

# Joseph Road Precinct

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## Development Contributions Plan

July 2019

Amended December 2023 (VC249)

Version	Date	Amendment	Description of changes
1	December 2023	VC249	Incorporate changes associated with small second dwelling exemption.

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# 1 INTRODUCTION

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## 1.1 Purpose

The Joseph Road Precinct Development Contributions Plan (the 'DCP') has been prepared by the Victorian Planning Authority (VPA) with the assistance of the City of Maribyrnong, service authorities, and other major stakeholders.

The DCP:

- Outlines public realm projects required to assist in meeting the Joseph Road Precinct Objectives and Guidelines;
- Outlines infrastructure projects required to ensure that future residents, visitors and workers in the area can be provided with timely access to infrastructure and services necessary to support a quality and affordable lifestyle;
- Establishes a framework for development proponents to make a financial contribution towards the cost the identified infrastructure projects in the public realm (principally on streets). It ensures that the cost of providing new infrastructure and services is shared equitably between various development proponents in accordance with the demand to be created by each development; and
- Provides the details of the calculation of financial contributions that must be made by future developments towards the nominated projects. In this way, it provides developers, investors and local communities with certainty about development contribution requirements and how these will be administered.

## 1.2 Report Structure

The DCP document comprises six parts:

### Section 2 – Strategic Planning and Justification

Section 2 explains the strategic basis for the DCP, which includes information about the Joseph Road Precinct.

### Section 3 – Charge Areas and Development Scenarios

Section 3 sets out the charge areas, development projections and project staging.

### Section 4 – Infrastructure Projects and Calculation of Contributions

Section 4 outlines the projects to be funded by the DCP and sets out how the development contributions are calculated and costs apportioned.

### Section 5 - Development Contributions Plan Administration and Implementation

Section 5 focuses on administration and implementation of the DCP

### Section 6 - Other Information

Section 6 provides other supporting information.

## 1.3 Planning & Environment Act 1987

The DCP has been prepared in accordance with Part 3B of the *Planning and Environment Act 1987* (the Act) as well as other relevant legislation and has been developed in line with the State and Local Planning



Policy Framework of the Maribyrnong Planning Scheme. It is consistent with the Minister for Planning's Direction on Development Contributions made under section 46M(1) of the Act and has regard to the Victorian Government's Development Contributions Guidelines (the 'DCP Guidelines').

The DCP provides for the charging of a Development Infrastructure Levy pursuant to section 46J(a) of the Act towards works, services and facilities. The DCP will not be providing for the charging of a Community Infrastructure Levy pursuant to section 46J(b) of the Act.

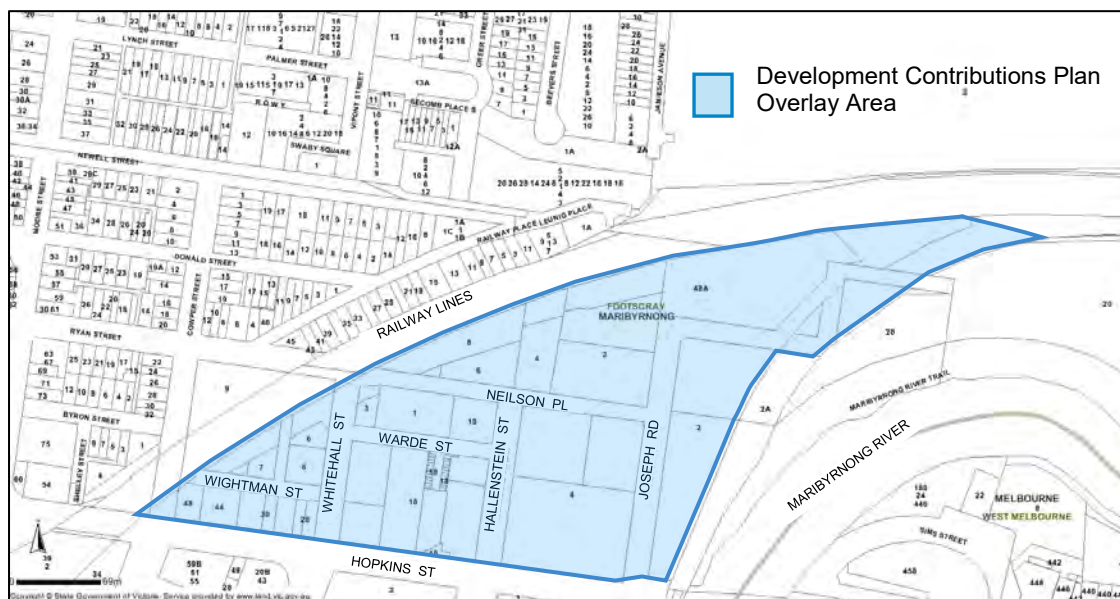
The DCP forms part of the Maribyrnong Planning Scheme pursuant to section 46I of the Act and is an incorporated document under Clause 72.04 of the Maribyrnong Planning Scheme.

## 1.4 Area to which this Development Contributions Plan applies

The Development Contributions Plan Overlay applies to the area comprising approximately 15 hectares shown in Plan 1.

The area is generally bounded by the public reserves on the west bank of the Maribyrnong River to the east, the railway reserve between Footscray and South Kensington stations to the north and west, and Hopkins Street to the south. In accordance with section 46K(1)(a) of the Act the DCP applies to land shown in Plan 1. The area is also shown on Development Contributions Plan Overlay Schedule 1 of the Maribyrnong Planning Scheme.

Plan 1 Joseph Road Precinct Development Contributions Plan Area



## 2 STRATEGIC PLANNING AND JUSTIFICATION

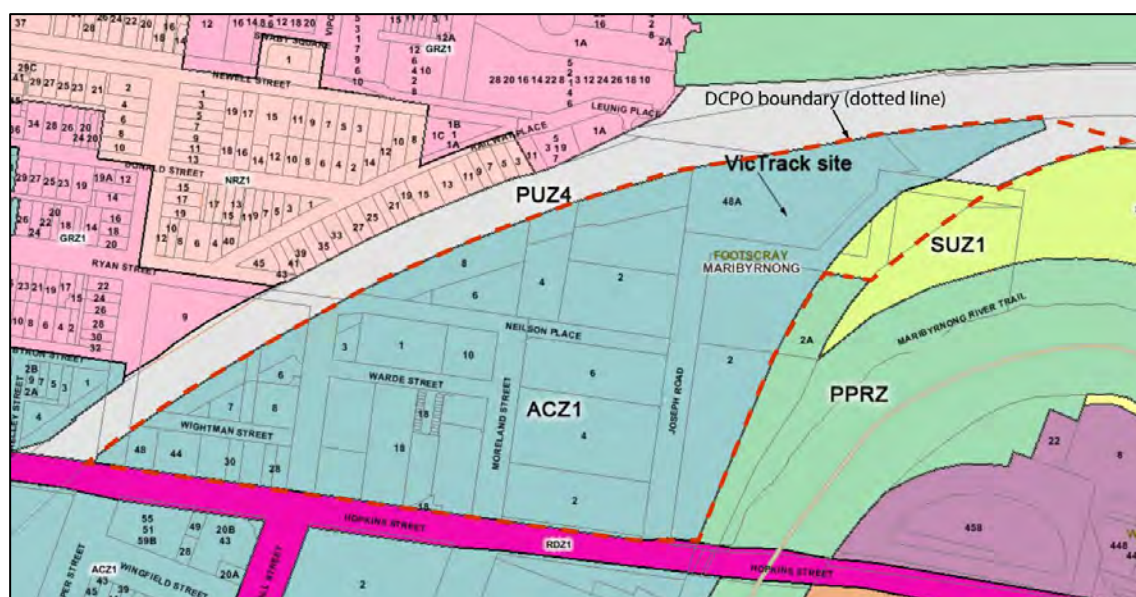
### Maribyrnong Planning Scheme

The strategic basis for the DCP is established by the State and Local Planning Policy Framework of the Maribyrnong Planning Scheme. The key sections of the Maribyrnong Planning Scheme are Clause 21.11-1, which is the local areas policy for the Footscray Metropolitan Activity Centre; Clause 21.12, which references the Footscray CAA Structure Plan; and Clause 37.08, the Activity Centre Zone Schedule 1 (ACZ1).

The local area policy explains that the Footscray Metropolitan Activity Centre (FMAC) is the most regionally significant activity centre of Melbourne's west.

The majority of the land in the Joseph Road precinct is affected by the ACZ1 with the exception of the north eastern part of the precinct which is affected by the Special Use Zone Schedule 1 (SUZ1) and Public Use Zone Schedule 4 (PUZ4), as shown in Plan 2.

Plan 2 Planning zones in the Joseph Road Precinct



The ACZ1 identifies the following objectives in the Planning Scheme:

- To create a vibrant, mixed use precinct that complements the role and function of the Footscray Central Activities Area through:
  - a diverse range of higher-density housing development accommodating
  - approximately 4,000 dwellings
  - a viable mix of commercial, retail, community, entertainment, and recreation land uses
  - a wide range of employment opportunities to complement the role of central Footscray.
- To encourage retail, entertainment and recreational uses along the existing and extended Warde Street, and along the riverfront.
- To encourage the provision of showroom, restricted retail and office along the Hopkins Street frontage.
- To establish a robust urban character with:
  - high quality architecture and urban design
  - an active, attractive and accessible riverfront with improved public recreation
  - opportunities and high amenity public spaces and places

- an active and improved frontage to Hopkins Street that marks the precinct as a ‘gateway’ to Footscray.
  - To provide a high amenity, upgraded street and pathway network with improved pedestrian and cyclist connections to areas beyond the precinct.
  - To encourage sustainable development that:
    - incorporates best practice energy efficiency and water management measures
    - promotes sustainable travel patterns through an integrated approach to transport
    - planning
    - supports the inclusion of community facilities and housing affordability.
  - To ensure that development responds to the site features and constraints including heritage values of the heritage listed features, potential contamination, flooding, and service infrastructure requirements.
  - To provide built form that does not result in significant overshadowing of the St Monica’s Primary School.

The Joseph Road precinct guidelines envisage the following:

- A network of high amenity public places and pedestrian spaces should be provided as shown in the Precinct Plan.
- Visual and physical connections between the river and the precinct should be provided.
- Active frontages created by retail, entertainment, and recreation uses at ground level are encouraged along the main connections to the river along Warde Street and along Hopkins Street.
- Development proposals should respect planned pedestrian and cycling network.
- Pedestrian/cycle bridges provided across the passenger rail line and crossing points of the freight rail line should be defined by robust landscaping and clear sight lines, and designed to the satisfaction of VicTrack, the Department of Economic Development, Jobs, Transport and Resources and Public Transport Victoria.
- Development proposals with river frontage should include opportunities for activation along the riverside.
- Development should provide a high quality street environment which incorporates, footpaths, cycle paths, and on-street car parking, and maximises opportunities for street planting where appropriate.
- Opportunities should be provided to green the urban environment both in the public realm and as a part of new developments.
- The primary vehicle access point to and from the precinct should be via a signalised intersection at the corner of Hopkins Street and Hallenstein Street, with associated intersection treatments. Secondary vehicle access points should be provided at the intersection of Whitehall Street and Joseph Road, with Hopkins Street.
- On-street car parking should be provided in streets whilst ensuring sufficient width to accommodate parallel car parking spaces as well as bicycle lanes, pedestrian footpaths, and landscaping treatments.

### Footscray CAA Structure Plan (2014)

The Footscray CAA Structure Plan is the basis for the local area policy. It is a reference document in Clause 21.12 of the Scheme, under Economic Development.

The vision for the Joseph Road Precinct as stated in the Footscray CAA Structure Plan is for a thriving, vibrant, mixed use precinct, with high quality public areas that is inviting to residents, workers and visitors alike. The Joseph Road Precinct will be home to approximately 4,000 new households which will enjoy proximity and access to the Maribyrnong River, Footscray station and the central precinct.

The Footscray CAA Structure Plan is now reflected in and given effect by the Activity Centre Zone Schedule 1 that was introduced to the Planning Scheme in March 2015.

To realise the Footscray CAA Structure Plan vision for the Joseph Road Precinct, Council has prepared the Joseph Road Precinct Public Realm Plan (2017). This will become an incorporated document in the Planning Scheme. It forms an important strategic foundation for the DCP.

A number of other reports also provide insight into the likely future development trends for the area. These include:

- Forecast of retail commercial and Housing Activity in Footscray CAD (Tim Nott, 2012)
- 22 Hopkins St Footscray Retail Economic Assessment (Essential Economics, 2012)
- Footscray Retail Study (Collie, 2009)
- Review of Retail Development and Activity Centre Policy (Peter McNabb and Associates 2009)
- Priority Development Panel Report on Joseph Road Precinct Footscray (PDP 2009)

These reports have been taken into account in the preparation of the Joseph Road Precinct Public Realm Plan (2017).

### Joseph Road Precinct Public Realm Plan (2017)

The Joseph Road Precinct Public Realm Plan provides guidance on the design of the public realm areas and identifies the locations where new roads, footpaths, bike routes, drainage, street lighting and furniture, traffic signals and street trees will be needed.

The design of the Plan has been guided by standards specified in the Maribyrnong City Design Manual and urban design objectives including:

- Providing connections through the precinct and to surrounding areas.
- Providing a seamless transition in activity levels and function between Footscray central and Melbourne's CBD.
- Having regard to the built form outcomes of the Precinct.
- Creating a public realm that complements active ground floor uses, provides for safe and pleasant pedestrian circulation, and encourages wider public access and usage.
- Prioritising pedestrians, cyclists and encourage active transport modes.
- Providing an accessible and equitable public realm.
- Providing services and infrastructure required for the level of development in ways that do not limit opportunities for quality green infrastructure in the streetscape.
- Considering and managing the grading of the site and stormwater drainage in a positive way to contribute towards a resilient city.

### Current zoning and proposed land exchange with Department of Economic Development, Jobs, Transport and Resources (DEDJTR) and VicTrack

The boundaries of the Development Contributions Plan Overlay Schedule 1 (DCPO1) closely aligns with those of the ACZ1. However, the north-eastern portion of the DCPO also extends into land zoned Public Use (PUZ4) and Special Use (SUZ1). This is a result of the arrangement of land titles and current alignment of the Joseph Road and its desired future alignment.

The Regional Rail Link project completed in 2015, expanded the width of the rail corridor to the north of the precinct onto land currently zoned ACZ1. Many land parcels affected have not had their title boundaries updated to reflect the expanded corridor. It is understood that VicTrack is working with affected landowners to address this issue along the entire rail corridor.

The Regional Rail Link project also resulted in the north eastern section of Joseph Road to move east, which changed the zoning of the road to SUZ1. The existing cadastral and zoning maps show the road in its former alignment while the Joseph Road Public Realm Plan shows the road in its current alignment. Due to the move, the road is vested in multiple ownerships including Council, VicTrack and DEDJTR. Council is working with VicTrack and DEDJTR to facilitate the exchange of land and update of title boundaries. Once finalised, Council plans to review the cadastral map and determine if any land along the rail corridor is required to be rezoned to ensure it is consistent with the existing use.

## 3 CHARGE AREAS & DEVELOPMENT SCENARIO

### 3.1 Main Charge Area

The Joseph Road Precinct DCP has a single Main Charge Area (MCA). Therefore, all demand units within the DCP area will be charged the same rate for all projects.

### 3.2 Development Projections

A projection of all development within the DCP area has been undertaken to understand:

- what infrastructure will be required to service the new development and calculate the rate per demand unit; and
- the likely duration of the life of the DCP.

The development projection for the DCP area over the next 15 years is for approximately 4,500 dwellings and for complementary retail and office activity. The development projections are based on approved planning permits for a number of sites within the Precinct.

Assumed yields for sites not currently subject of an approved planning permit have been prepared. The scenarios are based on the provisions of the Maribyrnong Planning Scheme.

It is expected that the area will develop over the next 15 years to full build at a rate of approximately 300 dwellings per year.

Table 1 Development Projections over the next 15 years

Parcel #	ADDRESS	SITE AREA (m2 Approx.)	DWELLINGS (Propd)	COMMERCIAL (m2 Propd)	RETAIL (m2 Propd)
Planning Permits					
1	1 Warde Street	2,149	350	-	916
2	10 Moreland Street	1,248	198	-	426
3	2 Neilson Place	6,303	513	3,418	620
4	2 Hopkins Street	9,393	723	197	581
5	4 Hopkins Street (2-6 Hallenstein Street)	12,866	937	1,417	3,421
6	18-24 Hopkins Street	9,459	966	-	4,687
7	7 Wightman Street	710	85	383	178
	SUB-TOTAL	42,128	3,772	5,415	10,829



Other					
a	30-40, 44 Hopkins Street	2,081	209	-	1,041
b	4 Neilson Place	1,742	147	-	151
c	6 Neilson Place	1,511	59	567	-
d	11 Joseph Road (VicTrack site)	4,400	347	1,650	-
	SUB-TOTAL	9,734	762	2,217	1,192
TOTALS		51,862	4,534	7,632	12,021

### 3.3 Equivalence Ratios and Demand Units

The purpose of this DCP is to ensure that the cost of providing new road and public realm infrastructure is shared between developers on a fair and reasonable basis. As all the new infrastructure demand will be created by the development within the Joseph Road Precinct, it is reasonable that development pays for the full cost of implementing the works identified in the *Joseph Road Precinct Public Realm Plan (2017)* and the *Joseph Road Precinct Preferred WSUD Concepts report (2017)*.

All residential, commercial and retail including mixed use development within the charge area is required to pay the Development Infrastructure Levy. One dwelling or one vacant single dwelling lot is equal to one demand unit. Dwelling is as defined in Part 3B of the *Planning and Environment Act 1987* and also includes independent living units within a retirement village. For retail and commercial development, the equivalence ratios for all road, drainage and other public realm infrastructure are indicated in Table 2. The equivalence ratios for retail and office are in accordance with the standard ratios indicated in *Development Contributions Guidelines (March 2007)*.

Table 2 Proposed Development

Retail	19 sqm floor space = 1 demand unit
Office/Commercial	121 sqm floor space = 1 demand unit
Source: <i>Development Contributions Guidelines</i> (Department of Sustainability and the Environment, March 2007) pp.45-46, available for download from the DELWP website at <a href="https://www.planning.vic.gov.au/data/assets/pdf_file/0022/102982/Preparing_a_Full_Cost_Apportment_DCP.pdf">https://www.planning.vic.gov.au/data/assets/pdf_file/0022/102982/Preparing_a_Full_Cost_Apportment_DCP.pdf</a>	

For a mixed use development, the Development Infrastructure Levy is to be based on the total number of demand units comprising the development.

### 3.4 Items not included in this DCP

The following items are not included in the DCP. These items are considered to be normal to the construction of a development and do not warrant cost sharing arrangements.

Planning permits for development in the area covered by the DCP must contain conditions which require the provision of the infrastructure set out below:

- Waterway management works and drainage systems.
- Water, sewerage, underground power, gas and telecommunications services.
- Basic levelling, provision of biodiversity offsets, water tapping and landscaping of open space.
- Public open space reserve masterplans and any agreed associated works.
- Council's plan checking and supervision fees.
- Bus stops.

### 3.5 Land or development excluded from this DCP

The following items are exempted from this DCP:

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by VC249

- The development of land for a small second dwelling.
- The extension of a building or extension of works associated with an established use in the area at the date of approval, providing the extension results in no more than a 50% increase in the floor area of the building or works as compared to the floor space at the date of approval.
- Development of land for housing by or for the Department of Health and Human Services, as defined in Ministerial Direction on Development Contributions Plans of 11 October 2016.
- Development of land for a non-government school. In this provision, “non-government school” has the same meaning as in section 1.1.3 of the Education and Training Reform Act 2006.
- Development of land by Council for the area.

### 3.6 Contributions made under existing Planning Permits or Infrastructure Agreements

There are existing permit with conditions requiring some contributions to the public realm.

Where under such a permit condition, or an agreement entered into under such a permit condition, a monetary contribution is required to be made for public realm improvements or infrastructure works are to be provided in the public realm, those monetary contributions and infrastructure works may be recognised by the Collecting Agency and credited towards an owner’s liability to pay any Development Infrastructure Levy that is imposed pursuant to this DCP provided that the infrastructure which is to be or has been provided is included as infrastructure which is funded by this DCP.

However, where the quantum of any such monetary contribution or the value of the infrastructure works in respect of the public realm are less than the Development Infrastructure Levy required to be paid under this DCP, the development must pay a top-up payment to make the Development Infrastructure Levy in respect of each Demand Unit equal to the amount of the Development Infrastructure Levy required under this DCP.

### 3.7 Public Open Space Contributions

This DCP does not provide funding towards the cost of public open space. A development that proposes to subdivide land must make a contribution to public open space in an amount specified in the schedule to Clause 53.01 of the Maribyrnong Planning Scheme.



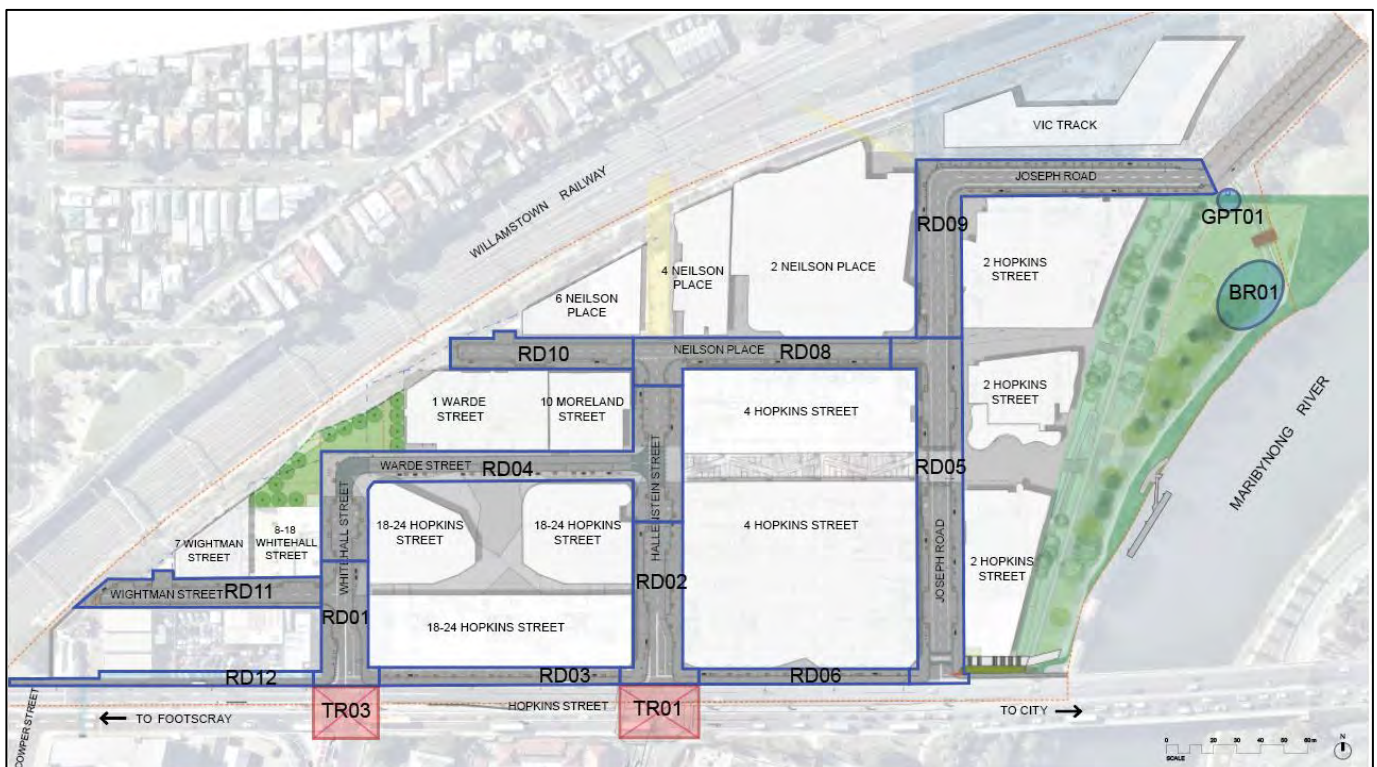
## 4 INFRASTRUCTURE PROJECTS & CALCULATION OF CONTRIBUTIONS

### 4.1 Infrastructure Projects

The DCP uses a project identification system of project category and sequential number in its tables and plans. The following types of projects are included in the DCP (refer to Plan 3):

- RD – Road Projects;
- TR – Traffic Improvement Works Projects;
- GPT01 – Gross Pollutant Trap;
- BR01 – Bio-Retention System

Plan 3: DCP infrastructure project areas



### 4.2 Calculation of costs

The costs of all projects were determined by a detailed costing advice provided by WT Partnership Quantity Surveyor. A copy of the cost estimates used to inform this DCP may be obtained from the City of Maribyrnong upon request.

Further information on the nature of the infrastructure projects which are funded is provided in Attachment 1.

