road Extension Connector road build up generally consists of:
  - 200mm thick compacted limestone sub base
  - 150mm thick crushed rock base course
  - 40mm thick asphalt
  - Based on the figure below from drawing 17-5-59/400 Rev B Concept Plan:

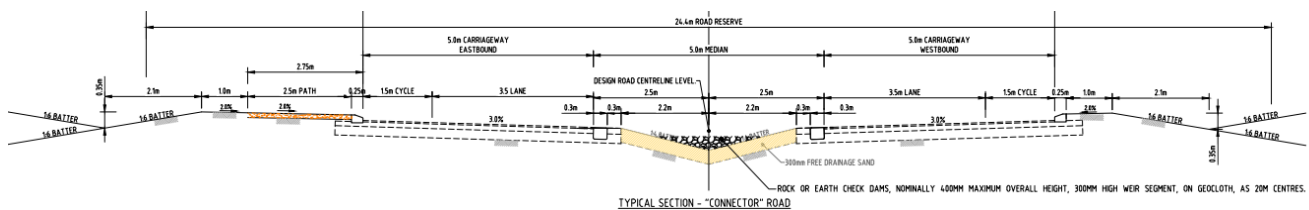


Figure 8: Hammond Road Extension Connector

- Hammond Road Extension Connector also assumes the following:
  - Concrete footpaths
- Culvert and Road Crossing over Peel Main Drain road build up generally consists of:
  - 150mm thick compacted limestone sub base
  - 100mm thick crushed rock base course
  - 40mm thick asphalt
  - Based on the figure below from drawing SK2 Rev B Concept Plan and Section:

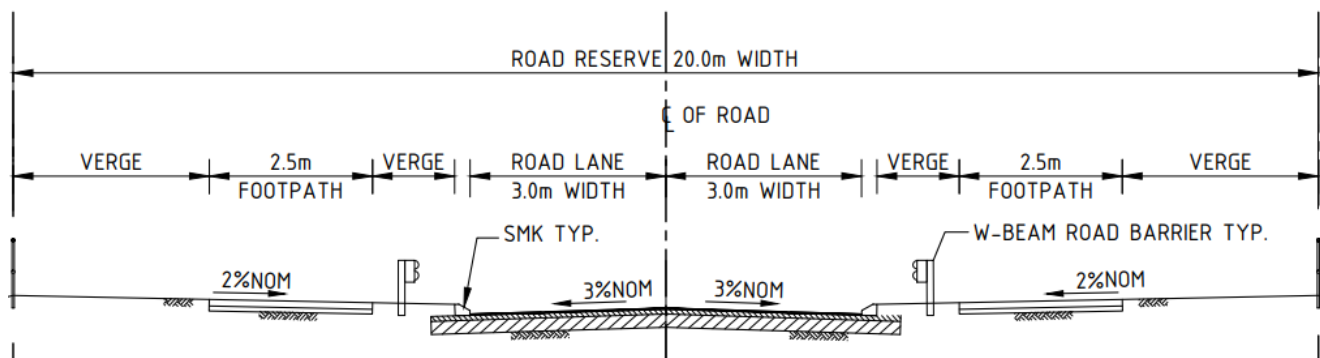


Figure 9: Road over Peel Main Culvert

- Culvert and Road Crossing over Peel Main Drain also assumes the following:
  - Only area within drainage reserve has been measured
  - Allowed to remove fencing and reinstate
  - Allowed to tie in to existing New Grange Loop
- Shared paths (Concrete) build up generally consists of:
  - 100 thick reinforced concrete
  - 100 thick compacted clean sand fill

- Shared paths (Asphalt) build up generally consists of:
  - 150mm thick compacted limestone sub base
  - 30mm thick asphalt
  - Red oxide
- Median build up (Concrete) generally consists of:
  - 150 thick reinforced concrete infill with pattern pave style
  - Semi mountable kerb to perimeter
  - Sub base and road base measured to whole median area
- Median build up (Brick) generally consists of:
  - 80 thick block paving
  - 30mm compacted sand bed
  - 150mm thick compacted limestone sub-base

### 7.3 Open Drains / Road Landscape / Public Open Space

- Generally, where sections do not include for Preliminaries and Contingencies, we have factored these into the rate
- As per City of Kwinana's guidance, we have updated rates only in the Excel file provided to reflect most current rates. We have not adjusted quantities unless requested
- Road Landscaping
  - Rawlinsons (W.A) have been provided actual costs for Millar Road road landscaping and have reflected this in the actual costs
  - Rawlinsons (W.A) have been provided actual costs for Lyon Road road landscaping and have reflected this in the actual costs
- Drainage
  - Rawlinsons (W.A) have been provided actual costs for the Bertram Road Drainage Basin and have reflected this in the actual costs
  - Rawlinsons (W.A) have been provided actual costs for the Peel Sub P drain and have reflected this in the actual costs. We understand this to be a portion of the drain construction and have pro-rated it's costs in this cost update (please see breakdown for workings). There is 174m still to be constructed.
  - Rawlinsons (W.A) have been provided actual costs for Peel Sub N1 drain and have reflected this in the actual costs, with 167m still to be constructed
  - Rawlinsons (W.A) have been provided actual costs for Peel Sub N2 drain and have reflected this in the actual costs, with 111m still to be constructed
  - We understand that the Peel Sub P drain in Casuarina has been excluded due to the piping solution instead; we have reflected this in the costs
- Public Open Spaces
  - Rawlinsons (W.A) have been provided actual costs for DCA 5, POS 22B and POS 22C from the City of Kwinana – Wandi North and South Open Space
  - Rawlinsons (W.A.) have been provided actual costs for DCA 6, POS 5, POS 8, POS A, POS B and POS D and have reflected this in the actual costs. Maintenance over 2 years has been included with each POS
  - Rawlinsons (W.A.) have been provided actual costs for DCA 4, POS 3 and POS 12 and have reflected this in the actual costs. Maintenance over 2 years has also been included
  - Rawlinsons (W.A.) have been provided actual costs for POS A, POS B and POS D and have reflected this in the actual costs. Maintenance over 2 years has been included with both
  - No information has been provided on the "District Sporting Ground, excluding the building (DCA2-7)" outlined in the Attachment B document during RFT. However, from the DCP of 2022, we have seen that this has been excluded and have done so accordingly in this update as well.

#### 7.4 Other

- Please see breakdown in Annexures for further detailed assumptions

### 8 Below the Line Costs

#### 8.1 Risk Contingency

A risk contingency of 10% of the construction costs has been included to help cover design and construction risks.

#### 8.2 Project Overheads and Preliminaries (Indirect Construction Costs)

An allowance of 15% for the Roadworks and Utilities and 15% for the Open Spaces of the construction costs has been included to cover Builder associated setup, management, insurance, etc. costs.

#### 8.3 Project Owner's Cost (Planning and Design Cost)

Project Owner's costs have been allowed at 7.50% for Roadworks and Open Spaces and at 7.50% of the construction costs for Utilities for design and owner related costs.

#### 8.4 Traffic Management

Generally allowed traffic management costs at 5% of the construction costs.

#### 8.5 Escalation

No escalation has been allowed in our cost estimate.



## 9 Variance of Cost from Previous Rawlinsons (W.A) Estimate

The following is a summary of the variances from the previous issued report of 2023, 1.03:

- All rates updated to December 2024
- Below the line costs are now compounding to all road construction estimates
- Actual costs included where provided. These include:
  - DCA 2 Peel Sub Drain N1 in Wellard – 289m constructed portion (included in 2024 update)
  - DCA 2 Peel Sub Drain N2 in Wellard – 245m constructed portion (included in 2024 update)
  - DCA 3 Thomas Road construction (included in 2024 update)
  - DCA 3 Piping Sub P Drain in Casuarina – actual cost updated for 641m constructed portion (included in 2024 update)
  - DCA 4 POS 3 (included in 2024 update)
  - DCA 4 POS 12 (included in 2024 update)
  - DCA 6 POS 5 (included in 2024 update)
  - DCA 6 POS 8 (included in 2024 update)
  - DCA 6 POS A (included in 2024 update)
  - DCA 6 POS B (included in 2024 update)
  - DCA 6 POS D (included in 2024 update)
- Updates to POS areas have been included to:
  - DCA4 Anketell North Public Open Space
    - POS 1 (area was 5429m2 now 5072m2)
    - POS 2 (area was 49005m2 now 37116m2)
    - POS 3 (area was 4017m2 now 3969m2)
    - POS 6 (area was 3828m2 now 3997m2)
    - POS 7 (area was 6963m2 now 7276m2)
    - POS 8 (area was 5378m2 now 10379m2)
    - POS 12 (area was 1055m2 now 1343m2)
  - DCA 6 Mandogalup Public Open Space
    - POS 3 (now 2345m2)
    - POS 4 (now 6803m2)
    - POS 5 (now 12136m2)
    - POS 8 (now 1630m2)
    - POS A (now 28988m2)
    - POS B (now 3711m2)
    - POS D (now 16285m2)





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## **ANNEXURE A – Road Infrastructure Cost Breakdown**

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## SUMMARY

**Project:** City of Kwinana DCP

**Details:** CITY OF KWINANA DCP UPDATE 2024

**Job No:** EST23-09

Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
	<b><u>DCA1</u></b>					
1	DCA1 - BERTRAM ROAD				6,615,040	Road construction below the line costs compounded
2	DCA 1 - WELLARD ROAD				23,906,470	Road construction below the line costs compounded
3	DCA 1 - PEEL MAINDRAIN CULVERT				943,278	Road construction below the line costs compounded
	<b><u>DCA2</u></b>					
4	DCA 2 - MILLAR ROAD				1,027,416	Road construction below the line costs compounded
5	DCA 2 - MORTIMER ROAD				7,309,935	Road construction below the line costs compounded
6	DCA 2 - SUNRISE BOULEVARD				1,977,962	Road construction below the line costs compounded
	<b><u>DCA3</u></b>					
7	DCA 3 - THOMAS ROAD (CONSTRUCTION COMPLETE)				9,264,930	Construction complete - Actuals provided
	<b><u>DCA4</u></b>					
8	DCA 4 - ANKETELL ROAD				12,934,529	Road construction below the line costs compounded
	<b><u>DCA5</u></b>					
9	DCA 5 - HONEYWOOD AVENUE (CORDATA ROAD)				2,680,816	Road construction below the line costs compounded
10	DCA 5 - LYON ROAD (CONSTRUCTION COMPLETE)				4,343,010	Construction complete - Actuals provided
	<b><u>DCA6</u></b>					
11	DCA 6 - HAMMOND ROAD				2,264,460	Road construction below the line costs compounded
12	DCA 6 - CONNECTOR ROAD (HAMMOND ROAD EXTENSION)				2,412,660	Road construction below the line costs compounded

**DCA TOTAL: \$75,680,506**

DCA1 - BERTRAM ROAD

Project: City of Kwinana DCP				Details: CITY OF KWINANA DCP UPDATE 2024		
Building: City of Kwinana DCP				Job No: EST23-09		
Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
1	DCA1 - BERTRAM ROAD					
1.1	Road Construction	926	m	5,423.87	5,023,700	
1.2	Utilities	926	m	1,718.10	1,591,340	
DCA1 - BERTRAM ROAD					6,615,040	

# DCA1 - BERTRAM ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>1.1 ROAD CONSTRUCTION</b>							
	<u>Earthworks and Site Preparation</u>						
1	Site Clearance (based on light shrubs)	16,183	m2	3.76	60,848		60,848
2	Removal of topsoil 150mm and stockpile for later re-use	16,183	m2	1.72	27,835		27,835
3	Breaking up existing roads surfacing and cart away	7,395	m2	21.30	157,514		157,514
4	Remove kerb		m	13.38	0		0
5	Cut to Fill - General Earthworks	5,141	m3	10.98	56,448		56,448
6	Imported Fill	1,159	m3	28.76	33,333		33,333
7	Remove signs	13	No	92.50	1,203		1,203
8	Remove bollards	29	No	51.25	1,486		1,486
	<u>Subgrade Preparation</u>						
9	Preparation, trim and compact	17,126	m2	6.13	104,982		104,982
	<u>Sub Base and Base Course</u>						
10	150mm thick crushed rock base course	16,588	m2	17.78	294,935		294,935
11	200mm thick compacted limestone sub base	17,126	m2	23.71	406,057		406,057
	<u>Road Paving</u>						
12	40mm thick (AC14)	15,236	m2	29.01	441,996		441,996
13	Extra over for 2% red oxide	2,689	m2	11.79	31,703		31,703
14	Primer seal	16,312	m2	8.39	136,858		136,858
15	150mm thick concrete infill to medians	276	m2	100.00	27,600		27,600
	<u>Kerbing</u>						
16	Mountable Kerb (MK)	0	m	28.92	0		0
17	Reinforced Flush Kerb (300mm)	1,793	m	71.38	127,984		127,984
18	Semi Mountable Kerb (SMK)	1,793	m	34.26	61,428		61,428
19	Barrier / Upright Kerb	0	m	56.57	0		0
20	Kerb openings	0	no	373.56	0		0
	<u>Line Marking and Furniture</u>						
21	Line marking	7,170	m	6.75	48,398		48,398
22	Chevron sign	0	No	652.06	0		0
23	Traffic sign	38	No	519.29	19,733		19,733
	<u>Concrete Cycleways and Footpaths</u>						
24	100 thick reinforced concrete footpath with broomed finish	2,951	m2	72.19	213,033		213,033
25	Allow to repair existing footpath to western side of Bertram Road	542	m2	90.38	48,986		48,986
26	Sand fill below concrete path including compaction (100mm)	3,493	m2	4.80	16,766		16,766
27	Pram ramp	0	no	926.68	0		0
28	Pram ramp including tactile	0	no	1,366.16	0		0
29	Tactile paving	0	m2	346.88	0		0
	<u>Landscaping</u>						
	Soft landscaping	8,149	m2	22.20	180,908		EXCL
	Landscape mix	1,612	m3	101.40	163,457		EXCL

# DCA1 - BERTRAM ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>1.1</b>	<b>ROAD CONSTRUCTION</b>						
	Rock pitching	185	m2	178.25	32,976		32,976
	Drainage layer	5,548	m2	36.83	204,333		INCL
	<u>Other</u>						
30	Allow to tie in to existing roads	2	Item	2,875.00	5,750		5,750
31	Allow to tie in to existing footpaths	1	Item	1,495.00	1,495		1,495
32	Allow to tie in to existing median	1	Item	2,643.94	2,644		2,644
	<u>Street Lighting</u>						
33	12.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	27	no	13,546.66	365,760		365,760
34	Remove existing lighting in preparation for new works	3	no	3,472.31	10,417		10,417
	<u>Drainage</u>						
35	Form swale	925	m	164.37	152,042		152,042
36	450dia reinforced concrete pipe including excavation and backfill	1,027	m	231.29	237,535		237,535
37	Raised gully / bubble up pits (1200mm) including liner, cover, grate, excavation, rock pitching, and associated works	31	no	5,105.29	158,264		158,264
38	Combined Side Entry Pits - Supply and Install (1050mm)	0	no	4,645.43	0		0
39	Headwall to suit 450 pipe including stone pitching and connection to pipe	6	no	1,860.00	11,160		11,160
40	Basin construction	151	m	1,464.58	221,152		221,152
	<u>Preliminaries and Project Costs</u>						
41	Traffic Management	5.00	%		175,916		175,916
42	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		554,135		554,135
43	Project Owner's Cost (Planning and Design Costs)	7.50	%		318,628		318,628
44	Risk Contingency Allowance	10.00	%		456,700		456,700
	<b>ROAD CONSTRUCTION</b>						<b>5,023,700</b>

## DCA1 - BERTRAM ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>1.2</b>	<b>UTILITIES</b>						
	<u>Electrical (Western Power)</u>						
1	Provisional sum to underground all overhead power	290	m	1,414.09	410,185		410,185
	<u>Communications (NBN / Telstra / Other)</u>						
2	Provisional sum to to relocate existing communications pits and pipes in ground	368	m	401.12	147,613		147,613
	<u>Water and Sewer (Water Corporation)</u>						
3	Provisional sum to to relocate existing sewer pressure main	927	m	600.53	556,688		556,688
	<u>Gas (ATCO)</u>						
	<i>Existing gas infrastructure does not seem to interfere with the works</i>		Note				
	<u>Preliminaries and Project Costs</u>						
4	Traffic Management	5.00	%		55,724		55,724
5	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		175,532		175,532
6	Project Owner's Cost (Planning and Design Costs)	7.50	%		100,931		100,931
7	Risk Contingency Allowance	10.00	%		144,667		144,667
	<b>UTILITIES</b>						<b>1,591,340</b>

DCA 1 - WELLARD ROAD

Project: City of Kwinana DCP				Details: CITY OF KWINANA DCP UPDATE 2024		
Building: City of Kwinana DCP				Job No: EST23-09		
Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
2	DCA 1 - WELLARD ROAD					
2.1	Road Construction	2,041	m	8,127.07	16,586,695	
2.2	Utilities	2,041	m	3,586.51	7,319,775	
DCA 1 - WELLARD ROAD					23,906,470	

# DCA 1 - WELLARD ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>2.1 ROAD CONSTRUCTION</b>							
	<u>Earthworks and Site Preparation</u>						
1	Site Clearance (based on light shrubs)	37,912	m2	3.76	142,549		142,549
2	Removal of topsoil 250mm and stockpile for later re-use	37,912	m2	2.89	109,566		109,566
3	Remove trees	197	No	744.40	146,647		146,647
4	Breaking up existing roads surfacing and cart away	30,972	m2	21.30	659,704		659,704
5	Breaking up existing footpath and cart away	4,195	m2	21.30	89,354		89,354
6	Remove kerb	1,363	m	13.38	18,237		18,237
7	Cut to Fill - General Earthworks	11,374	m3	10.98	124,887		124,887
8	Imported Fill	3,792	m3	28.76	109,058		109,058
9	Limestone wall	153	m2	725.25	110,963		110,963
10	Remove bollards	6	no	51.25	308		308
11	Remove bus shelter	2	no	4,528.80	9,058		9,058
12	Remove limestone wall	103	m	96.93	9,984		9,984
13	Remove fencing	775	m	13.57	10,517		10,517
14	Remove existing headwall	4	No	1,248.75	4,995		4,995
	<u>Subgrade Preparation</u>						
15	Preparation, trim and compact	54,073	m2	6.13	331,467		331,467
	<u>Sub Base and Base Course</u>						
16	100mm thick crushed rock base course	102	m2	11.86	1,210		1,210
17	150mm thick crushed rock base course	50,492	m2	17.78	897,748		897,748
18	150mm thick compacted limestone sub base	54,073	m2	17.78	961,418		961,418
19	200mm thick compacted limestone sub base	2,582	m2	23.71	61,219		61,219
	<u>Road Paving</u>						
20	40mm thick (AC14)	48,123	m2	29.01	1,396,048		1,396,048
21	Extra over for 2% red oxide	0	m2	11.79	0		0
22	Primer seal	50,011	m2	8.39	419,592		419,592
23	80mm block paving including 30mm thick sand bed	2,357	m2	112.94	266,200		266,200
	<u>Kerbing</u>						
24	Mountable Kerb (MK)	1,238	m	28.92	35,803		35,803
25	Reinforced Flush Kerb (FK1)	3,186	m	71.38	227,417		227,417
26	Reinforced Flush Kerb (FK2)	2,969	m	71.38	211,927		211,927
27	Semi Mountable Kerb (SMK)	3,491	m	34.26	119,602		119,602
28	Barrier / Upright Kerb	0	m	56.57	0		0
29	Kerb openings	0	no	373.56	0		0
	<u>Line Marking and Furniture</u>						
30	Line marking	13,210	m	6.75	89,168		89,168
31	Chevron sign	0	No	652.06	0		0
32	Traffic sign	0	No	519.29	0		0
33	Safety barrier	1,852	m	511.97	948,168		948,168
34	Bike barrier fence	729	m	118.47	86,365		86,365



# DCA 1 - WELLARD ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>2.1 ROAD CONSTRUCTION</b>							
35	Remove and relocate existing signs	52	no	276.42	14,374		14,374
36	Remove and relocate existing gate	1	no	276.42	276		276
	<u>Concrete Cycleways and Footpaths</u>						
37	100 thick reinforced concrete footpath with broomed finish	4,009	m2	72.19	289,410		289,410
38	Sand fill below concrete path including compaction (100mm)	4,009	m2	4.80	19,243		19,243
39	30mm thick red asphalt footpath including 100mm thick crushed rock base and 150mm thick compacted sub-base (Pavement B)	4,453	m2	62.54	278,491		278,491
40	30mm thick red asphalt footpath including 200mm thick compacted sub-base (Pavement C)	1,170	m2	56.61	66,234		66,234
41	Pram ramp	29	no	926.68	26,874		26,874
42	Pram ramp including tactile	0	no	1,366.16	0		0
43	Tactile paving	92	m2	346.88	31,913		31,913
	<u>Landscaping</u>						
	Soft landscaping	13,501	m2	22.20	299,722		EXCL
	Landscape mix	3,185	m3	101.40	322,959		EXCL
	Rock pitching	926	m2	178.25	165,060		165,060
	Loose rock	78	m2	178.25	13,904		13,904
	Drainage layer	8,655	m2	36.83	318,764		INCL
	<u>Other</u>						
44	Allow to tie in to existing roads	4	Item	2,875.00	11,500		11,500
45	Allow to tie in to existing footpaths	14	Item	1,495.00	20,930		20,930
46	Allow to tie in to existing basin	2	Item	1,447.44	2,895		2,895
	<u>Street Lighting</u>						
47	12.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	52	no	13,546.66	704,426		704,426
48	Remove existing lighting in preparation for new works	13	no	3,472.31	45,140		45,140
	<u>Drainage</u>						
49	Remove existing pipe	486	no	142.63	69,318		69,318
50	Remove existing pits	28	no	1,799.78	50,394		50,394
51	Form swale	1,116	m	164.37	183,437		183,437
52	Drainage retention basin construction including limestone wall	654	m	1,464.58	957,835		957,835
53	300dia reinforced concrete pipe including excavation and backfill	1,503	m	190.90	286,923		286,923
54	375dia reinforced concrete pipe including excavation and backfill	381	m	200.23	76,288		76,288
55	450dia reinforced concrete pipe including excavation and backfill	301	m	231.29	69,618		69,618
56	525dia reinforced concrete pipe including excavation and backfill	41	m	262.35	10,756		10,756
57	Raised gully / bubble up pits (1200mm) including liner, cover, grate, excavation, rock pitching, and associated works	50	no	5,105.29	255,265		255,265