Table 3: Infrastructure Projects and calculation of costs

DCP Project No.	Project	Infrastructure Category	Estimated Project Cost: Construction	% Apportioned to DCP	Total cost recovered by DCP
	<b>Road Projects</b>				
RD01	Whitehall Street	Development	\$1,118,039	100.0%	\$1,118,039
RD02	Hallenstein Street	Development	\$1,664,503	100.0%	\$1,664,503
RD03	Hopkins Street (Central West)	Development	\$748,152	94.5%	\$706,933
RD04	Warde Street	Development	\$3,928,592	100.0%	\$3,928,592
RD05	South Joseph Road	Development	\$3,201,075	100.0%	\$3,201,075
RD06	Hopkins Street (Central East)	Development	\$696,967	94.8%	\$660,555
RD08	Neilson Place (East)	Development	\$3,647,787	100.0%	\$3,647,787
RD09	North Joseph Road <sup>1</sup>	Development	\$3,247,853	100.0%	\$3,247,853
RD10	Neilson Place (West)	Development	\$1,208,902	100.0%	\$1,208,902
RD11	Wightman Street	Development	\$1,421,537	100.0%	\$1,421,537
RD12	Hopkins Street (Far West)	Development	\$871,028	91.5%	\$796,921
	<b>Sub-Total Road Projects</b>		<b>\$21,754,435</b>	<b>99.3%</b>	<b>\$21,602,697</b>
	<b>Traffic Improvement Works</b>				
TR01	Hopkins St & Hallenstein St - Traffic Lights – Construction	Development	\$3,131,920	97.7% <sup>2</sup>	\$3,058,732
TR03	Hopkins St & Whitehall St signals upgrade	Development	\$1,092,752	100%	\$1,092,752
	<b>Sub-Total Traffic Improvement Works</b>		<b>\$4,224,672</b>	<b>98.3%</b>	<b>\$4,151,484</b>
	<b>Drainage Project</b>				
GPT01	Gross Pollutant Trap	Development	\$396,211	100.0%	\$396,211
BR01	Bio-Retention System	Development	\$404,682	100.0%	\$404,682
	<b>Sub-Total Infrastructure Project</b>		<b>\$800,893</b>	<b>100.0%</b>	<b>\$800,893</b>
	<b>Plan Preparation Charge</b>				
PP01	Plan Preparation Charge	Development	\$0	-	\$0
	<b>Sub-Total Plan Preparation Charges</b>		<b>\$0</b>	<b>-</b>	<b>\$0</b>
	<b>TOTALS</b>				
	<b>Total cost all projects</b>		<b>\$26,780,000</b>	<b>99.2%</b>	<b>\$26,555,074</b>

Notes:

1. The north-east extent of Joseph Road is not funded under this DCP. The road works may be considered for funding by alternative mechanisms such as a planning permit condition or requirement where land abutting the road has sufficient nexus with the need for the road.
2. TR01's percentage apportioned to the DCP is 97.7% because \$73,188 was received from the development at 1-11 Moreland Street towards the cost of the traffic signals.

### 4.3 Cost apportionment

This DCP apportions a charge to all new development within the MCA according to each site's projected shared use of an identified infrastructure item. Costs must be shared in accordance with the projected development outcomes and estimated shared use of each infrastructure project.

The proposed shared bicycle path on the northern side of Hopkins Street that forms part of projects RD03, RD06 and RD12 is likely to be used by cyclists from the precinct and the broader community alike. As a result, a portion of the pavement component of the shared bicycle path is externally apportioned to recognise potential external usage. The external cost apportionment is 76.6% of the pavement component to each project. Specifically, that is \$41,219 for RD03, \$36,412 for RD06 and \$74,107 for RD12. The apportioned percentage takes into consideration the future population of the precinct relative to Footscray suburb, and the externally apportioned amounts have been subtracted from the costs funded under the DCP. For detailed cost information, refer to Attachment 1, Sections 5.1 and 5.2 in the Cost Estimate Report.

A contribution of \$73,188 has been received from 1-11 Moreland Street towards the cost of Traffic Improvement Works at the intersection of Hopkins Street and Hallenstein Street (TR01). The site is located adjacent to the precinct and was required to contribute towards the cost of the traffic improvement works when their planning permit was amended in 2016. As such, the cost of TR01 apportioned to the DCP is its estimated project cost minus \$73,188.

For all other projects, the full cost of the projects are apportioned to new developments within the precinct given the demand for them is created by these developments.

This DCP calculates what each new development should pay towards the provision of each identified infrastructure project. This is the total cost of the item (after deducting other funding sources and making allowance for any external demand) divided by the total demand units (dwellings, or non-residential floor space) for the main charge area.

### 4.4 Summary of costs

Table Four sets out a summary of costs payable for each infrastructure category.

Table 4: Summary of total costs by project type

SUMMARY - TOTAL COSTS BY PROJECT TYPE	
Project Type	Total Costs of Projects
Road Projects	\$21,754,435
Traffic Improvement Works	\$4,224,672
Drainage Project	\$800,893
<b>Total</b>	<b>\$26,780,000</b>
<b>Externally apportioned amount</b>	<b>\$151,738</b>
<b>Traffic Improvement Works Previously Recovered</b>	<b>\$73,188</b>
<b>Total Cost Recovered by DCP</b>	<b>\$26,555,074</b>
SUMMARY - TOTAL COSTS BY INFRASTRUCTURE CATEGORY	
Project Type	Total Costs of Projects
Total - Development Infrastructure Levy (DIL)	\$26,780,000
Total - Community Infrastructure Levy (CIL)	\$0
<b>Total</b>	<b>\$26,780,000</b>
<b>Total Cost Recovered by DCP</b>	<b>\$26,555,074</b>

## 4.5 Summary of contributions

The table below sets out charges payable for each main charge area.

Table 5: Summary of contributions rates for development outcomes

SUMMARY - DEVELOPMENT INFRASTRUCTURE LEVY (DIL) BY MAIN CHARGE AREA		
Main Charge Area	Rate	
MCA1 (Residential)	\$5,077.68	per lot/dwelling
MCA1 (Commercial)	\$41.96	per m2 leasable floorspace
MCA1 (Retail)	\$267.25	per m2 leasable floorspace
SUMMARY - COMMUNITY INFRASTRUCTURE LEVY (CIL) BY MAIN CHARGE AREA		
Main Charge Area	Rate	
MCA1 (Residential)	\$0.00	per lot/dwelling

## 4.6 Project Staging

For the purpose of preparation of the DCP, each item to be funded by the DCP has an assumed indicative provision date specified (Table 6). The indicative timing of the provision of the items is consistent with the information available at the time that this DCP was prepared. The Collecting Agency will monitor and will determine when items should be provided after having regard to funding available through capital works programs, the staging and progression of development and the availability of development contribution funds to undertake the items.

The Collecting Agency may re-order the timing of the delivery of infrastructure works or land where:

- Infrastructure is to be constructed / provided by development proponents as works in kind, as agreed by the Collecting Agency;
- Network priorities require the delivery of works or land in a different order to facilitate broader road network connections.

Every endeavour will be made to provide all items in this DCP as soon as is practicable provided sufficient contributions are available and also having regard to the Development Agency's capacity to source any balance of funds not recovered under this DCP.

All items included in the DCP will be provided before the expiry date of this DCP which is 15 years from when this DCP is incorporated into the Maribyrnong Planning Scheme. If development projections vary as against what is anticipated in this DCP, an application will be made to the Minister pursuant to the Act to extend the life of the DCP.

Table 6: Estimated project staging and sequencing of projects

DCP Project No.	Project	Project Staging	Estimate year of construction works
	<b>Road Projects</b>		
RD01	Whitehall Street	1	2019-2021
RD02	Hallenstein Street	1	2019-2021
RD03	Hopkins Street (Central West)	1	2019-2021
RD04	Warde Street	2	2020-2022
RD05	South Joseph Road	1	2019-2021
RD06	Hopkins Street (Central East)	1	2019-2021
RD08	Neilson Place (East)	2	2020-2022
RD09	North Joseph Road	2	2020-2022
RD10	Neilson Place (West)	3	2021-2024
RD11	Wightman Street	5	2025 or later
RD12	Hopkins Street (Far West)	3	2021-2024
	<b>Traffic Improvement Works</b>		
TR01	Hopkins St & Hallenstein St - Traffic Lights - Construction	1	2019-2021
TR03	Hopkins St & Whitehall St signals upgrade	1	2019-2021
	<b>Drainage Project</b>		
GPT01	Gross Pollutant Trap	2	2020-2022
BR01	Bio-Retention System	4	2023 or later

## 5 DEVELOPMENT CONTRIBUTIONS PLAN ADMINISTRATION & IMPLEMENTATION

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This section sets out how this DCP will be administered and covers the timing of payment, provision of works-in-kind and how funds generated by this DCP will be managed in terms of reporting, indexation and review periods.

The DCP applies to the subdivision and / or development of land.

### 5.1 Collecting Agency

Maribyrnong City Council is the Collecting Agency pursuant to section 46K(1)(fa) of the *Planning and Environment Act 1987* which means that it is the public authority to whom all levies are payable. As the Collecting Agency, Maribyrnong City Council is also responsible for the administration of the DCP and its enforcement pursuant to Section 46QC of the Act.

### 5.2 Development Agency

Maribyrnong City Council is the Development Agency pursuant to section 46K(1)(fb) of the *Planning and Environment Act 1987* and is responsible for the provision of all the infrastructure projects identified in this DCP.

### 5.3 Payment of Contribution Levies and Payment Timing

Where a planning permit is issued, the following conditions must be included on the planning permit:

#### 5.3.1 Planning Permit for subdivision of land

A Development Infrastructure Levy in accordance with the approved Development Contributions Plan which applies to the land must be paid to the Collecting Agency for the land in respect of each demand unit within the following specified time, namely after the certification of the relevant plan of subdivision but no earlier than up to 21 days prior to the issue of a Statement of Compliance for that plan of subdivision.

Where the subdivision is to be developed in stages, the Development Infrastructure Levy for the stage to be developed may only be paid to the Collecting Agency no earlier than up to 21 days prior to the issue of a Statement of Compliance for that stage.

The Collecting Agency may agree to a different time for payment.

A Schedule of Development Contributions must be submitted with each stage of a plan of subdivision. The Schedule of Development Contributions must show the amount of the Development Infrastructure Levy payable for each stage to the satisfaction of the Collecting Agency.

If the Collecting agency agrees to works-in-kind in lieu of the payment of the Development Infrastructure Levy, the owner must enter into an agreement under Section 173 of the *Planning and Environment Act 1987* in respect of the proposed work in kind arrangements.

#### 5.3.2 Planning Permit for development of land

A Development Infrastructure Levy in accordance with the approved Development Contributions Plan which applies to the land must be paid to the Collecting Agency for each demand unit proposed to be developed. The Development Infrastructure Levy must be paid prior to the issue of any Building Approval under the *Building Act 1993* unless the Collecting Agency agrees to a different time for payment.

If the Collecting agency agrees to works-in-kind in lieu of the payment of the Development Infrastructure Levy, the owner must enter into an agreement under Section 173 of the *Planning and Environment Act 1987* in respect of the proposed works-in-kind arrangements.



### 5.3.3 Where no planning permit is required

Where no planning permit is required to use or develop land, the land may only be used and developed when a Development Infrastructure Levy in accordance with the approved Development Contributions Plan that applies to the land is paid to the Collecting Agency prior to the issue of a Building Approval under the *Building Act 1993* unless the Collecting Agency agrees to any other time for payment.

If the Collecting Agency agrees to works-in-kind in lieu of the payment of the Development Infrastructure Levy, the owner must enter into an agreement under Section 173 of the *Planning and Environment Act 1987* in respect of the proposed work-in-kind arrangement.

## 5.4 Works-In-Kind

The Collecting Agency may allow a development proponent to satisfy its obligations under this DCP by undertaking building or works provided that:

- The building or works constitute infrastructure funded by this DCP.
- The Collecting Agency agrees that the timing of the building or works would be consistent with the priorities as determined by the Collecting Agency to relevant matters including to this DCP.
- The building or works are defined and agreed in an agreement made under Section 173 of the Act.
- The building or works are to be provided to a standard that accords with this DCP to the satisfaction of the Development Agency, unless an alternative is agreed by both the Development and Collecting Agencies.
- Detailed design are approved by the Development and Collecting Agencies which generally accord with the design upon which this DCP is based unless an alternative is agreed by both the Development and Collecting Agencies.
- The construction of the buildings and works are completed to the satisfaction of the Development and Collecting Agencies.
- There is no negative financial impact on this DCP to the satisfaction of the Collecting Agency.
- Buildings and works will only be accepted in lieu of a financial contribution required by this DCP to the extent that they constitute part or all of the design of an infrastructure funded by this DCP or otherwise reduce the cost to complete that design, to the Collecting Agency's satisfaction. Temporary works will not be accepted as works-in-kind unless they can be incorporated into the final design at no additional cost to the DCP.

## 5.5 Funds Administration

The administration of the development contributions made under the DCP will be held until required for provision of the items in that class of development (transport, community buildings or sporting reserves). Details of funds received and expenditures will be held by the Collecting Agency in accordance with the provisions of the *Local Government Act 1993* and the Act.

The administration of contributions made under the DCP will be transparent and demonstrate the:

- Amount and timing of funds collected;
- Source of the funds collected;
- Amount and timing of expenditure on specific projects;
- Project on which the expenditure was made;
- Account balances for individual project classes;
- Details of works-in-kind arrangements for project provision;
- Pooling or quarantining of funds to deliver specific projects where applicable.

The Collecting Agency will provide for regular monitoring, reporting and review of the monies received and expended in accordance with this DCP.

The Collecting Agency will establish interest bearing accounts and all monies held in these accounts will be used solely for the provision of infrastructure as itemised in this DCP, as required under Section 46Q of the Act.

Should the Collecting Agency resolve to not proceed with any of the infrastructure projects listed in this DCP, the funds collected for these items will be used for the provision of alternative works in the same infrastructure class as specified in this DCP. Such funds may also be used for the provision of additional works, services or facilities where approved by the Minister responsible for the Act, or will be refunded to owners of land subject to these infrastructure charges.

## 5.6 Project Indexation

The Development Contributions Levy must be indexed on 1 July 2017 for the 2017/2018 financial year and on 1 July for each subsequent financial year in accordance with the following requirement. The amount of the Development Infrastructure Levy must be indexed using the Producer Price Index Numbers for Road and Bridge construction – Victoria published by the Australian Bureau of Statistics (catalogue 6427.0, Table 17, Output of the Construction of Industries, subdivision and class index numbers) for the June, September, December and March quarters occurring immediately before the beginning of the financial year in respect of which the indexed rate is being determined.

## 5.7 Development Contributions Plan review period

This DCP adopts a long term outlook for development. It takes into account planned future development in the Joseph Road Precinct. For the purposes of the preparation of this DCP, a 'full development' horizon of fifteen years after gazettal of the DCP has been adopted.

This DCP commences on the Approval Date of the amendment introducing the DCP into the Maribyrnong Planning Scheme. This DCP will end on the 15th anniversary from the Approval Date unless it is extended in accordance with the provision of the Act.

The DCP should be reviewed and if necessary updated every five years (or more frequently if required). This may require an amendment to the Maribyrnong Planning Scheme to amend, review, or replace this document. Any review should have regard to any arrangements (for example an agreement under s173 of the Act) for the implementation of this DCP and the rate that development is occurring including the rate of collection of funds.

The projected development outcome in Table 1 is based on the proposed yield of new developments with planning permits and the expected yield of sites that are likely to be developed but not currently in receipt of a planning permit. In determining the expected yield, preferred maximum height provisions in the Maribyrnong Planning Scheme were used to estimate the number of dwellings that may be developed. If there is evidence to suggest that a site is not likely to be developed within the 15 year time frame of the DCP, it is excluded from DCP calculations.

In the event that the excluded sites are proposed to be developed within the time frame of the DCP, they will be required to pay the relevant contribution and the DCP will be amended (through a planning scheme amendment) accordingly.



## 6 OTHER INFORMATION

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### 6.1 Supporting Documentation

The DCP is supported by the following documents and reports which together form part of the incorporated document:

- Joseph Road Public Realm Cost Estimate Report by WT Partnership, 17 June 2019 (Attachment 1)
- Joseph Road Precinct Public Realm Plan by Aspect Studios, 7 July 2017 (Attachment 2)
- Joseph Road Precinct Preferred WSUD Concepts Report by Alluvium Consulting, 12 May 2017 (Attachment 3)

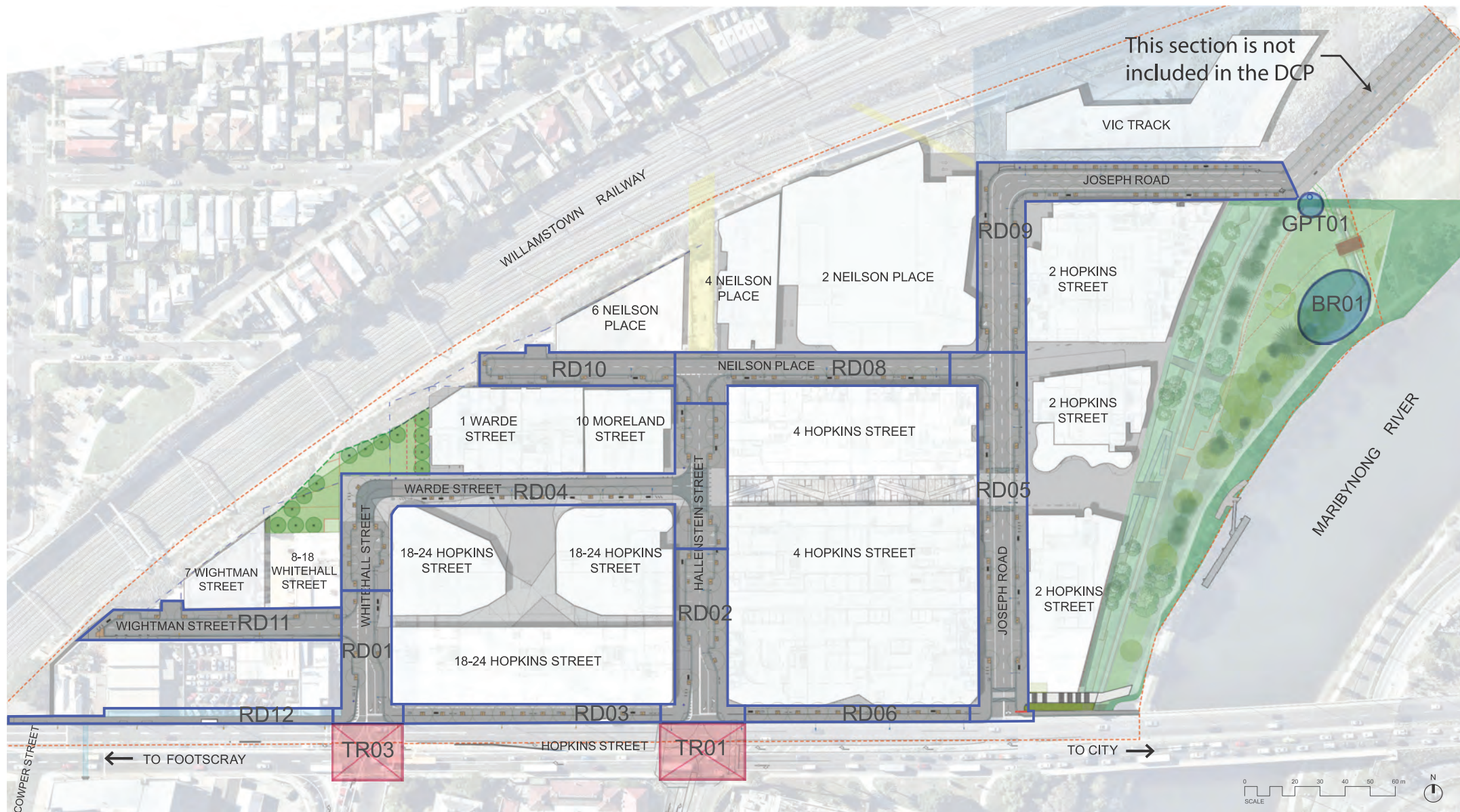


Joseph Road Precinct  
Development Contributions Plan

**Attachment 1**

Joseph Road Public Realm Cost Estimate  
Report (WT Partnership)

# Joseph Road Precinct DCP Project Areas



**ESTIMATE SUMMARY****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019****Job No: 16291****Cost Base Date: July 2017****GFA (m2): 19,787.00****Date Printed: 17/06/2019**

	Section	Unit	Quantity	Rate	Cost (\$)
1	Area Schedule				
2	Basis of Estimate				
3	Exclusions				
4					
5	Whitehall Street Public Realm Works (RD01)	m2	1,090	1,026	1,118,039
6	Hallenstein Street Public Realm Works (RD02)	m2	1,512	1,101	1,664,503
7	Hopkins Street Footpath Update Works (Central West) (RD03)	m2	693	1,080	748,152
8	Warde Street Public Realm Works (RD04)	m2	3,528	1,114	3,928,592
9	South Joseph Road Public Realm Works (RD05)	m2	3,122	1,025	3,201,075
10	Hopkins Street Footpath Upgrade Works (Central East) (RD06)	m2	580	1,202	696,967
11	Hopkins Street Footpath Upgrade Works (East) (RD07) (Project Removed)	Excl			
12	East Neilson Place Public Realm Works (RD08)	m2	1,605	2,273	3,647,787
13	North Joseph Road Public Realm Works (RD09)	m2	3,174	1,023	3,247,853
14	West Neilson Place Public Realm Works (RD10)	m2	1,045	1,157	1,208,902
15	Wightman Street Public Realm Works (RD11)	m2	1,237	1,149	1,421,537
16	Hopkins Street Footpath Upgrade Works (West) (RD12)	m2	673	1,294	871,028
17	Traffic Improvement Works - Traffic Lights at the intersection of Hallenstein Street and Hopkins Street (TR01)	m2	768	4,078	3,131,920
18	Traffic Improvement Works - Pedestrian operated crossing near Cowper Street (TR02) (Project Removed)	Excl			
19	Traffic Improvement Works - Whitehall Street / Hopkins Street signal upgrade (TR03)	m2	760	1,438	1,092,752
20	Gross Pollutant Trap (GPT01)	Item	1	396,211	396,211
21	Bio-Retention Basin (BR01)	Item	1	404,682	404,682

**ESTIMATE SUMMARY****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019****Job No: 16291****Cost Base Date: July 2017****GFA (m2): 19,787.00****Date Printed: 17/06/2019**

Section		Unit	Quantity	Rate	Cost (\$)
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	19,787	1,353	26,780,000



## ESTIMATE DETAIL

## 16291 - Joseph Road Precinct

## Joseph Road Precinct - 17 June 2019 (Detail)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 19,787.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>1</b>	<b>Area Schedule</b>				
1.1	The following areas have been used in this cost plan: <u>Public Realm area schedule</u>				
1.2	Whitehall Street Public Realm Works (RD01)	m2	1,090		
1.3	Hallenstein Street Public Realm Works (RD02)	m2	1,512		
1.4	Hopkins Street Footpath Update Works (Central West) (RD03)	m2	693		
1.5	Warde Street Public Realm Works (RD04)	m2	3,528		
1.6	South Joseph Road Public Realm Works (RD05)	m2	3,122		
1.7	Hopkins Street Footpath Upgrade Works (Central East) (RD06)	m2	580		
1.8	Hopkins Street Footpath Upgrade Works (East) (RD07) - Removed from scope	Note			
1.9	East Neilson Place Public Realm Works (RD08)	m2	1,605		
1.10	North Joseph Road Public Realm Works (RD09)	m2	3,174		
1.11	West Neilson Place Public Realm Works (RD10)	m2	1,045		
1.12	Wightman Street Public Realm Works (RD11)	m2	1,237		
1.13	Hopkins Street Footpath Upgrade Works (West) (RD12)	m2	673		
1.14	Traffic Improvement Works - Traffic Lights at the intersection of Hallenstein Street and Hopkins Street (TR01)	m2	768		
1.15	Traffic Improvement Works - Pedestrian operated crossing near Cowper Street (TR02) - Removed from scope	Note			
1.16	Traffic Improvement Works - Whitehall Street / Hopkins Street signal upgrade (TR03)	m2	760		
	<b>TOTAL AREA</b>	<b>m2</b>	<b>19,787</b>		

**2 Basis of Estimate**

- 2.1 The following information forms the basis of this cost plan:

**ESTIMATE DETAIL****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (Detail)****Job No: 16291****Cost Base Date: July 2017****GFA (m2): 19,787.00****Date Printed: 17/06/2019**

Item	Section	Unit	Qty	Rate	Cost \$
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**2 Basis of Estimate***(Continued)*

2.2	DCP Project Areas (Revised) - Public Realm Plan dated received 6 June 2019
2.3	Joseph Road DCP Project Areas high quality print received 6 June 2019
2.4	TTW Minor Stormwater (5 Year) Drainage Concept Plan - Sheet 1 dated 11 January 2017
2.5	TTW Minor Stormwater (5 Year) Drainage Concept Plan - Sheet 2 dated 11 January 2017
2.6	Maribyrnong City Council Public Realm Plan - Concept Design Report dated 7 July 2017
2.7	Catchment Flow Calcs - 12D Model - Hydraulic Design Sheet dated 18 January 2017
2.8	LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16 June 2017
2.9	One Mile Grid Hopkins Street / Whitehall Street Maribyrnong City Traffic Signal Plan dated 20 November 2018
2.10	One Mile Grid Hopkins Street / Hallenstein Street Maribyrnong City Traffic Signal Plan dated 20 November 2018
2.11	Alluvium Consulting Preferred WSUD Concepts dated 12 May 2017 (Bio-Retention Basin Design)
2.12	Jemena Overhead/Underground Joseph RD Precinct - Package B Footscray drawings dated 13 September 2018
2.13	Project Area RD09 update revision 3 dated received 29 May 2019
2.14	C145 Joseph Road Precinct DCP - Quantity Surveyor Brief May 2019 received 29 May 2019

**3 Exclusions**

3.1	The following items are specifically excluded from this cost plan:
3.2	Trunk services into the development lots; all services stop at the perimeter boundary of the development lots



**ESTIMATE DETAIL****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (Detail)****Job No: 16291****Cost Base Date: July 2017****GFA (m2): 19,787.00****Date Printed: 17/06/2019**

Item	Section	Unit	Qty	Rate	Cost \$
<b>3</b>	<b>Exclusions</b>				<i>(Continued)</i>
3.3	Substations				
3.4	Heritage restoration works				
3.5	Works within development lots				
3.6	Works to railway corridor				
3.7	Works to banks of Maribyrnong river such as scour protection, groins, etc.				
3.8	Marine works				
3.9	Open space land purchase				
3.10	Public open space works adjacent the Maribyrnong river				
3.11	Costs associated with Archaeological excavations				
3.12	Cost impact of Cultural heritage management plan				
3.13	Works outside site boundary except traffic signalisation				
3.14	Works outside of designated work areas				
3.15	Roadworks to Hopkins St except traffic signalisation				
3.16	Tram works				
3.17	Work out of normal working hours				
3.18	Fibre to the home				
3.19	Sewer, water, gas and communications to the public realm as advised by Maribyrnong City Council (2 February 2017)				
3.20	Authority and Headwork charges as these costs are assumed to be borne by developers and are not apart of the DCP				
3.21	CCTV as advised by Maribyrnong City Council (2 February 2017)				
3.22	Contamination remediation and removal to ground within the development lots				
3.23	Removal of Non-Rippable rock				
3.24	Latent Conditions				
3.25	Remediation of ground water				

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (Detail)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 19,787.00

Date Printed: 17/06/2019

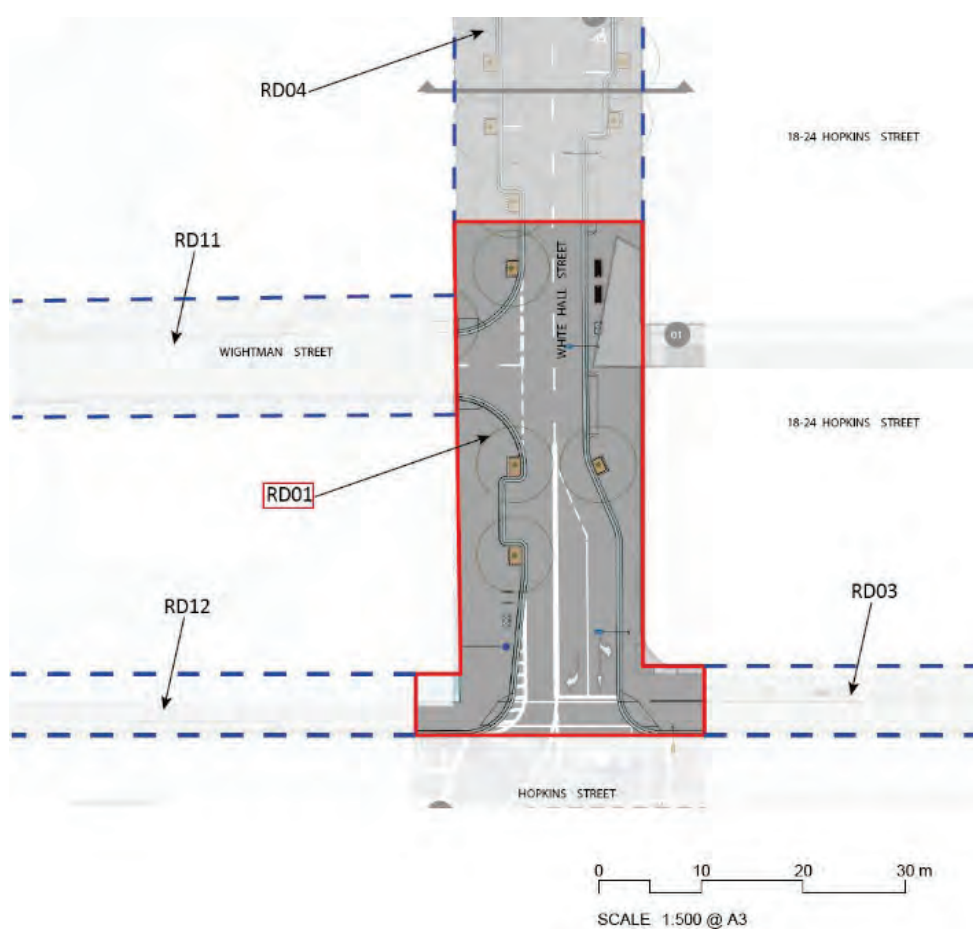
Item	Section	Unit	Qty	Rate	Cost \$
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**3 Exclusions** (Continued)

3.26	Cost escalation beyond July 2017
3.27	Retention of existing infrastructure
3.28	GST

## PROJECT AREA: RD01

Description: Whitehall Street Public Realm Works  
 Drawing Ref: Page 12 of the Joseph Road Public Realm Plan (Aspect Studios)  
 Date: 7 July 2017  
 Revision: 3



## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD01)

Job No: 16291  
 Cost Base Date: July 2017  
 GFA (m2): 1,090.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	1,090	91.49	99,725
2	Contamination	m3	545	313.00	170,585
3	Groundworks	m3	164	433.33	70,850
4	Roadworks	m2	644	254.10	163,643
5	Pavements	m2	438	115.23	50,470
6	Street Furniture	m2	1,090	19.54	21,300
7	Street lighting (Electrical Measured Separately)	No	2	5,000.00	10,000
8	Traffic Signalisation - Measured separately	N/A			
9	Landscaping	m2	1,090	5.76	6,280
10	Power	m2	1,090	37.30	40,658
11	Stormwater	m2	1,090	36.89	40,215
12	Sewer	m2	1,090		
13	Water	m2	1,090		
14	Gas	m2	1,090		
15	Communications	m2	1,090		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>1,090</b>	<b>618.10</b>	<b>673,726</b>
16	Design Development Contingency	%	10.0	673,726.00	67,373
17	Temporary works	%	2	741,098.60	14,822
18	Preliminaries and Supervision	%	8	755,921	60,474
19	Builder's Margin	%	5	816,394	40,820
20	Cost Escalation (FEB - JUL)	%	1	857,214	8,572
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>1,090</b>	<b>794.30</b>	<b>865,786</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	865,786	129,868
22	Design and Consultant Fees	%	9	995,654	89,609
23	Project Management Fees	%	3	1,085,263	32,776

**ESTIMATE SUMMARY****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (RD01)****Job No: 16291****Cost Base Date: July 2017****GFA (m2): 1,090.00****Date Printed: 17/06/2019**

	Section	Unit	Quantity	Rate	Cost (\$)
	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	1,090	1,025.72	1,118,039
24	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	1,090	1,025.72	1,118,039

## ESTIMATE DETAIL

## 16291 - Joseph Road Precinct

## Joseph Road Precinct - 17 June 2019 (RD01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,090.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**1 Demolition**

1.1	Allowance for demolition of roads and pavement	m2	1,090	20.00	21,800
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000
1.3	Demolition of existing stormwater pipework including redundant pit removal	m	39	75.00	2,925

**99,725****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities and disposal methodology at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	Assume 100% of RD01 area @ 0.50m deep is contaminated: 1,090m2 x 100% x 0.50m deep = 545m3 approx	Note			
2.4	Allow 5% at Cat A [\$850/t]	m3	27	1,700	46,325
2.5	Allow Nil% at Cat B	m3	Nil		
2.6	Allow 95% at Cat C [\$140/t]	m3	518	240	124,260

**170,585****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of RD01 area @ 0.50m deep is affected: 1,090m2 x 30% x 0.50m deep = 164m3 approx	m3	164	100.00	16,350
3.3	Allowance for engineered fill in lieu of contamination removal	m3	545	100.00	54,500

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,090.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**3 Groundworks***(Continued)***70,850****4 Roadworks**

	<u>Road</u>				
4.1	180mm Asphalt road with 400mm crushed rock sub-base including associated excavation works	m2	644	165.00	106,260
4.2	Road kerbing consisting of 300 wide sawn bluestone block and 300 wide concrete channel including 150 thick concrete footing on 75 thick crushed rock base	m	119	350.00	41,650
4.3	Allowance for linemarking to the extent of the works	m2	644	10.00	6,440
4.4	Allowance for traffic signage	Item	1	5,500.00	5,500
4.5	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
4.6	We have allowed for rippable rock to 10% of road excavation	Note			
4.7	Allowance for trenching in rock	m3	32	120.00	3,793

**163,643****5 Pavements**

	<u>Pavement</u>				
5.1	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	438	65.00	28,470
5.2	E/O Vehicle Crossover	No	1	10,000.00	10,000
5.3	E/O Pram/Pedestrian Crossover (assumed sloped into asphalt pavement as per Maribyrnong City Design Manual SF 003)	No	4	3,000.00	12,000

**50,470****6 Street Furniture**

6.1	Stainless steel bicycle hoops (SF 401)	No	2	750.00	1,500
6.2	Aluminium framed waste unit - Single (SF 301 & 302)	No	2	2,500.00	5,000
6.3	Aluminium framed recycling unit - Single (SF 301 & 302)	No	2	2,650.00	5,300
6.4	Butt Out Bin fixed to waste units	No	2	450.00	900
6.5	Promenade seating including back rest (SF 201)	No	2	2,100.00	4,200

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,090.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>6</b>	<b>Street Furniture</b>				<i>(Continued)</i>
6.6	Way finding signage (SF 701)	No	1	2,500.00	2,500
6.7	Traffic Sign - As advised by Maribyrnong City Council	No	2	250.00	500
6.8	Parking Sign - As advised by Maribyrnong City Council	No	7	200.00	1,400
					<b>21,300</b>

**7 Street lighting (Electrical Measured Separately)**

7.1	Aluminium Light Pole including luminaries - Power supply measured in Power trade	No	2	5,000.00	10,000
					<b>10,000</b>

**8 Landscaping**

<u>Street Landscaping</u>					
8.1	Allowance of \$450 per tree advised by Footscray City Council dated 22 August 2016	note			
8.2	75L Tree including 2 year establishment and ongoing maintenance	No	4	450.00	1,800
8.3	Granitic gravel mixture to tree base	m2	8	100.00	800
8.4	40 thick Bluestone surround to tree base including mortar bedding	m	23	160.00	3,680
					<b>6,280</b>

**9 Power**

<u>General</u>					
9.1	Demolition of existing Infrastructure Services measured elsewhere	Note			
<u>Electricity</u>					
9.2	Allowance for substations	Excl			
<u>Underground Power Distribution</u>					
9.3	LV 1x150 conduit run including trenching and cable installation	m	27	315	8,505
9.4	Allowance for cable joints	No	3	750	2,250
9.5	Pulling of cables undertaken by Authority	EXCL			
<u>Pits</u>					



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,090.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>9</b>	<b>Power</b>				<i>(Continued)</i>
9.6	Allowance for precast pits <i>Street Lighting</i>	Item	1	10,000.00	10,000
9.7	Allowance for luminary fitting to light pole	No	2	1,500.00	3,000
9.8	Allowance work in connecting to street mains	No	2	450.00	900
9.9	LV cabling ran within street light poles (assumed standard 11m height)	No	2	460.00	920
9.10	Conduit including LV cabling ran from light pole base to street mains (assumed 10 m per pole) <i>Misc</i>	m	20	350.00	7,000
9.11	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
9.12	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
9.13	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
9.14	We have allowed for rippable rock to 30% of trench excavation	Note			
9.15	Allowance for trenching in rock in assumed 600 wide	m3	5	120.00	583
					<b>40,658</b>

**10 Stormwater**

	<u>Stormwater</u>				
	<i>Pits</i>				
10.1	New stormwater pits	No	7	4,000.00	28,000
	<i>Pipework</i>				
10.2	The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network	Note			
	<i>Existing</i>				
10.3	300 dia concrete pipe including excavation and backfill - Existing	m	32		
10.4	375 dia concrete pipe including excavation and backfill - Existing	m			

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,090.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**10 Stormwater***(Continued)*

10.5	450 dia concrete pipe including excavation and backfill - Existing	m	26		
10.6	600 dia concrete pipe including excavation and backfill - Existing	m			
10.7	675 dia concrete pipe including excavation and backfill - Existing	m			
10.8	1250 dia concrete pipe including excavation and backfill - Existing	m			
	<i>Proposed</i>				
10.9	300 dia concrete pipe including excavation and backfill	m	28	130.00	3,640
10.10	375 dia concrete pipe including excavation and backfill	m	3	135.00	405
10.11	450 dia concrete pipe including excavation and backfill	m		175.00	
10.12	525 dia concrete pipe including excavation and backfill	m		200.00	
10.13	600 dia concrete pipe including excavation and backfill	m		350.00	
10.14	675 dia concrete pipe including excavation and backfill	m		410.00	
	<i>Misc</i>				
10.15	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.16	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
10.17	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
10.18	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
10.19	We have allowed for rippable rock to 30% of trench excavation	Note			
10.20	Allowance for trenching in rock in assumed 600 wide	m3	6	120.00	670

**40,215****11 Sewer**

	<u>Sewer</u>				
11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,090.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**11 Sewer***(Continued)***12 Water**Water Supply

12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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**13 Gas**Gas

13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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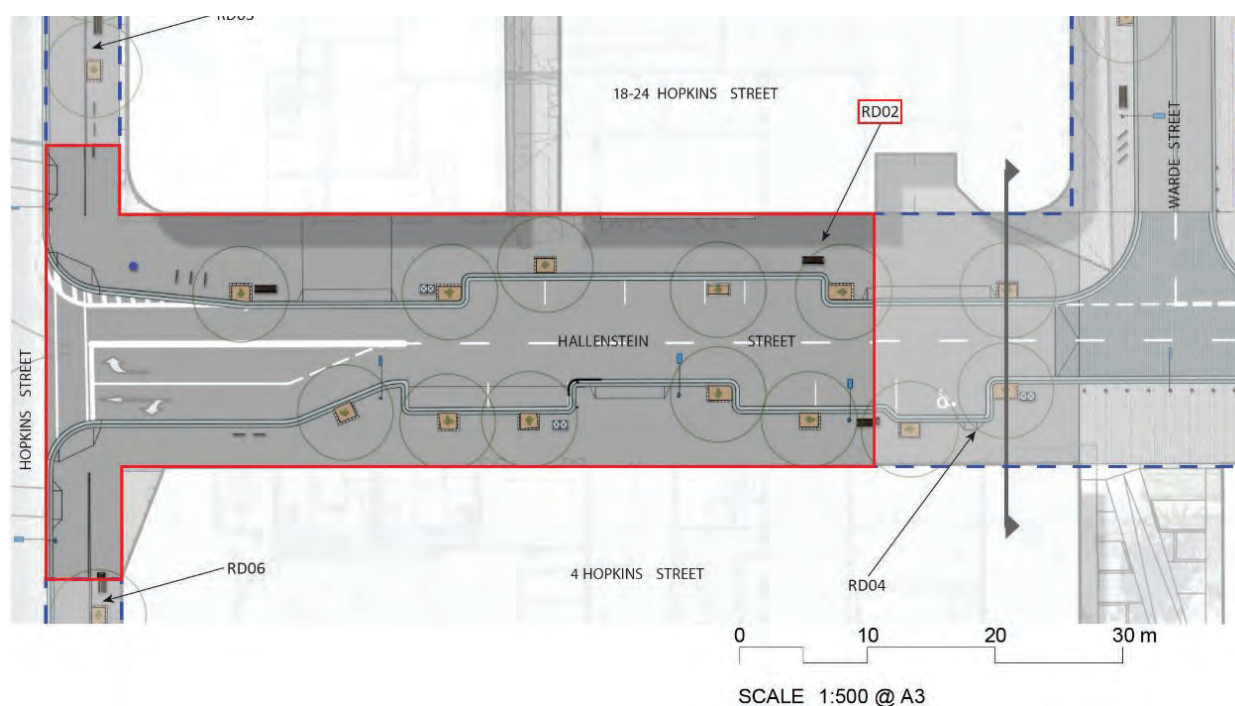
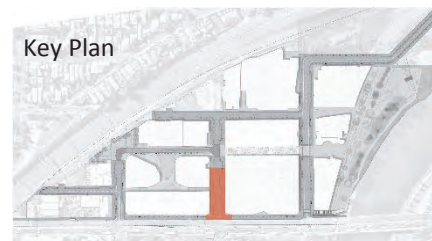
**14 Communications**Communications

14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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## PROJECT AREA: RD02

Description: Hallenstein Street Public Realm Works  
 Drawing Ref: Page 16 of the Joseph Road Public Realm Plan  
 (Aspect Studios)  
 Date: 7 July 2017  
 Revision: 3



## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Job No: 16291

Joseph Road Precinct - 17 June 2019 (RD02)

Cost Base Date: July 2017

GFA (m2): 1,512.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	1,512	72.13	109,065
2	Contamination	m3	756	313.00	236,628
3	Groundworks	m3	227	433.33	98,280
4	Roadworks	m2	1,052	253.82	267,018
5	Pavements	m2	710	110.07	78,150
6	Street Furniture	m2	1,512	17.36	26,250
7	Street lighting (Electrical Measured Separately)	No	6	4,166.67	25,000
8	Traffic Signalisation	N/A			
9	Landscaping	m2	1,512	10.78	16,300
10	Power	m2	1,512	73.72	111,470
11	Stormwater	m2	1,512	23.10	34,927
12	Sewer	m2	1,512		
13	Water	m2	1,512		
14	Gas	m2	1,512		
15	Communications	m2	1,512		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>1,512</b>	<b>663.42</b>	<b>1,003,088</b>
16	Design Development Contingency	%	10	1,003,087.62	100,309
17	Temporary works	%	2	1,103,396.38	22,068
18	Preliminaries and Supervision	%	8	1,125,464	90,037
19	Builder's Margin	%	5	1,215,501	60,775
20	Cost Escalation (FEB - JUL)	%	1	1,276,277	12,763
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>1,512</b>	<b>852.54</b>	<b>1,289,039</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	1,289,039	193,356
22	Design and Consultant Fees	%	9	1,482,395	133,416
23	Project Management Fees	%	3	1,615,811	48,692



## ESTIMATE SUMMARY

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD02)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,512.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	1,512	1,100.86	1,664,503
24	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	1,512	1,100.86	1,664,503



## ESTIMATE DETAIL

## 16291 - Joseph Road Precinct

## Joseph Road Precinct - 17 June 2019 (RD02)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,512.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**1 Demolition**

1.1	Allowance for demolition of roads and pavement	m2	1,512	20.00	30,240
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000
1.3	Demolition of existing stormwater pipework including redundant pit removal	m	51	75.00	3,825

**109,065****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities and disposal methodology at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	Assume 100% of RD02 area @ 0.50m deep is contaminated: 1,512m2 x 100% x 0.50m deep = 756m3 approx	Note			
2.4	Allow 5% at Cat A [\$850/t]	m3	38	1,700	64,260
2.5	Allow Nil at Cat B	m3	Nil		
2.6	Allow 95% at Cat C [\$140/t]	m3	718	240	172,368

**236,628****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of RD02 area affected @ 0.50m deep : 1,512m2 x 30% x 0.50m deep = 227m3 approx	m3	227	100.00	22,680
3.3	Allowance for engineered fill in lieu of contamination removal	m3	756	100.00	75,600

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD02)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,512.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**3 Groundworks***(Continued)***98,280****4 Roadworks**

	<u>Road</u>				
4.1	180mm Asphalt road with 480mm crushed rock sub-base including associated excavation works	m2	1,052	180.00	189,360
4.2	Road kerbing consisting of 300 wide sawn bluestone block and 300 wide concrete channel including 150 thick concrete footing on 75 thick crushed rock base	m	159	350.00	55,650
4.3	Allowance for linemarking to the extent of the works	m2	1,052	10.00	10,520
4.4	Allowance for traffic signage	Item	1	5,500.00	5,500
4.5	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
4.6	We have allowed for rippable rock to 10% of road excavation	Note			
4.7	Allowance for trenching in rock	m3	50	120.00	5,988

**267,018****5 Pavements**

	<u>Pavement</u>				
5.1	Cobblestone footpaths included under roadworks	Note			
5.2	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	710	65.00	46,150
5.3	E/O Vehicle Crossover	No	2	10,000.00	20,000
5.4	E/O Pram/Pedestrian Crossover (assumed sloped into asphalt pavement as per Maribyrnong City Design Manual SF 003)	No	4	3,000.00	12,000

**78,150****6 Street Furniture**

6.1	Stainless steel bicycle hoops (SF 401)	No	5	750.00	3,750
6.2	Aluminium framed waste unit - Single (SF 301 & 302)	No	2	2,500.00	5,000
6.3	Aluminium framed recycling unit - Single (SF 301 & 302)	No	2	2,650.00	5,300
6.4	Butt Out Bin fixed to waste units	No	2	450.00	900

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD02)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,512.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**6 Street Furniture***(Continued)*

6.5	Promenade seating including back rest (SF 201)	No	3	2,100.00	6,300
6.6	Way finding signage (SF 701)	No	1	2,500.00	2,500
6.7	Traffic Sign - As advised by Maribyrnong City Council	No	2	250.00	500
6.8	Parking Sign - As advised by Maribyrnong City Council	No	10	200.00	2,000

**26,250****7 Street lighting (Electrical Measured Separately)**

7.1	Aluminium Light Pole including luminaries - Power supply measured in Power trade	No	5	5,000.00	25,000
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**25,000****8 Landscaping**

<u>Street Landscaping</u>					
8.1	Allowance of \$450 per plant advised by Footscray City Council dated 22 August 2016	note			
8.2	75L Tree including 2 year establishment and ongoing maintenance	No	10	450.00	4,500
8.3	Gravel / Sand mixture to tree base	m2	22	100.00	2,200
8.4	40 thick Bluestone surround to tree base including mortar bedding	m	60	160.00	9,600

**16,300****9 Power**

<u>General</u>					
9.1	Demolition of existing Infrastructure Services measured elsewhere	Note			
<u>Electricity</u>					
9.2	Allowance for substations	Excl			
<u>Underground Power Distribution</u>					
9.3	LV 1x63 conduit run including trenching and cable installation	m	14	200	2,804
9.4	LV 1x150 conduit run including trenching and cable installation	m	25	315	7,875

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD02)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,512.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>9</b>	<b>Power</b>				<i>(Continued)</i>
9.5	HV 4x150 conduit run including trenching and cable installation	m	60	760	45,585
9.6	Allowance for cable joints	No	5	750	3,750
9.7	Pulling of cables undertaken by Authority	EXCL			
	<i>Pits</i>				
9.8	Allowance for precast pits between conduit runs	Item	1	10,000.00	10,000
	<i>Street Lighting</i>				
9.9	Allowance for luminary fitting to light pole	No	5	1,500.00	7,500
9.10	Allowance for work in connecting to street mains	No	5	450.00	2,250
9.11	LV cabling ran within street light poles (assumed standard 11m height)	No	5	460.00	2,300
9.12	Conduit including LV cabling ran from light pole base to street mains (assumed 10 m per pole)	m	50	350.00	17,500
	<i>Misc</i>				
9.13	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
9.14	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
9.15	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
9.16	We have allowed for rippable rock to 30% of trench excavation	Note			
9.17	Allowance for trenching in rock in assumed 600 wide	m3	37	120.00	4,406

**111,470****10 Stormwater**

	<u>Stormwater</u>				
	<i>Pits</i>				
10.1	New stormwater pits	No	4	4,000.00	16,000
	<i>Pipework</i>				
10.2	The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network	Note			

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD02)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,512.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**10 Stormwater***(Continued)*

<i>Proposed</i>					
10.3	300 dia concrete pipe including excavation and backfill	m	19	130.00	2,470
10.4	600 dia concrete pipe including excavation and backfill	m	23	350.00	8,050
<i>Misc</i>					
10.5	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.6	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
10.7	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
10.8	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
10.9	We have allowed for rippable rock to 30% of trench excavation	Note			
10.10	Allowance for trenching in rock in assumed 600 wide	m3	8	120.00	907

**34,927****11 Sewer**

<u>Sewer</u>					
11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**12 Water**

<u>Water Supply</u>					
12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**13 Gas**

<u>Gas</u>					
13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD02)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,512.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**14 Communications**Communications

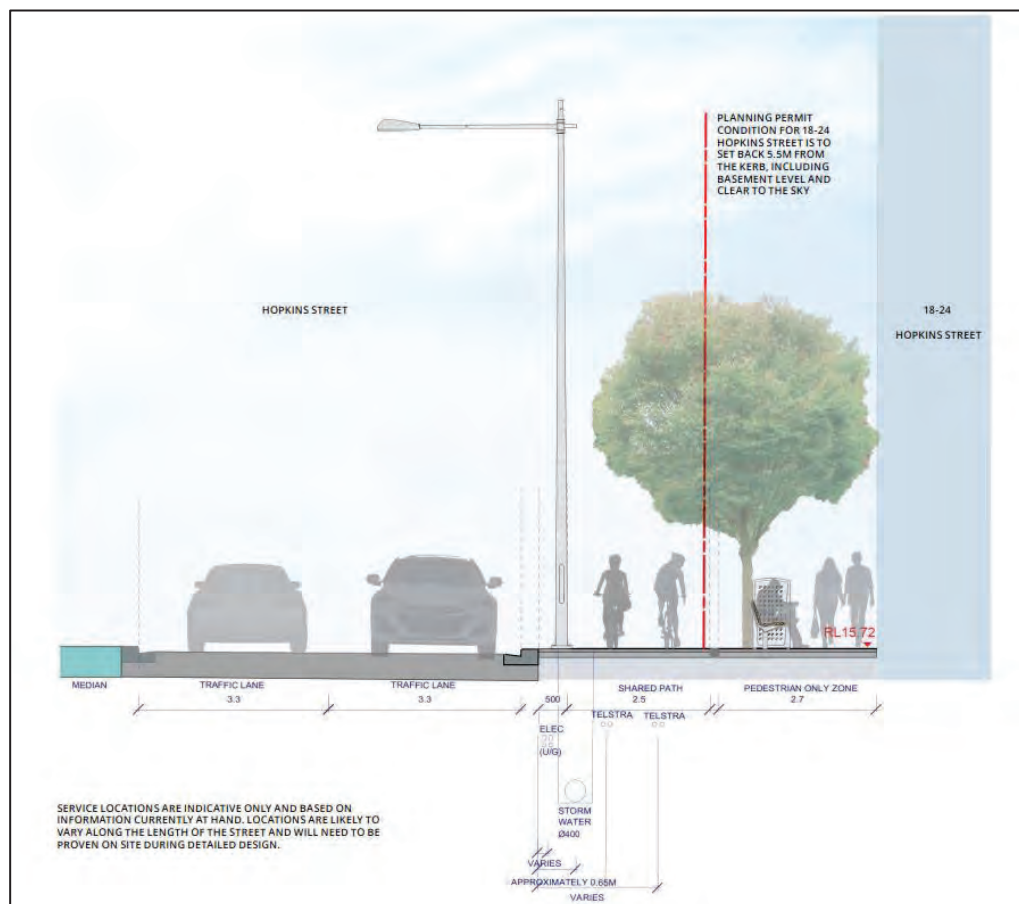
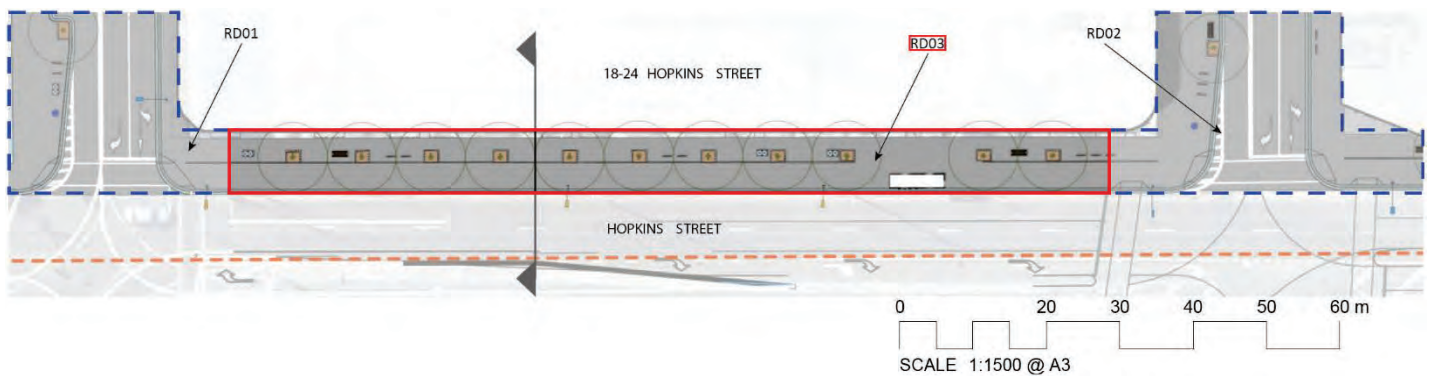
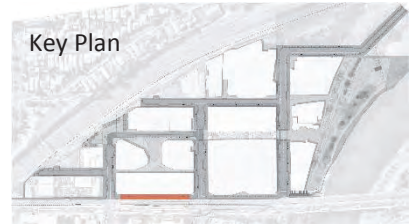
14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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## PROJECT AREA: RD03