## DCA 1 - WELLARD ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>2.1 ROAD CONSTRUCTION</b>							
58	Combined Side Entry Pits - Supply and Install (1050mm)	55	no	4,645.43	255,499		255,499
59	Double Side Entry Pits - Supply and Install	4	no	6,482.23	25,929		25,929
60	Junction Pits - Supply and Install	16	no	4,645.43	74,327		74,327
61	Headwall to suit 300 pipe	1	no	1,600.96	1,601		1,601
62	Headwall to suit 450 pipe	4	no	1,860.00	7,440		7,440
63	Headwall to suit 525 pipe	1	no	1,927.56	1,928		1,928
	<u>Preliminaries and Project Costs</u>						
64	Traffic Management	5.00	%		580,820		580,820
65	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		1,829,583		1,829,583
66	Project Owner's Cost (Planning and Design Costs)	7.50	%		1,052,010		1,052,010
67	Risk Contingency Allowance	10.00	%		1,507,881		1,507,881
<b>ROAD CONSTRUCTION</b>							<b>16,586,695</b>

## DCA 1 - WELLARD ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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### 2.2 UTILITIES

	<u>Electrical (Western Power)</u>						
1	Provisional sum to underground all overhead power	706	m	1,315.73	929,549		929,549
2	Provisional sum to relocate underground power to northern side of road	2,041	m	774.32	1,580,334		1,580,334
	<u>Communications (NBN / Telstra / Other)</u>						
3	Provisional sum to to relocate existing communications pits and pipes in ground	2,041	m	675.82	1,379,348		1,379,348
	<u>Water and Sewer (Water Corporation)</u>						
4	Provisional sum to to relocate existing sewer pressure main	2,041	m	507.86	1,036,534		1,036,534
5	Provisional sum to to relocate existing water pressure main	231	m	868.40	200,600		200,600
	<u>Gas (ATCO)</u>						
	<i>Existing gas infrastructure does not seem to interfere with the works</i>		Note				
	<u>Preliminaries and Project Costs</u>						
6	Traffic Management	5.00	%		256,318		256,318
7	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		807,402		807,402
8	Project Owner's Cost (Planning and Design Costs)	7.50	%		464,256		464,256
9	Risk Contingency Allowance	10.00	%		665,434		665,434

### UTILITIES

**7,319,775**

DCA 1 - PEEL MAINDRAIN CULVERT

<b>Project:</b> City of Kwinana DCP				<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024		
<b>Building:</b> City of Kwinana DCP				<b>Job No:</b> EST23-09		
Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
3	DCA 1 - PEEL MAINDRAIN CULVERT					
3.1	Road Construction	25	m	37,867.45	943,278	
3.2	Utilities	25	m	0.00	0	
DCA 1 - PEEL MAINDRAIN CULVERT					943,278	

# DCA 1 - PEEL MAINDRAIN CULVERT

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>3.1 ROAD CONSTRUCTION</b>							
	<u>Earthworks and Site Preparation</u>						
1	Site Clearance (based on light shrubs)	1,023	m2	3.76	3,846		3,846
2	Remove trees	5	No	744.40	3,722		3,722
3	Removal of topsoil 150mm and stockpile for later re-use	1,023	m2	1.72	1,760		1,760
4	Breaking up existing roads surfacing and cart away	0	m2	21.30	0		0
5	Detailed Excavation & Cartaway / Disperse Surplus Material	335	m3	44.91	15,045		15,045
6	Imported Fill	1,152	m3	28.76	33,132		33,132
7	Remove existing fence	33	m	13.57	448		448
	<u>Subgrade Preparation</u>						
8	Preparation, trim and compact	581	m2	6.13	3,562		3,562
	<u>Sub Base and Base Course</u>						
9	100mm thick crushed rock base course	163	m2	11.86	1,933		1,933
10	150mm thick compacted limestone sub base	163	m2	17.78	2,898		2,898
	<u>Road Paving</u>						
11	30mm thick (AC10)	139	m2	21.11	2,934		2,934
12	Extra over for 2% red oxide	0	m2	11.79	0		0
13	Primer seal	152	m2	8.39	1,275		1,275
14	150mm thick concrete infill to medians	0	m2	100.00	0		0
	<u>Kerbing</u>						
15	Mountable Kerb (MK)	0	m	28.92	0		0
16	Reinforced Flush Kerb (300mm)	0	m	71.38	0		0
17	Semi Mountable Kerb (SMK)	42	m	34.26	1,439		1,439
18	Barrier / Upright Kerb	0	m	56.57	0		0
19	Kerb openings	0	no	373.56	0		0
	<u>Line Marking and Furniture</u>						
20	Line marking	60	m	6.75	405		405
21	Chevron sign	0	No	652.06	0		0
22	Traffic sign	2	No	519.29	1,039		1,039
23	Chainmesh fence	34	m	104.68	3,559		3,559
24	Chainmesh gates	2	No	710.80	1,422		1,422
25	Road barrier	43	m	511.97	22,015		22,015
26	Pedestrian barrier	45	m	425.40	19,143		19,143
27	Handrail	37	m	306.94	11,357		11,357
	<u>Concrete Cycleways and Footpaths</u>						
28	100 thick reinforced concrete footpath with broomed finish	107	m2	72.19	7,724		7,724
29	Sand fill below concrete path including compaction (100mm)	107	m2	4.80	514		514
30	Natural access path	34	m2	28.57	971		971
31	Pram ramp	0	no	926.68	0		0
32	Pram ramp including tactile	0	no	1,366.16	0		0

# DCA 1 - PEEL MAINDRAIN CULVERT

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>3.1 ROAD CONSTRUCTION</b>							
33	Tactile paving	0	m2	346.88	0		0
	<u>Landscaping</u>						
	Soft landscaping	128	m2	22.20	2,842		EXCL
	Landscape mix	0	m3	101.40	0		EXCL
	Rock pitching	238	m2	178.25	42,424		42,424
	Drainage layer	0	m2	36.83	0		INCL
	<u>Other</u>						
34	Allow to tie in to existing roads	1	Item	2,875.00	2,875		2,875
35	Allow to tie in to existing footpaths	2	Item	1,495.00	2,990		2,990
36	Allow to tie in to existing median	0	Item	2,643.94	0		0
	<u>Street Lighting</u>						
37	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	2	no	4,408.05	8,816		8,816
38	6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	0	no	6,545.98	0		0
	<u>Drainage</u>						
39	450dia reinforced concrete pipe including excavation and backfill	25	m	231.29	5,782		5,782
40	Combined Side Entry Pits - Supply and Install (1050mm)	4	no	4,645.43	18,582		18,582
41	Allowance for dewatering	1	PS	26,924.00	26,924		26,924
42	Temporary drainage bypass	1	PS	16,154.40	16,154		16,154
43	100mm compacted thickness limestone subbase course	270	m2	17.78	4,801		4,801
44	300mm thick concrete base slab	81	m3	1,615.44	130,851		130,851
45	3000x1800 box culvert	20	no	10,994.69	219,894		219,894
46	Headwall, wingwalls and apron slab	25	m3	1,615.44	40,386		40,386
	<u>Preliminaries and Project Costs</u>						
47	Traffic Management	5.00	%		33,031		33,031
48	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		104,048		104,048
49	Project Owner's Cost (Planning and Design Costs)	7.50	%		59,827		59,827
50	Risk Contingency Allowance	10.00	%		85,753		85,753
<b>ROAD CONSTRUCTION</b>							<b>943,278</b>

## DCA 1 - PEEL MAINDRAIN CULVERT

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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### 3.2 UTILITIES

	<u>Electrical (Western Power)</u>						
	<i>Existing electrical infrastructure does not seem to interfere with the works</i>		Note				
	<u>Communications (NBN / Telstra / Other)</u>						
	<i>Existing communications infrastructure does not seem to interfere with the works</i>		Note				
	<u>Water and Sewer (Water Corporation)</u>						
	<i>Existing water and sewer infrastructure does not seem to interfere with the works</i>		Note				
	<u>Gas (ATCO)</u>						
	<i>Existing gas infrastructure does not seem to interfere with the works</i>		Note				
	<u>Preliminaries and Project Costs</u>						
1	Traffic Management	5.00	%		0		0
2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		0		0
3	Project Owner's Cost (Planning and Design Costs)	7.50	%		0		0
4	Risk Contingency Allowance	10.00	%		0		0

### UTILITIES

0

**DCA 2 - MILLAR ROAD**

<b>Project:</b> City of Kwinana DCP				<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024		
<b>Building:</b> City of Kwinana DCP				<b>Job No:</b> EST23-09		
Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
4	DCA 2 - MILLAR ROAD					
4.1	ROAD CONSTRUCTION	540	m	1,901.81	1,027,416	
4.2	Utilities	540	m	0.00	0	
DCA 2 - MILLAR ROAD					1,027,416	



## DCA 2 - MILLAR ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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### 4.1 ROAD CONSTRUCTION

	<u>Earthworks and Site Preparation</u>						
1	Site Clearance (based on light shrubs)	497	m2	3.76	1,869		1,869
2	Removal of topsoil 150mm and stockpile for later re-use	497	m2	1.72	855		855
3	Remove trees	0	No	744.40	0		0
4	Breaking up existing roads surfacing and cart away	126	m2	21.30	2,684		2,684
5	Reprofiling top layer only of existing road	820	m2	20.70	16,974		16,974
6	Breaking up existing footpath and cart away	0	m2	21.30	0		0
7	Remove kerb	0	m	13.38	0		0
8	Cut to Fill - General Earthworks	149	m3	10.98	1,636		1,636
9	Imported Fill	249	m3	28.76	7,161		7,161
10	Form embankment	0	m2	7.16	0		0
11	Remove signs	0	no	92.50	0		0
12	Remove guardrail	0	m	16.29	0		0
13	Remove fencing	0	m	13.57	0		0
14	Remove existing headwall	0	no	1,248.75	0		0
	<u>Subgrade Preparation</u>						
15	Preparation, trim and compact	65	m2	6.13	398		398
	<u>Sub Base and Base Course</u>						
16	130mm thick crushed rock base course	54	m2	15.42	833		833
17	150mm thick compacted limestone sub base	65	m2	17.78	1,156		1,156
	<u>Road Paving</u>						
18	30mm thick (AC10)	820	m2	21.11	17,310		17,310
19	Extra over for 2% red oxide	0	m2	11.79	0		0
20	Primer seal	847	m2	8.39	7,106		7,106
21	150mm thick concrete infill to medians	0	m2	100.00	0		0
	<u>Kerbing</u>						
22	Mountable Kerb (MK)	0	m	28.92	0		0
23	Reinforced Flush Kerb (300mm)	107	m	71.38	7,638		7,638
24	Semi Mountable Kerb (SMK)	107	m	34.26	3,666		3,666
25	Barrier / Upright Kerb	0	m	56.57	0		0
26	Kerb openings	0	no	373.56	0		0
	<u>Line Marking and Furniture</u>						
27	Line marking	107	m	6.75	722		722
28	Chevron sign	0	No	652.06	0		0
29	Traffic sign	0	No	519.29	0		0
30	Remove and relocate existing signs	0	no	276.42	0		0
	<u>Concrete Cycleways and Footpaths</u>						
31	100 thick reinforced concrete footpath with broomed finish	0	m2	72.19	0		0
32	Sand fill below concrete path including compaction (100mm)	0	m2	4.80	0		0

## DCA 2 - MILLAR ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>4.1 ROAD CONSTRUCTION</b>							
33	Asphalt footpath including 150mm thick compacted sub-base	202	m2	87.17	17,608		17,608
34	Pram ramp	0	no	926.68	0		0
35	Pram ramp including tactile	0	no	1,366.16	0		0
36	Tactile paving	0	m2	346.88	0		0
	<u>Landscaping</u>						
	Soft landscaping	0	m2	22.20	0		EXCL
	Landscape mix	0	m3	101.40	0		0
	Rock pitching	0	m2	178.25	0		0
	Drainage layer	0	m2	36.83	0		0
	<u>Other</u>						
37	Allow to tie in to existing roads	1	Item	2,875.00	2,875		2,875
38	Allow to tie in to existing footpaths	1	Item	1,495.00	1,495		1,495
39	Allow to tie in to existing median	0	Item	2,643.94	0		0
	<u>Street Lighting</u>						
40	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	2	no	4,408.05	8,816		8,816
	<u>Road Drainage</u>						
41	Form swale	107	m	14.02	1,500		1,500
42	Rock check dam	0	No	323	0		0
43	450dia reinforced concrete pipe including excavation and backfill	0	m	231.29	0		0
44	525dia reinforced concrete pipe including excavation and backfill	0	m	262.35	0		0
45	Raised gully / bubble up pits (1200mm) including liner, cover, grate, excavation, rock pitching, and associated works	0	no	5,105.29	0		0
46	Combined Side Entry Pits - Supply and Install (1050mm)	0	no	4,645.43	0		0
47	Headwall	0	no	1,927.56	0		0
48	Basin construction	0	m2	126.36	0		0
	<u>Preliminaries and Project Costs</u>						
49	Traffic Management	5.00	%		5,115		5,115
50	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		16,113		16,113
51	Project Owner's Cost (Planning and Design Costs)	7.50	%		9,265		9,265
52	Risk Contingency Allowance	10.00	%		13,279		13,279
	<b>ACTUAL COSTS - CH36.77-186</b>						
53	Actual costs for the construction of Millar Upgrade (CH36.77-186)	1	Item	98,245.20	98,245		98,245
	<b>ACTUAL COSTS - CH186-470</b>						
54	Actual costs for the construction of Millar Upgrade (CH186-470)	1	Item	783,096.86	783,097		783,097
<b>ROAD CONSTRUCTION</b>							<b>1,027,416</b>

## DCA 2 - MILLAR ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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### 4.2 UTILITIES

	<u>Electrical (Western Power)</u>						
1	Provisional sum to relocate underground power to northern side of road	57	m	0.00	0		Excl.
	<u>Communications (NBN / Telstra / Other)</u>						
2	Provisional sum to to relocate existing communications pits and pipes in ground	107	m	0.00	0		Excl.
	<u>Water and Sewer (Water Corporation)</u>						
3	Provisional sum to to relocate existing water main	107	m	0.00	0		Excl.
	<u>Gas (ATCO)</u>						
4	Provisional sum to relocate gas main to northern side of road	107	m	0.00	0		Excl.
	<u>Preliminaries and Project Costs</u>						
5	Traffic Management	5.00	%		0		0
6	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		0		0
7	Project Owner's Cost (Planning and Design Costs)	7.50	%		0		0
8	Risk Contingency Allowance	10.00	%		0		0

### UTILITIES

0

**DCA 2 - MORTIMER ROAD**

<b>Project:</b> City of Kwinana DCP				<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024		
<b>Building:</b> City of Kwinana DCP				<b>Job No:</b> EST23-09		
Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
5	<b>DCA 2 - MORTIMER ROAD</b>					
5.1	Road Construction	863	m	4,957.04	4,276,437	
5.2	Utilities	863	m	3,516.28	3,033,498	
<b>DCA 2 - MORTIMER ROAD</b>					<b>7,309,935</b>	

## DCA 2 - MORTIMER ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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### 5.1 ROAD CONSTRUCTION

	<u>Earthworks and Site Preparation</u>						
1	Site Clearance (based on light shrubs)	10,912	m2	3.76	41,029		41,029
2	Removal of topsoil 150mm and stockpile for later re-use	10,912	m2	1.72	18,769		18,769
3	Remove trees	25	No	744.40	18,610		18,610
4	Breaking up existing roads surfacing and cart away	9,457	m2	21.30	201,434		201,434
5	Breaking up existing footpath and cart away	212	m2	21.30	4,516		4,516
6	Remove kerb	518	m	13.38	6,931		6,931
7	Cut to Fill - General Earthworks	8,663	m3	10.98	95,120		95,120
8	Imported Fill	2,888	m3	28.76	83,059		83,059
9	Remove signs	5	no	92.50	463		463
10	Remove guardrail	79	m	16.29	1,287		1,287
11	Remove fencing	222	m	13.57	3,013		3,013
12	Remove drainage structures	4	No	1,799.78	7,199		7,199
	<u>Subgrade Preparation</u>						
13	Preparation, trim and compact	12,431	m2	6.13	76,202		76,202
	<u>Sub Base and Base Course</u>						
14	150mm thick crushed rock base course	11,913	m2	17.78	211,813		211,813
15	200mm thick compacted limestone sub base	12,431	m2	23.71	294,739		294,739
	<u>Road Paving</u>						
16	40mm thick (AC14)	10,005	m2	29.01	290,245		290,245
17	Extra over for 2% red oxide	1,948	m2	11.79	22,967		22,967
18	Primer seal	11,045	m2	8.39	92,668		92,668
19	150mm thick concrete infill to medians	969	m2	100.00	96,900		96,900
	<u>Kerbing</u>						
20	Mountable Kerb (MK)	95	m	28.92	2,747		2,747
21	Reinforced Flush Kerb (300mm)	976	m	71.38	69,667		69,667
22	Semi Mountable Kerb (SMK)	3,232	m	34.26	110,728		110,728
23	Barrier / Upright Kerb	59	m	56.57	3,338		3,338
24	Kerb openings	0	no	373.56	0		0
	<u>Line Marking and Furniture</u>						
25	Line marking	5,177	m	6.75	34,945		34,945
26	Chevron sign	9	No	652.06	5,869		5,869
27	Traffic sign	35	No	519.29	18,175		18,175
28	Remove and relocate existing signs	2	no	276.42	553		553
	<u>Concrete Cycleways and Footpaths</u>						
29	100 thick reinforced concrete footpath with broomed finish	3,608	m2	72.19	260,462		260,462
30	Sand fill below concrete path including compaction (100mm)	3,608	m2	4.80	17,318		17,318
31	Pram ramp	0	no	926.68	0		0
32	Pram ramp including tactile	10	no	1,366.16	13,662		13,662

## DCA 2 - MORTIMER ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>5.1 ROAD CONSTRUCTION</b>							
33	Tactile paving	9	m2	346.88	3,122		3,122
	<u>Landscaping</u>						
	Soft landscaping	4,089	m2	22.20	90,776		EXCL
	Landscape mix	410	m3	101.40	41,574		EXCL
	Rock pitching	98	m2	178.25	17,469		17,469
	Drainage layer	1,464	m2	36.83	53,919		INCL
	<u>Other</u>						
34	Allow to tie in to existing roads	5	Item	2,875.00	14,375		14,375
35	Allow to tie in to existing footpaths	1	Item	1,495.00	1,495		1,495
36	Allow to tie in to existing median	1	Item	2,643.94	2,644		2,644
	<u>Street Lighting</u>						
37	12.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	25	no	13,546.66	338,667		338,667
	<u>Drainage</u>						
38	Form swale	488	m	77.89	38,010		38,010
39	450dia reinforced concrete pipe including excavation and backfill	872	m	231.29	201,685		201,685
40	Raised gully / bubble up pits (1200mm) including liner, cover, grate, excavation, rock pitching, and associated works	17	no	5,105.29	86,790		86,790
41	Combined Side Entry Pits - Supply and Install (1050mm)	8	no	4,645.43	37,163		37,163
42	Headwall to suit 450 pipe including stone pitching and connection to pipe	1	no	1,860.00	1,860		1,860
43	Basin construction	1,640	m3	126.36	207,230		207,230
	<u>Preliminaries and Project Costs</u>						
44	Traffic Management	5.00	%	3,257,339	162,867		162,867
45	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%	3,257,339	488,601		488,601
46	Project Owner's Cost (Planning and Design Costs)	7.50	%	3,257,339	244,300		244,300
47	Risk Contingency Allowance	10.00	%	3,257,339	325,734		325,734
<b>ROAD CONSTRUCTION</b>							<b>4,276,437</b>

## DCA 2 - MORTIMER ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>5.2 UTILITIES</b>							
	<u>Electrical (Western Power)</u>						
1	Provisional sum to underground all overhead power	594	m	1,311.23	778,318		778,318
2	Provisional sum to relocate underground power to northern side of road	168	m	1,224.25	205,221		205,221
	<u>Communications (NBN / Telstra / Other)</u>						
3	Provisional sum to to relocate existing communications pits and pipes in ground	863	m	417.70	360,349		360,349
	<u>Water and Sewer (Water Corporation)</u>						
4	Provisional sum to to relocate existing water main	646	m	573.37	370,334		370,334
	<u>Gas (ATCO)</u>						
5	Provisional sum to relocate gas main to northern side of road	863	m	817.19	704,994		704,994
	<u>Preliminaries and Project Costs</u>						
6	Traffic Management	5.00	%		71,784		71,784
7	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		226,119		226,119
8	Project Owner's Cost (Planning and Design Costs)	7.50	%		130,019		130,019
9	Risk Contingency Allowance	10.00	%		186,360		186,360
<b>UTILITIES</b>							<b>3,033,498</b>