Description: Hopkins Street Footpath Upgrade Works (Central West)  
 Drawing Ref: Pages 26 & 28 of the Joseph Road Public Realm Plan  
 (Aspect Studios)  
 Date: 7 July 2017  
 Revision: 3



**ESTIMATE SUMMARY****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (RD03)**
**Job No: 16291**  
**Cost Base Date: July 2017**  
**GFA (m2): 693.00**
**Date Printed: 17/06/2019**

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	693	128.23	88,860
2	Contamination	m3	347	313.00	108,455
3	Groundworks	m3	104	433.33	45,045
4	Roadworks	m2	693	54.40	37,700
5	Pavements	m2	670	80.31	53,810
6	Street Furniture	m2	693	45.53	31,550
7	Street lighting (Electrical Measured Separately)	m2	693		
8	Traffic Signalisation	N/A			
9	Landscaping	m2	693	25.24	17,490
10	Power	m2	693	87.13	60,381
11	Stormwater	m2	693	10.82	7,500
12	Sewer	m2	693		
13	Water	m2	693		
14	Gas	m2	693		
15	Communications	m2	693		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>693</b>	<b>650.49</b>	<b>450,790</b>
16	Design Development Contingency	%	10.0	450,790.10	45,079
17	Temporary works	%	2	495,869.11	9,917
18	Preliminaries and Supervision	%	8	505,786	40,463
19	Builder's Margin	%	5	546,249	27,312
20	Cost Escalation (FEB - JUL)	%	1	573,562	5,736
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>693</b>	<b>835.93</b>	<b>579,298</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	579,298	86,895
22	Design and Consultant Fees	%	9	666,192	59,957
23	Project Management Fees	%	3	726,149	22,003

**ESTIMATE SUMMARY****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (RD03)****Job No: 16291****Cost Base Date: July 2017****GFA (m2): 693.00****Date Printed: 17/06/2019**

	Section	Unit	Quantity	Rate	Cost (\$)
24	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	693	1,079.58	748,152
	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	693	1,079.58	748,152

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD03)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 693.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**1 Demolition**

1.1	Allowance for demolition of roads and pavement	m2	693	20.00	13,860
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000

**88,860****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities and disposal methodology at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	Assumed RD03 has the same contamination classification as RD01 & RD02	Note			
2.4	Assume 100% of RD03 area @ 0.50m deep is contaminated: 693m2 x 100% x 0.50m deep = 347m3 approx	Note			
2.5	Allow 5% at Cat A [\$850/t]	m3	17	1,700	29,453
2.6	Allow Nil at Cat B	m3	Nil		
2.7	Allow 95% at Cat C [\$140/t]	m3	329	240	79,002

**108,455****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of public realm area affected @ 0.50m deep : 693m2 x 30% x 0.50m deep = 104m3 approx	m3	104	100.00	10,395
3.3	Allowance for engineered fill in lieu of contamination removal	m3	347	100.00	34,650

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD03)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 693.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**3 Groundworks***(Continued)***45,045****4 Roadworks**

	<u>Road</u>				
4.1	Road kerbing consisting of 300 wide sawn bluestone block and 300 wide concrete channel including 150 thick concrete footing on 75 thick crushed rock base	m	92	350.00	32,200
4.2	Allowance for traffic signage	Item	1	5,500.00	5,500

**37,700****5 Pavements**

	<u>Pavement</u>				
5.1	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	670	65.00	43,550
5.2	300 wide sawn bluestone banding within Asphalt including mortar bedding, 32 MPa concrete pad and crushed rock subbase	m	76	135.00	10,260
5.3	The cost of the pavement (5.1 & 5.2) will be externally apportioned through Amendment C145 at 76.6% (\$41,219)	Note			

**53,810****6 Street Furniture**

6.1	Stainless steel bicycle hoops (SF 401)	No	7	750.00	5,250
6.2	Aluminium framed waste unit - Single (SF 301 & 302)	No	2	2,500.00	5,000
6.3	Aluminium framed recycling unit - Single (SF 301 & 302)	No	2	2,600.00	5,200
6.4	Butt Out Bin fixed to waste unit	No	2	450.00	900
6.5	Promenade seating including back rest (SF 201)	No	2	2,100.00	4,200
6.6	Bus shelter (SF 801)	No	1	10,000.00	10,000
6.7	Parking Sign - As advised by Maribyrnong City Council	No	5	200.00	1,000

**31,550****7 Street lighting (Electrical Measured Separately)**

7.1	Street lights shown within RD03 are existing	Note			
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## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD03)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 693.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>7</b>	<b>Street lighting (Electrical Measured Separately)</b>				<i>(Continued)</i>

**8 Landscaping**

	<u>Street Landscaping</u>				
8.1	Allowance of \$450 per plant advised by Footscray City Council dated 22 August 2016	note			
8.2	75L Tree including 2 year establishment and ongoing maintenance	No	11	450.00	4,950
8.3	Gravel / Sand mixture to tree base	m2	23	100.00	2,300
8.4	40 thick Bluestone surround to tree base including mortar bedding	m	64	160.00	10,240

**17,490****9 Power**

	<u>General</u>				
9.1	Demolition of existing Infrastructure Services measured elsewhere	Note			
	<u>Electricity</u>				
9.2	Allowance for substations	Excl			
	<u>Underground Power Distribution</u>				
9.3	LV 1x150 conduit run including trenching and cable installation	m	91	315	28,665
9.4	Allowance for cable joints	No	3	750	2,250
9.5	Pulling of cables undertaken by Authority	EXCL			
	<u>Pits</u>				
9.6	Allowance for precast pits between conduit runs	Item	1	10,000.00	10,000
	<u>Street Lighting</u>				
9.7	Allowance to connect existing street lights to newly proposed underground cables	Item	1	10,000.00	10,000
	<u>Misc</u>				
9.8	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
9.9	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD03)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 693.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>9</b>	<b>Power</b>				(Continued)
9.10	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
9.11	We have allowed for rippable rock to 30% of trench excavation	Note			
9.12	Allowance for trenching in rock in assumed 600 wide	m3	16	120.00	1,966
					<b>60,381</b>

**10 Stormwater**

<u>Stormwater</u>					
<i>Pipework</i>					
10.1	The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network	Note			
<i>Existing</i>					
10.2	450 dia concrete pipe including excavation and backfill - Existing	m	106		
<i>Misc</i>					
10.3	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.4	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
10.5	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
					<b>7,500</b>

**11 Sewer**

<u>Sewer</u>					
11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**12 Water**

<u>Water Supply</u>					
12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD03)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 693.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**12 Water***(Continued)***13 Gas**Gas

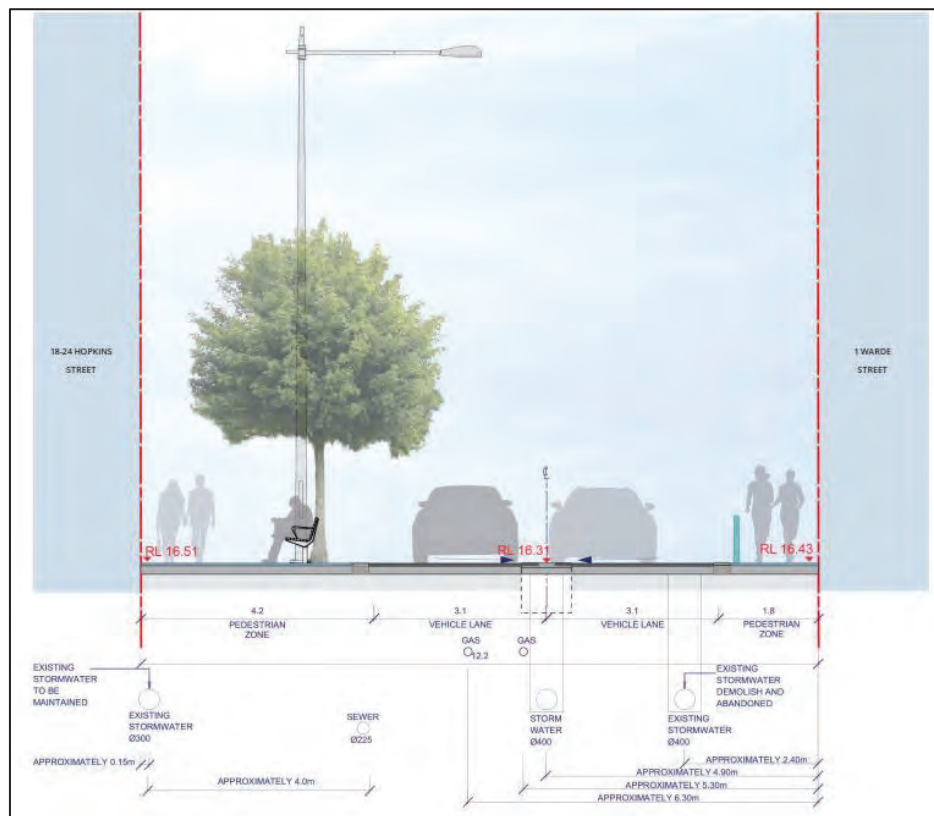
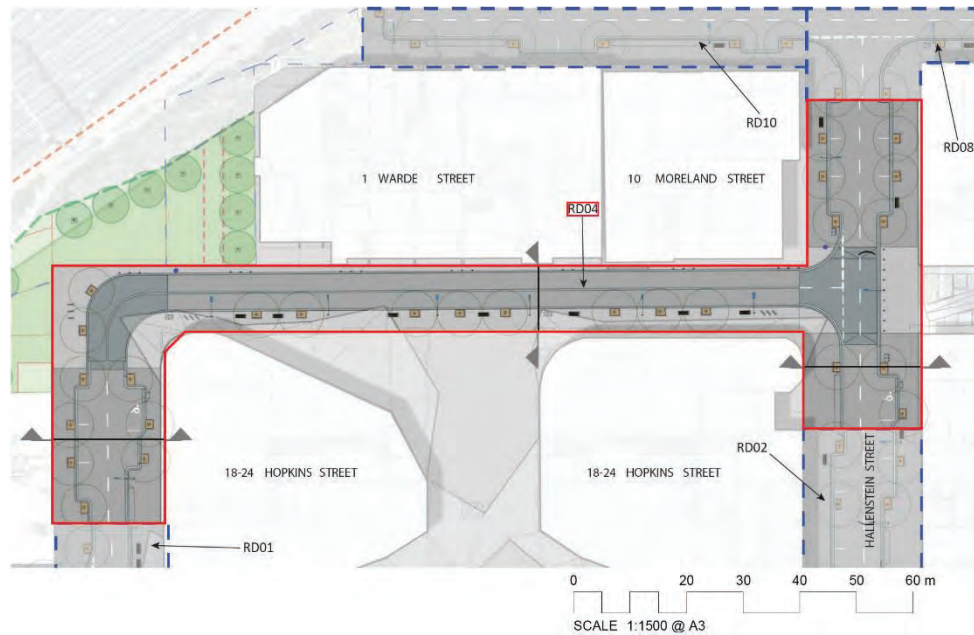
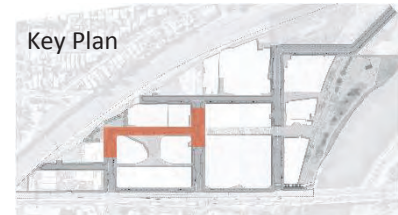
13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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**14 Communications**Communications

14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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## PROJECT AREA: RD04

Description: Warde Street Public Realm Works  
 Drawing Ref: Pages 12, 14, 15, 16 of the Joseph Road Public Realm Plan (Aspect Studios)  
 Date: 7 July 2017  
 Revision: 3



## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD04)

Job No: 16291  
 Cost Base Date: July 2017  
 GFA (m2): 3,528.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	3,528	43.32	152,835
2	Contamination	m3	1,764	313.00	552,132
3	Groundworks	m3	529	433.33	229,320
4	Roadworks	m2	1,523	273.43	416,434
5	Pavements	m2	1,958	282.22	552,580
6	Street Furniture	m2	3,528	31.60	111,500
7	Street lighting (Electrical Measured Separately)	No	9	5,000.00	45,000
8	Traffic Signalisation	N/A			
9	Landscaping	m2	3,528	11.04	38,960
10	Power	m2	3,528	60.48	213,360
11	Stormwater	m2	3,528	15.75	55,565
12	Sewer	m2	3,528		
13	Water	m2	3,528		
14	Gas	m2	3,528		
15	Communications	m2	3,528		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>3,528</b>	<b>671.11</b>	<b>2,367,685</b>
16	Design Development Contingency	%	10.0	2,367,685.49	236,769
17	Temporary works	%	2	2,604,454.04	52,089
18	Preliminaries and Supervision	%	8	2,656,543	212,523
19	Builder's Margin	%	5	2,869,067	143,453
20	Cost Escalation (FEB - JUL)	%	1	3,012,520	30,125
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>3,528</b>	<b>862.43</b>	<b>3,042,645</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	3,042,645	456,397
22	Design and Consultant Fees	%	9	3,499,042	314,914
23	Project Management Fees	%	3	3,813,956	114,636



## ESTIMATE SUMMARY

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD04)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,528.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	3,528	1,113.55	3,928,592
24	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	3,528	1,113.55	3,928,592

## ESTIMATE DETAIL

## 16291 - Joseph Road Precinct

## Joseph Road Precinct - 17 June 2019 (RD04)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,528.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**1 Demolition**

1.1	Allowance for demolition of roads and pavement	m2	3,528	20.00	70,560
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000
1.3	Demolition of existing stormwater pipework including redundant pit removal	m	97	75.00	7,275

**152,835****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	Assume 100% of RD04 area @ 0.50m deep is contaminated: $3,528\text{m}^2 \times 100\% \times 0.50\text{m deep} = 1,764\text{m}^3$ approx	Note			
2.4	Allow 5% at Cat A [\$850/t]	m3	88	1,700	149,940
2.5	Allow Nil at Cat B	m3	Nil		
2.6	Allow 95% at Cat C [\$140/t]	m3	1,676	240	402,192

**552,132****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of public RD04 affected @ 0.50m deep : $3,528\text{m}^2 \times 30\% \times 0.50\text{m deep} = 529\text{m}^3$ approx	m3	529	100.00	52,920
3.3	Allowance for engineered fill in lieu of contamination removal	m3	1,764	100.00	176,400

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD04)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,528.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**3 Groundworks***(Continued)***229,320****4 Roadworks**

	<u>Road</u>				
4.1	180mm Asphalt road with 360mm crushed rock sub-base including associated excavation works	m2	1,225	160.00	196,000
4.2	Bluestone pavement including subbase (Warde / Hallenstein Street Intersection & Joseph Road)	m2	262	350.00	91,700
4.3	Bluestone cobble pavement including subbase (Bluestone pavement (Warde / Hallenstein Intersection & Joseph Road)	m2	36	400.00	14,400
4.4	300 wide flush bluestone kerb strip including 150 thick concrete footing on 75 thick crushed rock base	m	246	275.00	67,650
4.5	150 wide bluestone spoon drain including 150 thick concrete footing on 75 thick crushed rock base and drainage channel	m	123	155.00	19,065
4.6	Allowance for linemarking to the extent of the works	m2	1,225	10.00	12,250
4.7	Allowance for traffic signage	Item	1	5,500.00	5,500
4.8	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
4.9	We have allowed for rippable rock to 10% of road excavation	Note			
4.10	Allowance for trenching in rock	m3	82	120.00	9,869

**416,434****5 Pavements**

	<u>Pavement</u>				
5.1	Bluestone pavement including subbase (Warde / Hallenstein Street Intersection & Joseph Road)	m2	1,366	350.00	478,100
5.2	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	592	65.00	38,480
5.3	E/O Vehicle Crossover	No	3	10,000.00	30,000

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD04)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,528.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**5 Pavements***(Continued)*

5.4	E/O Pram/Pedestrian Crossover (assumed sloped into asphalt pavement as per Maribyrnong City Design Manual SF 003)	No	2	3,000.00	6,000
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**552,580****6 Street Furniture**

6.1	Stainless steel bicycle hoops (SF 401)	No	9	750.00	6,750
6.2	Stainless steel bollards including bollard caps (SF 501)	No	30	1,800.00	54,000
6.3	Aluminium framed waste unit - Single (SF 301 & 302)	No	4	2,500.00	10,000
6.4	Aluminium framed recycling unit - Single (SF 301 & 302)	No	4	2,650.00	10,600
6.5	Butt Out Bin fixed to waste unit	No	4	450.00	1,800
6.6	Promenade seating including back rest (SF 201)	No	9	2,100.00	18,900
6.7	Way finding signage (SF 701)	No	2	2,500.00	5,000
6.8	Traffic Sign - As advised by Maribyrnong City Council	No	1	250.00	250
6.9	Parking Sign - As advised by Maribyrnong City Council	No	21	200.00	4,200

**111,500****7 Street lighting (Electrical Measured Separately)**

7.1	Aluminium Light Pole including luminaries - Power supply measured in Power trade	No	9	5,000.00	45,000
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**45,000****8 Landscaping**

<u>Street Landscaping</u>					
8.1	Allowance of \$450 per plant advised by Footscray City Council dated 22 August 2016	note			
8.2	75L Tree including 2 year establishment and ongoing maintenance	No	26	450.00	11,700
8.3	Gravel / Sand mixture to tree base	m2	47	100.00	4,700
8.4	40 thick Bluestone surround to tree base including mortar bedding	m	141	160.00	22,560

**38,960**



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD04)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,528.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>9</b>	<b>Power</b>				
	<u>General</u>				
9.1	Demolition of existing Infrastructure Services measured elsewhere	Note			
	<u>Electricity</u>				
9.2	Allowance for substations	Excl			
	<i>Underground Power Distribution</i>				
9.3	LV 1x150 conduit run including trenching and cable installation	m	18	315	5,670
9.4	HV 4x150 conduit run including trenching and cable installation	m	171	760	129,917
9.5	Allowance for cable joints	No	4	750	3,000
9.6	Pulling of cables undertaken by Authority	EXCL			
	<i>Pits</i>				
9.7	Allowance for precast pits between conduit runs	Item	1	10,000.00	10,000
	<i>Street Lighting</i>				
9.8	Allowance for luminary fitting to light pole	No	9	1,500.00	13,500
9.9	Allowance for connection to street mains	No	9	450.00	4,050
9.10	LV cabling ran within street light poles (assumed standard 11m height)	No	9	460.00	4,140
9.11	Conduit including LV cabling ran from light pole base to street mains (assumed 10 m per pole)	m	90	350.00	31,500
	<i>Misc</i>				
9.12	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
9.13	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
9.14	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
9.15	We have allowed for rippable rock to 30% of trench excavation	Note			
9.16	Allowance for trenching in rock in assumed 600 wide	m3	34	120.00	4,082

**213,360**

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD04)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,528.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>10 Stormwater</b>					
	<u>Stormwater</u>				
	<i>Pits</i>				
10.1	New stormwater pits	No	9	4,000.00	36,000
	<i>Pipework</i>				
10.2	The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network	Note			
	<i>Existing</i>				
10.3	300 dia concrete pipe including excavation and backfill - Existing	m	113		
	<i>Proposed</i>				
10.4	300 dia concrete pipe including excavation and backfill	m	30	130.00	3,900
10.5	375 dia concrete pipe including excavation and backfill	m	48	135.00	6,480
	<i>Misc</i>				
10.6	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.7	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
10.8	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
10.9	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
10.10	We have allowed for rippable rock to 30% of trench excavation	Note			
10.11	Allowance for trenching in rock in assumed 600 wide	m3	14	120.00	1,685

**55,565****11 Sewer**

	<u>Sewer</u>				
11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD04)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,528.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**12 Water**Water Supply

12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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**13 Gas**Gas

13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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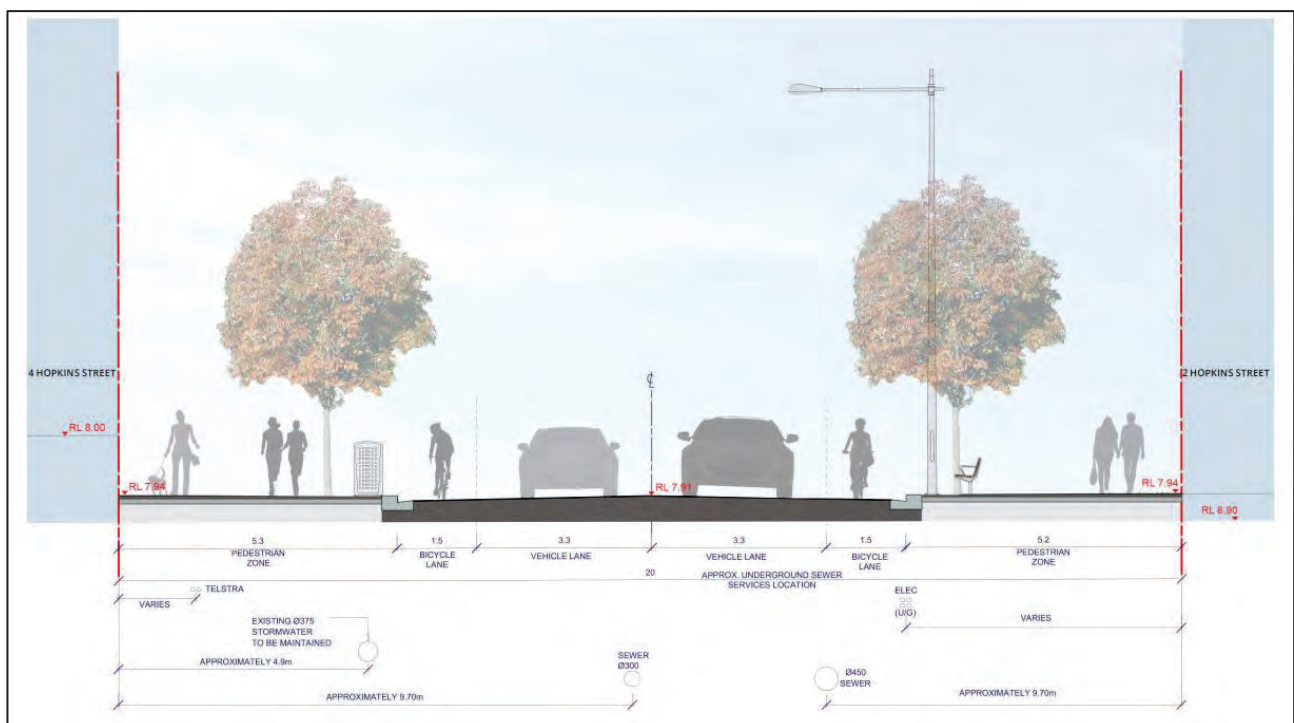
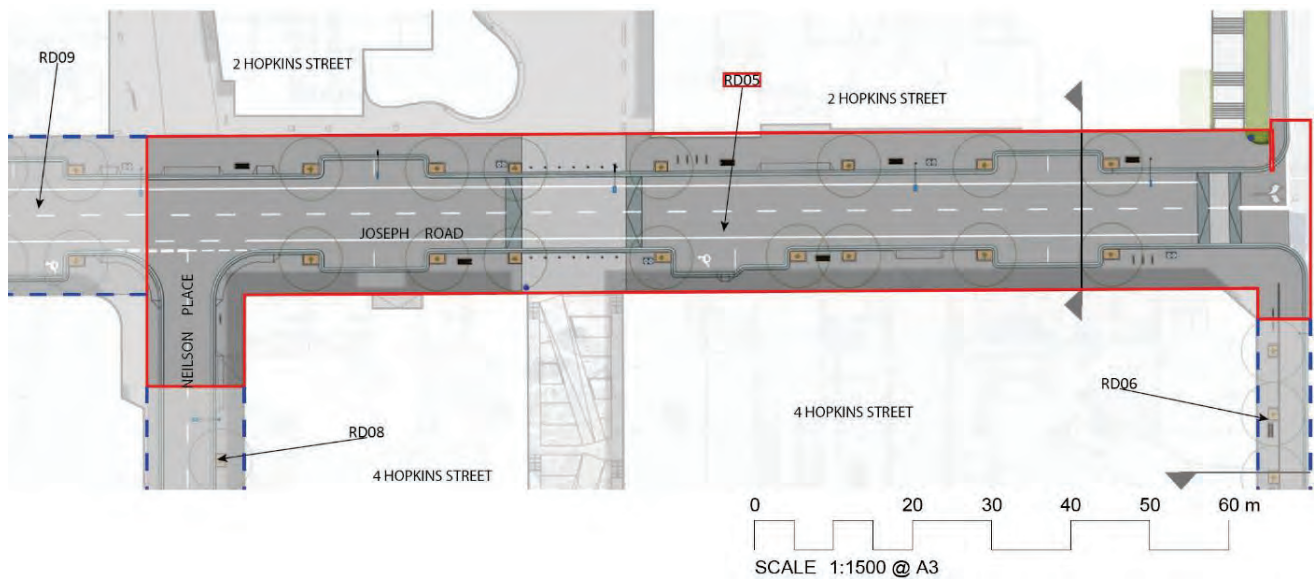
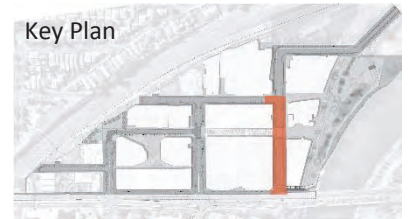
**14 Communications**Communications

14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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## PROJECT AREA: RD05

Description: South Joseph Road Public Realm Works  
 Drawing Ref: Pages 20 & 22 of the Joseph Road Public Realm Plan  
 (Aspect Studios)  
 Date: 7 July 2017  
 Revision: 3



**ESTIMATE SUMMARY****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (RD05)**
**Job No: 16291**  
**Cost Base Date: July 2017**  
**GFA (m2): 3,122.00**
**Date Printed: 17/06/2019**

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	3,122	46.89	146,390
2	Contamination	m3	1,561	313.00	488,593
3	Groundworks	m3	468	433.33	202,930
4	Roadworks	m2	2,092	264.70	553,744
5	Pavements	m2	1,001	164.32	164,485
6	Street Furniture	m2	3,122	25.21	78,700
7	Street lighting (Electrical Measured Separately)	No	4	5,000.00	20,000
8	Traffic Signalisation	N/A			
9	Landscaping	m2	3,122	7.40	23,090
10	Power	m2	3,122	55.79	174,191
11	Stormwater	m2	3,122	24.69	77,078
12	Sewer	m2	3,122		
13	Water	m2	3,122		
14	Gas	m2	3,122		
15	Communications	m2	3,122		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>3,122</b>	<b>617.94</b>	<b>1,929,201</b>
16	Design Development Contingency	%	10.0	1,929,200.60	192,920
17	Temporary works	%	2	2,122,120.66	42,442
18	Preliminaries and Supervision	%	8	2,164,563	173,165
19	Builder's Margin	%	5	2,337,728	116,886
20	Cost Escalation (FEB - JUL)	%	1	2,454,615	24,546
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>3,122</b>	<b>794.09</b>	<b>2,479,161</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	2,479,161	371,874
22	Design and Consultant Fees	%	9	2,851,035	256,593
23	Project Management Fees	%	3	3,107,628	93,447



## ESTIMATE SUMMARY

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD05)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,122.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	3,122	1,025.33	3,201,075
24	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	3,122	1,025.33	3,201,075

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD05)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,122.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>1</b>	<b>Demolition</b>				
1.1	Allowance for demolition of roads and pavement	m2	3,122	20.00	62,440
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000
1.3	Demolition of existing stormwater pipework including redundant pit removal	m	86	75.00	6,450
1.4	Demolition of existing concrete pillar	Item	1	2,500	2,500

**146,390****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017				
2.3	Assume 100% of RD05 area @ 0.50m deep is contaminated: 3,122m2 x 100% x 0.50m deep = 1,561m3 approx	Note			
2.4	Allow 5% at Cat A [\$850/t]	m3	78	1,700	132,685
2.5	Allow Nil at Cat B	m3	Nil		
2.6	Allow 95% at Cat C [\$140/t]	m3	1,483	240	355,908

**488,593****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of public RD05 affected @ 0.50m deep : 3,122m2 x 30% x 0.50m deep = 468m3 approx	m3	468	100.00	46,830



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD05)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,122.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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### 3 Groundworks (Continued)

3.3	Allowance for engineered fill in lieu of contamination removal	m3	1,561	100.00	156,100
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**202,930**

### 4 Roadworks

	<u>Road</u>				
4.1	180mm Asphalt road with 480mm crushed rock sub-base including associated excavation works	m2	1,919	180.00	345,420
4.2	Bluestone pavement (Warde / Hallenstein Street Intersection & Joseph Road)	m2	119	350.00	41,650
4.3	Bluestone cobble pavement (Bluestone pavement (Warde / Hallenstein Street Intersection & Joseph Road)	m2	54	400.00	21,600
4.4	Road kerbing consisting of 300 wide sawn bluestone block and 300 wide concrete channel including 150 thick concrete footing on 75 thick crushed rock base	m	297	350.00	103,950
4.5	Allowance for linemarking to the extent of the works	m2	1,919	10.00	19,190
4.6	Allowance for traffic signage	Item	1	5,500.00	5,500
4.7	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
4.8	We have allowed for rippable rock to 10% of road excavation	Note			
4.9	Allowance for trenching in rock	m3	137	120.00	16,434

**553,744**

### 5 Pavements

	<u>Pavement</u>				
5.1	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	891	65.00	57,915
5.2	Bluestone pavement (Warde / Hallenstein Street Intersection & Joseph Road)	m2	110	350.00	38,500
5.3	300 wide sawn bluestone banding within Asphalt including mortar bedding, 32 MPa concrete pad and crushed rock subbase	m	82	135.00	11,070
5.4	E/O Vehicle Crossover	No	4	10,000.00	40,000

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD05)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,122.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**5 Pavements***(Continued)*

5.5	E/O Pram/Pedestrian Crossover (assumed sloped into asphalt pavement as per Maribyrnong City Design Manual SF 003)	No	4	3,000.00	12,000
5.6	E/O Pram/Pedestrian Crossover - Extended	No	1	5,000.00	5,000

**164,485****6 Street Furniture**

6.1	Stainless steel bicycle hoops (SF 401)	No	9	750.00	6,750
6.2	Stainless steel bollards including bollard caps (SF 501)	No	14	1,800.00	25,200
6.3	Aluminium framed waste unit - Single (SF 301 & 302)	No	4	2,500.00	10,000
6.4	Aluminium framed recycling unit - Single (SF 301 & 302)	No	4	2,650.00	10,600
6.5	Butt Out Bin fixed to waste unit	No	4	450.00	1,800
6.6	Promenade seating including back rest (SF 201)	No	6	2,100.00	12,600
6.7	Way finding signage (SF 701)	No	2	2,500.00	5,000
6.8	Traffic Sign - As advised by Maribyrnong City Council	No	7	250.00	1,750
6.9	Parking Sign - As advised by Maribyrnong City Council	No	25	200.00	5,000

**78,700****7 Street lighting (Electrical Measured Separately)**

7.1	Aluminium Light Pole - Power supply measured elsewhere	No	4	5,000.00	20,000
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**20,000****8 Landscaping**

<u>Street Landscaping</u>					
8.1	Allowance of \$450 per plant advised by Footscray City Council dated 22 August 2016	note			
8.2	75L Tree including 2 year establishment and ongoing maintenance	No	15	450.00	6,750
8.3	Gravel / Sand mixture to tree base	m2	29	100.00	2,900
8.4	40 thick Bluestone surround to tree base including mortar bedding	m	84	160.00	13,440

**23,090**

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD05)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,122.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**9 Power**General

- 9.1 Demolition of existing Infrastructure Services measured elsewhere Note

Electricity

- 9.2 Allowance for substations Excl

*Underground Power Distribution*

- 9.3 HV Power Conduits including associated trenching m 191 675.00 128,925

- 9.4 Pulling of cables undertaken by Authority EXCL

*Pits*

- 9.5 Allowance for precast pits between conduit runs Item 1 10,000.00 10,000

*Street Lighting*

- 9.6 Allowance for luminary fitting to light pole No 4 1,500.00 6,000

- 9.7 Allowance for connection to street mains No 4 450.00 1,800

- 9.8 LV cabling ran within street light poles (assumed standard 11m height) No 4 460.00 1,840

- 9.9 Conduit including LV cabling ran from light pole base to street mains (assumed 10 m per pole) m 40 350.00 14,000

*Misc*

- 9.10 Allowance for asset recording and quality testing Item 1 2,500.00 2,500

- 9.11 Allowance for taping into surrounding mains (Staged Works) Item 1 5,000.00 5,000

- 9.12 Refer to LR Pardo & Associates geotechnical report for identification of rock. Note

- 9.13 We have allowed for rippable rock to 30% of trench excavation Note

- 9.14 Allowance for trenching in rock in assumed 600 wide m3 34 120.00 4,126

**174,191****10 Stormwater**Stormwater*Pits*

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD05)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,122.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>10 Stormwater</b>					<i>(Continued)</i>
10.1	New stormwater pits	No	12	4,000.00	48,000
	<i>Pipework</i>				
10.2	The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network	Note			
	<i>Existing</i>				
10.3	375 dia concrete pipe including excavation and backfill - Existing	m	73		
	<i>Proposed</i>				
10.4	300 dia concrete pipe including excavation and backfill	m	28	130.00	3,640
10.5	375 dia concrete pipe including excavation and backfill	m	20	135.00	2,700
10.6	600 dia concrete pipe including excavation and backfill	m	35	350.00	12,250
	<i>Misc</i>				
10.7	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.8	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
10.9	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
10.10	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
10.11	We have allowed for rippable rock to 30% of trench excavation	Note			
10.12	Allowance for trenching in rock in assumed 1000 wide	m3	25	120.00	2,988

**77,078****11 Sewer**

	<u>Sewer</u>				
11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD05)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,122.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**12 Water**Water Supply

12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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**13 Gas**Gas

13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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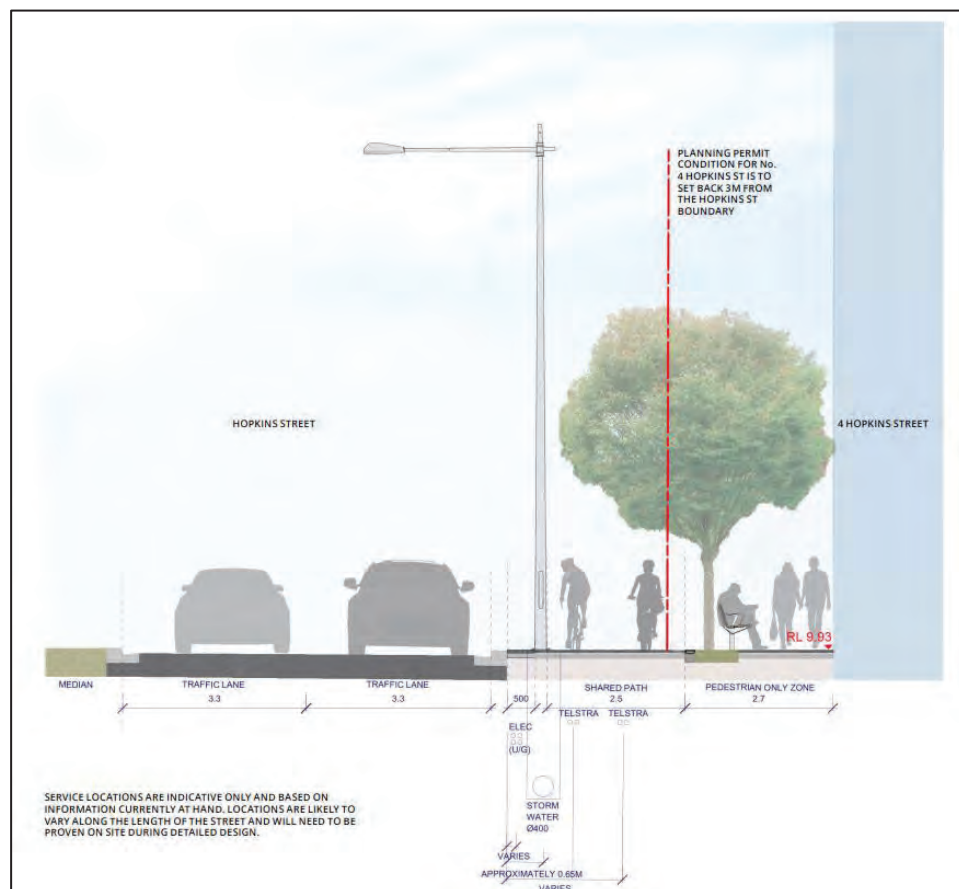
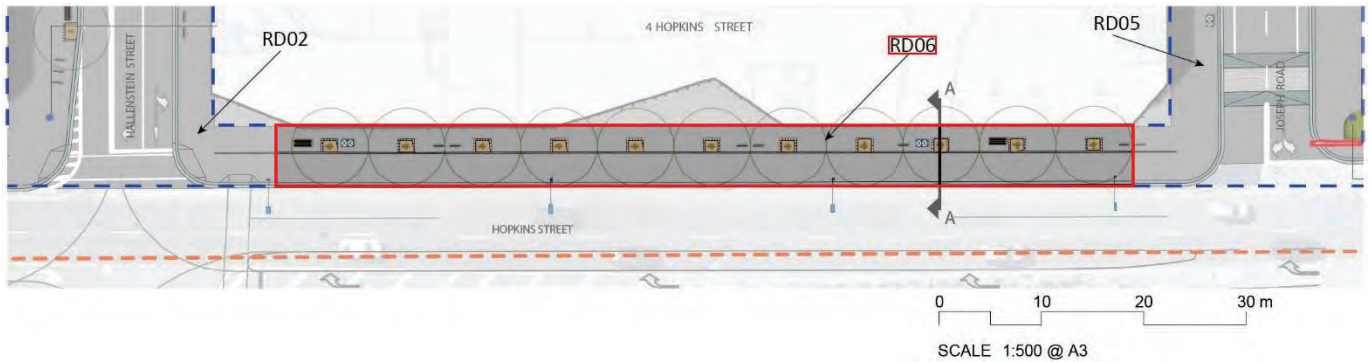
**14 Communications**Communications

14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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## PROJECT AREA: RD06

Description: Hopkins Street Footpath Upgrade Works (Central East)  
 Drawing Ref: Pages 26-27 of the Joseph Road Public Realm Plan  
 (Aspect Studios)  
 Date: 7 July 2017  
 Revision: 3



**ESTIMATE SUMMARY****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (RD06)**
**Job No: 16291**  
**Cost Base Date: July 2017**  
**GFA (m2): 580.00**
**Date Printed: 17/06/2019**

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	580	149.31	86,600
2	Contamination	m3	290	313.00	90,770
3	Groundworks	m3	87	433.33	37,700
4	Roadworks	m2	580	58.97	34,200
5	Pavements	m2	651	73.02	47,535
6	Street Furniture	m2	580	35.43	20,550
7	Street lighting (Electrical Measured Separately)	No	4	3,750.00	15,000
8	Traffic Signalisation	N/A			
9	Landscaping	m2	580	27.81	16,130
10	Power	m2	580	103.37	59,955
11	Stormwater	m2	580	19.83	11,500
12	Sewer	m2	580		
13	Water	m2	580		
14	Gas	m2	580		
15	Communications	m2	580		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>580</b>	<b>724.04</b>	<b>419,940</b>
16	Design Development Contingency	%	10.0	419,940.40	41,994
17	Temporary works	%	2	461,934.44	9,239
18	Preliminaries and Supervision	%	8	471,173	37,694
19	Builder's Margin	%	5	508,867	25,443
20	Cost Escalation (FEB - JUL)	%	1	534,310	5,343
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>580</b>	<b>930.44</b>	<b>539,653</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	539,653	80,948
22	Design and Consultant Fees	%	9	620,601	55,854
23	Project Management Fees	%	3	676,456	20,511





## ESTIMATE SUMMARY

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD06)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 580.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	580	1,201.67	696,967
24	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	580	1,201.67	696,967

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD06)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 580.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**1 Demolition**

1.1	Allowance for demolition of roads and pavement	m2	580	20.00	11,600
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000

**86,600****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	Assume 100% of RD06 area @ 0.50m deep is contaminated: 580m2 x 100% x 0.50m deep = 290m3 approx	Note			
2.4	Allow 5% at Cat A [\$850/t]	m3	15	1,700	24,650
2.5	Allow Nil at Cat B	m3	Nil		
2.6	Allow 95% at Cat C [\$140/t]	m3	276	240	66,120

**90,770****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of RD06 area affected @ 0.50m deep : 580m2 x 30% x 0.50m deep = 87m3 approx	m3	87	100.00	8,700
3.3	Allowance for engineered fill in lieu of contamination removal	m3	290	100.00	29,000

**37,700**

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD06)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 580.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**4 Roadworks**

<u>Road</u>					
4.1	Road kerbing consisting of 300 wide sawn bluestone block and 300 wide concrete channel including 150 thick concrete footing on 75 thick crushed rock base	m	82	350.00	28,700
4.2	Allowance for traffic signage	Item	1	5,500.00	5,500
					<b>34,200</b>

**5 Pavements**

<u>Pavement</u>					
5.1	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	561	65.00	36,465
5.2	300 wide sawn bluestone banding within Asphalt including mortar bedding, 32 MPa concrete pad and crushed rock subbase	m	82	135.00	11,070
5.3	The cost of the pavement (5.1 & 5.2) will be externally apportioned through Amendment C145 at 76.6% (\$36,412)	Note			
					<b>47,535</b>

**6 Street Furniture**

6.1	Stainless steel bicycle hoops (SF 401)	No	6	750.00	4,500
6.2	Aluminium framed waste unit - Single (SF 301 & 302)	No	2	2,500.00	5,000
6.3	Aluminium framed recycling unit - Single (SF 301 & 302)	No	2	2,650.00	5,300
6.4	Butt Out Bin fixed to waste unit	No	2	450.00	900
6.5	Promenade seating including back rest (SF 201)	No	2	2,100.00	4,200
6.6	Traffic Sign - As advised by Maribyrnong City Council	No	1	250.00	250
6.7	Parking Sign - As advised by Maribyrnong City Council	No	2	200.00	400
					<b>20,550</b>

**7 Street lighting (Electrical Measured Separately)**

7.1	Aluminium Light Pole - Power supply measured elsewhere	No	3	5,000.00	15,000
					<b>15,000</b>

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD06)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 580.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**8 Landscaping**

<u>Street Landscaping</u>					
8.1	Allowance of \$450 per plant advised by Footscray City Council dated 22 August 2016	note			
8.2	75L Tree including 2 year establishment and ongoing maintenance	No	11	450.00	4,950
8.3	Gravel / Sand mixture to tree base	m2	19	100.00	1,900
8.4	40 thick Bluestone surround to tree base including mortar bedding	m	58	160.00	9,280

**16,130****9 Power**

<u>General</u>					
9.1	Demolition of existing Infrastructure Services measured elsewhere	Note			
<u>Electricity</u>					
9.2	Allowance for substations	Excl			
<u>Underground Power Distribution</u>					
9.3	LV 1x150 conduit run including trenching and cable installation	m	69	315	21,735
9.4	Allowance for cable joints	No	2	750	1,500
9.5	Pulling of cables undertaken by Authority	EXCL			
<u>Pits</u>					
9.6	Allowance for precast pits between conduit runs	Item	1	10,000.00	10,000
<u>Street Lighting</u>					
9.7	Allowance for luminary fitting to light pole	No	3	1,500.00	4,500
9.8	Allowance for connection to street mains	No	3	450.00	1,350
9.9	LV cabling ran within street light poles (assumed standard 11m height)	No	3	460.00	1,380
9.10	Conduit including LV cabling ran from light pole base to street mains (assumed 10 m per pole)	m	30	350.00	10,500
<u>Misc</u>					
9.11	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD06)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 580.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>9</b>	<b>Power</b>				<i>(Continued)</i>
9.12	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
9.13	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
9.14	We have allowed for rippable rock to 30% of trench excavation	Note			
9.15	Allowance for trenching in rock in assumed 600 wide	m3	12	120.00	1,490
					<b>59,955</b>

**10 Stormwater**

<u>Stormwater</u>					
<i>Pits</i>					
10.1	New stormwater pits	No	1	4,000.00	4,000
<i>Pipework</i>					
10.2	The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network	Note			
<i>Existing</i>					
10.3	600 dia concrete pipe including excavation and backfill - Existing	m	114		
<i>Misc</i>					
10.4	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.5	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
10.6	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
10.7	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
10.8	We have allowed for rippable rock to 30% of trench excavation	Note			
					<b>11,500</b>

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD06)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 580.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**11 Sewer**Sewer

11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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**12 Water**Water Supply

12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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**13 Gas**Gas

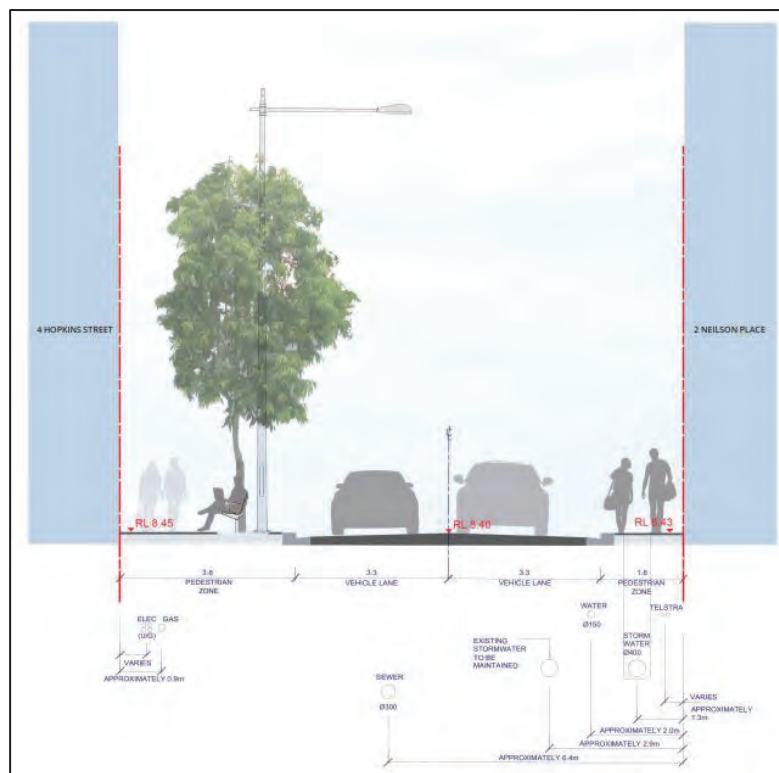
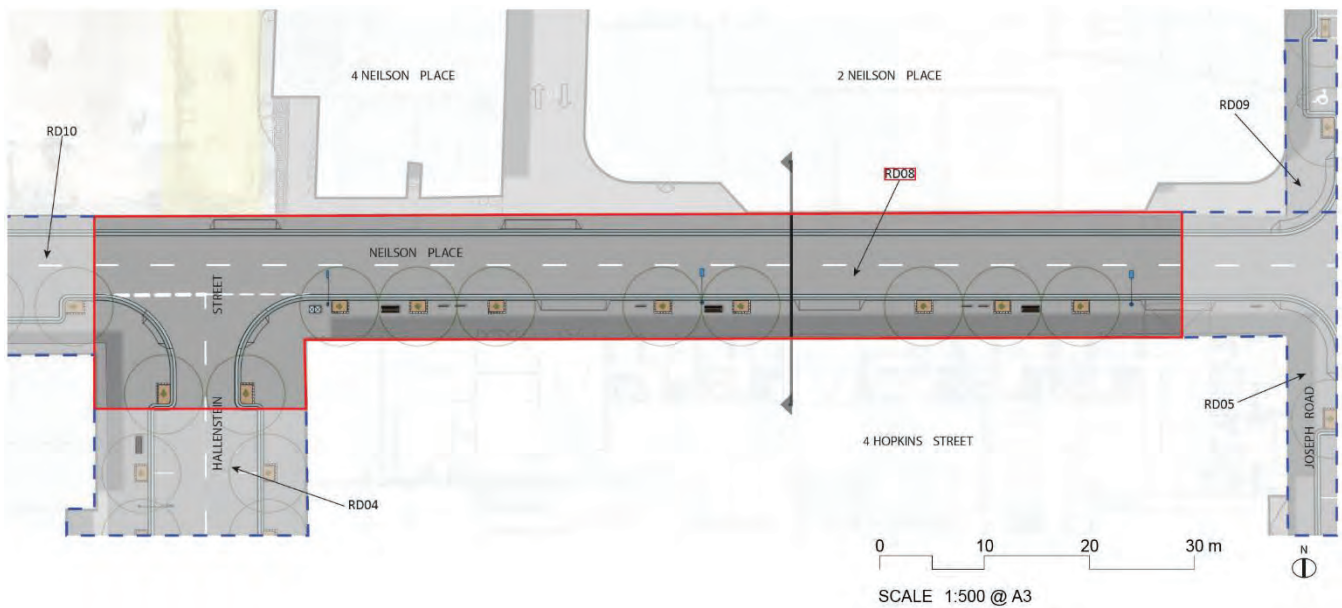
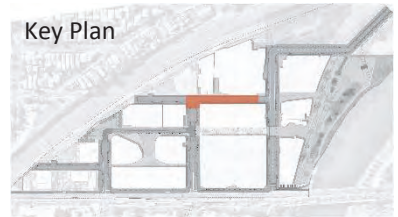
13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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**14 Communications**Communications

14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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## PROJECT AREA: RD08

Description: East Neilson Place Public Realm Works  
 Drawing Ref: Pages 18-19 of the Joseph Road Public Realm Plan  
 (Aspect Studios)  
 Date: 2 July 2017  
 Revision: 3



## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD08)

Job No: 16291  
 Cost Base Date: July 2017  
 GFA (m2): 1,605.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	1,605	73.22	117,525
2	Contamination	m3	803	1,512.29	1,213,609
3	Groundworks	m3	241	433.33	104,325
4	Roadworks	m2	1,064	391.41	416,465
5	Pavements	m2	522	172.28	89,930
6	Street Furniture	m2	1,605	11.28	18,100
7	Street lighting (Electrical Measured Separately)	No	3	5,000.00	15,000
8	Traffic Signalisation	N/A			
9	Landscaping	m2	1,605	9.47	15,200
10	Power	m2	1,605	88.36	141,810
11	Stormwater	m2	1,605	41.42	66,476
12	Sewer	m2	1,605		
13	Water	m2	1,605		
14	Gas	m2	1,605		
15	Communications	m2	1,605		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>1,605</b>	<b>1,369.74</b>	<b>2,198,440</b>
16	Design Development Contingency	%	10.0	2,198,439.96	219,844
17	Temporary works	%	2	2,418,283.96	48,366
18	Preliminaries and Supervision	%	8	2,466,650	197,332
19	Builder's Margin	%	5	2,663,982	133,199
20	Cost Escalation (FEB - JUL)	%	1	2,797,181	27,972
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>1,605</b>	<b>1,760.22</b>	<b>2,825,152</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	2,825,152	423,773
22	Design and Consultant Fees	%	9	3,248,925	292,403
23	Project Management Fees	%	3	3,541,329	106,458



## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Job No: 16291

Joseph Road Precinct - 17 June 2019 (RD08)

Cost Base Date: July 2017

GFA (m2): 1,605.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	1,605	2,272.76	3,647,787
24	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	1,605	2,272.76	3,647,787

## ESTIMATE DETAIL

## 16291 - Joseph Road Precinct

## Joseph Road Precinct - 17 June 2019 (RD08)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,605.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**1 Demolition**

1.1	Allowance for demolition of roads and pavement	m2	1,605	20.00	32,100
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000
1.3	Demolition of existing stormwater pipework including redundant pit removal	m	139	75.00	10,425

**117,525****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	The below quantities have been based of the information provided within LR Pardo & Associates Technical Report 1710011 Joseph Rd/1	Note			
2.4	Assume 100% of RD08 area @ 0.50m deep is contaminated: 1,605m2 x 100% x 0.50m deep = 803m3 approx	Note			
2.5	Allow 66% at Cat A including asbestos removal [\$925/t]	m3	538	1,850	995,624
2.6	Allow Nil at Cat B	m3	Nil		
2.7	Allow 33% at Cat C including asbestos removal [\$185/t]	m3	265	370	97,985
2.8	Allowance for additional preliminaries in regards to asbestos removal (approx \$3,000 per day)	Item	1	120,000.00	120,000

**1,213,609**

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD08)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,605.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>3 Groundworks</b>					
3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of RD08 area affected @ 0.50m deep : 1,617m2 x 30% x 0.50m deep = 243m3 approx	m3	241	100.00	24,075
3.3	Allowance for engineered fill in lieu of contamination removal	m3	803	100.00	80,250

**104,325****4 Roadworks**

	<u>Road</u>				
4.1	180mm Asphalt road with 480mm crushed rock sub-base including associated excavation works	m2	1,064	180.00	191,520
4.2	Road kerbing consisting of 300 wide sawn bluestone block and 300 wide concrete channel including 150 thick concrete footing on 75 thick crushed rock base	m	215	350.00	75,250
4.3	Allowance for linemarking to the extent of the works	m2	1,064	10.00	10,640
4.4	Allowance for traffic signage	Item	1	5,500.00	5,500
4.5	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
4.6	We have allowed for rippable rock to 10% of road excavation	Note			
4.7	Allowance for trenching in rock	m3	53	120.00	6,360
4.8	E/O for removal of asbestos during excavation [\$120/t]	m3	530	240.00	127,195

**416,465****5 Pavements**

	<u>Pavement</u>				
5.1	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	522	65.00	33,930
5.2	E/O Vehicle Crossover	No	5	10,000.00	50,000
5.3	E/O Pram/Pedestrian Crossover (assumed sloped into asphalt pavement as per Maribyrnong City Design Manual SF 003)	No	2	3,000.00	6,000

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD08)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,605.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**5 Pavements***(Continued)***89,930****6 Street Furniture**

6.1	Stainless steel bicycle hoops (SF 401)	No	5	750.00	3,750
6.2	Aluminium framed waste unit - Single (SF 301 & 302)	No	1	2,500.00	2,500
6.3	Aluminium framed recycling unit - Single (SF 301 & 302)	No	1	2,650.00	2,650
6.4	Butt Out Bin fixed to waste unit	No	1	450.00	450
6.5	Promenade seating including back rest (SF 201)	No	3	2,100.00	6,300
6.6	Traffic Sign - As advised by Maribyrnong City Council	No	1	250	250
6.7	Parking Sign - As advised by Maribyrnong City Council	No	11	200.00	2,200

**18,100****7 Street lighting (Electrical Measured Separately)**

7.1	Aluminium Light Pole - Power supply measured elsewhere	No	3	5,000.00	15,000
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**15,000****8 Landscaping**

<u>Street Landscaping</u>					
8.1	Allowance of \$450 per plant advised by Footscray City Council dated 22 August 2016	note			
8.2	75L Tree including 2 year establishment and ongoing maintenance	No	10	450.00	4,500
8.3	Gravel / Sand mixture to tree base	m2	19	100.00	1,900
8.4	40 thick Bluestone surround to tree base including mortar bedding	m	55	160.00	8,800

**15,200****9 Power**

<u>General</u>					
9.1	Demolition of existing Infrastructure Services measured elsewhere	Note			
<u>Electricity</u>					
9.2	Allowance for substations	Excl			

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD08)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,605.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**9 Power***(Continued)**Underground Power Distribution*

9.3	HV Power Conduits including associated trenching	m	153	675.00	103,275
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9.4	Pulling of cables undertaken by Authority	EXCL			
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*Pits*

9.5	Allowance for precast pits between conduit runs	Item	1	10,000.00	10,000
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*Street Lighting*

9.6	Allowance for luminary fitting to light pole	No	3	1,500.00	4,500
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9.7	Allowance for connection to street mains	No	3	450.00	1,350
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9.8	LV cabling ran within street light poles (assumed standard 11m height)	No	3	460.00	1,380
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9.9	Conduit including LV cabling ran from light pole base to street mains (assumed 10 m per pole)	m	30	350.00	10,500
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*Misc*

9.10	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
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9.11	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
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9.12	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
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9.13	We have allowed for rippable rock to 30% of trench excavation	Note			
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9.14	Allowance for trenching in rock in assumed 600 wide	m3	28	120.00	3,305
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**141,810****10 Stormwater**Stormwater*Pits*

10.1	New stormwater pits	No	8	4,000.00	32,000
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*Pipework*

10.2	The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network	Note			
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## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD08)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,605.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**10 Stormwater***(Continued)**Proposed*

10.3	300 dia concrete pipe including excavation and backfill	m	9	130.00	1,170
10.4	375 dia concrete pipe including excavation and backfill	m	13	135.00	1,755
10.5	450 dia concrete pipe including excavation and backfill	m	32	175.00	5,600
10.6	525 dia concrete pipe including excavation and backfill	m	78	200.00	15,600
10.7	600 dia concrete pipe including excavation and backfill	m		350.00	

*Misc*

10.8	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.9	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
10.10	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
10.11	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
10.12	We have allowed for rippable rock to 30% of trench excavation	Note			
10.13	Allowance for trenching in rock in assumed 600 wide	m3	24	120.00	2,851

**66,476****11 Sewer**Sewer

11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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**12 Water**Water Supply

12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			
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## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD08)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,605.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**13 Gas**Gas

13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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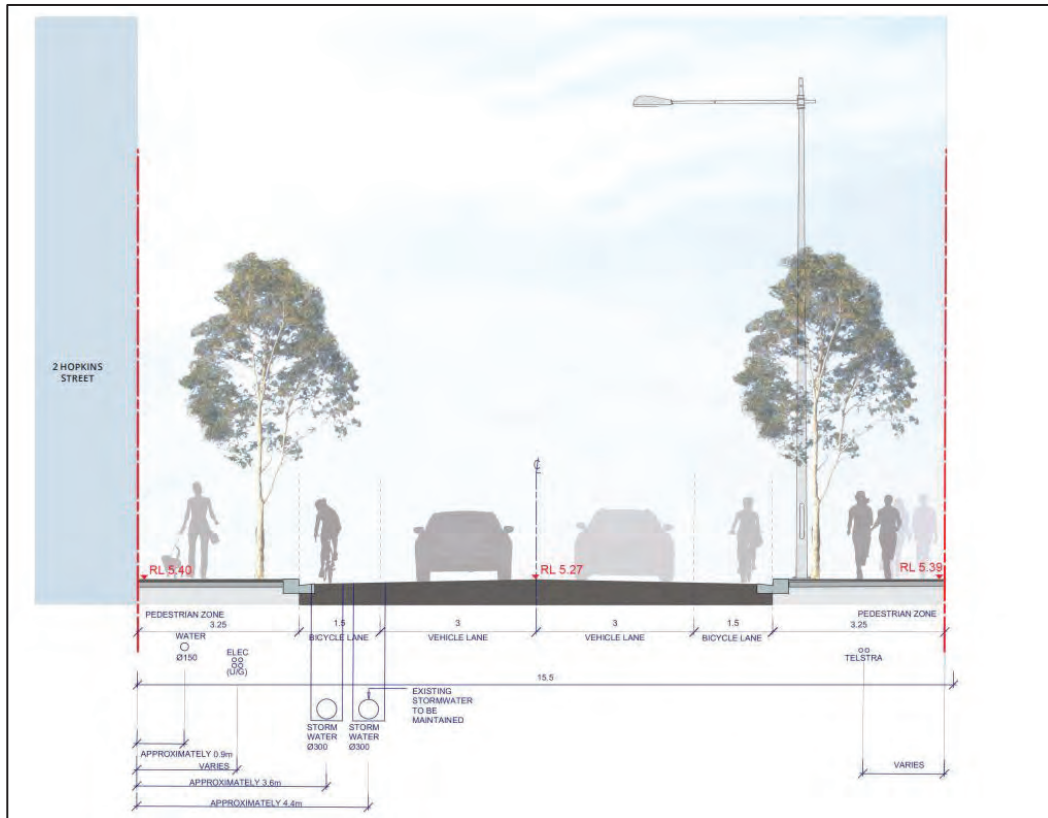
**14 Communications**Communications

14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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Section AA across North Joseph Road, from page 24 of the Joseph Road Public Realm Plan

**ESTIMATE SUMMARY****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (RD09)**
**Job No: 16291**  
**Cost Base Date: July 2017**  
**GFA (m2): 3,174.00**
**Date Printed: 17/06/2019**

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	3,174	48.80	154,912
2	Contamination	m3	1,587	313.00	496,789
3	Groundworks	m3	476	433.33	206,335
4	Roadworks	m2	2,141	240.76	515,476
5	Pavements	m2	975	115.26	112,375
6	Street Furniture	m2	3,174	10.43	33,100
7	Street lighting (Electrical Measured Separately)	No	7	5,000.00	35,000
8	Traffic Signalisation	N/A			
9	Landscaping	m2	3,174	14.56	46,230
10	Power	m2	3,174	67.70	214,908
11	Stormwater	m2	3,174	43.58	138,328
12	Sewer	m2	3,174		
13	Water	m2	3,174		
14	Gas	m2	3,174		
15	Communications	m2	3,174		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>3,174</b>	<b>615.38</b>	<b>1,953,454</b>
16	Design Development Contingency	%	10.0	1,953,453.62	195,345
17	Temporary works	%	2	2,148,798.98	42,976
18	Preliminaries and Supervision	%	8	2,191,775	175,342
19	Builder's Margin	%	5	2,367,117	118,356
20	Cost Escalation (FEB - JUL)	%	1	2,485,473	24,855
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>3,174</b>	<b>790.81</b>	<b>2,510,328</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	2,510,328	376,549
22	Design and Consultant Fees	%	9	2,886,877	259,819
23	Project Management Fees	%	3	3,146,696	101,158

## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Job No: 16291

Joseph Road Precinct - 17 June 2019 (RD09)

Cost Base Date: July 2017

GFA (m2): 3,174.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	3,174	1,023.15	3,247,853
24	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	3,174	1,023.15	3,247,853

## ESTIMATE DETAIL

## 16291 - Joseph Road Precinct

## Joseph Road Precinct - 17 June 2019 (RD09)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,174.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>1</b>	<b>Demolition</b>				
1.1	Allowance for demolition of roads and pavement	m2	3,174	20.00	63,487
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000
1.3	Demolition of existing stormwater pipework including redundant pit removal	m	219	75.00	16,425

**154,912****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	Assume 100% of RD09 area @ 0.50m deep is contaminated: $3,174\text{m}^2 \times 100\% \times 0.50\text{m deep} = 1,587\text{m}^3$ approx	Note			
2.4	Allow 5% at Cat A [\$850/t]	m3	79	1,700	134,911
2.5	Allow Nil at Cat B	m3	Nil		
2.6	Allow 95% at Cat C [\$140/t]	m3	1,508	240	361,878

**496,789****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of RD09 area affected @ 0.50m deep : $3,174\text{m}^2 \times 30\% \times 0.50\text{m deep} = 476\text{m}^3$ approx	m3	476	100.00	47,616
3.3	Allowance for engineered fill in lieu of contamination removal	m3	1,587	100.00	158,719

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD09)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,174.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**3 Groundworks***(Continued)***206,335****4 Roadworks**

	<u>Road</u>				
4.1	180mm Asphalt road with 400mm crushed rock sub-base including associated excavation works	m2	2,141	165.00	353,265
4.2	Road kerbing consisting of 300 wide sawn bluestone block and 300 wide concrete channel including 150 thick concrete footing on 75 thick crushed rock base	m	344	350.00	120,400
4.3	Allowance for linemarking to the extent of the works	m2	2,141	10.00	21,410
4.4	Allowance for traffic signage	Item	1	5,500.00	5,500
4.5	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
4.6	We have allowed for rippable rock to 10% of road excavation	Note			
4.7	Allowance for trenching in rock	m3	124	120.00	14,901

**515,476****5 Pavements**

	<u>Pavement</u>				
5.1	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	975	65.00	63,375
5.2	E/O Vehicle Crossover	No	2	10,000.00	20,000
5.3	E/O Pram/Pedestrian Crossover (assumed sloped into asphalt pavement as per Maribyrnong City Design Manual SF 003)	No	8	3,000.00	24,000
5.4	E/O Pram/Pedestrian Crossover - Extended	No	1	5,000.00	5,000

**112,375****6 Street Furniture**

6.1	Stainless steel bicycle hoops (SF 401)	No	8	750.00	6,000
6.2	Aluminium framed waste unit - Single (SF 301 & 302)	No	2	2,500.00	5,000
6.3	Aluminium framed recycling unit - Single (SF 301 & 302)	No	2	2,650.00	5,300
6.4	Butt Out Bin fixed to waste unit	No	2	450.00	900



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD09)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,174.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**6 Street Furniture***(Continued)*

6.5	Promenade seating including back rest (SF 201)	No	4	2,100.00	8,400
6.6	Way finding signage (SF 701)	No	1	2,500.00	2,500
6.7	Traffic Sign - As advised by Maribyrnong City Council	No	8	250.00	2,000
6.8	Parking Sign - As advised by Maribyrnong City Council	No	15	200.00	3,000

**33,100****7 Street lighting (Electrical Measured Separately)**

7.1	Aluminium Light Pole - Power supply measured elsewhere	No	7	5,000.00	35,000
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**35,000****8 Landscaping**

<u>Street Landscaping</u>					
8.1	Allowance of \$450 per plant advised by Footscray City Council dated 22 August 2016	note			
8.2	75L Tree including 2 year establishment and ongoing maintenance	No	31	450.00	13,950
8.3	Gravel / Sand mixture to tree base	m2	59	100.00	5,900
8.4	40 thick Bluestone surround to tree base including mortar bedding	m	153	160.00	24,480
8.5	135 wide 300 deep concrete surround to tree base within road including concrete colouring	m	20	95.00	1,900

**46,230****9 Power**

<u>General</u>					
9.1	Demolition of existing Infrastructure Services measured elsewhere	Note			
<u>Electricity</u>					
9.2	Allowance for substations	Excl			
<u>Underground Power Distribution</u>					
9.3	HV Power Conduits including associated trenching	m	224	675.00	151,200
9.4	Pulling of cables undertaken by Authority	EXCL			

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD09)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,174.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**9 Power***(Continued)*

<i>Pits</i>					
9.5	Allowance for precast pits between conduit runs	Item	1	10,000.00	10,000
<i>Street Lighting</i>					
9.6	Allowance for luminary fitting to light pole	No	7	1,500.00	10,500
9.7	Allowance for connection to street mains	No	7	450.00	3,150
9.8	LV cabling ran within street light poles (assumed standard 11m height)	No	7	460.00	3,220
9.9	Conduit including LV cabling ran from light pole base to street mains (assumed 10 m per pole)	m	70	350.00	24,500
<i>Misc</i>					
9.10	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
9.11	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
9.12	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
9.13	We have allowed for rippable rock to 30% of trench excavation	Note			
9.14	Allowance for trenching in rock in assumed 600 wide	m3	40	120.00	4,838

**214,908****10 Stormwater**

<u>Stormwater</u>					
<i>Pits</i>					
10.1	New stormwater pits	No	10	4,000.00	40,000
<i>Pipework</i>					
10.2	The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network	Note			
<i>Existing</i>					
10.3	1800 dia open drain - Existing	m	64		
<i>Proposed</i>					



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD09)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,174.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>10 Stormwater</b>					<i>(Continued)</i>
10.4	300 dia concrete pipe including excavation and backfill	m	24	130.00	3,120
10.5	600 dia concrete pipe including excavation and backfill	m	69	350.00	24,150
10.6	675 dia concrete pipe including excavation and backfill	m	135	410.00	55,350
	<i>Misc</i>				
10.7	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.8	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
10.9	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
10.10	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
10.11	We have allowed for rippable rock to 30% of trench excavation	Note			
10.12	Allowance for trenching in rock in assumed 1000 wide	m3	68	120.00	8,208

**138,328****11 Sewer**Sewer

11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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**12 Water**Water Supply

12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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**13 Gas**Gas

13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD09)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 3,174.00

Date Printed: 17/06/2019

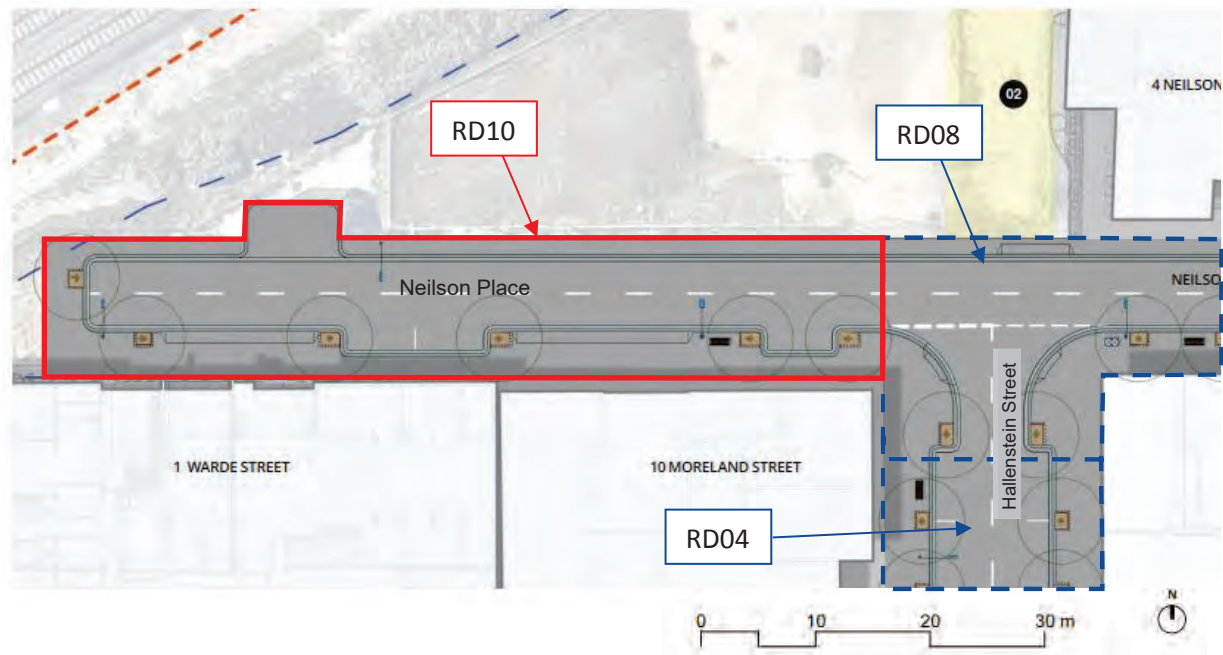
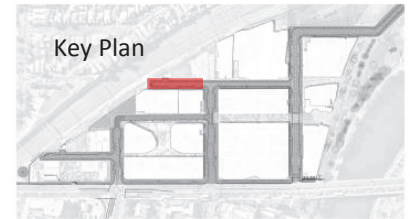
Item	Section	Unit	Qty	Rate	Cost \$
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**14 Communications**Communications

14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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## PROJECT AREA: RD10

Description: West Neilson Place Public Realm Works  
 Drawing Ref: Page 18 of the Joseph Road Public Realm Plan (Aspect Studios)  
 Date: 7 July 2017  
 Revision: 2



## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Job No: 16291

Joseph Road Precinct - 17 June 2019 (RD10)

Cost Base Date: July 2017

GFA (m2): 1,045.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	1,045	93.21	97,400
2	Contamination	m3	523	313.00	163,699
3	Groundworks	m3	157	433.12	68,000
4	Roadworks	m2	637	293.84	187,175
5	Pavements	m2	394	191.90	75,610
6	Street Furniture	m2	1,045	4.50	4,700
7	Street lighting (Electrical Measured Separately)	No	3	5,000.00	15,000
8	Traffic Signalisation	N/A			
9	Landscaping	m2	1,045	9.44	9,860
10	Power	m2	1,045	68.38	71,453
11	Stormwater	m2	1,045	34.06	35,593
12	Sewer	m2	1,045		
13	Water	m2	1,045		
14	Gas	m2	1,045		
15	Communications	m2	1,045		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>1,045</b>	<b>697.12</b>	<b>728,490</b>
16	Design Development Contingency	%	10.0	728,490.44	72,849
17	Temporary works	%	2	801,339.48	16,027
18	Preliminaries and Supervision	%	8	817,366	65,389
19	Builder's Margin	%	5	882,756	44,138
20	Cost Escalation (FEB - JUL)	%	1	926,893	9,269
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>1,045</b>	<b>895.85</b>	<b>936,162</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	936,162	140,424
22	Design and Consultant Fees	%	9	1,076,587	96,893
23	Project Management Fees	%	3	1,173,479	35,423

## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Job No: 16291

Joseph Road Precinct - 17 June 2019 (RD10)

Cost Base Date: July 2017

GFA (m2): 1,045.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	1,045	1,156.84	1,208,902
24	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	1,045	1,156.84	1,208,902

## ESTIMATE DETAIL

## 16291 - Joseph Road Precinct

## Joseph Road Precinct - 17 June 2019 (RD10)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,045.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>1</b>	<b>Demolition</b>				
1.1	Allowance for demolition of roads and pavement	m2	1,045	20.00	20,900
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000
1.3	Demolition of existing stormwater pipework including redundant pit removal	m	20	75.00	1,500
					<b>97,400</b>

## 2 Contamination

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	Assume 100% of RD10 area @ 0.50m deep is contaminated: 1,045m2 x 100% x 0.50m deep = 523m3 approx	Note			
2.4	Allow 5% at Cat A [\$850/t]	m3	26	1,700	44,455
2.5	Allow Nil at Cat B	m3	Nil		
2.6	Allow 95% at Cat C [\$140/t]	m3	497	240	119,244
					<b>163,699</b>

## 3 Groundworks

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of RD10 area affected @ 0.50m deep : 1,045m2 x 30% x 0.50m deep = 157m3 approx	m3	157	100.00	15,700
3.3	Allowance for engineered fill in lieu of contamination removal	m3	523	100.00	52,300

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD10)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,045.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**3 Groundworks***(Continued)***68,000****4 Roadworks**

	<u>Road</u>				
4.1	180mm Asphalt road with 480mm crushed rock sub-base including associated excavation works	m2	637	180.00	114,660
4.2	Road kerbing consisting of 300 wide sawn bluestone block and 300 wide concrete channel including 150 thick concrete footing on 75 thick crushed rock base	m	151	350.00	52,850
4.3	300 Flush bluestone kerb strip including 150 thick concrete footing on 75 thick crushed rock base (assumed reduced footing size in lieu of concrete channel)	m	10	275.00	2,750
4.4	Allowance for linemarking to the extent of the works	m2	637	10.00	6,370
4.5	Allowance for traffic signage	Item	1	5,500.00	5,500
4.6	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
4.7	We have allowed for rippable rock to 10% of road excavation	Note			
4.8	Allowance for trenching in rock	m3	42	120.00	5,045

**187,175****5 Pavements**

	<u>Pavement</u>				
5.1	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	394	65.00	25,610
5.2	E/O Vehicle Crossover	No	4	10,000.00	40,000
5.3	Allowance for additional works associated with custom vehicle crossover (surface measured under asphalt pavement - subbase non specified)	Item	1	10,000.00	10,000

**75,610****6 Street Furniture**

6.1	Promenade seating including back rest (SF 201)	No	1	2,100.00	2,100
6.2	Parking Sign - As advised by Maribyrnong City Council	No	13	200.00	2,600

**4,700**

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD10)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,045.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**7 Street lighting (Electrical Measured Separately)**

7.1	Aluminium Light Pole - Power supply measured elsewhere	No	3	5,000.00	15,000
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**15,000****8 Landscaping**Street Landscaping

8.1	Allowance of \$450 per plant advised by Footscray City Council dated 22 August 2016	note			
8.2	75L Tree including 2 year establishment and ongoing maintenance	No	6	450.00	2,700
8.3	Gravel / Sand mixture to tree base	m2	14	100.00	1,400
8.4	40 thick Bluestone surround to tree base including mortar bedding	m	36	160.00	5,760

**9,860****9 Power**General

9.1	Demolition of existing Infrastructure Services measured elsewhere	Note			
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Electricity

9.2	Allowance for substations	Excl			
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Underground Power Distribution

9.3	HV Power Conduits including associated trenching	m	52	675.00	35,100
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9.4	Pulling of cables undertaken by Authority	EXCL			
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Pits

9.5	Allowance for precast pits between conduit runs	Item	1	10,000.00	10,000
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Street Lighting

9.6	Allowance for luminary fitting to light pole	No	3	1,500.00	4,500
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9.7	Allowance for connection to street mains	No	3	450.00	1,350
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9.8	LV cabling ran within street light poles (assumed standard 11m height)	No	3	460.00	1,380
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## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD10)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,045.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>9</b>	<b>Power</b>				<i>(Continued)</i>
9.9	Conduit including LV cabling ran from light pole base to street mains (assumed 10 m per pole)	m	30	350.00	10,500
	<i>Misc</i>				
9.10	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
9.11	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
9.12	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
9.13	We have allowed for rippable rock to 30% of trench excavation	Note			
9.14	Allowance for trenching in rock in assumed 600 wide	m3	9	120.00	1,123