DCA 2 - SUNRISE BOULEVARD

Project: City of Kwinana DCP				Details: CITY OF KWINANA DCP UPDATE 2024		
Building: City of Kwinana DCP				Job No: EST23-09		
Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
6	DCA 2 - SUNRISE BOULEVARD					
6.1	Road Construction	408	m	3,502.09	1,428,956	
6.2	Utilities	408	m	1,345.50	549,006	
DCA 2 - SUNRISE BOULEVARD					1,977,962	



## DCA 2 - SUNRISE BOULEVARD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>6.1 ROAD CONSTRUCTION</b>							
	<u>Earthworks and Site Preparation</u>						
1	Site Clearance (based on light shrubs)	6,824	m2	3.76	25,658		25,658
2	Removal of topsoil 150mm and stockpile for later re-use	6,824	m2	3.47	23,679		23,679
3	Remove trees	37	No	744.40	27,543		27,543
4	Breaking up existing roads surfacing and cart away	630	m2	21.30	13,419		13,419
5	Breaking up existing footpath and cart away	270	m2	21.30	5,751		5,751
6	Remove kerb	180	m	13.38	2,408		2,408
7	Cut to Fill - General Earthworks	3,412	m3	10.98	37,464		37,464
8	Imported Fill	3,412	m3	28.76	98,129		98,129
9	Remove signs	0	no	92.50	0		0
10	Remove guardrail	0	m	16.29	0		0
11	Remove fencing	180	m	13.57	2,443		2,443
12	Remove drainage structures	4	No	1,799.78	7,199		7,199
	<u>Subgrade Preparation</u>						
13	Preparation, trim and compact	2,939	m2	6.13	18,016		18,016
	<u>Sub Base and Base Course</u>						
14	150mm thick crushed rock base course	2,939	m2	17.78	52,255		52,255
15	200mm thick compacted limestone sub base	2,939	m2	23.71	69,684		69,684
	<u>Road Paving</u>						
16	40mm thick (AC14)	2,449	m2	29.01	71,045		71,045
17	Extra over for 2% red oxide	0	m2	11.79	0		0
18	Primer seal	2,637	m2	8.39	22,124		22,124
19	150mm thick concrete infill to medians	0	m2	100.00	0		0
	<u>Kerbing</u>						
20	Mountable Kerb (MK)	0	m	28.92	0		0
21	Reinforced Flush Kerb (300mm)	0	m	71.38	0		0
22	Semi Mountable Kerb (SMK)	817	m	34.26	27,990		27,990
23	Barrier / Upright Kerb	0	m	56.57	0		0
24	Kerb openings	0	no	373.56	0		0
	<u>Line Marking and Furniture</u>						
25	Line marking	1,225	m	6.75	8,269		8,269
26	Chevron sign	1	No	652.06	652		652
27	Traffic sign	4	no	519.29	2,077		2,077
28	Remove and relocate existing signs	0	no	276.42	0		0
29	Fencing	753	m	134.62	101,369		101,369
	<u>Concrete Cycleways and Footpaths</u>						
30	100 thick reinforced concrete footpath with broomed finish	1,007	m2	72.19	72,695		72,695
31	Sand fill below concrete path including compaction (100mm)	1,007	m2	4.80	4,834		4,834
32	Pram ramp	2	no	926.68	1,853		1,853

## DCA 2 - SUNRISE BOULEVARD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>6.1 ROAD CONSTRUCTION</b>							
33	Pram ramp including tactile	0	no	1,366.16	0		0
34	Tactile paving	0	m2	346.88	0		0
	<u>Landscaping</u>						
	Soft landscaping	2,629	m2	22.20	58,364		EXCL
	Landscape mix	0	m3	101.40	0		EXCL
	Rock pitching	0	m2	178.25	0		0
	Drainage layer	0	m2	36.83	0		INCL
	<u>Other</u>						
35	Allow to tie in to existing roads	3	Item	2,875.00	8,625		8,625
36	Allow to tie in to existing footpaths	3	Item	1,495.00	4,485		4,485
37	Allow to tie in to existing median	0	Item	2,643.94	0		0
	<u>Street Lighting</u>						
38	6.5 SOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	24	no	4,408.05	105,793		105,793
	<u>Drainage</u>						
39	Form swale	0	m2		0		0
40	450dia reinforced concrete pipe including excavation and backfill	376	m	231.29	86,965		86,965
41	Raised gully / bubble up pits (1200mm) including liner, cover, grate, excavation, rock pitching, and associated works	11	no	5,105.29	56,158		56,158
42	Combined Side Entry Pits - Supply and Install (1050mm)		no	4,645.43	0		0
43	100mm compacted thickness limestone subbase course	54	m2	17.78	960		960
44	150mm thick concrete base slab	8	m3	1,615.44	12,924		12,924
45	Culvert	30	m	650.63	19,519		19,519
46	Headwall	2	no	1,860.00	3,720		3,720
47	Basin construction	40	m3	126.36	5,054		5,054
	<u>Preliminaries and Project Costs</u>						
48	Traffic Management	5.00	%		50,038		50,038
49	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		157,620		157,620
50	Project Owner's Cost (Planning and Design Costs)	7.50	%		90,631		90,631
51	Risk Contingency Allowance	10.00	%		129,905		129,905
<b>ROAD CONSTRUCTION</b>							<b>1,428,956</b>

## DCA 2 - SUNRISE BOULEVARD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>6.2 UTILITIES</b>							
1	<u>Electrical (Western Power)</u> Provisional sum to relocate underground power to western side of road <u>Communications (NBN / Telstra / Other)</u> <i>No pits and pipes based on DBYD</i> <u>Water and Sewer (Water Corporation)</u>	105	m	1,499.14	157,634		157,634
2	Provisional sum to to relocate existing water main <u>Gas (ATCO)</u>	105	m	1,125.99	118,398		118,398
3	Provisional sum to relocate gas main to northern side of road <u>Preliminaries and Project Costs</u>	105	m	1,480.72	155,697		155,697
4	Traffic Management	5.00	%		13,705		13,705
5	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		43,170		43,170
6	Project Owner's Cost (Planning and Design Costs)	7.50	%		24,823		24,823
7	Risk Contingency Allowance	10.00	%		35,579		35,579
<b>UTILITIES</b>							<b>549,006</b>

# DCA 3 - THOMAS ROAD (CONSTRUCTION COMPLETE)

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
7	DCA 3 - THOMAS ROAD (CONSTRUCTION COMPLETE)					
7.1	Road Construction and Utilities		Item		9,264,930	
DCA 3 - THOMAS ROAD (CONSTRUCTION COMPLETE)					9,264,930	

DCA 3 - THOMAS ROAD (CONSTRUCTION  
COMPLETE)

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
7.1	ROAD CONSTRUCTION AND UTILITIES						
	Provided by City of Kwinana on 21/07/24						
	<b>ACTUAL COSTS</b>						
1	Actual costs for the construction of Thomas Road Upgrade (Length = 1107m)	1	Item	9,264,930.00	9,264,930		9,264,930
	ROAD CONSTRUCTION AND UTILITIES						9,264,930

DCA 4 - ANKETELL ROAD

Project: City of Kwinana DCP				Details: CITY OF KWINANA DCP UPDATE 2024		
Building: City of Kwinana DCP				Job No: EST23-09		
Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
8	DCA 4 - ANKETELL ROAD					
8.1	Road Construction	1,083	m	6,287.02	6,809,406	
8.2	Utilities	1,083	m	5,655.23	6,125,124	
DCA 4 - ANKETELL ROAD					12,934,529	

## DCA 4 - ANKETELL ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>8.1 ROAD CONSTRUCTION</b>							
	<u>Earthworks and Site Preparation</u>						
1	Site Clearance (based on light shrubs)	24,937	m2	3.76	93,763		93,763
2	Removal of topsoil 150mm and stockpile for later re-use	24,937	m2	1.72	42,892		42,892
3	Remove trees	30	No	744.40	22,332		22,332
4	Breaking up existing roads surfacing and cart away	13,516	m2	21.30	287,891		287,891
5	Breaking up existing footpath and cart away	0	m2	21.30	0		0
6	Remove kerb	826	m	13.38	11,052		11,052
7	Cut to Fill - General Earthworks	7,482	m3	10.98	82,152		82,152
8	Imported Fill	4,988	m3	28.76	143,455		143,455
9	Remove signs	6	No	92.50	555		555
10	Remove bollards	25	No	51.25	1,281		1,281
11	Remove fencing	472	m	13.57	6,405		6,405
12	Remove bus shelter	1	No	4,528.80	4,529		4,529
	<u>Subgrade Preparation</u>						
13	Preparation, trim and compact	20,944	m2	6.13	128,387		128,387
	<u>Sub Base and Base Course</u>						
14	150mm thick crushed rock base course	18,390	m2	17.78	326,974		326,974
15	200mm thick compacted limestone sub base	19,040	m2	23.71	451,438		451,438
	<u>Road Paving</u>						
16	40mm thick (AC14)	14,077	m2	29.01	408,374		408,374
17	Extra over for 2% red oxide	3,250	m2	11.79	38,318		38,318
18	Primer seal	14,717	m2	8.39	123,476		123,476
19	150mm thick concrete infill to medians	2,511	m2	100.00	251,100		251,100
	<u>Kerbing</u>						
20	Mountable Kerb (MK)	0	m	28.92	0		0
21	Reinforced Flush Kerb (300mm)	941	m	71.38	67,169		67,169
22	Semi Mountable Kerb (SMK)	4,275	m	34.26	146,462		146,462
23	Barrier / Upright Kerb	0	m	56.57	0		0
24	Kerb openings	0	no	373.56	0		0
	<u>Line Marking and Furniture</u>						
25	Line marking	7,546	m	6.75	50,936		50,936
26	Chevron sign	0	No	652.06	0		0
27	Traffic sign	26	No	519.29	13,502		13,502
28	Remove and relocate existing signs	1	no	276.42	276		276
29	Allow for new bus shelter	1	No	26,654.76	26,655		EXCL
	<u>Concrete Cycleways and Footpaths</u>						
30	100 thick reinforced concrete footpath with broomed finish	5,757	m2	72.19	415,598		415,598
31	Sand fill below concrete path including compaction (100mm)	5,757	m2	4.80	27,634		27,634
32	Asphalt footpath including 150mm thick compacted sub-base	0	m2	87.17	0		0

## DCA 4 - ANKETELL ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>8.1 ROAD CONSTRUCTION</b>							
33	Pram ramp	0	no	926.68	0		0
34	Pram ramp including tactile	12	no	1,366.16	16,394		16,394
35	Tactile paving		m2	346.88	0		0
	<u>Landscaping</u>						
	Soft landscaping	9,434	m2	22.20	209,435		EXCL
	Landscape mix	682	m3	101.40	69,155		EXCL
	Rock pitching	79	m2	178.25	14,082		14,082
	Drainage layer	2,352	m2	36.83	86,624		INCL
	<u>Other</u>						
36	Allow for traffic signals at 4-way intersection	1	item	513,748.06	513,748		513,748
37	Allow to tie in to existing roads	3	Item	2,875.00	8,625		8,625
38	Allow to tie in to existing footpaths	1	Item	1,495.00	1,495		1,495
39	Allow to tie in to existing median	1	Item	2,643.94	2,644		2,644
	<u>Street Lighting</u>						
40	12.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	35	no	13,546.66	474,133		474,133
	<u>Road Drainage</u>						
41	Form swale	471	m	129.82	61,145		61,145
42	450dia reinforced concrete pipe including excavation and backfill	1,474	m	231.29	340,921		340,921
43	Raised gully / bubble up pits (1200mm) including liner, cover, grate, excavation, rock pitching, and associated works	16	no	5,105.29	81,685		81,685
44	Combined Side Entry Pits - Supply and Install (1050mm)	14	no	4,645.43	65,036		65,036
45	Headwall	4	no	1,860.00	7,440		7,440
46	Basin construction	282	m3	126.36	35,634		35,634
	<u>Preliminaries and Project Costs</u>						0
47	Traffic Management	5.00	%		238,446		238,446
48	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		751,106		751,106
49	Project Owner's Cost (Planning and Design Costs)	7.50	%		431,886		431,886
50	Risk Contingency Allowance	10.00	%		619,037		619,037
<b>ROAD CONSTRUCTION</b>							<b>6,809,406</b>



## DCA 4 - ANKETELL ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>8.2 UTILITIES</b>							
	<u>Electrical (Western Power)</u>						
1	Provisional sum to underground all overhead power	798	m	1,385.29	1,105,464		1,105,464
2	Provisional sum to relocate underground power	736	m	1,249.00	918,636		918,636
	<u>Communications (NBN / Telstra / Other)</u>						
3	Provisional sum to to relocate existing communications pits and pipes in ground	1,083	m	962.89	1,042,893		1,042,893
	<u>Water and Sewer (Water Corporation)</u>						
4	Provisional sum to to relocate existing water main	844	m	660.32	557,308		557,308
	<u>Gas (ATCO)</u>						
5	Provisional sum to relocate gas main to southern side of road	844	m	1,507.02	1,271,928		1,271,928
	<u>Preliminaries and Project Costs</u>						
6	Traffic Management	5.00	%		143,606		143,606
7	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		452,360		452,360
8	Project Owner's Cost (Planning and Design Costs)	7.50	%		260,107		260,107
9	Risk Contingency Allowance	10.00	%		372,820		372,820
<b>UTILITIES</b>							<b>6,125,124</b>

## DCA 5 - HONEYWOOD AVENUE (CORDATA ROAD)

<b>Project:</b> City of Kwinana DCP				<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024		
<b>Building:</b> City of Kwinana DCP				<b>Job No:</b> EST23-09		
Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
9	<b>DCA 5 - HONEYWOOD AVENUE (CORDATA ROAD)</b>					
9.1	Road Construction	491	m	3,892.46	1,909,331	
9.2	Utilities	491	m	1,572.79	771,486	
<b>DCA 5 - HONEYWOOD AVENUE (CORDATA ROAD)</b>					<b>2,680,816</b>	

# DCA 5 - HONEYWOOD AVENUE (CORDATA ROAD)

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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## 9.1 ROAD CONSTRUCTION

	<u>Earthworks and Site Preparation</u>						
1	Site Clearance (based on light shrubs)	13,587	m2	3.76	51,087		51,087
2	Removal of topsoil 150mm and stockpile for later re-use	13,587	m2	1.72	23,370		23,370
3	Remove trees	25	No	744.40	18,610		18,610
4	Breaking up existing roads surfacing and cart away	106	m2	21.30	2,258		2,258
5	Breaking up existing footpath and cart away	0	m2	21.30	0		0
6	Remove kerb	0	m	13.38	0		0
7	Cut to Fill - General Earthworks	4,077	m3	10.98	44,765		44,765
8	Imported Fill	2,968	m3	28.76	85,360		85,360
9	Remove signs	1	No	92.50	93		93
10	Remove fencing	29	m	13.57	394		394
	<u>Subgrade Preparation</u>						
11	Preparation, trim and compact	6,277	m2	6.13	38,479		38,479
	<u>Sub Base and Base Course</u>						
12	150mm thick crushed rock base course	4,937	m2	17.78	87,780		87,780
13	200mm thick compacted limestone sub base	5,231	m2	23.71	124,027		124,027
	<u>Road Paving</u>						
14	40mm thick (AC14)	4,089	m2	29.01	118,622		118,622
15	Extra over for 2% red oxide	0	m2	11.79	0		0
16	Primer seal	4,384	m2	8.39	36,782		36,782
17	150mm thick concrete infill to medians	259	m2	100.00	25,900		25,900
	<u>Kerbing</u>						
18	Mountable Kerb (MK)	1,158	m	28.92	33,489		33,489
19	Reinforced Flush Kerb (300mm)	818	m	71.38	58,389		58,389
20	Semi Mountable Kerb (SMK)	0	m	34.26	0		0
21	Barrier / Upright Kerb	0	m	56.57	0		0
22	Kerb openings	0	no	373.56	0		0
	<u>Line Marking and Furniture</u>						
23	Line marking	1,963	m	6.75	13,250		13,250
24	Chevron sign	0	No	652.06	0		0
25	Traffic sign	10	No	519.29	5,193		5,193
26	Remove and relocate existing signs	0	no	276.42	0		0
	<u>Concrete Cycleways and Footpaths</u>						
27	100 thick reinforced concrete footpath with broomed finish	2,448	m2	72.19	176,721		176,721
28	Sand fill below concrete path including compaction (100mm)	2,448	m2	4.80	11,750		11,750
29	Asphalt footpath including 150mm thick compacted sub-base	0	m2	87.17	0		0
30	Pram ramp	0	no	926.68	0		0
31	Pram ramp including tactile	2	no	1,366.16	2,732		2,732
32	Tactile paving		m2	346.88	0		0

## DCA 5 - HONEYWOOD AVENUE (CORDATA ROAD)

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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### 9.1 ROAD CONSTRUCTION

	<u>Landscaping</u>						
	Soft landscaping	4,920	m2	22.20	109,224		EXCL
	Landscape mix	593	m3	101.40	60,130		EXCL
	Rock pitching	69	m2	178.25	12,299		12,299
	Drainage layer	2,045	m2	36.83	75,317		INCL
	<u>Other</u>						
33	Allow to tie in to existing roads	2	Item	2,875.00	5,750		5,750
34	Allow to tie in to existing footpaths	4	Item	1,495.00	5,980		5,980
35	Allow to tie in to existing median	2	Item	2,643.94	5,288		5,288
	<u>Street Lighting</u>						
36	6.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and	15	no	6,545.98	98,190		98,190
	<u>Road Drainage</u>						
37	Form swale	409	m	129.82	53,096		53,096
38	450dia reinforced concrete pipe including excavation and backfill	551	m	231.29	127,441		127,441
39	Raised gully / bubble up pits (1200mm) including liner, cover, grate, excavation, rock pitching, and associated works	11	no	5,105.29	56,158		56,158
40	Combined Side Entry Pits - Supply and Install (1050mm)	3	no	4,645.43	13,936		13,936
41	Headwall	0	no	1,860.00	0		0
42	Basin construction	0	m3		0		0
	<u>Preliminaries and Project Costs</u>						0
43	Traffic Management	5.00	%		66,859		66,859
44	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		210,607		210,607
45	Project Owner's Cost (Planning and Design Costs)	7.50	%		121,099		121,099
46	Risk Contingency Allowance	10.00	%		173,576		173,576

### ROAD CONSTRUCTION

**1,909,331**

## DCA 5 - HONEYWOOD AVENUE (CORDATA ROAD)

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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### 9.2 UTILITIES

1	<u>Electrical (Western Power)</u>						
	<i>Existing power works at Anketell Road covered in DCA 4</i>		Note				
	<u>Communications (NBN / Telstra / Other)</u>						
	<i>Existing infrastructure at Cordata Avenue / Atalaya Loop intersection does not seem to interfere with the road</i>		Note				
	<i>Existing infrastructure at Anketell Road covered elsewhere</i>		Note				
	<u>Water and Sewer (Water Corporation)</u>						
	Provisional sum to to relocate existing sewer main and manholes	545	m	991.39	540,306		540,306
	<u>Gas (ATCO)</u>						
	<i>Existing gas at Cordata Avenue / Atalaya Loop intersection does not seem to interfere with the road</i>		Note				
	<u>Preliminaries and Project Costs</u>						
2	Traffic Management	5.00	%		27,015		27,015
3	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		85,098		85,098
4	Project Owner's Cost (Planning and Design Costs)	7.50	%		48,931		48,931
5	Risk Contingency Allowance	10.00	%		70,135		70,135
<b>UTILITIES</b>							<b>771,486</b>

**DCA 5 - LYON ROAD (CONSTRUCTION  
COMPLETE)**

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
10	DCA 5 - LYON ROAD (CONSTRUCTION COMPLETE)					
10.1	Road Construction and Utilities		Item		4,343,010	
DCA 5 - LYON ROAD (CONSTRUCTION COMPLETE)					4,343,010	

# DCA 5 - LYON ROAD (CONSTRUCTION COMPLETE)

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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## 10.1 ROAD CONSTRUCTION AND UTILITIES

	<u>Extracted from DCP 2022 and "Provided by City of Kwinana on 28/04/2021":</u>						
	<b>Road Construction:</b>						
1	North - Honeywood (2016 RJV actuals - Satterleys section)	1	Item	2,524,275.19	2,524,275		2,524,275
2	North - Honeywood (2016 RJV actuals - variations - Satterleys section)	1	Item	206,070.23	206,070		206,070
3	North - Honeywood (2016 RJV actuals - Galati section)	1	Item	221,984.50	221,985		221,985
4	South - Honeywood Rise (2016 RJV actuals - Satterley section)	1	Item	746,656.83	746,657		746,657
5	South - Honeywood Rise (Stage 4 actuals - Satterly section)	1	Item	188,832.22	188,832		188,832
	<b>CHAINAGE 2540m - 2740m</b>						
6	Engineering Design	1	Item	8,902.63	8,903		8,903
7	Road Construction	1	Item	112,970.58	112,971		112,971
8	Road Construction VOs		Note		EXCL		EXCL
9	Survey	1	Item	1,800.00	1,800		1,800
10	Lighting Design	1	Item	3,047.25	3,047		3,047
11	Lighting Construction	1	Item	21,189.48	21,189		21,189
12	Linemarking	1	Item	2,803.50	2,804		2,804
13	Supervision Fee	1	Item	1,381.09	1,381		1,381
	<b>CHAINAGE 2740m - 2903m</b>						
14	Engineering Design	1	Item	6,920.00	6,920		6,920
15	Road Construction	1	Item	228,299.86	228,300		228,300
16	Road Construction VOs	1	Item	38,268.99	38,269		38,269
17	Survey	1	Item	3,400.00	3,400		3,400
18	Lighting Design	1	Item	5,862.66	5,863		5,863
19	Lighting Construction	1	Item	11,607.00	11,607		11,607
20	Linemarking	1	Item	4,732.46	4,732		4,732
21	Supervision Fee	1	Item	3,998.53	3,999		3,999

## ROAD CONSTRUCTION AND UTILITIES

**4,343,010**

DCA 6 - HAMMOND ROAD

<b>Project:</b> City of Kwinana DCP				<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024		
<b>Building:</b> City of Kwinana DCP				<b>Job No:</b> EST23-09		
Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
11	DCA 6 - HAMMOND ROAD					
11.1	Road Construction	373	m	6,066.55	2,264,460	
11.2	Utilities	373	m	0.00	0	
DCA 6 - HAMMOND ROAD					2,264,460	



## DCA 6 - HAMMOND ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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### 11.1 ROAD CONSTRUCTION

	<u>Earthworks and Site Preparation</u>						
1	Site Clearance (based on light shrubs)	26,056	m2	3.76	97,971		97,971
2	Removal of topsoil 150mm and stockpile for later re-use	26,056	m2	1.72	44,816		44,816
3	Removal of existing topsoil stockpile	5,103	m3	23.16	118,185		118,185
4	Remove trees	0	No	744.40	0		0
5	Breaking up existing roads surfacing and cart away	0	m2	21.30	0		0
6	Breaking up existing footpath and cart away	0	m2	21.30	0		0
7	Remove kerb	0	m	13.38	0		0
8	Cut to Fill - General Earthworks	26,320	m3	10.98	288,994		288,994
9	Imported Fill	2,606	m3	28.76	74,949		74,949
10	Form embankment	3,355	m2	7.16	24,022		24,022
11	Remove signs	0	no	92.50	0		0
12	Remove guardrail	0	m	16.29	0		0
13	Remove fencing	0	m	13.57	0		0
14	Remove existing headwall	0	No	1,248.75	0		0
	<u>Subgrade Preparation</u>						
15	Preparation, trim and compact	5,188	m2	6.13	31,802		31,802
	<u>Sub Base and Base Course</u>						
16	150mm thick crushed rock base course	4,716	m2	17.78	83,850		83,850
17	200mm thick compacted limestone sub base	4,716	m2	23.71	111,816		111,816
	<u>Road Paving</u>						
18	40mm thick (AC14)	3,733	m2	29.01	108,294		108,294
19	Extra over for 2% red oxide	1,120	m2	11.79	13,205		13,205
20	Primer seal	3,920	m2	8.39	32,889		32,889
21	150mm thick concrete infill to medians	88	m2	100.00	8,800		8,800
	<u>Kerbing</u>						
22	Mountable Kerb (MK)	0	m	28.92	0		0
23	Reinforced Flush Kerb (300mm)	667	m	71.38	47,610		47,610
24	Semi Mountable Kerb (SMK)	776	m	34.26	26,586		26,586
25	Barrier / Upright Kerb	0	m	56.57	0		0
26	Kerb openings	0	no	373.56	0		0
	<u>Line Marking and Furniture</u>						
27	Line marking	2,240	m	6.75	15,120		15,120
28	Chevron sign	1	No	652.06	652		652
29	Traffic sign	8	No	519.29	4,154		4,154
30	Remove and relocate existing signs	0	no	276.42	0		0
	<u>Concrete Cycleways and Footpaths</u>						
31	100 thick reinforced concrete footpath with broomed finish	840	m2	72.19	60,640		60,640
32	Sand fill below concrete path including compaction (100mm)	840	m2	4.80	4,032		4,032

## DCA 6 - HAMMOND ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>11.1 ROAD CONSTRUCTION</b>							
33	Asphalt footpath including 150mm thick compacted sub-base	0	m2	87.17	0		0
34	Pram ramp	0	no	926.68	0		0
35	Pram ramp including tactile	0	no	1,366.16	0		0
36	Tactile paving	0	m2	346.88	0		0
	<u>Landscaping</u>						
	Soft landscaping	2,747	m2	22.20	60,983		EXCL
	Landscape mix	601	m3	101.40	60,941		EXCL
	Rock pitching	0	m2	178.25	0		0
	Drainage layer	2,001	m2	36.83	73,697		INCL
	<u>Other</u>						
37	Allow to tie in to existing roads	0	Item	2,875.00	0		0
38	Allow to tie in to existing footpaths	0	Item	1,495.00	0		0
39	Allow to tie in to existing median	0	Item	2,643.94	0		0
	<u>Street Lighting</u>						
40	12.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	11	No	13,546.66	149,013		149,013
	<u>Road Drainage</u>						
41	Form swale	928	m	164.37	152,535		152,535
42	Rock check dam	5	No	323	1,615		1,615
43	450dia reinforced concrete pipe including excavation and backfill	105	m	231.29	24,285		24,285
44	525dia reinforced concrete pipe including excavation and backfill	20	m	262.35	5,247		5,247
45	Raised gully / bubble up pits (1200mm) including liner, cover, grate, excavation, rock pitching, and associated works	2	no	5,105.29	10,211		10,211
46	Combined Side Entry Pits - Supply and Install (1050mm)	1	no	4,645.43	4,645		4,645
47	Headwall	1	no	1,927.56	1,928		1,928
48	Basin construction	301	m2	126.36	38,034		38,034
	<u>Preliminaries and Project Costs</u>						
49	Traffic Management	5.00	%		79,295		79,295
50	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		249,780		249,780
51	Project Owner's Cost (Planning and Design Costs)	7.50	%		143,623		143,623
52	Risk Contingency Allowance	10.00	%		205,860		205,860
<b>ROAD CONSTRUCTION</b>							<b>2,264,460</b>

## DCA 6 - HAMMOND ROAD

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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### 11.2 UTILITIES

	<u>Electrical (Western Power)</u>						
	<i>No existing infrastructure based DBYD Drawings</i>		Note				
	<u>Communications (NBN / Telstra / Other)</u>						
	<i>No existing infrastructure based DBYD Drawings</i>		Note				
	<u>Water and Sewer (Water Corporation)</u>						
	<i>No existing infrastructure based DBYD Drawings</i>		Note				
	<u>Gas (ATCO)</u>						
	<i>No existing infrastructure based DBYD Drawings</i>		Note				
	<u>Preliminaries and Project Costs</u>						
1	Traffic Management	5.00	%		0		0
2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		0		0
3	Project Owner's Cost (Planning and Design Costs)	7.50	%		0		0
4	Risk Contingency Allowance	10.00	%		0		0

### UTILITIES

0

**DCA 6 - CONNECTOR ROAD (HAMMOND ROAD EXTENSION)**

<b>Project:</b> City of Kwinana DCP				<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024		
<b>Building:</b> City of Kwinana DCP				<b>Job No:</b> EST23-09		
Code	Description	Quantity	Unit	Rate	Total	RWA Comments 2024
12	<b>DCA 6 - CONNECTOR ROAD (HAMMOND ROAD EXTENSION)</b>					
12.1	Road Construction	488	m	4,947.52	2,412,660	
12.2	Utilities	488	m	0.00	0	
<b>DCA 6 - CONNECTOR ROAD (HAMMOND ROAD EXTENSION)</b>					<b>2,412,660</b>	

# DCA 6 - CONNECTOR ROAD (HAMMOND ROAD EXTENSION)

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
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## 12.1 ROAD CONSTRUCTION

	<u>Earthworks and Site Preparation</u>						
1	Site Clearance (based on light shrubs)	20,642	m2	3.76	77,614		77,614
2	Removal of topsoil 150mm and stockpile for later re-use	20,642	m2	1.72	35,504		35,504
3	Remove trees	10	No	744.40	7,444		7,444
4	Breaking up existing roads surfacing and cart away	0	m2	21.30	0		0
5	Breaking up existing footpath and cart away	0	m2	21.30	0		0
6	Remove kerb	0	m	13.38	0		0
7	Cut to Fill - General Earthworks	37,959	m3	10.98	416,790		416,790
8	Imported Fill	2,065	m3	28.76	59,389		59,389
9	Form embankment	5,808	m2	7.16	41,585		41,585
10	Remove signs	0	no	92.50	0		0
11	Remove guardrail	0	m	16.29	0		0
12	Remove fencing	0	m	13.57	0		0
13	Remove existing headwall	0	no	1,248.75	0		0
	<u>Subgrade Preparation</u>						
14	Preparation, trim and compact	6,121	m2	6.13	37,522		37,522
	<u>Sub Base and Base Course</u>						
15	150mm thick crushed rock base course	6,121	m2	17.78	108,831		108,831
16	200mm thick compacted limestone sub base	6,121	m2	23.71	145,129		145,129
	<u>Road Paving</u>						
17	40mm thick (AC14)	4,877	m2	29.01	141,482		141,482
18	Extra over for 2% red oxide	1,463	m2	11.79	17,249		17,249
19	Primer seal	5,121	m2	8.39	42,965		42,965
20	150mm thick concrete infill to medians	74	m2	100.00	7,400		7,400
	<u>Kerbing</u>						
21	Mountable Kerb (MK)	0	m	28.92	0		0
22	Reinforced Flush Kerb (300mm)	951	m	71.38	67,882		67,882
23	Semi Mountable Kerb (SMK)	1,040	m	34.26	35,630		35,630
24	Barrier / Upright Kerb	0	m	56.57	0		0
25	Kerb openings	0	no	373.56	0		0
	<u>Line Marking and Furniture</u>						
26	Line marking	2,926	m	6.75	19,751		19,751
27	Chevron sign	0	No	652.06	0		0
28	Traffic sign	10	No	519.29	5,193		5,193
29	Remove and relocate existing signs	0	no	276.42	0		0
	<u>Concrete Cycleways and Footpaths</u>						
30	100 thick reinforced concrete footpath with broomed finish	1,220	m2	72.19	88,072		88,072
31	Sand fill below concrete path including compaction (100mm)	1,220	m2	4.80	5,856		5,856
32	Asphalt footpath including 150mm thick compacted sub-base	0	m2	87.17	0		0

## DCA 6 - CONNECTOR ROAD (HAMMOND ROAD EXTENSION)

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
<b>12.1 ROAD CONSTRUCTION</b>							
33	Pram ramp	0	no	926.68	0		0
34	Pram ramp including tactile	0	no	1,366.16	0		0
35	Tactile paving	0	m2	346.88	0		0
	<u>Landscaping</u>						
	Soft landscaping	3,351	m2	22.20	74,392		EXCL
	Landscape mix	713	m3	101.40	72,298		EXCL
	Rock pitching	0	m2	178.25	0		0
	Drainage layer	2,376	m2	36.83	87,508		INCL
	<u>Other</u>						
36	Allow to tie in to existing roads	0	Item	2,875.00	0		0
37	Allow to tie in to existing footpaths	0	Item	1,495.00	0		0
38	Allow to tie in to existing median	0	Item	2,643.94	0		0
	<u>Street Lighting</u>						
39	12.5 DOR Street Light Pole incl. all conduits, light cabling, excavation, and related overheads	14	no	13,546.66	189,653		189,653
	<u>Road Drainage</u>						
40	Form swale	814	m	164.37	133,797		133,797
41	Rock check dam	23	No	215	4,954		4,954
42	450dia reinforced concrete pipe including excavation and backfill	0	m	231.29	0		0
43	525dia reinforced concrete pipe including excavation and backfill	0	m	262.35	0		0
44	Raised gully / bubble up pits (1200mm) including liner, cover, grate, excavation, rock pitching, and associated works	0	no	5,105.29	0		0
45	Combined Side Entry Pits - Supply and Install (1050mm)	0	no	4,645.43	0		0
46	Headwall	0	no	1,927.56	0		0
47	Basin construction	0	m2	126.36	0		0
	<u>Preliminaries and Project Costs</u>						
48	Traffic Management	5.00	%		84,485		84,485
49	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		266,127		266,127
50	Project Owner's Cost (Planning and Design Costs)	7.50	%		153,023		153,023
51	Risk Contingency Allowance	10.00	%		219,333		219,333
<b>ROAD CONSTRUCTION</b>							<b>2,412,660</b>

DCA 6 - CONNECTOR ROAD (HAMMOND  
ROAD EXTENSION)

<b>Project:</b> City of Kwinana DCP	<b>Details:</b> CITY OF KWINANA DCP UPDATE 2024
<b>Building:</b> City of Kwinana DCP	<b>Job No:</b> EST23-09

Code	Description	Quantity	Unit	Rate	Subtotal	Factor	Total
12.2	UTILITIES						
	<u>Electrical (Western Power)</u>						
	No existing infrastructure based DBYD Drawings		Note				
	<u>Communications (NBN / Telstra / Other)</u>						
	No existing infrastructure based DBYD Drawings		Note				
	<u>Water and Sewer (Water Corporation)</u>						
	No existing infrastructure based DBYD Drawings		Note				
	<u>Gas (ATCO)</u>						
	No existing infrastructure based DBYD Drawings		Note				
	<u>Preliminaries and Project Costs</u>						
1	Traffic Management	5.00	%		0		0
2	Project Overheads and Preliminaries (Indirect Construction Costs)	15.00	%		0		0
3	Project Owner's Cost (Planning and Design Costs)	7.50	%		0		0
4	Risk Contingency Allowance	10.00	%		0		0
	UTILITIES						0

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## **ANNEXURE B – Road Landscaping Cost Breakdown**

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Bertram Road, Wellard

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Median Swales	-	30.37	-		32.42	-	-		35.03	-	-	Allowance for grading, mulch, planting
Verges	5,190	41.11	213,363		45.44	235,834	235,834		48.55	251,975	251,975	Allowance for grading, mulch, planting
Street Trees	28	445.21	12,466		483.01	13,524	13,524		515.27	14,428	14,428	
<b>Sub-Total</b>	<b>5,218</b>		<b>225,829</b>	<b>-</b>		<b>249,358</b>	<b>249,358</b>	<b>-</b>		<b>266,402</b>	<b>266,402</b>	
<b>Total Footprint Cost</b>	<b>5,218</b>		<b>225,829</b>	<b>-</b>		<b>249,358</b>	<b>249,358</b>	<b>-</b>		<b>266,402</b>	<b>266,402</b>	
Preliminaries and Margin			Excluded		20.00%	49,872	49,872		20.00%	53,280	53,280	
Traffic Management			Excluded		5.00%	12,468	12,468		5.00%	15,984	15,984	
Allowance for Professional Fees			Excluded		7.00%	17,455	17,455		7.00%	23,497	23,497	
Contingency	10.0%		22,583		10.00%	24,936	24,936		10.00%	35,916	35,916	
<b>Total</b>			<b>22,583</b>	<b>-</b>		<b>104,730</b>	<b>104,730</b>	<b>-</b>		<b>128,678</b>	<b>128,678</b>	
<b>Total</b>		<b>47.61</b>	<b>248,412</b>	<b>-</b>	<b>68</b>	<b>354,088</b>	<b>354,088</b>	<b>-</b>	<b>76</b>	<b>395,080</b>	<b>395,080</b>	

Wellard Road, Wellard

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Preliminaries			367,239			383,137	383,137			416,534	416,534	
Site Preparation			56,404			59,299	59,299			64,468	64,468	
Hardworks			10,404			10,938	10,938			11,891	11,891	
Landscape Works			1,567,745			1,648,213	1,648,213			1,791,885	1,791,885	
Reticulation Works			187,605			197,234	197,234			214,427	214,427	
<b>Sub-Total</b>	<b>35,132</b>	<b>62</b>	<b>2,189,397</b>	<b>-</b>	<b>65</b>	<b>2,298,821</b>	<b>2,298,821</b>	<b>-</b>	<b>71</b>	<b>2,499,205</b>	<b>2,499,205</b>	
<b>Total Footprint Cost</b>	<b>35,132</b>	<b>62</b>	<b>2,189,397</b>	<b>-</b>	<b>65</b>	<b>2,298,821</b>	<b>2,298,821</b>	<b>-</b>	<b>71</b>	<b>2,499,205</b>	<b>2,499,205</b>	
Contingency			252,592			344,823	344,823			374,881	374,881	15% allowance
Other works by the City			61,309			114,941	114,941			143,704	143,704	5% allowance
Professional Consultation Fees			28,159			45,976	45,976			60,356	60,356	2% allowance (landscape architect)
<b>Total</b>			<b>342,060</b>	<b>-</b>		<b>505,740</b>	<b>505,740</b>	<b>-</b>		<b>578,941</b>	<b>578,941</b>	
<b>Total</b>		<b>72</b>	<b>2,531,457</b>	<b>-</b>	<b>80</b>	<b>2,804,561</b>	<b>2,804,561</b>	<b>-</b>	<b>88</b>	<b>3,078,146</b>	<b>3,078,146</b>	

Millar Road

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Landscape Architect - Design and Contract Admin:	1.00	13,250.00	13,250			13,250	13,250	13,250			13,250	Works have been completed
Landscape Contractor - Installation:	1.00	47,782.25	47,782			47,782	47,782	47,782			47,782	
Landscape Contractor - 2 year maintenance	1.00	13,403.39	13,403			13,403	13,403	13,403			13,403	
Developer Project Management & Administration @ 5%:	1.00	3,721.78	3,722			3,722	3,722	3,722			3,722	
<b>Sub-Total</b>			<b>78,157</b>			<b>78,157</b>	<b>78,157</b>	<b>78,157</b>			<b>78,157</b>	
<b>Total Footprint Cost</b>			<b>78,157</b>	-		-	<b>78,157</b>	<b>78,157</b>			<b>78,157</b>	
<b>Total</b>			-	-		-	<b>78,157</b>	<b>78,157</b>			<b>78,157</b>	
<b>Total</b>			<b>78,157</b>	-		-	<b>78,157</b>	<b>78,157</b>			<b>78,157</b>	

Mortimer Road, Wellard

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Median Swales	1,100	30.37	33,407		32.42	35,662	35,662		35.03	38,533	38,533	Allowance for grading, mulch, planting
Verges	3,130	41.11	128,676		45.44	142,227	142,227		48.55	151,962	151,962	Allowance for grading, mulch, planting
Street Trees	75	445.21	33,391		483.01	36,226	36,226		515.27	38,645	38,645	
<b>Sub-Total</b>	<b>4,305</b>		<b>195,473</b>	<b>-</b>		<b>214,115</b>	<b>214,115</b>	<b>-</b>		<b>229,140</b>	<b>229,140</b>	
<b>Total Footprint Cost</b>	<b>4,305</b>		<b>195,473</b>	<b>-</b>		<b>214,115</b>	<b>214,115</b>	<b>-</b>		<b>229,140</b>	<b>229,140</b>	
Preliminaries and Margin			Excluded		20.00%	42,823	42,823		20.00%	45,828	45,828	
Traffic Management			Excluded		5.00%	10,706	10,706		5.00%	13,748	13,748	
Allowance for Professional Fees			Excluded		7.00%	14,988	14,988		7.00%	20,210	20,210	
Contingency	10.0%		19,547		10.00%	21,411	21,411		10.00%	30,893	30,893	
<b>Total</b>			<b>19,547</b>	<b>-</b>		<b>89,928</b>	<b>89,928</b>	<b>-</b>		<b>110,679</b>	<b>110,679</b>	
<b>Total</b>		<b>49.95</b>	<b>215,020</b>	<b>-</b>	<b>71</b>	<b>304,043</b>	<b>304,043</b>	<b>-</b>	<b>79</b>	<b>339,819</b>	<b>339,819</b>	

Sunrise Boulevard, Wellard - 15.4m wide

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Median Swales	-	30.37	-		32.42	-	-		35.03	-	-	Allowance for grading, mulch, planting
Verges	2,074	41.11	85,263		45.44	94,243	94,243		48.55	100,693	100,693	Allowance for grading, mulch, planting
Street Trees	34	445.21	15,137		483.01	16,422	16,422		515.27	17,519	17,519	
<b>Sub-Total</b>	<b>2,108</b>		<b>100,400</b>			<b>110,665</b>	<b>110,665</b>			<b>118,212</b>	<b>118,212</b>	
			-									
<b>Total Footprint Cost</b>	<b>2,108</b>		<b>100,400</b>			<b>110,665</b>	<b>110,665</b>			<b>118,212</b>	<b>118,212</b>	
Preliminaries and Margin			Excluded		20.00%	22,133	22,133		20.00%	23,642	23,642	
Traffic Management			Excluded		5.00%	5,533	5,533		5.00%	7,093	7,093	
Allowance for Professional Fees			Excluded		7.00%	7,747	7,747		7.00%	10,426	10,426	
Contingency	10%		10,040		10.00%	11,066	11,066		10.00%	15,937	15,937	
<b>Total</b>			<b>10,040</b>			<b>46,479</b>	<b>46,479</b>			<b>57,099</b>	<b>57,099</b>	
<b>Total</b>		<b>52.39</b>	<b>110,440</b>		<b>75</b>	<b>157,144</b>	<b>157,144</b>		<b>83</b>	<b>175,311</b>	<b>175,311</b>	
Lot 440 (180m)	180		47,332			67,347	67,347			75,133	75,133	
Lot 28 (121m)	121		31,817			45,272	45,272			50,506	50,506	
Lot 59 (119m)	119		31,291			44,524	44,524			49,671	49,671	