**71,453****10 Stormwater**

	<u>Stormwater</u>				
	<i>Pits</i>				
10.1	New stormwater pits	No	6	4,000.00	24,000
	<i>Pipework</i>				
10.2	The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network	Note			
	<i>Existing</i>				
10.3	300 dia concrete pipe including excavation and backfill - Existing	m	72		
	<i>Proposed</i>				
10.4	300 dia concrete pipe including excavation and backfill	m	27	130.00	3,510
	<i>Misc</i>				
10.5	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.6	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
10.7	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD10)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,045.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>10</b>	<b>Stormwater</b>				<i>(Continued)</i>
10.8	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
10.9	We have allowed for rippable rock to 30% of trench excavation	Note			
10.10	Allowance for trenching in rock in assumed 600 wide	m3	5	120.00	583
					<b>35,593</b>

**11 Sewer**

	<u>Sewer</u>				
11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**12 Water**

	<u>Water Supply</u>				
12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**13 Gas**

	<u>Gas</u>				
13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

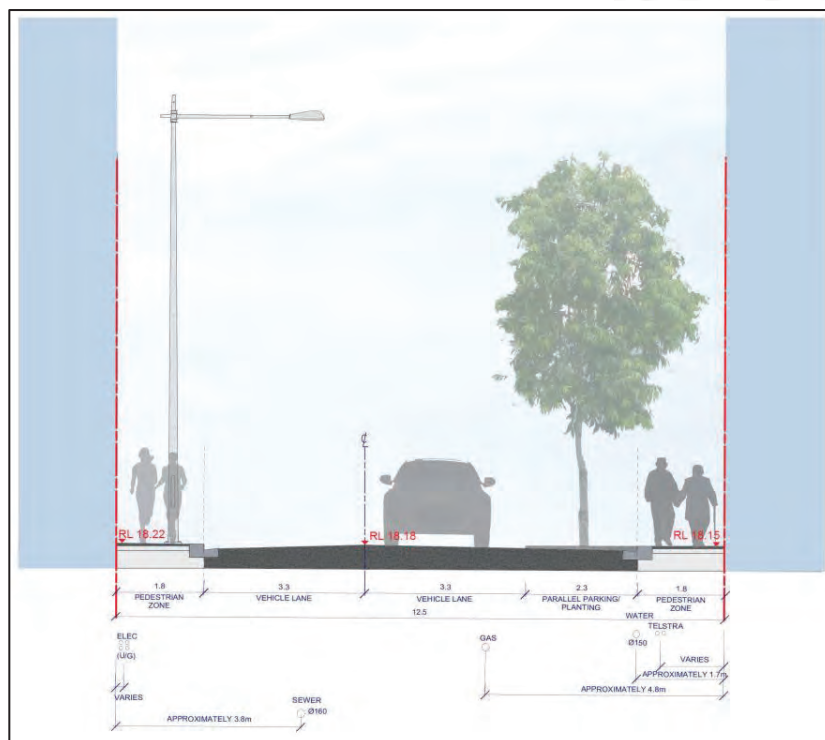
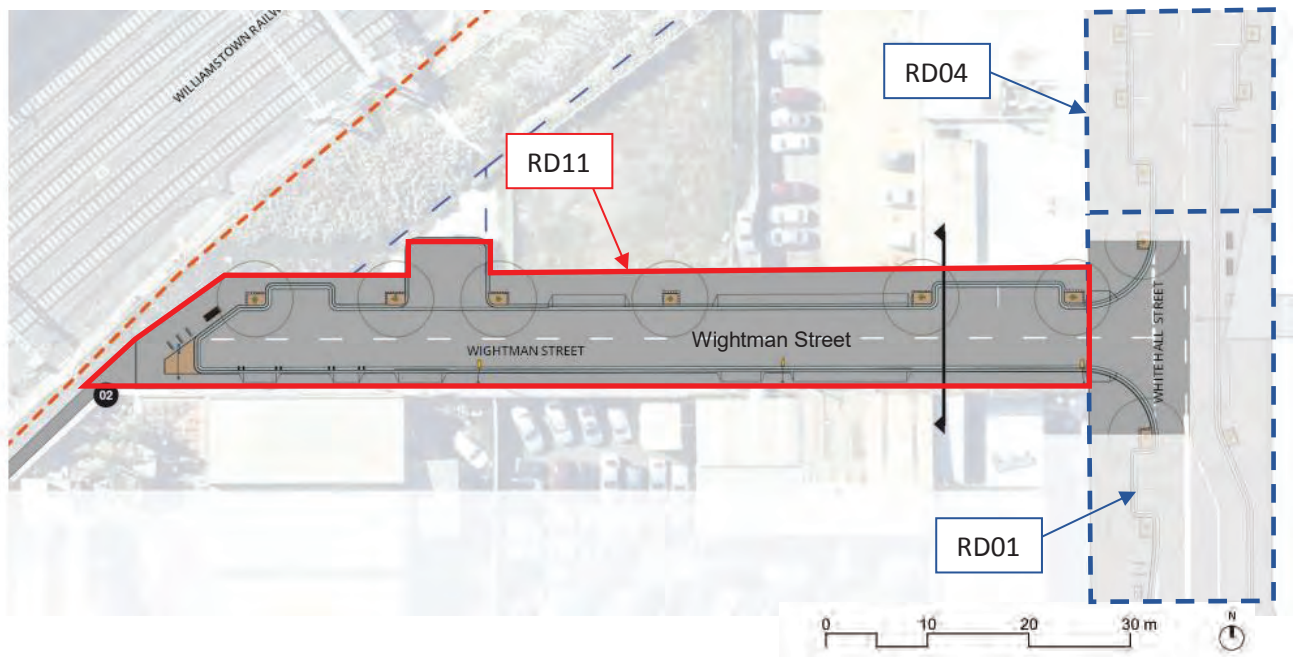
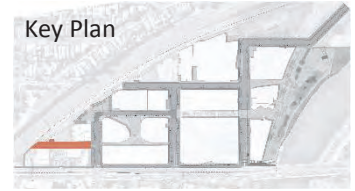
**14 Communications**

	<u>Communications</u>				
14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

## PROJECT AREA: RD11

Description: Wightman Street Public Realm Works  
 Drawing Ref: Pages 10-11 of the Joseph Road Public Realm Plan  
 (Aspect Studios)  
 Date: 7 July 2017  
 Revision: 2

Key Plan



## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Job No: 16291

Joseph Road Precinct - 17 June 2019 (RD11)

Cost Base Date: July 2017

GFA (m2): 1,237.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	1,237	81.60	100,940
2	Contamination	m3	619	313.00	193,747
3	Groundworks	m3	186	432.80	80,500
4	Roadworks	m2	783	272.36	213,259
5	Pavements	m2	431	320.22	138,015
6	Street Furniture	m2	1,237	6.10	7,550
7	Street lighting (Electrical Measured Separately)	No	1	5,000.00	5,000
8	Traffic Signalisation	N/A			
9	Landscaping	m2	1,237	9.09	11,240
10	Power	m2	1,237	67.35	83,318
11	Stormwater	m2	1,237	18.66	23,080
12	Sewer	m2	1,237		
13	Water	m2	1,237		
14	Gas	m2	1,237		
15	Communications	m2	1,237		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>1,237</b>	<b>692.52</b>	<b>856,648</b>
16	Design Development Contingency	%	10.0	856,648.44	85,665
17	Temporary works	%	2	942,313.28	18,846
18	Preliminaries and Supervision	%	8	961,160	76,893
19	Builder's Margin	%	5	1,038,052	51,903
20	Cost Escalation (FEB - JUL)	%	1	1,089,955	10,900
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>1,237</b>	<b>889.94</b>	<b>1,100,854</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	1,100,854	165,128
22	Design and Consultant Fees	%	9	1,265,983	113,938
23	Project Management Fees	%	3	1,379,921	41,616



## ESTIMATE SUMMARY

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD11)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,237.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	1,237	1,149.18	1,421,537
24	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	1,237	1,149.18	1,421,537

**ESTIMATE DETAIL****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (RD11)****Job No: 16291****Cost Base Date: July 2017****GFA (m2): 1,237.00****Date Printed: 17/06/2019**

Item	Section	Unit	Qty	Rate	Cost \$
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**1 Demolition**

1.1	Allowance for demolition of roads and pavement	m2	1,237	20.00	24,740
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000
1.3	Demolition of existing stormwater pipework including redundant pit removal	m	16	75.00	1,200

**100,940****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	The below quantities have been based of the information provided within LR Pardo & Associates Technical Report 1710011 Joseph Rd/1	Note			
2.4	Assume 100% of RD11 area @ 0.50m deep is contaminated: 1,237m2 x 100% x 0.50m deep = 619m3 approx	Note			
2.5	Allow 5% at Cat A [\$850/t]	m3	31	1,700	52,615
2.6	Allow Nil at Cat B	m3	Nil		
2.7	Allow 95% at Cat C [\$140/t]	m3	588	240	141,132

**193,747****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
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## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD11)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,237.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>3</b>	<b>Groundworks</b>				<i>(Continued)</i>
3.2	Assume 30% of RD11 area affected @ 0.50m deep : 1,237m2 x 30% x 0.50m deep = 186m3 approx	m3	186	100.00	18,600
3.3	Allowance for engineered fill in lieu of contamination removal	m3	619	100.00	61,900

**80,500****4 Roadworks**

	<u>Road</u>				
4.1	180mm Asphalt road with 360mm crushed rock sub-base including associated excavation works	m2	783	160.00	125,280
4.2	Road kerbing consisting of 300 wide sawn bluestone block and 300 wide concrete channel including 150 thick concrete footing on 75 thick crushed rock base	m	187	350.00	65,450
4.3	300 Flush bluestone kerb strip including 150 thick concrete footing on 75 thick crushed rock base (assumed reduced footing size in lieu of concrete channel)	m	15	275.00	4,125
4.4	Allowance for linemarking to the extent of the works	m2	783	10.00	7,830
4.5	Allowance for traffic signage	Item	1	5,500.00	5,500
4.6	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
4.7	We have allowed for rippable rock to 10% of road excavation	Note			
4.8	Allowance for trenching in rock	m3	42	120.00	5,074

**213,259****5 Pavements**

	<u>Pavement</u>				
5.1	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	431	65.00	28,015
5.2	E/O Vehicle Crossover	No	10	10,000.00	100,000
5.3	Allowance for additional works associated with custom vehicle crossover (surface measured under asphalt pavement - subbase non specified)	Item	1	10,000.00	10,000

**138,015**

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD11)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,237.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>6</b>	<b>Street Furniture</b>				
6.1	Stainless steel bicycle hoops (SF 401)	No	3	750.00	2,250
6.2	Promenade seating including back rest (SF 201)	No	1	2,100.00	2,100
6.3	Parking Sign - As advised by Maribyrnong City Council	No	16	200.00	3,200

**7,550****7 Street lighting (Electrical Measured Separately)**

7.1	Aluminium Light Pole - Power supply measured elsewhere	No	1	5,000.00	5,000
7.2	Aluminium light pole all other street lights shown as existing	Note			

**5,000****8 Landscaping**

	<u>Street Landscaping</u>				
8.1	Allowance of \$450 per plant advised by Footscray City Council dated 22 August 2016	note			
8.2	75L Tree including 2 year establishment and ongoing maintenance	No	6	450.00	2,700
8.3	Gravel / Sand mixture to tree base	m2	23	100.00	2,300
8.4	40 thick Bluestone surround to tree base including mortar bedding	m	39	160.00	6,240

**11,240****9 Power**

	<u>General</u>				
9.1	Demolition of existing Infrastructure Services measured elsewhere	Note			
	<u>Electricity</u>				
9.2	Allowance for substations	Excl			
	<u>Underground Power Distribution</u>				
9.3	HV Power Conduits including associated trenching	m	86	675.00	58,050
9.4	Pulling of cables undertaken by Authority	EXCL			
	<u>Pits</u>				



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD11)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,237.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>9</b>	<b>Power</b>				<i>(Continued)</i>
9.5	Allowance for precast pits between conduit runs	Item	1	10,000.00	10,000
	<i>Street Lighting</i>				
9.6	Allowance for luminary fitting to light pole	No	1	1,500.00	1,500
9.7	Allowance for connection to street mains	No	1	450.00	450
9.8	LV cabling ran within street light poles (assumed standard 11m height)	No	1	460.00	460
9.9	Conduit including LV cabling ran from light pole base to street mains (assumed 10 m per pole)	m	10	350.00	3,500
	<i>Misc</i>				
9.10	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
9.11	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
9.12	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
9.13	We have allowed for rippable rock to 30% of trench excavation	Note			
9.14	Allowance for trenching in rock in assumed 600 wide	m3	15	120.00	1,858

**83,318****10 Stormwater**

	<u>Stormwater</u>				
	<i>Pits</i>				
10.1	New stormwater pits	No	2	4,000.00	8,000
	<i>Pipework</i>				
10.2	The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network	Note			
	<i>Proposed</i>				
10.3	300 dia concrete pipe including excavation and backfill	m	50	130.00	6,500
	<i>Misc</i>				

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD11)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 1,237.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>10 Stormwater</b> <span style="float: right;">(Continued)</span>					
10.4	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.5	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
10.6	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
10.7	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
10.8	We have allowed for rippable rock to 30% of trench excavation	Note			
10.9	Allowance for trenching in rock in assumed 600 wide	m3	9	120.00	1,080
					<b>23,080</b>

**11 Sewer**Sewer

11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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**12 Water**Water Supply

12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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**13 Gas**Gas

13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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**14 Communications**Communications

14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note
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**ESTIMATE DETAIL****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (RD11)****Job No: 16291****Cost Base Date: July 2017****GFA (m2): 1,237.00****Date Printed: 17/06/2019**

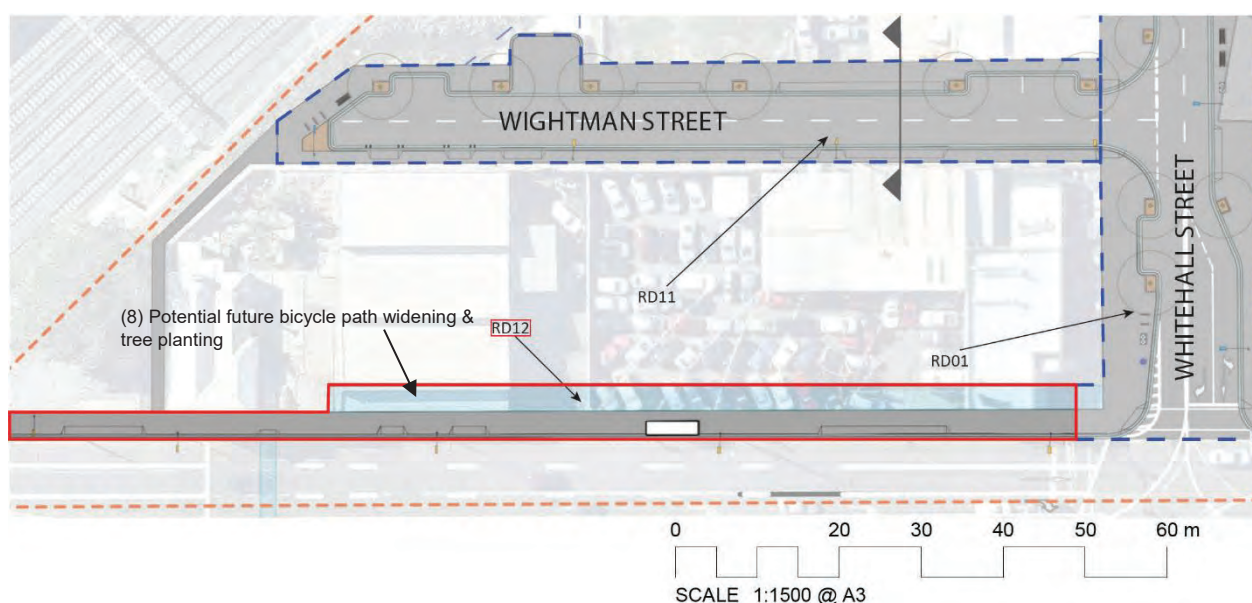
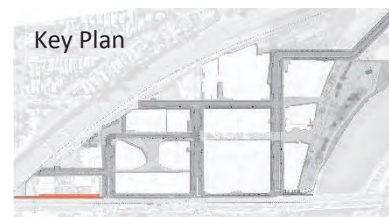
Item	Section	Unit	Qty	Rate	Cost \$
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**14 Communications***(Continued)*

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## PROJECT AREA: RD12

Description: Hopkins Street Footpath Upgrade Works (West)  
 Drawing Ref: Page 8, 26 of the Joseph Road Public Realm Plan (Aspect Studios)  
 Date: 7 July 2017  
 Revision: 3



### Note:

The cost estimate for RD12 includes the area coloured in light blue. The area represents the future widened footpath should the properties fronting Hopkins Street be redeveloped within the life of the DCP. The assumption that the footpath will be widened is in accordance with the Schedule to Clause 37.08 of the Maribyrnong Planning Scheme, which requires all new developments to be set back by 3m from their frontages to Hopkins Street. The widened footpath will facilitate the continuation of the shared bike path in front of 18-24 Hopkins Street and the planting of trees and the provision of street furniture in the project area. For this reason, the cost estimate includes allowances for future bike path, street trees, and street furniture.

## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD12)

Job No: 16291  
 Cost Base Date: July 2017  
 GFA (m2): 673.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	673	131.44	88,460
2	Contamination	m3	337	313.00	105,325
3	Groundworks	m3	101	433.33	43,745
4	Roadworks	m2	673	86.70	58,350
5	Pavements	m2	673	143.75	96,745
6	Street Furniture	m2	673	45.77	30,800
7	Street lighting (Electrical Measured Separately)	m2	673		
8	Traffic Signalisation	N/A			
9	Landscaping	m2	673	22.29	15,000
10	Power	m2	673	124.70	83,925
11	Stormwater	m2	673	3.71	2,500
12	Sewer	m2	673		
13	Water	m2	673		
14	Gas	m2	673		
15	Communications	m2	673		
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>673</b>	<b>779.86</b>	<b>524,849</b>
16	Design Development Contingency	%	10.0	524,849.10	52,485
17	Temporary works	%	2	577,334.01	11,547
18	Preliminaries and Supervision	%	8	588,881	47,110
19	Builder's Margin	%	5	635,991	31,800
20	Cost Escalation (FEB - JUL)	%	1	667,791	6,678
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>673</b>	<b>1,002.18</b>	<b>674,469</b>
21	Construction Contingency (As advised by Maribyrnong City Council)	%	15	674,469	101,170
22	Design and Consultant Fees	%	9	775,639	69,808
23	Project Management Fees	%	3	845,446	25,582

**ESTIMATE SUMMARY****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (RD12)****Job No: 16291****Cost Base Date: July 2017****GFA (m2): 673.00****Date Printed: 17/06/2019**

	Section	Unit	Quantity	Rate	Cost (\$)
24	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	673	1,294.25	871,028
	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	673	1,294.25	871,028

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD12)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 673.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**1 Demolition**

1.1	Allowance for demolition of roads and pavement	m2	673	20.00	13,460
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000

**88,460****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	Due to the preliminary nature of the project, WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	Assume 100% of RD12 area @ 0.50m deep is contaminated: 673m2 x 100% x 0.50m deep = 337m3 approx	Note			
2.4	Allow 5% at Cat A [\$850/t]	m3	17	1,700	28,603
2.5	Allow Nil at Cat B	m3	Nil		
2.6	Allow 95% at Cat C [\$140/t]	m3	320	240	76,722

**105,325****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of RD12 area affected @ 0.50m deep : 673m2 x 30% x 0.50m deep = 101m3 approx	m3	101	100.00	10,095
3.3	Allowance for engineered fill in lieu of contamination removal	m3	337	100.00	33,650

**43,745**



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD12)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 673.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**4 Roadworks**

<u>Road</u>					
4.1	Road kerbing consisting of 300 wide sawn bluestone block and 300 wide concrete channel including 150 thick concrete footing on 75 thick crushed rock base	m	151	350.00	52,850
4.2	Allowance for traffic signage	Item	1	5,500.00	5,500
					<b>58,350</b>

**5 Pavements**

<u>Pavement</u>					
5.1	50 thick asphalt pavement including 75 thick crushed rock subbase	m2	673	65.00	43,745
5.2	E/O Vehicle Crossover	No	5	10,000.00	50,000
5.3	E/O Pram/Pedestrian Crossover (assumed sloped into asphalt pavement as per Maribyrnong City Design Manual SF 003)	No	1	3,000.00	3,000
5.4	The cost of the pavement (5.1, 5.2 & 5.3) will be externally apportioned through Amendment C145 at 76.6% (\$74,107)	Note			
					<b>96,745</b>

**6 Street Furniture**

6.1	Bus shelter (SF 801)	No	1	10,000.00	10,000
6.2	Parking Sign - As advised by Maribyrnong City Council	No	4	200.00	800
6.3	Allowance for street furniture to future proposed bike path	Item	1	20,000.00	20,000
					<b>30,800</b>

**7 Street lighting (Electrical Measured Separately)**

7.1	Street lights shown within RD12 are existing	Note			
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**8 Landscaping**

8.1	Allowance for misc landscaping to future proposed bike path	Item	1	15,000.00	15,000
					<b>15,000</b>

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD12)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 673.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**9 Power**General

- 9.1 Demolition of existing Infrastructure Services measured elsewhere Note

Electricity

- 9.2 Allowance for substations Excl

Underground Power Distribution

- 9.3 HV Power Conduits including associated trenching m 81 675.00 54,675

- 9.4 Pulling of cables undertaken by Authority EXCL

Pits

- 9.5 Allowance for precast pits between conduit runs Item 1 10,000.00 10,000

Street Lighting

- 9.6 Allowance to connect existing street lights to newly proposed underground cables Item 1 10,000.00 10,000

Misc

- 9.7 Allowance for asset recording and quality testing Item 1 2,500.00 2,500

- 9.8 Allowance for taping into surrounding mains (Staged Works) Item 1 5,000.00 5,000

- 9.9 Refer to LR Pardo & Associates geotechnical report for identification of rock. Note

- 9.10 We have allowed for rippable rock to 30% of trench excavation Note

- 9.11 Allowance for trenching in rock in assumed 600 wide m3 15 120.00 1,750

**83,925****10 Stormwater**Pipework

- 10.1 The below stormwater reticulation is as per TTW Stormwater Drainage Concept Plan read in conjunction with Maribynong City Council drainage network Note

Existing

- 10.2 450 dia concrete pipe including excavation and backfill - Existing m 95

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (RD12)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 673.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**10 Stormwater***(Continued)*

	<u>Misc</u>				
10.3	Allowance for the reconnection of development space stormwater services to new pits and pipes - Bourne by developers	Excl			
10.4	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500
					<b>2,500</b>

**11 Sewer**

	<u>Sewer</u>				
11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**12 Water**

	<u>Water Supply</u>				
12.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**13 Gas**

	<u>Gas</u>				
13.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**14 Communications**

	<u>Communications</u>				
14.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

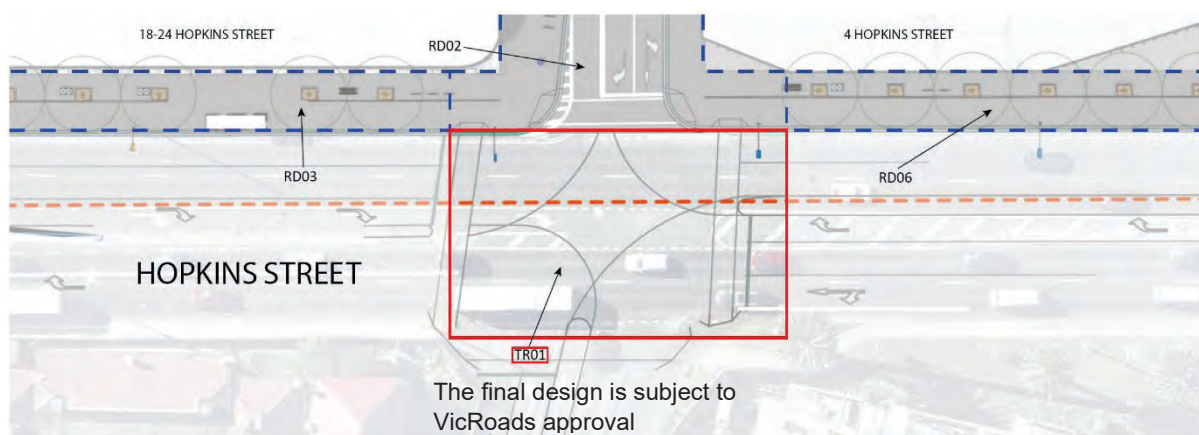
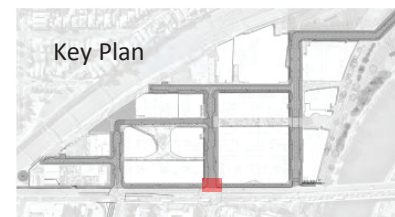
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## PROJECT AREA: TR01

Description: Traffic Lights at the Intersection of Hallenstein St and Hopkins St

Drawing Ref: Hopkins Street / Moreland Street /Hallenstein Street  
Maribyrnong City Traffic Signal Plan (One Mile Grid)  
Drawing No. 170820TSP201, 25.07.18.