Sunrise Boulevard, Wellard - 19.4m wide

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Median Swales	-	30.37	-		32.42	-	-		35.03	-	-	Allowance for grading, mulch, planting
Verges	2,995	41.11	123,126		45.44	136,093	136,093		48.55	145,407	145,407	Allowance for grading, mulch, planting
Street Trees	34	445.21	15,137		483.01	16,422	16,422		515.27	17,519	17,519	
<b>Sub-Total</b>	<b>3,029</b>		<b>138,263</b>			<b>152,515</b>	<b>152,515</b>			<b>162,926</b>	<b>162,926</b>	
<b>Total Footprint Cost</b>	<b>3,029</b>		<b>138,263</b>			<b>152,515</b>	<b>152,515</b>			<b>162,926</b>	<b>162,926</b>	
Preliminaries and Margin			Excluded		20.00%	30,503	30,503		20.00%	32,585	32,585	
Traffic Management			Excluded		5.00%	7,626	7,626		5.00%	9,776	9,776	
Allowance for Professional Fees			Excluded		7.00%	10,676	10,676		7.00%	14,370	14,370	
Contingency	10%		13,826		10.00%	15,252	15,252		10.00%	21,966	21,966	
<b>Total</b>			<b>13,826</b>			<b>64,056</b>	<b>64,056</b>			<b>78,697</b>	<b>78,697</b>	
<b>Total</b>	<b>50.21</b>		<b>152,089</b>		<b>71</b>	<b>216,571</b>	<b>216,571</b>		<b>80</b>	<b>241,623</b>	<b>241,623</b>	
Lot 440 (180m)	180		65,181			92,816	92,816			103,553	103,553	
Lot 28 (121m)	121		43,816			62,393	62,393			69,610	69,610	
Lot 59 (119m)	119		43,092			61,362	61,362			68,460	68,460	

Thomas Road, Wellard

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Median Swales	6,140	30.37	186,470		32.42	199,059	199,059		35.03	215,084	215,084	Allowance for grading, mulch, planting
Verges	15,800	41.11	649,545		45.44	717,952	717,952		48.55	767,090	767,090	Allowance for grading, mulch, planting
Street Trees	125	445.21	55,651		483.01	60,376	60,376		515.27	64,409	64,409	
Sub-Total	22,065		891,666			977,387	977,387			1,046,583	1,046,583	
Total Footprint Cost	22,065		891,666			977,387	977,387			1,046,583	1,046,583	
Preliminaries and Margin			Excluded		20.00%	195,477	195,477		20.00%	209,317	209,317	
Traffic Management			Excluded		5.00%	48,869	48,869		5.00%	62,795	62,795	
Allowance for Professional Fees			Excluded		7.00%	68,417	68,417		7.00%	92,309	92,309	
Contingency	10%		89,167		10.00%	97,739	97,739		10.00%	141,100	141,100	
Total			89,167			410,503	410,503			505,520	505,520	
Total		44.45	980,833		63	1,387,890	1,387,890		70	1,552,103	1,552,103	

Anketell Road, Wellard

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Median Swales	1,970	30.37	59,828		32.42	63,867	63,867		35.03	69,009	69,009	Allowance for grading, mulch, planting
Verges	11,840	41.11	486,747		45.44	538,010	538,010		48.55	574,832	574,832	Allowance for grading, mulch, planting
Street Trees	109	445.21	48,528		483.01	52,648	52,648		515.27	56,164	56,164	
<b>Sub-Total</b>	<b>13,919</b>		<b>595,104</b>			<b>654,525</b>	<b>654,525</b>			<b>700,006</b>	<b>700,006</b>	
<b>Total Footprint Cost</b>	<b>13,919</b>		<b>595,104</b>			<b>654,525</b>	<b>654,525</b>			<b>700,006</b>	<b>700,006</b>	
Preliminaries and Margin			Excluded		20.00%	130,905	130,905		20.00%	140,001	140,001	
Traffic Management			Excluded		5.00%	32,726	32,726		5.00%	42,000	42,000	
Allowance for Professional Fees			Excluded		7.00%	45,817	45,817		7.00%	61,740	61,740	
Contingency	10%		59,510		10.00%	65,453	65,453		10.00%	94,375	94,375	
<b>Total</b>			<b>59,510</b>			<b>274,901</b>	<b>274,901</b>			<b>338,117</b>	<b>338,117</b>	
<b>Total</b>		<b>47.03</b>	<b>654,614</b>		<b>67</b>	<b>929,426</b>	<b>929,426</b>		<b>75</b>	<b>1,038,122</b>	<b>1,038,122</b>	



Hammond Road Extension

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Median Swales	1,905	30.37	57,867		32.42	61,773	61,773		35.03	66,746	66,746	Allowance for grading, mulch, planting
Verges	14,909	41.11	612,915		45.44	677,465	677,465		48.55	723,832	723,832	Allowance for grading, mulch, planting
Street Trees	92	445.21	40,959		483.01	44,437	44,437		515.27	47,405	47,405	
Sub-Total	16,906		711,741			783,675	783,675			837,983	837,983	
Total Footprint Cost	16,906		711,741			783,675	783,675			837,983	837,983	
Preliminaries and Margin			Excluded		20.00%	156,735	156,735		20.00%	167,597	167,597	
Traffic Management			Excluded		5.00%	39,184	39,184		5.00%	50,279	50,279	
Allowance for Professional Fees			Excluded		7.00%	54,857	54,857		7.00%	73,910	73,910	
Contingency	10%		71,174		10.00%	78,367	78,367		10.00%	112,977	112,977	
Total			71,174			329,143	329,143			404,763	404,763	
Total		46.31	782,915		66	1,112,818	1,112,818		74	1,242,745	1,242,745	

Hammond Road Connector Road

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Median Swales	2,266	30.37	68,818		32.42	73,464	73,464		35.03	79,378	79,378	Allowance for grading, mulch, planting
Verges	9,422	41.11	387,322		45.44	428,113	428,113		48.55	457,414	457,414	Allowance for grading, mulch, planting
Street Trees	132	445.21	58,768		483.01	63,757	63,757		515.27	68,016	68,016	
<b>Sub-Total</b>	<b>11,820</b>		<b>514,907</b>			<b>565,334</b>	<b>565,334</b>			<b>604,807</b>	<b>604,807</b>	
<b>Total Footprint Cost</b>	<b>11,820</b>		<b>514,907</b>			<b>565,334</b>	<b>565,334</b>			<b>604,807</b>	<b>604,807</b>	
Preliminaries and Margin			Excluded		20.00%	113,067	113,067		20.00%	120,961	120,961	
Traffic Management			Excluded		5.00%	28,267	28,267		5.00%	36,288	36,288	
Allowance for Professional Fees			Excluded		7.00%	39,573	39,573		7.00%	53,344	53,344	
Contingency	10%		51,491		10.00%	56,533	56,533		10.00%	81,540	81,540	
<b>Total</b>			<b>51,491</b>			<b>237,440</b>	<b>237,440</b>			<b>292,134</b>	<b>292,134</b>	
<b>Total</b>		<b>47.92</b>	<b>566,398</b>		<b>68</b>	<b>802,774</b>	<b>802,774</b>		<b>76</b>	<b>896,942</b>	<b>896,942</b>	

Lyon Road

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
North - Honeywood. POS 10 Lyon Road (2011 cost)		13.80	60,053		13.80	60,053	60,053		13.80	60,053	60,053	RWA understand that these are actual costs
North - Honeywood. Lyon road (Sept 2012)		71.32	310,349		71.32	310,349	310,349		71.32	310,349	310,349	
North - Honeywood. Lyon road re-veg (2013 cost)		2.41	10,474		2.41	10,474	10,474		2.41	10,474	10,474	
North - Honeywood. Lyon road buffer (2016 cost)		9.21	40,084		9.21	40,084	40,084		9.21	40,084	40,084	
South - Honeywood Rise. Conservation park (2016 cost)		5.04	21,924		5.04	21,924	21,924		5.04	21,924	21,924	
South - Honeywood Rise. Wandl South Buffer (Stage 2 - July 2017)		12.22	53,186		12.22	53,186	53,186		12.22	53,186	53,186	
<b>Sub-Total</b>	<b>4,351</b>		<b>496,070</b>			<b>496,070</b>	<b>496,070</b>			<b>496,070</b>	<b>496,070</b>	
<b>Total Footprint Cost</b>	<b>4,351</b>		<b>496,070</b>			<b>496,070</b>	<b>496,070</b>			<b>496,070</b>	<b>496,070</b>	
Contingency			Excluded									
<b>Total</b>			-									
<b>Total</b>	<b>114.00</b>		<b>496,070</b>		<b>114</b>	<b>496,070</b>	<b>496,070</b>		<b>114</b>	<b>496,070</b>	<b>496,070</b>	

Cordata Ave, Wandl

Items	Area (m²)/Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Median Swales	3336	30.37	101,314		32.42	108,153	108,153		35.03	116,860	116,860	Allowance for grading, mulch, planting
Verges	3336	41.11	137,144		45.44	151,588	151,588		48.55	161,963	161,963	Allowance for grading, mulch, planting
Street Trees	28	445.21	12,377		483.01	13,524	13,524		515.27	14,428	14,428	
<b>Sub-Total</b>	<b>6,672</b>		<b>250,835</b>			<b>273,265</b>	<b>273,265</b>			<b>293,250</b>	<b>293,250</b>	

<b>Total Footprint Cost</b>	<b>6,672</b>		<b>250,835</b>			<b>273,265</b>	<b>273,265</b>			<b>293,250</b>	<b>293,250</b>	
Preliminaries and Margin	20.0%		50,167		20.00%	54,653	54,653		20.00%	58,650	58,650	
Traffic Management	5.0%		12,542		5.00%	13,663	13,663		5.00%	17,595	17,595	
Allowance for Professional Fees	7.5%		18,813		7.00%	19,129	19,129		7.00%	25,865	25,865	
Contingency	10%		25,083		10.00%	27,327	27,327		10.00%	39,536	39,536	
<b>Total</b>			<b>106,605</b>			<b>114,771</b>	<b>114,771</b>			<b>141,646</b>	<b>141,646</b>	
<b>Total</b>			<b>357,440</b>		<b>58</b>	<b>388,037</b>	<b>388,037</b>		<b>65</b>	<b>434,896</b>	<b>434,896</b>	

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## **ANNEXURE C – Open Drain Cost Breakdown**

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Bertram Road Basin

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
<b>PRELIMINARIES</b>													
<b>Establishment</b>													- See actuals below
Mobilisation / Demobilisation	1	item	3,816.11	3,816.11									-
Project Board (Provisional)	1	item	3,816.11	3,816.11									-
Insurances	1	item	3,572.89	3,572.89									-
<b>Authorities and Fees</b>													-
Construction Industry Training Fund Levy (0.2% of Contract Sum)	1	item	942.80	942.80									-
Liaison and Coordination of Service Bodies for Service Installation	1	item	2,289.67	2,289.67									-
Building License for Walls and Structures	1	item	1,908.06	1,908.06									-
<b>Testing</b>													-
Scheduled Testing	1	item	2,544.08	2,544.08									-
<b>Survey/Supervision/Project management</b>													-
As Constructed Details	1	item	3,180.10	3,180.10									-
Survey / Supervision/Project Management	1	item		-									-
Survey	1	item	10,000.00	10,000.00									-
Project Management - Design	1	item	10,000.00	10,000.00									-
Project Management/Construction Supervision - Construction	1	item	30,000.00	30,000.00									-
Detailed Design	1	item	30,000.00	30,000.00									-
<b>Construction Water</b>													-
Construction water from nearby hydrant/standpipe	1	item	1,908.06	1,908.06									-
<b>OH&amp;S</b>													-
Occupational Health and Safety Management	1	item	1,272.04	1,272.04									-
Safety Management Plan	1	item	1,017.63	1,017.63									-
<b>Other</b>													-
Final Clean up	1	item	2,544.08	2,544.08									-
Other Items Necessary for Completion of the Works	1	item	2,544.08	2,544.08									-
<b>Subtotal Preliminaries</b>				<b>111,355.70</b>									-
<b>SITEWORKS</b>													
<b>Clearing</b>													-
Clearing, Grubbing and Dispose Off Site	1	item	6,360.19	6,360.19									-
<b>Demolition</b>													-
Remove and dispose existing Pipe to Peel Main Drain	1	item	1,272.04	1,272.04									-
<b>Topsoll</b>													-
Strip and Stockpile Topsoil and respread in adjoining POS	2,200	m2	2.40	5,283.83									-
<b>Earthworks</b>													-
Proof rolling of fill areas	2,200	m2	1.27	2,798.48									-
Import and Compact Fill sand	1,200	m3	31.80	38,161.14									-
Import and compact clay liner	300	m3	44.52	13,356.40									-
Import and Compact Fill sand for extra required in existing basin	900	m3	31.80	28,620.86									-
Final Trim and Shaping	2,200	m2	1.76	3,865.54									-
<b>Subtotal Earthworks</b>				<b>99,718.48</b>									-
<b>FENCING AND BUNDS</b>													
<b>Removal and disposal of existing fences</b>													-
Remove and Dispose Existing Chainmesh on exiting basin	255	m	18.96	4,835.08									-
<b>Supply and install complete fences</b>													-
1800 chainmesh fence with barb wire	210	m	69.52	14,600.06									-
Double Gate in Chainmesh Fence	1	No.	1,466.33	1,466.33									-
<b>Subtotal Fencing</b>				<b>20,901.47</b>									-
<b>STORMWATER DRAINAGE</b>													
<b>Pipework/Excavate/Supply/Lay/Backfill</b>													-
150 PVC SWP	30	m	189.61	5,688.33									-
525 Dia Class 2	260	m	442.43	115,030.77									-
<b>Subsoil drainage</b>													-
150 PVC Subsoil Drain	135	m	176.97	23,891.01									-
Subsoil Flushing Point On Line	2	No.	1,516.89	3,033.78									-
<b>Drainage pits</b>													-
Junction Pits - Standard installed on existing line	1	No.	3,816.11	3,816.11									-
Grated Pits outlet pits	1	No.	3,816.11	3,816.11									-
<b>Revegetation</b>													-
Supply of shrubs	2,200	Item	2.53	5,561.93									-
Planting of shrubs	2,200	Item	2.53	5,561.93									-
Supply of sedges	8,800	Item	2.63	23,137.62									-
Planting of sedges	8,800	Item	2.63	23,137.62									-
<b>Outlets</b>													-
Spillway complete	1	No.	10,176.30	10,176.30									-
Type B outlet to Peel Main Drain	1	No.	3,943.32	3,943.32									-
Rock Pitching	40	m2	151.69	6,067.56									-
Permeable Rock Inlet Dissipator	1	Item	12,720.38	12,720.38									-
<b>Sand filter</b>													-
Placing 200 mm Pea Gravel bedding for Sand Filter Floor	1,300	m2	22.90	29,765.69									-
Supplying and placing filter sand	390	m3	120.84	47,129.01									-
mix supplied NUA with filter sand	1,300	m2	38.16	49,609.49									-
NUA cartage costs from Capel	1	Item	4,070.52	4,070.52									-
<b>Subtotal Stormwater drainage</b>				<b>376,157.49</b>									-

Contingency	%	15.00	91,219.97	-	-	-	-	-	-
Construction Costs as Provided by CoK on 01/03/2023									
Actual construction costs as carried out by Bulletproof Civil	1	Item	362,900.47	362,900.47	362,900.47	362,900.47	362,900.47	As per costs provided by CoK	
Maintenance cost per annum									
Maintenance based on 2,200 sqm - Year 1	1	Item	6,000.00	6,000.00	6,000.00	6,000.00	-	-	6,000.00 Allowed for 2 year maintenance
Maintenance based on 2,200 sqm - Year 2	1	Item	6,314.81	6,314.81	6,314.81	6,314.81	6,314.81	6,314.81	6,314.81
Total cost for construction of DCA1 Bertram Road Drainage Basin									
			699,353	362,900	12,315	375,215	368,900	6,315	375,215

Peel Sub N Drain

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Construction cost per 10 m sections <1000mm deep													Rates include for preliminaries
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	140	m3	46.62	6,526.67		62.88	8,803.20	8,803.20		66.80	9,352.00	9,352.00	includes topsoil stripping and clearing
fine grading	200	m2	1.76	351.41		2.18	436.00	436.00		2.33	466.00	466.00	
rock pitching	10	m2	152.64	1,526.45		186.30	1,863.00	1,863.00		189.28	1,892.80	1,892.80	
landscaping/ planting (140mm x 3/m2)	200	m2	23.51	4,702.36		30.60	6,120.00	6,120.00		31.09	6,218.00	6,218.00	
tubestock x 3/m2	200	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)	3	no	445.21	1,335.62		489.60	1,468.80	1,468.80		526.69	1,580.07	1,580.07	
Mulch	200	m2	13.99	2,798.66		18.00	3,600.00	3,600.00		18.93	3,786.00	3,786.00	allowed for 150mm
Contingency 10%		%	10.00	1,724.12			2,229.10	2,229.10			2,329.49	2,329.49	
total cost per 10 lineal meters				18,965.28			24,520.10	24,520.10			25,624.36	25,624.36	
Construction cost per 10 m sections 1000 - 1500mm deep													
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	240	m3	46.62	11,188.58		62.88	15,091.20	15,091.20		66.80	16,032.00	16,032.00	includes topsoil stripping and clearing
fine grading	200	m2	1.76	351.41		2.18	436.00	436.00		2.33	466.00	466.00	
rock pitching	20	m2	152.64	3,052.89		186.30	3,726.00	3,726.00		189.28	3,785.60	3,785.60	
landscaping/ planting (140mm x 3/m2)	200	m2	23.51	4,702.36		30.60	6,120.00	6,120.00		31.09	6,218.00	6,218.00	
tubestock x 3/m2	200	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)	3	no	445.21	1,335.62		489.60	1,468.80	1,468.80		526.69	1,580.07	1,580.07	
Mulch	200	m2	13.99	2,798.66		18.00	3,600.00	3,600.00		18.93	3,786.00	3,786.00	allowed for 150mm
10% Contingency		%	10.00	2,342.95			3,044.20	3,044.20			3,186.77	3,186.77	
total cost per 10 meters				25,772.47			33,486.20	33,486.20			35,054.44	35,054.44	
Maintenance cost per annum													
20m wide x 10lm per annum	1	Item	381.61	381.61		732.00	732.00	732.00		783.00	783.00	783.00	based on 200m2; RWA estimate
Subtotal				23,132.10			30,467.15	30,467.15			31,905.40	31,905.40	
Total cost for construction of a 20m wide x 10m length Living Stream	10	m		23,132.10	-		30,467.15	30,467.15	-		31,905.40	31,905.40	
Total estimated cost for Peel Sub-Drain N – 165m x 20m wide; Livir	165	m		381,680	-		502,708	502,708	-		526,439	526,439	
Completed Actual Construction Costs													
Actual cost completed in addition to estimated remaining 165m calculated above	1	Item			843,914.37			843,914.37	843,914.37			843,914.37	As provided by the City of Kwinana
Total cost for Peel Sub-Drain N – to date	Total			381,680	843,914		502,708	1,346,622	843,914		526,439	1,370,353	



Peel Sub Drain N1 in Wellard

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Construction cost per 10 m sections <1000mm deep													
Earthworks and Site Preparation													Rates include for preliminaries
bulk earthworks (cut to spoil, compact and final grade)	56	m3	46.62	2,610.67		62.88	3,521.28	3,521.28		66.80	3,740.80	3,740.80	includes topsoil stripping and clearing
fine grading	80	m2	1.76	140.57		2.18	174.40	174.40		2.33	186.40	186.40	
rock pitching	10	m2	152.64	1,526.45		186.30	1,863.00	1,863.00		189.28	1,892.80	1,892.80	
landscaping/ planting (140mm x 3/m2)	80	m2	23.51	1,880.94		30.60	2,448.00	2,448.00		31.09	2,487.20	2,487.20	
tubestock x 3/m2	3	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)		No	445.21	-		489.60	-	-		526.69	-	-	
Mulch	80	m2	13.99	1,119.46		18.00	1,440.00	1,440.00		18.93	1,514.40	1,514.40	allowed for 150mm
Contingency 10%		%	10.00	727.81			944.67	944.67			982.16	982.16	
total cost per 10 lineal meters				8,005.89			10,391.35	10,391.35			10,803.76	10,803.76	
Maintenance Cost per annum													
8m wide x 10m per annum	1	Item	152.65	152.65		378.00	378.00	378.00		405.00	405.00	405.00	based on 80m2; RWA estimate
Subtotal				8,158.54			10,769.35	10,769.35			11,208.76	11,208.76	
Total cost for construction of a 8m wide x 10m length Living Stream													
	10	m		8,311.19			10,769.35	10,769.35			11,208.76	11,208.76	
Total Cost for Peel Sub-Drain N1 – 456m x 8m wide; Living Stream													
Completed Actual Construction Costs	456	m		378,990	-		491,082	491,082	-		187,186	187,186	167m to be constructed
Actual cost completed (289m)													
	289	m							87,087.96			87,087.96	As provided by the City of Kwinana
Total cost for Peel Sub-Drain N1 – to date													
	Total			381,680	-		491,082	491,082	87,088		187,186	274,274	

Peel Sub-Drain N2 in Wellard

Items	Qty	Unit	Unit Rate \$2021	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Construction cost per 10 m sections <1000mm deep													Rates include for preliminaries
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	56	m3	36.88	2,065.28		62.88	3,521.28	3,521.28		66.80	3,740.80	3,740.80	includes topsoil stripping and clearing
fine grading	80	m2	1.39	111.20		2.18	174.40	174.40		2.33	186.40	186.40	
rock pitching	10	m2	120.76	1,207.56		186.30	1,863.00	1,863.00		189.28	1,892.80	1,892.80	
landscaping/ planting (140mm x 3/m2)	80	m2	18.60	1,488.00		30.60	2,448.00	2,448.00		31.09	2,487.20	2,487.20	
tubestock x 3/m2	3	m2	10.57	31.71		18.36	55.08	55.08		20.12	Excluded	-	
advanced tree planting (no.)		No	352.20	-		489.60	-	-		526.69	-	-	
Mulch	80	m2	11.07	885.60		18.00	1,440.00	1,440.00		18.93	1,514.40	1,514.40	allowed for 150mm
Contingency 10%		%	10.00	578.94			950.18	950.18			982.16	982.16	
total cost per 10 lineal meters				6,368.29			10,451.94	10,451.94			10,803.76	10,803.76	
Maintenance Cost per annum													
8m wide x 10m per annum	1	Item	120.76	120.76		378.00	378.00	378.00		405.00	405.00	405.00	based on 80m2; RWA estimate
Subtotal				6,489.05			10,829.94	10,829.94			11,208.76	11,208.76	
Total cost for construction of a 8m wide x 10m length Living Stream	10	m		6,609.81			10,829.94	10,829.94			11,208.76	11,208.76	
Total cost for Peel Sub-Drain N2 - 356m and 111m x 8m wide; Living Stream	356	m		235,309			385,546	385,546			124,417	124,417	111m to be constructed
Completed Actual Construction Costs													
Actual cost completed (245m)	245	m							199,634.65			199,634.65	As provided by the City of Kwinana
Total cost for Peel Sub-Drain N1 – to date		Total		381,680	-		385,546	385,546	199,635		124,417	324,052	

Peel Sub-Drain P in Casuarina

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Construction cost per 10 m sections <1000mm deep													Excluded as detailed in previous year
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	140	m3	Excluded	Excluded			Excluded					Excluded	
fine grading	200	m2	Excluded	Excluded			Excluded					Excluded	
rock pitching	10	m2	Excluded	Excluded			Excluded					Excluded	
landscaping/ planting (140mm x 3/m2)	200	m2	Excluded	Excluded			Excluded					Excluded	
tubestock x 3/m2	200	m2	Excluded	Excluded			Excluded					Excluded	
advanced tree planting (no.)	3	no	Excluded	Excluded			Excluded					Excluded	
Mulch	200	m2	Excluded	Excluded			Excluded					Excluded	
Contingency 10%		%	Excluded	Excluded			Excluded					Excluded	
total cost per 10 lineal meters				-									
Construction cost per 10 m sections 1000 - 1500mm deep													
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	240	m3	Excluded	Excluded			Excluded					Excluded	
fine grading	200	m2	Excluded	Excluded			Excluded					Excluded	
rock pitching	20	m2	Excluded	Excluded			Excluded					Excluded	
landscaping/ planting (140mm x 3/m2)	200	m2	Excluded	Excluded			Excluded					Excluded	
tubestock x 3/m2	200	m2	Excluded	Excluded			Excluded					Excluded	
advanced tree planting (no.)	3	no	Excluded	Excluded			Excluded					Excluded	
Mulch	200	m2	Excluded	Excluded			Excluded					Excluded	
10% Contingency		%	Excluded	Excluded			Excluded					Excluded	
total cost per 10 meters				-									
Maintenance cost per annum													
20m wide x 10lm per annum	1	Item	Excluded	Excluded			Excluded					Excluded	
Subtotal				-									
Total cost for construction of a 20m wide x 10m length Living Stream													
	10	m		-									
Total Cost for Peel Sub-Drain P – 630m x 20m wide; Living Stream													
	630	m		-									

Peel Sub-Drain P1 in Casuarina

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
<b>Construction cost per 10 m sections &lt;1000mm deep</b>													
<b>Earthworks and Site Preparation</b>													
bulk earthworks (cut to spoil, compact and final grade)	140	m3	46.62	6,526.67		62.88	8,803.20	8,803.20		66.80	9,352.00	9,352.00	includes topsoil stripping and clearing
fine grading	200	m2	1.76	351.41		2.18	436.00	436.00		2.33	466.00	466.00	
rock pitching	10	m2	152.64	1,526.45		186.30	1,863.00	1,863.00		189.28	1,892.80	1,892.80	
landscaping/ planting (140mm x 3/m2)	200	m2	23.51	4,702.36		30.60	6,120.00	6,120.00		31.09	6,218.00	6,218.00	
tubestock x 3/m2	200	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)	3	no	445.21	1,335.62		489.60	1,468.80	1,468.80		526.69	1,580.07	1,580.07	
Mulch	200	m2	13.99	2,798.66		18.00	3,600.00	3,600.00		18.93	3,786.00	3,786.00	allowed for 150mm
Contingency 10%		%	10.00	1,724.12			2,229.10	2,229.10			2,329.49	2,329.49	
<b>total cost per 10 lineal meters</b>				18,965.28			<b>24,520.10</b>	<b>24,520.10</b>			<b>25,624.36</b>	<b>25,624.36</b>	
<b>Construction cost per 10 m sections 1000 - 1500mm deep</b>													
<b>Earthworks and Site Preparation</b>													
bulk earthworks (cut to spoil, compact and final grade)	240	m3	46.62	11,188.58		62.88	15,091.20	15,091.20		66.80	16,032.00	16,032.00	includes topsoil stripping and clearing
fine grading	200	m2	1.76	351.41		2.18	436.00	436.00		2.33	466.00	466.00	
rock pitching	20	m2	152.64	3,052.89		186.30	3,726.00	3,726.00		189.28	3,785.60	3,785.60	
landscaping/ planting (140mm x 3/m2)	200	m2	23.51	4,702.36		30.60	6,120.00	6,120.00		31.09	6,218.00	6,218.00	
tubestock x 3/m2	200	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)	3	no	445.21	1,335.62		489.60	1,468.80	1,468.80		526.69	1,580.07	1,580.07	
Mulch	200	m2	13.99	2,798.66		18.00	3,600.00	3,600.00		18.93	3,786.00	3,786.00	allowed for 150mm
10% Contingency		%	10.00	2,342.95			3,044.20	3,044.20			3,186.77	3,186.77	
<b>total cost per 10 meters</b>				25,772.47			<b>33,486.20</b>	<b>33,486.20</b>			<b>35,054.44</b>	<b>35,054.44</b>	
<b>Maintenance cost per annum</b>													
20m wide x 10m per annum	1	Item	381.61	381.61		732.00	732.00	732.00		783.00	783.00	783.00	based on 200m2; RWA estimate
<b>Subtotal</b>				23,132.10			<b>30,467.15</b>	<b>30,467.15</b>			<b>31,905.40</b>	<b>31,905.40</b>	
<b>Total cost for construction of a 20m wide x 10m length Living Stream</b>	<b>10</b>	<b>m</b>		<b>23,132.10</b>			<b>30,467.15</b>	<b>30,467.15</b>			<b>31,905.40</b>	<b>31,905.40</b>	
<b>Total cost for Peel Sub-Drain P1 – 395m x 20m; Living Stream</b>	<b>395</b>	<b>m</b>		<b>913,718</b>			<b>1,203,452</b>	<b>1,203,452</b>			<b>1,260,263</b>	<b>1,260,263</b>	

Peel Sub-Drain P1A in Casuarina

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Construction cost per 10 m sections <1000mm deep													Rates include for preliminaries
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	140	m3	46.62	6,526.67		62.88	8,803.20	8,803.20		66.80	9,352.00	9,352.00	includes topsoil stripping and clearing
fine grading	200	m2	1.76	351.41		2.18	436.00	436.00		2.33	466.00	466.00	
rock pitching	10	m2	152.64	1,526.45		186.30	1,863.00	1,863.00		189.28	1,892.80	1,892.80	
landscaping/ planting (140mm x 3/m2)	200	m2	23.51	4,702.36		30.60	6,120.00	6,120.00		31.09	6,218.00	6,218.00	
tubestock x 3/m2	200	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)	3	no	445.21	1,335.62		489.60	1,468.80	1,468.80		526.69	1,580.07	1,580.07	
Mulch	200	m2	13.99	2,798.66		18.00	3,600.00	3,600.00		18.93	3,786.00	3,786.00	allowed for 150mm
Contingency 10%		%	10.00	1,724.12		-	2,229.10	2,229.10			2,329.49	2,329.49	
total cost per 10 lineal meters				18,965.28			24,520.10	24,520.10			25,624.36	25,624.36	
Construction cost per 10 m sections 1000 - 1500mm deep													
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	240	m3	46.62	11,188.58		62.88	15,091.20	15,091.20		66.80	16,032.00	16,032.00	includes topsoil stripping and clearing
fine grading	200	m2	1.76	351.41		2.18	436.00	436.00		2.33	466.00	466.00	
rock pitching	20	m2	152.64	3,052.89		186.30	3,726.00	3,726.00		189.28	3,785.60	3,785.60	
landscaping/ planting (140mm x 3/m2)	200	m2	23.51	4,702.36		30.60	6,120.00	6,120.00		31.09	6,218.00	6,218.00	
tubestock x 3/m2	200	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)	3	no	445.21	1,335.62		489.60	1,468.80	1,468.80		526.69	1,580.07	1,580.07	
Mulch	200	m2	13.99	2,798.66		18.00	3,600.00	3,600.00		18.93	3,786.00	3,786.00	allowed for 150mm
10% Contingency		%	10.00	2,342.95		-	3,044.20	3,044.20			3,186.77	3,186.77	
total cost per 10 meters				25,772.47			33,486.20	33,486.20			35,054.44	35,054.44	
Maintenance cost per annum													
20m wide x 10lm per annum 10m	1	Item	381.61	381.61		732.00	732.00	732.00		783.00	783.00	783.00	based on 200m2; RWA estimate
Subtotal				23,132.10			30,467.15	30,467.15			31,905.40	31,905.40	
Total cost for construction of a 20m wide x 10m length Living Stream													
	10	m		23,132.10			30,467.15	30,467.15			31,905.40	31,905.40	
Total Cost for Peel Sub-Drain P1A – 220m x 20m; Living Stream													
	220	m		508,906			670,277	670,277			701,919	701,919	

Peel Sub-Drain O in Casuarina

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Construction cost per 10 m sections <1000mm deep													Rates include for preliminaries
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	140	m3	46.62	6,526.67		62.88	8,803.20	8,803.20		66.80	9,352.00	9,352.00	includes topsoil stripping and clearing
fine grading	200	m2	1.76	351.41		2.18	436.00	436.00		2.33	466.00	466.00	
rock pitching	10	m2	152.64	1,526.45		186.30	1,863.00	1,863.00		189.28	1,892.80	1,892.80	
landscaping/ planting (140mm x 3/m2)	200	m2	23.51	4,702.36		30.60	6,120.00	6,120.00		31.09	6,218.00	6,218.00	
tubestock x 3/m2	200	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)	3	no	445.21	1,335.62		489.60	1,468.80	1,468.80		526.69	1,580.07	1,580.07	
Mulch	200	m2	13.99	2,798.66		18.00	3,600.00	3,600.00		18.93	3,786.00	3,786.00	allowed for 150mm
Contingency 10%		%	10.00	1,724.12		-	2,229.10	2,229.10			2,329.49	2,329.49	
total cost per 10 lineal meters				18,965.28			24,520.10	24,520.10			25,624.36	25,624.36	
Construction cost per 10 m sections 1000 - 1500mm deep													
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	240	m3	46.62	11,188.58		62.88	15,091.20	15,091.20		66.80	16,032.00	16,032.00	includes topsoil stripping and clearing
fine grading	200	m2	1.76	351.41		2.18	436.00	436.00		2.33	466.00	466.00	
rock pitching	20	m2	152.64	3,052.89		186.30	3,726.00	3,726.00		189.28	3,785.60	3,785.60	
landscaping/ planting (140mm x 3/m2)	200	m2	23.51	4,702.36		30.60	6,120.00	6,120.00		31.09	6,218.00	6,218.00	
tubestock x 3/m2	200	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)	3	no	445.21	1,335.62		489.60	1,468.80	1,468.80		526.69	1,580.07	1,580.07	
Mulch	200	m2	13.99	2,798.66		18.00	3,600.00	3,600.00		18.93	3,786.00	3,786.00	allowed for 150mm
10% Contingency		%	10.00	2,342.95		-	3,044.20	3,044.20			3,186.77	3,186.77	
total cost per 10 meters				25,772.47			33,486.20	33,486.20			35,054.44	35,054.44	
Maintenance cost per annum													
20m wide x 10lm per annum	1	Item	381.61	381.61		732.00	732.00	732.00		783.00	783.00	783.00	based on 200m2; RWA estimate
Subtotal				23,132.10			30,467.15	30,467.15			31,905.40	31,905.40	
Total cost for construction of a 20m wide x 10m length Living Stream													
10	m			23,132.10			30,467.15	30,467.15			31,905.40	31,905.40	
Total cost for Peel Sub-Drain O – 500m x 20m wide; Living Stream													
500	m			1,156,605			1,523,358	1,523,358			1,595,270	1,595,270	

Piping Sub P Drain in Casuarina

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
We have adjusted the rates for this section and offset it by the actual costs received by Cok on 01/03/2023 for the works complete to date. This in turn leaves a remaining sum required to complete the construction.													
Piping of the Sub P drain in Casuarina													
Preliminaries Item	20.0	%		194,379.32			236,293.01	236,293.01			281,237.07	281,237.07	
Remove Existing Headwall at Thomas Road incl traffic management	1	no	19,080.57	19,080.57		20,700.53	20,700.53	20,700.53		22,604.98	22,604.98	22,604.98	Allowed to escalate this to today's rates due to lack of better information
Clean out existing open drain	810	m	63.60	51,517.54		75.49	61,146.90	61,146.90		86.55	70,105.50	70,105.50	
Dispose of material/vegetation	1	item	15,264.46	15,264.46		16,560.43	16,560.43	16,560.43		17,916.06	17,916.06	17,916.06	Allowed to escalate this to today's rates due to lack of better information
Grade Invert	910	m	6.36	5,787.77		8.33	7,580.30	7,580.30		8.83	8,035.30	8,035.30	
Supply and Install 900 Dia Class 3 RC RRI pipe	646	m	628.39	405,937.89		795.00	513,570.00	513,570.00		958.01	618,874.46	618,874.46	
Supply and Install 1500 Dia Class 3 RC RRI pipe	169	m	2,143.38	362,231.93		2,500.00	422,500.00	422,500.00		3,088.65	521,981.85	521,981.85	
Backfill with clean sand and compact for 900 Dia pipe	1,390	m3	31.80	44,203.32		42.00	58,380.00	58,380.00		44.10	61,299.00	61,299.00	
Backfill with clean sand and compact for 1500 Dia pipe	665	m3	31.80	21,147.63		42.00	27,930.00	27,930.00		44.10	29,326.50	29,326.50	
Construct manhole structure to connect culverts under Thomas Road	1	item	19,080.57	19,080.57		24,500.00	24,500.00	24,500.00		24,500.00	24,500.00	24,500.00	
Supply and install manhole to suit 900dia pipe	2	no	6,360.19	12,720.38		6,600.00	13,200.00	13,200.00		7,207.20	14,414.40	14,414.40	
Supply and install manhole to suit 1500dia pipe	1	no	6,360.19	6,360.19		6,600.00	6,600.00	6,600.00		7,207.20	7,207.20	7,207.20	
Supply and install splay bend to 1500 dia pipe	1	no	1,272.04	1,272.04		1,388.89	1,388.89	1,388.89		1,715.92	1,715.92	1,715.92	
Supply and install headwall to suit 1500 dia pipe	1	no	3,476.20	3,476.20		3,558.00	3,558.00	3,558.00		4,000.00	4,000.00	4,000.00	
225 dia pipe	1	item	1,272.04	1,272.04		1,200.00	1,200.00	1,200.00		1,310.40	1,310.40	1,310.40	
375 dia pipe	1	item	1,272.04	1,272.04		1,300.00	1,300.00	1,300.00		1,419.60	1,419.60	1,419.60	
450 dia pipe	1	item	1,272.04	1,272.04		1,350.00	1,350.00	1,350.00		1,474.20	1,474.20	1,474.20	
Engineering and Surveying	7.5	%		87,470.70			106,331.85	106,331.85			126,556.68	126,556.68	
Contingency	10.0	%		125,374.66			152,408.99	152,408.99			181,397.91	181,397.91	
Pro-rata the above to reduce to 174m in lieu of 815m	(1.0)	item				1,318,570.70	(1,318,570.70)	(1,318,570.70)		1,569,371.00	(1,569,371.00)	(1,569,371.00)	
Subtotal				1,379,121.31			357,928.21	357,928.21			426,006.04	426,006.04	
Construction Costs as Provided by Cok on 01/03/2023													
Construction costs for completed works to date	1	Item			668,369.58			668,369.58	550,916.00			550,916.00	We understand that this represents 641m of actual costs (leaving 174m of remaining works). Actual Cost updated by Cok on 21/07/2024
Total cost per m of Piping Sub P Drain in Casuarina													
				1,692.17			1,259.26				1,198.68		
Total cost for construction of Piping Sub P Drain in Casuarina													
	815	m		1,379,121	668,370		357,928	1,026,298	550,916		426,006	976,922	

Piping Sub P1 Drain in Casuarina

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
<b>Proposed Piping of Portions of Peel Sub P1 Drain, Casuarina</b>													
Preliminaries	1	item	49,191.46	49,191.46			62,132.97	62,132.97			67,700.07	67,700.07	
Remove existing pipe culvert	1	no	1,272.04	1,272.04		1,380.04	1,380.04	1,380.04		1,451.65	1,451.65	1,451.65	Allowed to escalate this to today's rates due to lack of better information
Clean out existing open drain	185	m	63.60	11,766.35		75.49	13,965.65	13,965.65		86.55	16,011.75	16,011.75	
Dispose of material/vegetation	1	item	3,816.11	3,816.11		4,140.11	4,140.11	4,140.11		4,479.02	4,479.02	4,479.02	Allowed to escalate this to today's rates due to lack of better information
Grade Invert	185	m	6.36	1,176.64		8.33	1,541.05	1,541.05		8.83	1,633.55	1,633.55	
Supply and Install 1200 Dia Class 3 RC RRI pipe	185	m	1,061.82	196,437.17		1,350.00	249,750.00	249,750.00		1,474.20	272,727.00	272,727.00	
Backfill with clean sand and compact for 1200 Dia pipe	890	m3	31.80	28,302.85		42.00	37,380.00	37,380.00		44.10	39,249.00	39,249.00	trenching allowed
Supply and install headwall to suit 1200 dia pipe	1	no	3,476.20	3,476.20		2,508.00	2,508.00	2,508.00		2,948.40	2,948.40	2,948.40	
Engineering and surveying	7.5	%		22,157.91			27,959.84	27,959.84			30,465.03	30,465.03	
Contingency	10	%		31,759.67			40,075.77	40,075.77			43,666.55	43,666.55	
<b>Subtotal</b>				<b>349,356.40</b>			<b>440,833.42</b>	<b>440,833.42</b>			<b>480,332.03</b>	<b>480,332.03</b>	
<b>Total cost per m of Piping Sub P1 Drain in Casuarina</b>													
				<b>1,888.41</b>			<b>2,382.88</b>	<b>440,833.42</b>			<b>2,596.39</b>	<b>480,332.03</b>	
<b>Total cost for construction of Piping Sub P1 Drain in Casuarina</b>													
	<b>185</b>	<b>m</b>		<b>349,356</b>			<b>440,833</b>	<b>440,833</b>			<b>480,332</b>	<b>480,332</b>	



DCAS P1A drain

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Construction cost per 10 m sections <1000mm deep													Rates include for preliminaries
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	\$56.00	m3	46.62	2,610.67		62.88	3,521.28	3,521.28		66.80	3,740.80	3,740.80	includes topsoil stripping and clearing
fine grading	\$80.00	m2	1.76	140.57		2.18	174.40	174.40		2.33	186.40	186.40	
rock pitching	\$10.00	m2	152.64	1,526.45		186.30	1,863.00	1,863.00		189.28	1,892.80	1,892.80	
landscaping/ planting (140mm x 3/m2)	\$80.00	m2	23.51	1,880.94		30.60	2,448.00	2,448.00		31.09	2,487.20	2,487.20	
tubestock x 3/m2	\$3.00	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)		no	445.21	-		489.60	-	-		526.69	-	-	
Mulch	\$80.00	m2	13.99	1,119.46		18.00	1,440.00	1,440.00		18.93	1,514.40	1,514.40	allowed for 150mm
Contingency 10%		%	10.00	727.81			944.67	944.67			982.16	982.16	
total cost per 10 meters				8,005.89			10,391.35	10,391.35			10,803.76	10,803.76	
Maintenance Cost per annum													
8m wide x 10m per annum	\$1.00	Item	152.65	152.65		378.00	378.00	378.00		405.00	405.00	405.00	based on 80m2; RWA estimate
Subtotal				8,311.19			10,769.35	10,769.35			11,208.76	11,208.76	
<b>Total cost for construction of a 8m wide x 10m length Living Stream</b>	<b>10</b>	<b>m</b>		<b>8,311.19</b>			<b>10,769.35</b>	<b>10,769.35</b>			<b>11,208.76</b>	<b>11,208.76</b>	
<b>Total Cost for P1A drain 220m x 8m wide; Living Stream</b>	<b>220</b>	<b>m</b>		<b>182,846</b>			<b>236,926</b>	<b>236,926</b>			<b>246,593</b>	<b>246,593</b>	

DCAS Drain O

Items	Qty	Unit	Unit Rate \$2022	Total Cost \$2022	Actual Costs	Unit Rate(\$2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Costs	Unit Rate(\$2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
Construction cost per 10 m sections <1000mm deep													Rates include for preliminaries
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	140	m3	46.62	6,526.67		62.88	8,803.20	8,803.20		66.80	9,352.00	9,352.00	includes topsoil stripping and clearing
fine grading	200	m2	1.76	351.41		2.18	436.00	436.00		2.33	466.00	466.00	
rock pitching	10	m2	152.64	1,526.45		186.30	1,863.00	1,863.00		189.28	1,892.80	1,892.80	
landscaping/ planting (140mm x 3/m2)	200	m2	23.51	4,702.36		30.60	6,120.00	6,120.00		31.09	6,218.00	6,218.00	
tubestock x 3/m2	200	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)	3	no	445.21	1,335.62		489.60	1,468.80	1,468.80		526.69	1,580.07	1,580.07	
Mulch	200	m2	13.99	2,798.66		18.00	3,600.00	3,600.00		18.93	3,786.00	3,786.00	allowed for 150mm
Contingency 10%		%	10.00	1,724.12		-	2,229.10	2,229.10			2,329.49	2,329.49	
total cost per 10 lineal meters				18,965.28			24,520.10	24,520.10			25,624.36	25,624.36	
Construction cost per 10 m sections 1000 - 1500mm deep													
Earthworks and Site Preparation													
bulk earthworks (cut to spoil, compact and final grade)	240	m3	46.62	11,188.58		62.88	15,091.20	15,091.20		66.80	16,032.00	16,032.00	includes topsoil stripping and clearing
fine grading	200	m2	1.76	351.41		2.18	436.00	436.00		2.33	466.00	466.00	
rock pitching	20	m2	152.64	3,052.89		186.30	3,726.00	3,726.00		189.28	3,785.60	3,785.60	
landscaping/ planting (140mm x 3/m2)	200	m2	23.51	4,702.36		30.60	6,120.00	6,120.00		31.09	6,218.00	6,218.00	
tubestock x 3/m2	200	m2	Excluded	Excluded		18.36	Excluded	-		20.12	Excluded	-	
advanced tree planting (no.)	3	no	445.21	1,335.62		489.60	1,468.80	1,468.80		526.69	1,580.07	1,580.07	
Mulch	200	m2	13.99	2,798.66		18.00	3,600.00	3,600.00		18.93	3,786.00	3,786.00	allowed for 150mm
10% Contingency		%	10.00	2,342.95		-	3,044.20	3,044.20			3,186.77	3,186.77	
total cost per 10 meters				25,772.47			33,486.20	33,486.20			35,054.44	35,054.44	
Maintenance cost per annum													
20m wide x 10lm per annum 20m	1	Item	381.61	381.61		732.00	732.00	732.00		783.00	783.00	783.00	based on 200m2; RWA estimate
Subtotal				23,132.10			30,467.15	30,467.15			31,905.40	31,905.40	
Total cost for construction of a 20m wide x 10m length Living Stream													
10	m			23,132.10			30,467.15	30,467.15			31,905.40	31,905.40	
Total Cost for Drain O 500m x 8m wide; Living Stream													
500	m			1,156,605			1,523,358	1,523,358			1,595,270	1,595,270	

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## **ANNEXURE D – Public Open Space Cost Breakdown**

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(DCA3) - Casuarina Public Open Space													
	Area (m <sup>2</sup> ) / Qty	Unit Rate	Total Unit Cost (\$2022)	Actual Cost	Unit Rate (2023)	Total Estimated Cost (\$2023)	Total Unit Cost (\$2023)	Actual Cost	Unit Rate (2024)	Total Estimated Cost (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments	
District playing field	30,000	71.08	2,132,371	-	99.06	2,971,903	2,971,903	-	111.68	3,350,285	3,350,285		
Misc. POS (estimated on average rate for Local and Neighbourhood parks)	83,199	141.17	4,985,390	-	213.68	17,778,052	17,778,052	-	263.37	21,912,225	21,912,225		
POS 1 (Neighbourhood Park)	40,602	137.68	5,589,951	-	174.50	7,087,526	7,087,526	-	220.26	8,942,840	8,942,840		
POS 2 (Neighbourhood Park)	29,522	137.68	4,064,493	-	154.56	5,153,390	5,153,390	-	220.26	6,502,402	6,502,402		
POS 3 (Local Park)	945	144.65	136,698	-	252.80	238,897	238,897	-	306.49	289,630	289,630		
POS 4 (Neighbourhood Park)	10,091	137.68	1,389,296	-	174.50	1,761,495	1,761,495	-	220.26	2,222,605	2,222,605		
POS 5 (Local Park)	2,490	144.65	360,188	-	252.80	629,475	629,475	-	306.49	763,151	763,151		
POS 6 (Local Park)	2,152	144.65	311,295	-	252.80	544,028	544,028	-	306.49	659,559	659,559		
POS 7 (Neighbourhood Park)	24,363	137.68	3,354,218	-	174.50	4,252,830	4,252,830	-	220.26	5,366,101	5,366,101		
POS 8 (Local Park)	904	144.65	130,767	-	252.80	228,532	228,532	-	306.49	277,064	277,064		
POS 9 (Local Park)	1,270	144.65	183,710	-	252.80	321,057	321,057	-	306.49	389,238	389,238		
POS 10, 11 & 12 (max 2% Restricted POS)	13,721	131.02	644,845	-	184.14	2,526,622	2,526,622	-	197.82	2,714,290	2,714,290		
<b>Sub-Total</b>	<b>239,259</b>		<b>23,283,219</b>			<b>43,493,807</b>	<b>43,493,807</b>			<b>53,389,388</b>	<b>53,389,388</b>		
<b>Total Footprint Cost</b>	<b>239,259</b>	<b>97.31</b>	<b>23,283,219</b>	<b>181.79</b>	<b>43,493,807</b>	<b>43,493,807</b>	<b>43,493,807</b>	<b>223.14</b>	<b>53,389,388</b>	<b>53,389,388</b>	<b>53,389,388</b>		

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Items	Area (m²)/Qty	Unit	Unit Rate	Total Unit Cost (\$2023)	Assumptions & Comments	Unit Rate (\$2023)	Total Unit Cost (\$2023)		Unit Rate (\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
<b>Earthworks</b>					Allow 0.5m average over entire site						Generally, rates include for Preliminaries and contingency as there is no separate items for these
Cut to fill over 1,000m³ - allowance	72,000	m³	12.00	431,887	Allow 50% of site	15.97	574,920		17.25	621,000	Balanced cut and fill over site 500mm-1000mm deep
Clearing scrub & trees - allowance	72,000	m²	3.69	132,888	Allow 100% of site	4.57	329,040		4.84	348,480	
Strip topsoil and respread	72,000	m²	2.34	168,325		2.83	203,760		3.04	218,880	Allowance of 150mm deep top soil
<b>Sub total</b>			<b>10.18</b>	<b>733,101</b>		<b>15.39</b>	<b>1,107,720.00</b>		<b>16.51</b>	<b>1,188,360.00</b>	
<b>Garden Beds - Landscaped Surrounds</b>											
Prep of planting area (weed removal & general leveling)	10,000	m²	3.10	30,955	Assume 1ha	3.50	35,000		5.31	53,100	
Import topsoil and machine spread (150mm thick)	10,000	m²	17.35	173,493	Assume 1ha	22.01	220,100		24.84	248,400	
Soil conditioner (20mm thick blended into top 200mm @ \$60/m³ plus \$3 install)	10,000	m²	5.20	52,004	Assume 1ha	7.00	70,000		7.13	71,300	Allowed for a suoval of \$100/m³
Suoval and lay standard mulch by hand (75mm layer - \$50/m³ + \$3 install)	10,000	m²	9.63	96,344	Assume 1ha	10.00	100,000		10.49	104,900	Allowed for suoval of \$56/m³
Suoval and lay high grade mulch by hand (75mm layer - \$90/m³ + \$3.50 fine finish install)	10,000	m²	14.77	147,700	Assume 1ha	15.00	150,000		15.27	152,700	Allowed for suoval of \$96/m³
Supply and install plants (includes allowance for 1 x 100l tree per 40m²) see notes	10,000	m²	34.98	349,789	Assume 1ha	43.13	431,300		45.09	450,900	
Miscellaneous allowance (kerb edging, feature retaining walls)		m²	6.19	61,910	Assume 1ha	6.69	66,900		7.30	73,000	This is highly dependent on scope as feature retaining walls are expensive structures. We have only allowed to escalate the March 2022 rate till today due to lack of better information
<b>Sub total</b>	10,000		<b>76.45</b>	<b>764,495</b>		<b>92.33</b>	<b>923,300.00</b>		<b>100.16</b>	<b>1,001,600.00</b>	
<b>Water Supply &amp; Reticulation</b>											
Irrigation - suoval & install materials	68,400	m²	8.02	548,740	Assume 95% of POS	19.00	1,299,600		20.40	1,395,360	(item) price of pumps and bores varies according to the volume of water required, depth of water table, type of soil. Excluded allowance for tank includes for tank
Bore (shallow - superficial)		Item	80,482.42	80,482	Allows 20m (50m) bore construction	91,000.00	91,000		96,000.00	96,000	
Bore (artesian)	1	Item	185,728.67	-		190,000.00	-		200,000.00	-	
Iron Bacteria Filtration Unit		Item	99,055.29	-		149,000.00	-		156,000.00	-	
<b>Sub total</b>			<b>9.20</b>	<b>629,223</b>		<b>20.33</b>	<b>1,390,600.00</b>		<b>21.80</b>	<b>1,491,360.00</b>	
<b>Turfing</b>											
Prep of turfing area (weed removal & general leveling)		m²	3.45	-	Completed at earthworks stage	3.50	-		5.31	-	
Import topsoil and spread (150mm thick)		m²	17.35	-		22.01	-		24.84	-	
Soil conditioner	55,000	m²	5.20	286,022	Assume 5.5 ha	7.00	385,500		7.13	392,150	20mm thick
Suoval and lay turf (roll on)	55,000	m²	8.23	452,665	Assume 5.5 ha	25.00	1,375,000		25.65	1,410,750	
Supply and install stolons	55,000	m²	4.92	270,699	Assume 5.5 ha	5.45	299,750		5.72	314,600	
Fertilising	55,000	m²	0.25	13,620	Assume 5.5 ha	0.69	37,950		0.72	39,600	
Soil Wetting Agent	55,000	m²	0.31	17,055	Assume 5.5 ha	0.53	29,150		0.56	30,800	
Weed spraying	55,000	m²	1.11	60,907	Assume 5.5 ha	1.38	75,900		1.45	79,750	
<b>Sub total</b>			<b>11.48</b>	<b>631,248</b>		<b>14.52</b>	<b>798,600.00</b>		<b>15.02</b>	<b>826,100.00</b>	
<b>Hardworks (supply &amp; install)</b>											
Active piece of equipment (general allowance - basketball court, BMX jumps, hit up wall, exercise equipment)		Item	34,669.35	-		50,000.00	-		55,000.00	-	This will be highly dependant on what is required; however, we allowed for provisional sum for an outdoor gym station as the current allowance seems low
Hardcourt		Item	80,482.42	-		126,400.00	-		149,600.00	-	allowed in this rate for an outdoor multifunction court of 510 sqm excluding fencing - Allowed for linemarking - Allowed for minimal stormwater drainage
Cricket practice nets (2 pitches and net)	1	Item	73,684.94	73,685	1 set	92,200.00	92,200		96,800.00	96,800	Double practice net enclosure 266



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Items	Area (m <sup>2</sup> )/Qty	Unit	Unit Rate	Total Unit Cost €(2021)	Assumptions & Comments	Unit Rate(€2023)	Total Unit Cost €(2023)		Unit Rate(€2024)	Total Unit Cost €(2024)	Rawlinsons Additional Assumptions & Comments
<b>Earthworks</b>					Allow 0.5m average over entire site						Generally, rates include for Preliminaries and contingency as there is no separate items for these
Cut to fill over 1,000m3 - allowance		m3	12.00	275,928	Allow 50% of site	15.97	367,310		17.25	396,750	Balanced cut and fill over site 500mm-1000mm deep
Clearing scrub & trees - allowance	46,000	m2	3.69	84,901	Allow 100% of site	4.57	210,220		4.84	222,640	
Strip topsoil and respread	46,000	m2	2.34	107,541		2.83	130,180		3.04	139,840	Allowance of 150mm deep top soil
<b>Sub total</b>			<b>10.18</b>	<b>468,370</b>		<b>15.39</b>	<b>707,710.00</b>		<b>16.51</b>	<b>759,230.00</b>	
<b>Garden Beds - Landscaped Surrounds</b>											
Prep of plantino area (weed removal & general leveling)	1,144	m2	3.10	3,541	Assume 0.1144ha	3.50	4,004		5.31	6,075	
Import topsoil and machine spread (150mm thick)	1,144	m2	17.35	19,848	Assume 0.1144ha	22.01	25,179		24.84	28,417	
Soil conditioner (20mm thick blended into top 200mm @ \$60/m3 plus \$3 install)	1,144	m2	5.20	5,949	Assume 0.1144ha	7.00	8,008		7.13	8,157	Allowed for a supply of \$100/m3
Soil and lav standard mulch by hand (75mm layer - \$50/m3 + \$3 install)	1,144	m2	9.63	11,022	Assume 0.1144ha	10.40	11,940		10.59	12,001	Allowed for supply of \$56/m3
Soil and lav high grade mulch by hand (75mm layer - \$90/m3 + \$3.50 fine finish install)		m2	14.77			15.00			15.27		Allowed for supply of \$96/m3
Supply and install plants (includes allowance for 1 x 100l tree per 40m2) see notes	1,144	m2	34.98	40,016	Assume 0.1144ha	43.13	49,341		45.09	51,583	
Miscellaneous allowance (kerb edging, feature retaining walls)		m2	6.19	7,082	Assume 0.1144ha	6.69	7,653		7.30	8,351	This is highly dependent on scope as feature retaining walls are expensive structures. We have only allowed to escalate the March 2022 rate till today due to lack of better information
<b>Sub total</b>	1,144		<b>76.45</b>	<b>87,458</b>			<b>105,625.52</b>		<b>100.16</b>	<b>114,583.04</b>	
<b>Water Supply &amp; Reticulation</b>											
Irrigation - supply & install materials	44,800	m2	8.02	359,409	Assume 100% of turf & garden	19.00	851,200		20.40	913,920	
Bore (shallow - superficial)		Item	80,482.42	80,482	Allows 20m (50m) bore construction	91,000.00	91,000		96,000.00	96,000	(Item) price of pumps and bores varies according to the volume of water required, depth of water table, type of soil. Excluded allowance for tank
Bore (artesian)	1	Item	185,728.67		Allows approx 100m bore construction	190,000.00	-		200,000.00	-	includes for tank
Iron Bacteria Filtration Unit		Item	99,055.29			149,000.00			156,000.00		
<b>Sub total</b>			<b>9.82</b>	<b>439,891</b>		<b>21.03</b>	<b>942,200.00</b>		<b>22.54</b>	<b>1,009,920.00</b>	
<b>Turfing</b>											
Prep of turfing area (weed removal & general leveling)		m2	3.45		Completed at earthworks stage	3.50	-		5.31	-	
Import topsoil and spread (150mm thick)		m2	17.35			22.01			24.84		
Soil conditioner	43,656	m2	5.20	227,029	Assume 4.3656ha	7.00	305,592		7.13	311,267	20mm thick
Supply and lay turf (roll on)		m2	8.23			25.00			25.65		
Supply and install stolons	43,656	m2	4.92	214,866	Assume 4.3656ha	5.45	237,925		5.72	249,712	
Fertilising	43,656	m2	0.25	10,811	Assume 4.3656ha	0.69	30,123		0.72	31,432	
Soil Wetting Agent		m2	0.31			0.53			0.56		
Weed spraying	43,656	m2	1.11	48,345	Assume 4.3656ha	1.38	60,245		1.45	63,301	
<b>Sub total</b>			<b>11.48</b>	<b>501,050</b>		<b>14.52</b>	<b>633,885.12</b>		<b>15.02</b>	<b>655,713.12</b>	
<b>Hardworks (supply &amp; install)</b>											
Active piece of equipment (general allowance - basketball court, BMX jumps, hit up wall, exercise equipment)		Item	34,669.35			50,000.00	-		55,000.00	-	This will be highly dependant on what is required, however, we allowed for provisional sum for an outdoor gym station as the current allowance seems low
Hardcourt		Item	80,482.42	-		126,400.00	-		149,600.00	-	- allowed in this rate for an outdoor multifunction court of 510 sqm excluding fencing - Allowed for minimal stormwater drainage
Cricket practice nets (2 pitches and net)	1	Item	73,684.94	73,685	1 set	92,200.00	92,200		96,800.00	96,800	Double practice net enclosure 26620 long x 7800 wide Cricket pitch 29120 long x 4200 wide over all including synthetic turf, 100 thick reinforced concrete slab, 200x200 extra thickening Allowed 4 lights per ovalino field
Cricket pitch (all seasons)		Item	23,871.13	23,871	1						

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L2 - 0.3ha											
Items	Area (m²)/Qty	Unit	Unit Rate	Total Unit Cost (\$2022)	Assumptions & Comments	Unit Rate(\$2023)	Total Unit Cost (\$2023)		Unit Rate(\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
<b>Earthworks</b>											
Cut to fill over 1,000m3 - allowance	500	m3	12.00	5,998	Allow nominal 500m3	15.97	7,985		17.25	8,625	Generally, rates include for Preliminaries and Contingency as there is no separate items for these
Clearing scrub & trees - allowance		m2	3.69	-	Nil	4.57	-		4.84	-	Balanced cut and fill over site 500mm-1000mm deep
Strip topsoil and respread		m2	2.34	-		2.83	-		3.04	-	Allowance of 150mm deep top soil
<b>Sub total</b>			<b>2.00</b>	<b>5,998</b>		<b>2.66</b>	<b>7,985.00</b>		<b>2.88</b>	<b>8,635.00</b>	
<b>Garden Beds - Landscaped Surrounds</b>											
Prep of plantino area (weed removal & general leveling)	3,000	m2	3.10	4,643	Allow 50% of POS	3.50	10,500		5.31	15,930	
Import topsoil and machine spread (150mm thick)	3,000	m2	17.35	26,024	Allow 50% of POS	22.01	66,030		24.84	74,520	
Soil conditioner (20mm thick blended into top 200mm @ \$60/m3 plus \$3 install)	3,000	m2	5.20	7,801	Allow 50% of POS	7.00	21,000		7.13	21,390	Allowed for a supply of \$100/m3
Suocul and lay standard mulch by hand (75mm layer - \$50/m3 + \$3 install)	3,000	m2	8.61	12,348	Allow 50% of POS	10.00	25,000		10.60	26,650	Allowed for supply of \$50/m3
Suocul and lay high grade mulch by hand (75mm layer - \$90/m3 + \$3.50 fine finish install)	3,000	m2	14.77	22,148	Allow 50% of POS	15.00	45,000		15.27	45,810	Allowed for supply of \$96/m3
Suocul and install plants (includes allowance for 1 x 100l tree per 40m2) see notes	3,000	m2	34.98	52,468	Allow 50% of POS	43.13	129,390		45.09	135,270	
Miscellaneous allowance (kerb edging, feature retaining walls)		m2	6.19	9,286	Allow 50% of POS	6.69	20,070		7.30	21,900	This is highly dependent on scope as feature retaining walls are expensive structures. We have only allowed to escalate the March 2022 rate till today due to lack of better information
<b>Sub total</b>	3,000		<b>81.58</b>	<b>122,371</b>		<b>97.33</b>	<b>291,990.00</b>		<b>104.94</b>	<b>314,820.00</b>	
<b>Water Supply &amp; Reticulation</b>											
Irrigation - supply & install materials	3,000	m2	8.02	24,068	Assume 100% of POS	19.00	57,000		20.40	61,200	
Bore (shallow - superficial)		Item	80,482.42	80,482	Allows 20m (50M) bore construction	91,000.00	91,000		96,000.00	96,000	(Item) price of pumps and bores varies according to the volume of water required, depth of water table, type of soil. Excluded allowance for tank includes for tank
Bore (artesian)	1	Item	185,728.67	-		190,000.00	-		200,000.00	-	
Iron Bacteria Filtration Unit		Item	99,055.79	-		149,000.00	-		156,000.00	-	
<b>Sub total</b>			<b>34.85</b>	<b>104,550</b>		<b>49.33</b>	<b>148,000.00</b>		<b>52.40</b>	<b>157,200.00</b>	
<b>Turfine</b>											
Prep of turfing area (weed removal & general leveling)	3,000	m2	3.45	5,168	Allow 50% of POS	3.50	10,500		5.31	15,930	
Import topsoil and spread (150mm thick)	3,000	m2	17.35	26,024	Allow 50% of POS	22.01	66,030		24.84	74,520	
Soil conditioner	3,000	m2	5.20	7,801	Allow 50% of POS	7.00	21,000		7.13	21,390	20mm thick
Suocul and lay turf (roll on)	3,000	m2	8.23	12,348	Allow 50% of POS	25.00	75,000		25.65	76,950	
Supply and install stolons		m2	4.92	-		5.45	-		5.72	-	
Fertilising	3,000	m2	0.25	371	Allow 50% of POS	0.69	2,070		0.72	2,160	
Soil Wetting Agent		m2	0.31	-		0.53	-		0.56	-	
Weed spraying	3,000	m2	1.11	1,661	Allow 50% of POS	1.38	4,140		1.45	4,350	
<b>Sub total</b>			<b>35.58</b>	<b>53,373</b>		<b>59.58</b>	<b>178,740.00</b>		<b>65.10</b>	<b>195,300.00</b>	
<b>Hardwoods (supply &amp; install)</b>											
Active piece of equipment (general allowance - basketball court, BMX jumps, hit up wall, exercise equipment)		Item	34,669.35	-		50,000.00	-		55,000.00	-	This will be highly dependant on what is required; however, we allowed for provisional sum for an outdoor gym station as the current allowance seems low
Hardcourt		Item	80,482.42	-		126,400.00	-		149,600.00	-	- allowed in this rate for an outdoor multifunction court of 510 sqm excluding fencing - Allowed for linemarking - Allowed for minimal stormwater drainage

6/10/2015, Estimate# 2005020-00, Estimate, 2005020, Estimate and Cost Report#1.2, 2.0, Cost Estimate, 2005020, Cost Estimate Report#1.1, 1.0 Report documents/Landscaping, POC#05733-00, Cost 007, Landscaping, 00000, POC, 20050200, 2005 UPRONT

**Wetlands Buffer 1.0ha**

Items	Area (m²)/Qty	Unit	Unit Rate	Total Unit Cost (\$2022)	Unit Rate(\$2023)	Total Unit Cost (\$2023)	Unit Rate(\$2024)	Total Unit Cost (\$2024)	Rawlinsons Additional Assumptions & Comments
									Generally, rates include for Preliminaries and contingency as there is no separate items for these
<b>Earthworks</b>									
Import topsoil and spread to contour work into adjoining levels (150mm thick)	2,500	m2	17.35	43,373	19.25	48,125	20.33	50,825	
<b>Sub total</b>			<b>4.34</b>	<b>43,373</b>	<b>4.81</b>	<b>48,125.00</b>	<b>5.08</b>	<b>50,825.00</b>	
<b>Landscaped Surrounds</b>									
Supply and installation of upland tubestock - initial planting	15,000	No	4.77	71,583	7.04	105,600	7.71	115,650	
Supply and installation of upland tubestock - year 1 infill planting	4,500	No	5.08	22,843	7.4	33,300	8.07	36,315	Indexed for 2025
Supply and installation of upland tubestock - year 2 infill planting	2,250	No	5.29	11,902	7.71	17,348	8.39	18,878	Indexed for 2026
Supply and installation of Ephemeral hydro-zone tubestock - initial planting	40,000	No	4.77	190,889	7.74	309,600	8.48	339,200	
Supply and installation of Ephemeral hydro-zone tubestock - year 1 infill planting	12,000	No	5.08	60,915	8.14	97,680	8.87	106,440	Indexed for 2025
Supply and installation of Ephemeral hydro-zone tubestock - year 2 infill planting	6,000	No	5.29	31,738	8.49	50,940	9.23	55,380	Indexed for 2026
Supply and installation of soil conditioner (terracottem) - initial planting	55,000	No	5.20	286,022	5.46	300,300	5.84	321,200	20 thick conditioner spread evenly over plants
Supply and installation of soil conditioner (terracottem) - year 1	16,500	No	5.53	91,274	5.74	94,710	6.11	100,815	Indexed for 2025
Supply and installation of soil conditioner (terracottem) - year 2	8,250	No	5.76	47,555	5.98	49,335	6.35	52,388	Indexed for 2026
Supply and installation of herbivory protection (plant guards) - initial planting	55,000	No	2.24	123,362	4.02	221,100	4.08	224,400	
Supply and installation of herbivory protection (plant guards) - year 1	16,500	No	2.39	39,367	4.23	69,795	4.27	70,455	Indexed for 2025
Supply and installation of herbivory protection (plant guards) - year 2	8,250	No	2.49	20,510	4.4	36,300	4.44	36,630	Indexed for 2026
Weed control - year 1	11	days	1,414.54	15,560	2,758.88	30,348	3,223.47	35,458	
Weed control - year 2	11	days	1,473.98	16,214	2,877.00	31,647	3,361.49	36,976	
<b>Sub total</b>			<b>102.97</b>	<b>1,029,733</b>	<b>144.80</b>	<b>1,448,002.18</b>	<b>155.02</b>	<b>1,550,184.56</b>	
<b>Water Supply &amp; Reticulation</b>									
Watering - initial planting	13	day	1,801.77	23,166	2,940.00	37,800	3,293.75	42,348	
Watering - year 1	13	day	1,916.57	24,642	3,090.90	39,740	3,445.23	44,296	
Watering - year 2	13	day	1,997.11	25,677	3,222.29	41,429	3,584.65	46,088	
<b>Sub total</b>			<b>7.35</b>	<b>73,484</b>	<b>11.90</b>	<b>118,969.59</b>	<b>13.27</b>	<b>132,732.39</b>	
<b>Hardworks (supply &amp; install)</b>									
Fence - Reserve (conservation fencing)	300	m	55.72	16,716	83	24,948	94	28,164	allowed for 1800mm high galv. chain mesh with posts and barbed wire
Gate - Heavy Duty	2	No	3,260.69	6,521	2,043	4,087	2,173	4,345	5m wide gates allowed
<b>Sub total</b>			<b>2.32</b>	<b>23,237</b>	<b>2.90</b>	<b>29,034.72</b>	<b>3.25</b>	<b>32,509.22</b>	
<b>Total Development Costs</b>			<b>116.98</b>	<b>1,169,828</b>	<b>164.41</b>	<b>1,644,131</b>	<b>176.63</b>	<b>1,766,251</b>	
<b>Indirect Costs</b>									
Design, contract administration & construction management - % of overall project costs	12%			140,379		197,296		211,950	
<b>Sub total</b>			<b>14.04</b>	<b>140,379</b>	<b>19.73</b>	<b>197,295.78</b>	<b>21.20</b>	<b>211,950.14</b>	
<b>Total Unit Rate</b>			<b>131.02</b>	<b>1,310,207</b>	<b>184.14</b>	<b>1,841,427</b>	<b>197.82</b>	<b>1,978,201</b>	

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## **ANNEXURE E – Reasons For Variance**

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## ROADS

Code	Description	Cost \$2023	Cost \$2024	Difference	% Difference	Reasons for variance
1.1	DCA 1 Bertram Road Upgrade	\$5,694,203	\$6,615,040	\$920,837	16.17%	Rates updated to December 2024 Below the line costs to road construction compounded
1.2	DCA 1 Wellard Road Upgrade	\$20,571,437	\$23,906,470	\$3,335,033	16.21%	Rates updated to December 2024 Below the line costs to road construction compounded
1.3	DCA 2 Millar Road Upgrade	\$1,280,540	\$1,027,416	-\$253,124	-19.77%	Rates updated to December 2024 Below the line costs to road construction compounded Error in Actual Costs (CH36.77-186) used in 2023 report, now updated
1.4	DCA 2 Mortimer Road upgrade	\$6,496,450	\$7,309,935	\$813,485	12.52%	Rates updated to December 2024 Below the line costs to road construction compounded
1.5	DCA 2 Sunrise Boulevard 15.4m wide***	\$1,798,104	\$1,977,962	\$179,858	10.00%	Rates updated to December 2024 Below the line costs to road construction compounded
1.6	DCA 3 Thomas Road Upgrade	\$9,990,149	\$9,264,930	-\$725,219	-7.26%	Actual costs provided for 2024 update
1.7	DCA 4 Anketell Road Upgrade	\$11,479,353	\$12,934,529	\$1,455,176	12.68%	Rates updated to December 2024 Below the line costs to road construction compounded
1.8	DCA 5 Honeywood Avenue (Cordata Avenue)	\$2,346,020	\$2,680,816	\$334,796	14.27%	Rates updated to December 2024 Below the line costs to road construction compounded
1.9	DCA 5 Lyon Road Upgrade	\$4,343,010	\$4,343,010	\$0	0.00%	Actual costs already provided. No variance.
1.1	DCA 6 Hammond Road	\$1,906,626	\$2,264,460	\$357,834	18.77%	Rates updated to December 2024 Below the line costs to road construction compounded
1.11	DCA 6 Connector Road (Hammond Road Extension)	\$2,006,649	\$2,412,660	\$406,011	20.23%	Rates updated to December 2024 Below the line costs to road construction compounded
1.12	DCA 1 Culvert and Road Crossing over Peel Main Drain in Bertram	\$833,575	\$943,278	\$109,703	13.16%	Rates updated to December 2024 Below the line costs to road construction compounded
TOTAL ROADS COST (excl. GST)		\$68,470,947	\$75,680,506	\$7,209,559	10.53%	
GST		\$6,847,095	\$7,568,051	\$720,956	10.53%	
TOTAL ROADS COST (incl. GST)		\$75,318,042	\$83,248,557	\$7,930,515	10.53%	

## DRAINS

Code	Description	Cost \$2023	Cost \$2024	Difference	% Difference	Reasons for variance
2.1	DCA 1 Bertram Road Drainage Basin	\$375,215	\$375,215	\$0	0.00%	Actual costs already provided
2.2	Peel Sub N Drain Upgrade in Wellard	\$1,346,622	\$1,370,353	\$23,731	1.76%	Rates updated to December 2024 Actual costs for part of the works already provided
2.3	Peel Sub N1 Drain Upgrade in Wellard	\$491,082	\$274,274	-\$216,808	-44.15%	Rates updated to December 2024 Actual costs provided for 2024 update that are a lot lower than estimate
2.4	Peel Sub N2 Drain Upgrade in Wellard	\$385,546	\$324,052	-\$61,494	-15.95%	Rates updated to December 2024 Actual costs provided for 2024 update that are lower than estimate
2.5	Peel Sub P Drain in Casuarina	Excl.	Excl.			Excluded
2.6	Peel Sub P1 Drain in Casuarina	\$1,203,452	\$1,260,263	\$56,811	4.72%	Rates updated to December 2024
2.7	Peel Sub P1A Drain in Casuarina	\$670,277	\$701,919	\$31,642	4.72%	Rates updated to December 2024
2.8	Peel Sub O Drain in Casuarina	\$1,523,358	\$1,595,270	\$71,912	4.72%	Rates updated to December 2024
2.9	Piping of the Sub P Drain in Casuarina	\$1,026,298	\$976,922	-\$49,376	-4.81%	Rates updated to December 2024 Updated actual costs provided for 2024 update that are lower than the estimate
2.1	Piping of the Sub P1 Drain in Casuarina	\$440,833	\$480,332	\$39,499	8.96%	Rates updated to December 2024
2.11	Piping of the Sub P1A Drain in Casuarina	\$236,926	\$246,593	\$9,667	4.08%	Rates updated to December 2024
2.12	Piping of the Sub O Drain in Casuarina	\$1,523,358	\$1,595,270	\$71,912	4.72%	Rates updated to December 2024
	<b>TOTAL OPEN DRAINS COST (excl. GST)</b>	<b>\$9,222,967</b>	<b>\$9,200,463</b>	<b>-\$22,504</b>	<b>-0.24%</b>	
	GST	\$922,297	\$920,046	-\$2,251	-0.24%	
	<b>TOTAL OPEN DRAINS COST (incl. GST)</b>	<b>\$10,145,264</b>	<b>\$10,120,509</b>	<b>-\$24,755</b>	<b>-0.24%</b>	

## ROAD LANDSCAPING

Code	Description	Cost \$2023	Cost \$2024	Difference	% Difference	Reasons for variance
3.1	Bertram Road, Wellard	\$354,088	\$395,080	\$40,992	11.58%	Rates updated to December 2024
3.2	Wellard Road, Wellard	\$2,804,561	\$3,078,146	\$273,585	9.76%	Rates updated to December 2024
3.3	Millar Road	\$78,157	\$78,157	\$0	0.00%	Actual costs already provided
3.4	Mortimer Road, Wellard	\$304,043	\$339,819	\$35,776	11.77%	Rates updated to December 2024
3.5	Sunrise Boulevard, Wellard – 15.4m wide	\$157,144	\$175,311	\$18,167	11.56%	Rates updated to December 2024
3.6	Sunrise Boulevard, Wellard – 19.4m wide	\$216,571	\$241,623	\$25,052	11.57%	Rates updated to December 2024
3.7	Thomas Road, Wellard	\$1,387,890	\$1,552,103	\$164,213	11.83%	Rates updated to December 2024
3.8	Anketell Road, Wellard	\$929,426	\$1,038,122	\$108,696	11.69%	Rates updated to December 2024
3.9	Hammond Road Extension	\$1,112,818	\$1,242,745	\$129,927	11.68%	Rates updated to December 2024
3.1	Hammond Road Connector Road	\$802,774	\$896,942	\$94,168	11.73%	Rates updated to December 2024
3.11	Lyon Road	\$496,070	\$496,070	\$0	0.00%	Actual costs already provided
3.12	Cordata Ave, Wandi	\$388,037	\$434,896	\$46,859	12.08%	Rates updated to December 2024
TOTAL ROAD LANDSCAPE COST (excl. GST)		\$9,031,581	\$9,969,014	\$937,433	10.38%	
	GST	\$903,158	\$996,901	\$93,743	10.38%	
TOTAL ROAD LANDSCAPE COST (incl. GST)		\$9,934,739	\$10,965,915	\$1,031,176	10.38%	

## PUBLIC OPEN SPACES

Code	Description	Cost \$2023	Cost \$2024	Difference	% Difference	Reasons for variance
4.1	DCA 3 Casuarina Public Open Space					
	District playing field	\$2,971,903	\$3,350,285	\$378,382	13%	Rates updated to December 2024
	Misc. POS (estimated on averaged rate for Local and Neighb	\$17,778,052	\$21,912,225	\$4,134,173	23%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation. Updated to pick up the missed cell (Landscape Furniture)
	POS 1 (Neighbourhood Park)	\$7,087,526	\$8,942,840	\$1,855,315	26%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation. Updated to pick up the missed cell (Landscape Furniture)
	POS 2 (Neighbourhood Park)	\$5,153,390	\$6,502,402	\$1,349,012	26%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation. Updated to pick up the missed cell (Landscape Furniture)
	POS 3 (Local Park)	\$238,897	\$289,630	\$50,733	21%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation. Updated to pick up the missed cell (Landscape Furniture)
	POS 4 (Neighbourhood Park)	\$1,761,495	\$2,222,605	\$461,110	26%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation. Updated to pick up the missed cell (Landscape Furniture)
	POS 5 (Local Park)	\$629,475	\$763,151	\$133,676	21%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation. Updated to pick up the missed cell (Landscape Furniture)
	POS 6 (Local Park)	\$544,028	\$659,559	\$115,531	21%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation. Updated to pick up the missed cell (Landscape Furniture)
	POS 7 (Neighbourhood Park)	\$4,252,830	\$5,366,101	\$1,113,271	26%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation. Updated to pick up the missed cell (Landscape Furniture)
	POS 8 (Local Park)	\$228,532	\$277,064	\$48,531	21%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation. Updated to pick up the missed cell (Landscape Furniture)
	POS 9 (Local Park)	\$321,057	\$389,238	\$68,180	21%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation. Updated to pick up the missed cell (Landscape Furniture)
	POS 10, 11 & 12 (max 2% Restricted POS)	\$2,526,622	\$2,714,290	\$187,668	7%	Rates updated to December 2024
	DCA 3 Casuarina Public Open Space	\$43,493,807	\$53,389,388	\$9,895,581	23%	
4.2	DCA 4 Anketell North Public Open Space					
	POS 1 (Neighbourhood Park)	\$947,692	\$1,117,139	\$169,448	18%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture) Area of POS decreased by 357m2
	POS 2 (Local Playing field)	\$4,528,550	\$4,064,034	-\$464,516	-10%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture) Area of POS decreased by 11889m2
	POS 3 (Neighbourhood Park)	\$701,386	\$680,435	-\$20,951	-3%	Actual costs included in 2024 update Maintenance costs included Area of POS decreased by 49m2
	POS 4 (Neighbourhood Park)	\$288,898	\$364,524	\$75,625	26%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	POS 5 (Local Park)	\$80,644	\$97,769	\$17,126	21%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	POS 6 (Conservation - wetland buffer)	\$704,898	\$790,687	\$85,789	12%	Rates updated to December 2024 Area of POS increased by 169m2
	POS 7 (Conservation - wetland buffer)	\$1,282,186	\$1,439,339	\$157,153	12%	Rates updated to December 2024 Area of POS increased by 313m2
	POS 8 (Neighbourhood Park)	\$938,789	\$2,286,039	\$1,347,250	144%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture) Area of POS increased by 5001m2
	POS 9 (Neighbourhood Park)	\$433,784	\$547,337	\$113,552	26%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	POS 10 (Community Site - land only)	\$0	\$0	\$0		
	POS 11 (Neighbourhood Park)	\$220,471	\$278,184	\$57,713	26%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	POS 12 (Neighbourhood Park)	\$184,162	\$205,536	\$21,374	12%	Actual costs included in 2024 update Maintenance costs included Area of POS increased by 288m2
	1:5yr drainage	\$746,330	\$801,765	\$55,435	7%	Rates updated to December 2024
	DCA 4 Anketell North Public Open Space	\$11,057,790	\$12,672,787	\$1,614,997	15%	
4.3	DCA 5 Wandri North and South Open Space					
	Wandri Playing field (POS 22B)	\$2,270,159	\$2,270,159	\$0		Actual costs already provided
	POS 22A (Playing Fields)	\$197,073	\$233,510	\$36,437	18%	Rates updated to December 2024
	POS 22C (Neighbourhood Park)	\$2,452,662	\$2,452,662	\$0		Actual costs already provided
	DCA 5 Wandri North and South Open Space	\$4,919,894	\$4,956,331	\$36,437	1%	
4.4	DCA 6 Mandogalup Public Open Space					
	POS1 (Local Park)	\$505,350	\$612,666	\$107,317	21%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	POS2 (Neighbourhood Park)	\$1,488,133	\$1,877,684	\$389,551	26%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	POS3 (Local Park)	\$578,915	\$718,710	\$139,796	24%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture) Area of POS increased by 55m2



	POS4 (Local Park)	\$1,598,462	\$2,085,027	\$486,565	30%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture) Area of POS increased by 480m2
	POS5 (Neighbourhood Park)	\$2,053,536	\$658,252	-\$1,395,284	-68%	Actual costs included in 2024 update (provided costs lower than estimate) Maintenance costs included Area of POS increased by 372m2
	POS6 (Playing Fields)	\$1,067,243	\$1,264,563	\$197,321	18%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	POS7 (Local Park)	\$301,592	\$365,638	\$64,046	21%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	POS8 (Local Park)	\$340,018	\$323,012	-\$17,005	-5%	Actual costs included in 2024 update Maintenance costs included Area of POS increased by 285m2
	POS A (Neighbourhood Park)	\$2,126,153	\$1,522,777	-\$603,376	-28%	Actual costs included in 2024 update (provided costs lower than estimate) Maintenance costs added Area of POS increased by 16808m2
	POS B (Local Park)	\$910,084	\$563,211	-\$346,873	-38%	Actual costs included in 2024 update (provided costs lower than estimate) Area of POS increased by 111m2
	POS C (Playing Fields)	\$1,255,851	\$1,488,044	\$232,192	18%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	POS D (Neighbourhood Park)	\$2,695,222	\$1,454,417	-\$1,240,805	-46%	Actual costs included in 2024 update (provided costs lower than estimate) Maintenance costs added Area of POS increased by 845m2
	POS E (Local Park)	\$487,906	\$591,519	\$103,612	21%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	POS F (Local Park)	\$1,686,184	\$2,044,264	\$358,080	21%	Rates updated to December 2024 Error found in excel sheet linked cells in 2022 and 2023 calculation; updated to pick up the missed cell (Landscape Furniture)
	<b>DCA 6 Mandogalup Public Open Space</b>	\$17,094,646	\$15,569,784	-\$1,524,862	-9%	
<b>4.5</b>	<b>DCA 2-7 District Sporting Ground (excluding building)</b>	NOT INCLUDED	NOT INCLUDED			
	<b>TOTAL PUBLIC OPEN SPACE COST (excl. GST)</b>	<b>\$76,566,138</b>	<b>\$86,588,290</b>	<b>\$10,022,152</b>	<b>13%</b>	
	GST	\$7,656,614	\$8,658,829	\$1,002,215	13%	
	<b>TOTAL PUBLIC OPEN SPACE COST (incl. GST)</b>	<b>\$84,222,752</b>	<b>\$95,247,119</b>	<b>\$11,024,367</b>	<b>13%</b>	