Date: As above



For details please refer to the traffic signals plan  
(One Mile Grid)



## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Job No: 16291

Joseph Road Precinct - 17 June 2019 (TR01)

Cost Base Date: July 2017

GFA (m2): 768.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	768	132.66	101,880
2	Contamination	m3	384	313.00	120,192
3	Groundworks	m3	115	433.33	49,920
4	Roadworks	m2	768	210.94	162,003
5	Pavements	m2	768	15.63	12,000
6	Street lighting (Electrical Measured Separately)	N/A			
7	Street Furniture	N/A			
8	Traffic Signalisation	Item	1	372,870.00	372,870
9	Traffic Signalisation - Traffic Management	Weeks	3	14,000.00	42,000
10	Landscaping	N/A			
11	Power	m2	768	34.71	26,656
12	Stormwater	N/A			
13	Sewer	m2	768		
14	Water	m2	768		
15	Gas	m2	768		
16	Communications	Item	1	1,000,000.00	1,000,000
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>768</b>	<b>2,457.71</b>	<b>1,887,520</b>
17	Design Development Contingency	%	10.0	1,887,520.06	188,752
18	Temporary works	%	2	2,076,272.07	41,525
19	Preliminaries and Supervision	%	8	2,117,798	169,424
20	Builder's Margin	%	5	2,287,221	114,361
21	Cost Escalation (FEB - JUL)	%	1	2,401,582	24,016
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>768</b>	<b>3,158.33</b>	<b>2,425,598</b>
22	Construction Contingency (As advised by Maribyrnong City Council)	%	15	2,425,598	363,840
23	Design and Consultant Fees	%	9	2,789,438	251,049

**ESTIMATE SUMMARY****16291 - Joseph Road Precinct****Joseph Road Precinct - 17 June 2019 (TR01)****Job No: 16291****Cost Base Date: July 2017****GFA (m2): 768.00****Date Printed: 17/06/2019**

	Section	Unit	Quantity	Rate	Cost (\$)
24	Project Management Fees	%	3	3,040,487	91,433
25	SUB-TOTAL DESIGN & CONSTRUCT COST	m2	768	4,078.02	3,131,920
26	Authority and Head works Charges	Excl			
	TOTAL DESIGN & CONSTRUCTION COST AS AT JUL 2017	m2	768	4,078.02	3,131,920



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (TR01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 768.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**1 Demolition**

1.1	Allowance for Demolition and Alteration works to roads and pavement to allow for traffic signalisation works including making good	m2	768	35.00	26,880
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000

**101,880****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	Assume 100% of TR01 area @ 0.50m deep is contaminated: 768m2 x 100% x 0.50m deep = 384m3 approx	Note			
2.4	Allow 5% at Cat A [\$850/t]	m3	19	1,700	32,640
2.5	Allow Nil at Cat B	m3	Nil		
2.6	Allow 95% at Cat C [\$140/t]	m3	365	240	87,552

**120,192****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of public realm area affected @ 0.50m deep : 768m2 x 30% x 0.50m deep = 115m3 approx	m3	115	100.00	11,520
3.3	Allowance for engineered fill in lieu of contamination removal	m3	384	100.00	38,400

**49,920**

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (TR01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 768.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**4 Roadworks**

	<u>Road</u>				
4.1	180mm Asphalt road with 480mm crushed rock sub-base including associated excavation works	m2	768	180.00	138,240
4.2	Allowance for linemarking to the extent of the works	m2	768	10.00	7,680
4.3	Additional linemarking to roads leading into newly proposed intersection	Item	1	10,000.00	10,000
4.4	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
4.5	We have allowed for rippable rock to 10% of road excavation	Note			
4.6	Allowance for trenching in rock	m3	51	120.00	6,083

**162,003****5 Pavements**

	<u>Pavement</u>				
5.1	Allowance for Pram/Pedestrian Crossover (assumed sloped into asphalt pavement as per Maribyrnong City Design Manual SF 003)	No	4	3,000.00	12,000

**12,000****6 Traffic Signalisation**

	<u>Allowance for traffic signalisation to the Hopkins street / Whitehall Street intersection including the following:</u>				
6.1	1 No. 20 dia signal/power conduits including trenching	m	10	110	1,100
6.2	1 No. 50 dia signal/power conduits including trenching	m	5	110	550
6.3	1 No. 64 dia signal/power conduits including trenching	m	4	110	440
6.4	2 No. 100 dia signal/power conduits including trenching	m	127	140	17,780
6.5	Conduit Pits	No	11	1,000	11,000
6.6	Pedestals	No	11	6,000	66,000
6.7	Pedestrian lanterns including push buttons	No	8	2,000	16,000
6.8	Lanterns including boom arms	No	20	3,750	75,000
6.9	Miscellaneous cabling	Item	1	20,000	20,000

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (TR01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 768.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**6 Traffic Signalisation***(Continued)*

6.10	Detector loops	No	10	2,500	25,000
6.11	Distribution Cabinet	No	1	5,000	5,000
6.12	Controller	No	1	25,000	25,000
6.13	Connections to existing Jemmena power mains	Item	1	10,000	10,000
6.14	Allowance for miscellaneous signage	Item	1	15,000	15,000
6.15	Allowance for decommissioning of redundant services	Item	1	35,000	35,000
6.16	Allowance for traffic signalling programming and co-ordination	Item	1	50,000	50,000

**372,870****7 Traffic Signalisation – Traffic Management**

7.1	Allowance for traffic management during the works	Weeks	3	14,000.00	42,000
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**42,000****8 Power**

<u>General</u>					
8.1	Demolition of existing Infrastructure Services measured elsewhere	Note			
<u>Electricity</u>					
8.2	Allowance for substations	Excl			
<i>Underground Power Distribution</i>					
8.3	LV 1x63 conduit run including trenching and cable installation	m	30	200	6,008
8.4	Allowance for cable joints	Item	1	2,500	2,500
8.5	Pulling of cables undertaken by Authority	EXCL			
<i>Pits</i>					
8.6	Allowance for precast pits between conduit runs	Item	1	10,000.00	10,000
<i>Misc</i>					
8.7	Traffic Signal power connections measured under Traffic Signalisation	Note			
8.8	Allowance for asset recording and quality testing	Item	1	2,500.00	2,500

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (TR01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 768.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>8</b>	<b>Power</b>				<i>(Continued)</i>
8.9	Allowance for taping into surrounding mains (Staged Works)	Item	1	5,000.00	5,000
8.10	Refer to LR Pardo & Associates geotechnical report for identification of rock.	Note			
8.11	We have allowed for rippable rock to 30% of trench excavation	Note			
8.12	Allowance for trenching in rock in assumed 600 wide	m3	5	120.00	648
					<b>26,656</b>

**9 Sewer**

	<u>Sewer</u>				
9.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**10 Water**

	<u>Water Supply</u>				
10.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**11 Gas**

	<u>Gas</u>				
11.1	Costs of all service work (with the exception of street lighting and stormwater) to be borne by developers	Note			

**12 Communications**

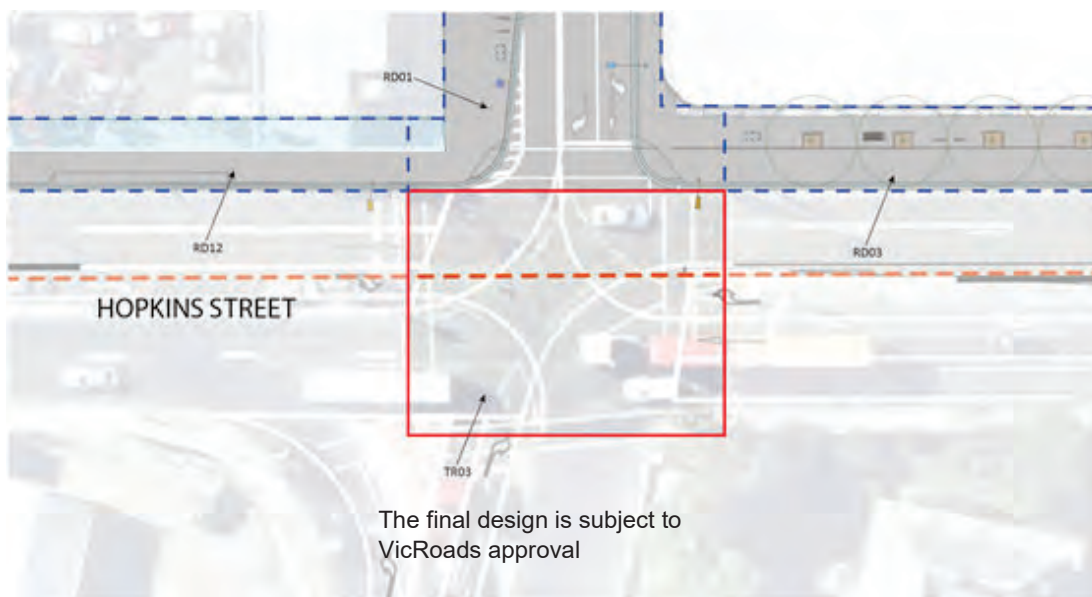
12.1	Allowance for Telstra upgrade works as per Maribyrnong Council advise received 20 February 2019	Item	1	1,000,000	1,000,000
					<b>1,000,000</b>

## PROJECT AREA: TR03

Description: Whitehall St/Hopkins St signals upgrade

Drawing Ref: Hopkins Street / Whitehall Street Maribyrnong City Traffic Signal Plan (One Mile Grid) Drawing No. 170820TSP200, 24.07.19

Date: As above



For details please refer to the traffic signals plan  
(One Mile Grid)







## ESTIMATE SUMMARY

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (TR03)

Job No: 16291  
 Cost Base Date: July 2017  
 GFA (m2): 760.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Demolition	m2	760	133.68	101,600
2	Contamination	m3	380	313.00	118,940
3	Groundworks	m3	114	433.33	49,400
4	Roadworks	m2	760	207.12	157,410
5	Traffic Signalisation	Item	1	209,720.00	209,720
6	Traffic Signalisation - Traffic Management	Weeks	2	14,000.00	28,000
	<b>SUB-TOTAL TRADE WORKS</b>	<b>m2</b>	<b>760</b>	<b>875.09</b>	<b>665,070</b>
7	Design Development Contingency	%	10.0	665,069.60	66,507
8	Temporary works	%	2	731,576.56	14,632
9	Preliminaries and Supervision	%	8	746,208	59,697
10	Builder's Margin	%	5	805,905	40,295
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>760</b>	<b>1,113.42</b>	<b>846,200</b>
11	Construction Contingency (As advised by Maribyrnong City Council)	%	15	846,200	126,930
12	Design and Consultant Fees	%	9	973,130	87,582
13	Project Management Fees	%	3	1,060,712	32,040
	<b>SUB-TOTAL DESIGN &amp; CONSTRUCT COST</b>	<b>m2</b>	<b>760</b>	<b>1,437.83</b>	<b>1,092,752</b>
14	Authority and Head works Charges	Excl			
	<b>TOTAL DESIGN &amp; CONSTRUCTION COST AS AT JUL 2017</b>	<b>m2</b>	<b>760</b>	<b>1,437.83</b>	<b>1,092,752</b>

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (TR03)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 760.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
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**1 Demolition**

1.1	Allowance for Demolition and Alteration works to roads and pavement to allow for traffic signalisation works including making good	m2	760	35.00	26,600
1.2	Allowance to de-commission and remove from site electrical infrastructure, comprising; under & overground cables, sub stations and redundant street lighting	Item	1	75,000.00	75,000

**101,600****2 Contamination**

2.1	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
2.2	WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
2.3	Assume 100% of TR03 area @ 0.50m deep is contaminated: 760m2 x 100% x 0.50m deep = 380m3 approx	Note			
2.4	Allow 5% at Cat A [\$850/t]	m3	19	1,700	32,300
2.5	Allow Nil at Cat B	m3	Nil		
2.6	Allow 95% at Cat C [\$140/t]	m3	361	240	86,640

**118,940****3 Groundworks**

3.1	The below allowances relate to to remediation of the isolated soft spots and contaminated soil including soil removal				
3.2	Assume 30% of public realm area affected @ 0.50m deep : 760m2 x 30% x 0.50m deep = 114m3 approx	m3	114	100.00	11,400
3.3	Allowance for engineered fill in lieu of contamination removal	m3	380	100.00	38,000

**49,400**



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (TR03)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 760.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>4</b>	<b>Roadworks</b>				
	<u>Road</u>				
4.1	180mm Asphalt road with 480mm crushed rock sub-base including associated excavation works	m2	760	180.00	136,800
4.2	Allowance for linemarking to the extent of the works	m2	760	10.00	7,600
4.3	Additional linemarking to roads leading into newly proposed intersection	Item	1	10,000.00	10,000
4.4	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
4.5	We have allowed for rippable rock to 10% of road excavation	Note			
4.6	Allowance for trenching in rock	m3	25	120.00	3,010

**157,410****5 Traffic Signalisation**

	<u>Allowance for traffic signalisation to the Hopkins street / Hallenstein Street intersection including the following:</u>				
5.1	Existing signal distribution board to be utilized	Note			
5.2	2 No. 100 dia signal/power conduits including trenching	m	23	140	3,220
5.3	Conduit Pits	No	1	1,000	1,000
5.4	Pedestals	No	5	6,000	30,000
5.5	Pedestrian lanterns including push buttons	No	4	2,000	8,000
5.6	Lanterns including boom arms	No	10	3,750	37,500
5.7	Miscellaneous cabling	Item	1	10,000	10,000
5.8	Detector loops	No	5	2,000	10,000
5.9	Connections to existing Jemmena power mains	Item	1	10,000	10,000
5.10	Allowance for miscellaneous signage	Item	1	15,000	15,000
5.11	Allowance for decommissioning of redundant services	Item	1	35,000	35,000
5.12	Allowance for traffic signalling programming and co-ordination	Item	1	50,000	50,000

**209,720**

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Job No: 16291

Joseph Road Precinct - 17 June 2019 (TR03)

Cost Base Date: July 2017

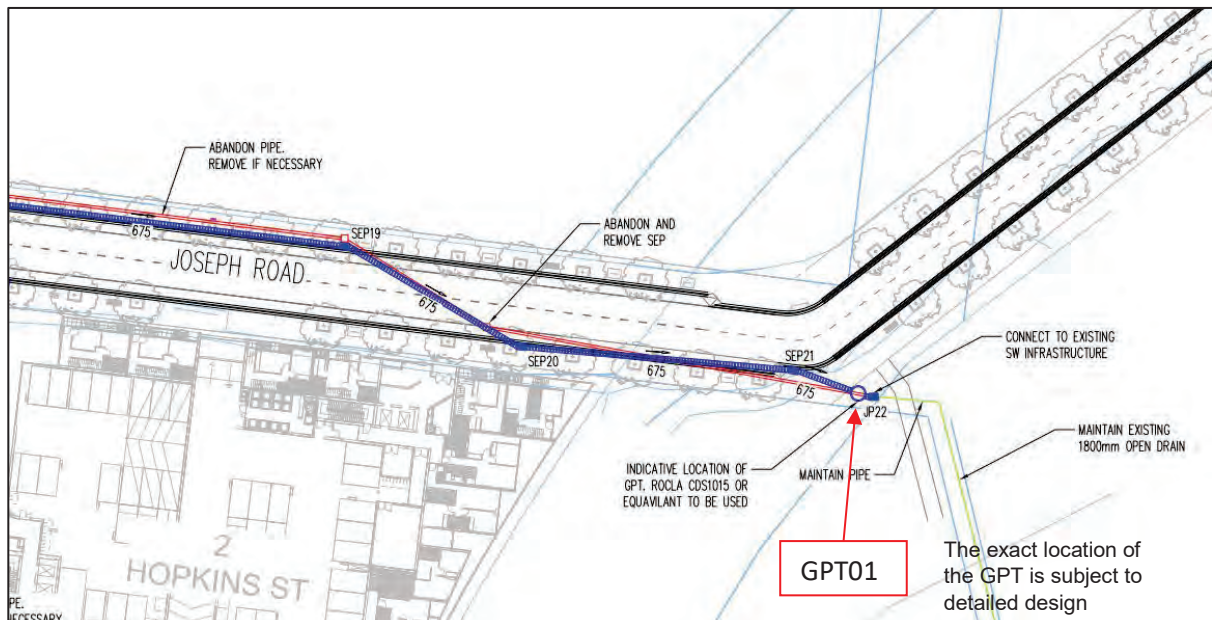
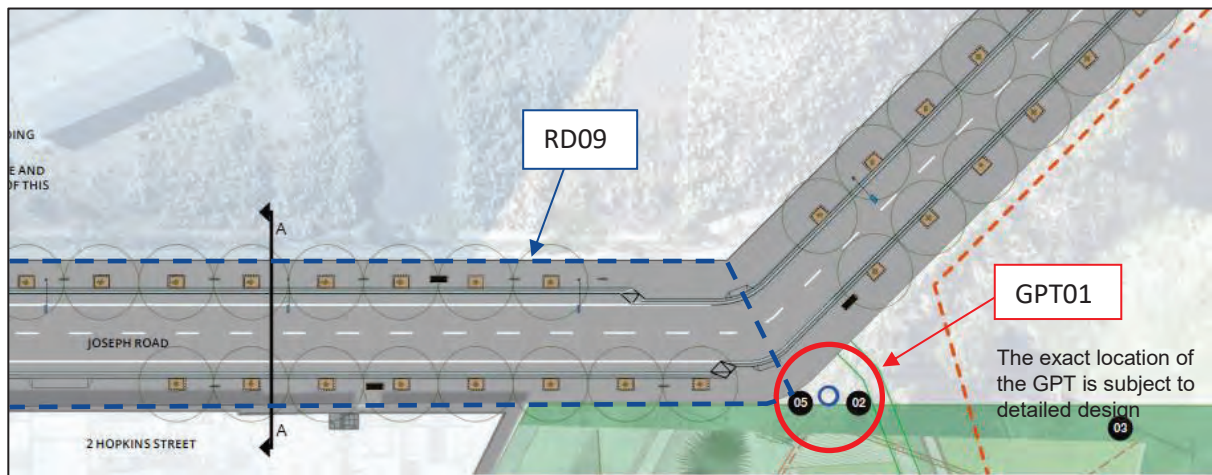
GFA (m2): 760.00

Date Printed: 17/06/2019

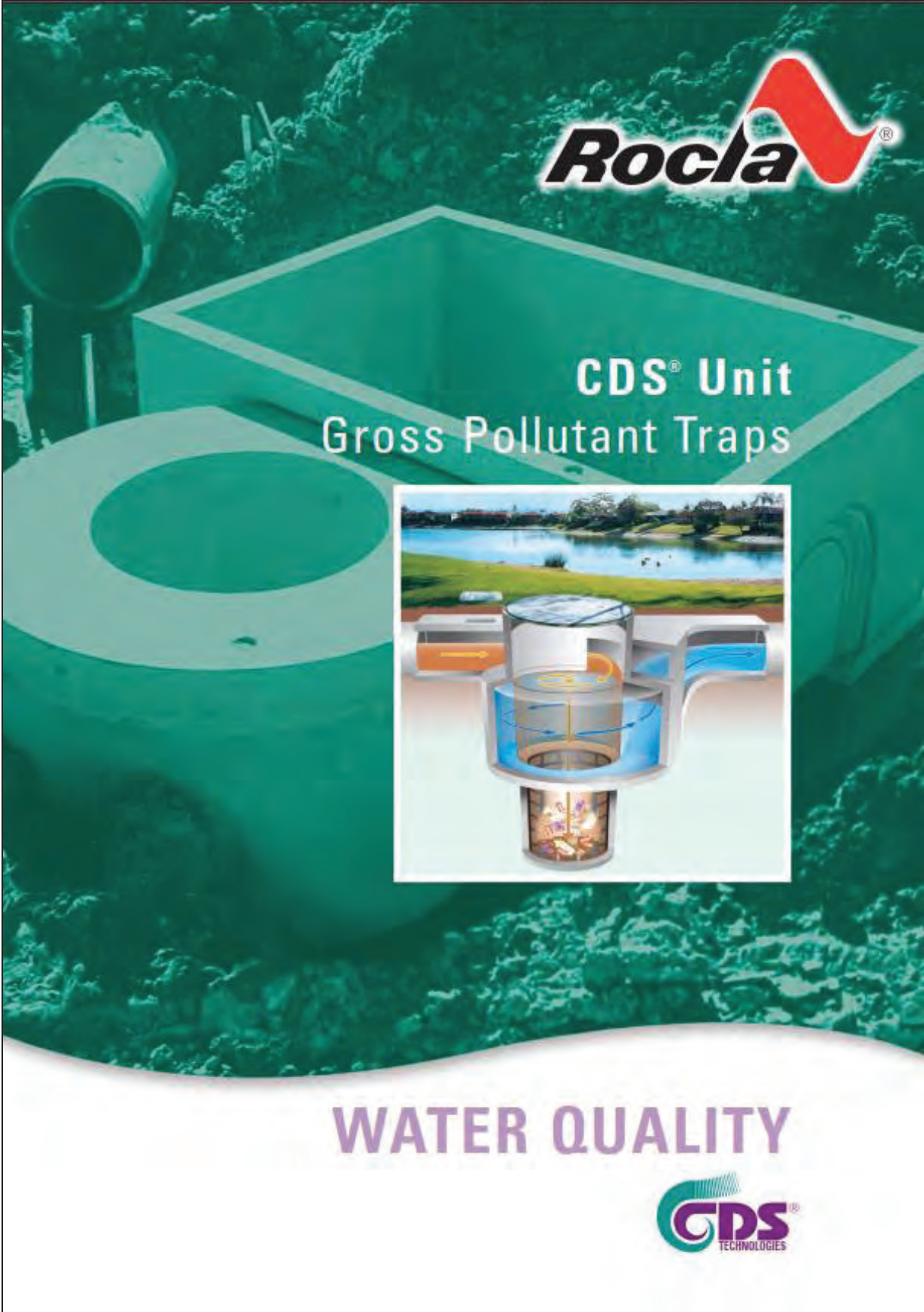
Item	Section	Unit	Qty	Rate	Cost \$
<b>6</b>	<b>Traffic Signalisation – Traffic Management</b>				
6.1	Allowance for traffic management during the works	Weeks	2	14,000.00	28,000
					<b>28,000</b>

## PROJECT AREA: GPT01

Description: Gross Pollutant Trap  
 Drawing Ref: Pages 23 & 53 of the Joseph Road Public Realm Plan (Aspect Studios), 7 July 2017; and Rocla CDS Unit Brochure.  
 Date: As above



Excerpt from pages 23 & 53 of the Joseph Road Public Realm Plan



The advertisement features a large, dark green background image of a concrete pipe installation in a trench. In the upper right corner, the **Rocla** logo is displayed in white with a red stylized 'A' and a registered trademark symbol. Centered on the right side, the text **CDS® Unit** and **Gross Pollutant Traps** is written in white. Below this text is a circular inset image showing a cross-section of the CDS unit. This inset shows a concrete structure with a central vertical pipe and a horizontal outlet. Blue arrows indicate the flow of water from the inlet, through the unit, and out to the right. At the bottom of the unit, a collection chamber is shown filled with various types of debris, including leaves, twigs, and small pieces of trash. At the bottom of the main advertisement, the words **WATER QUALITY** are written in large, bold, purple capital letters. To the right of this text is the **CDS TECHNOLOGIES** logo, which consists of a stylized 'CDS' in purple and blue with the word 'TECHNOLOGIES' in smaller blue capital letters below it.

**Rocla**

**CDS® Unit**  
**Gross Pollutant Traps**

**WATER QUALITY**

**CDS**  
TECHNOLOGIES



## The leading stormwater pollutant trap



### Characteristics of the CDS® Unit

- Non-blocking functionality
- 95% capture of gross pollutants >1mm
- 95% sediment capture >200µm
- Captures organics and oils
- Captures adsorbed toxics and nutrients
- Can treat any pipe or multiple pipes
- Various sump sizes available
- Customised bypass requirements
- Underground - small footprint
- Easy installation
- No moving parts
- Lowest life cycle costs
- More water treated than comparable treatment designs
- Pollutants stored in the sump, not the screens



### Applications

- Subdivisions and roads
- Residential, commercial and industrial developments
- Carparks and shopping centres
- Pre-treatment for wetlands
- Pre-treatment for reuse applications
- Pipes, channels, culverts and creeks

Other CDS® models are available for non-stormwater applications involving high flow solids/liquids separation, such as industrial processes and sewer overflows.

**High performance GPTs using patented CDS® indirect screening technology**



## Selecting a CDS® Unit

The size and type of CDS® GPT required depends on catchment area, flows, pollution loads, performance requirements, maintenance method, hydraulic limitations and site constraints. Visit the Rocla website ([www.rocla.com.au](http://www.rocla.com.au)) or email [solutions@rocla.com.au](mailto:solutions@rocla.com.au) for a sizing request. Details submitted with this form provide all the information needed to calculate the size of device most applicable for the site.

### CDS® Unit Models

CDS Unit No	Construction Material	Catchment Area (ha)
CDS0506	in-line polymer	< 1 ha
CDS0708	in-line concrete	< 2 ha
CDS0708M	in-line concrete	< 4 ha
CDS1009	pre-cast concrete	2-8 ha
CDS1012	pre-cast concrete	4-12 ha
CDS1015	pre-cast concrete	6-15 ha
CDS1512	pre-cast concrete	8-20 ha
CDS2018	pre-cast concrete	15-45 ha
CDS2028	pre-cast concrete	30-75 ha
CDS3018	pre-cast concrete	40-100 ha
CDS3024	pre-cast concrete	60-150 ha
CDS3030	pre-cast concrete	80-200 ha

### How Stormwater Pollutant Traps Rate

The CDS® GPT is rated the most effective stormwater pollution trap in every independent comparison.

On-Line Devices	<b>POOR</b>
Off-Line Devices	<b>GOOD</b>
Off-Line Non-Blocking Devices	<b>BETTER</b>
<b>Off-Line Non-Blocking Devices with Double Off-Line Storage (CDS)</b>	<b>BEST</b>

Independent studies show that no GPT rates higher than the CDS® GPT on performance and pollution retention.

## Complete design service

Rocla offers a complete design service for CDS® products that takes into account the catchment's characteristics, pollution load, hydraulic site constraints and opportunities, system capacities, velocity, backwater, as well as the location of services and access for cleaning. Hydraulic reports are available on request and are automatically carried out for larger units.

### Diversion chamber

Precast diversion chambers can be manufactured to suit most typical installations, or chambers can be tailored to meet the hydraulic limitations of the site.

The diversion chamber has the capacity to cater for the highest possible flow in the stormwater system. The chamber is configured on the assumption that the CDS® unit has not been maintained and there is no flow passing through the unit.

A weir is located within the diversion chamber to create a driving head and direct the majority of flows into the CDS® GPT.

### Diversion chamber options

- Precast diversion chambers
- Semi-precast diversion chambers
- Customised designs for multiple pipes, drops and bends
- In-situ channel designs
- Fixed or collapsible weirs
- Any flow capacity
- No flooding

The CDS® GPT and diversion chamber design depends on the system capacity and site constraints. Rocla will design the most suitable CDS® GPT configuration to meet project requirements.

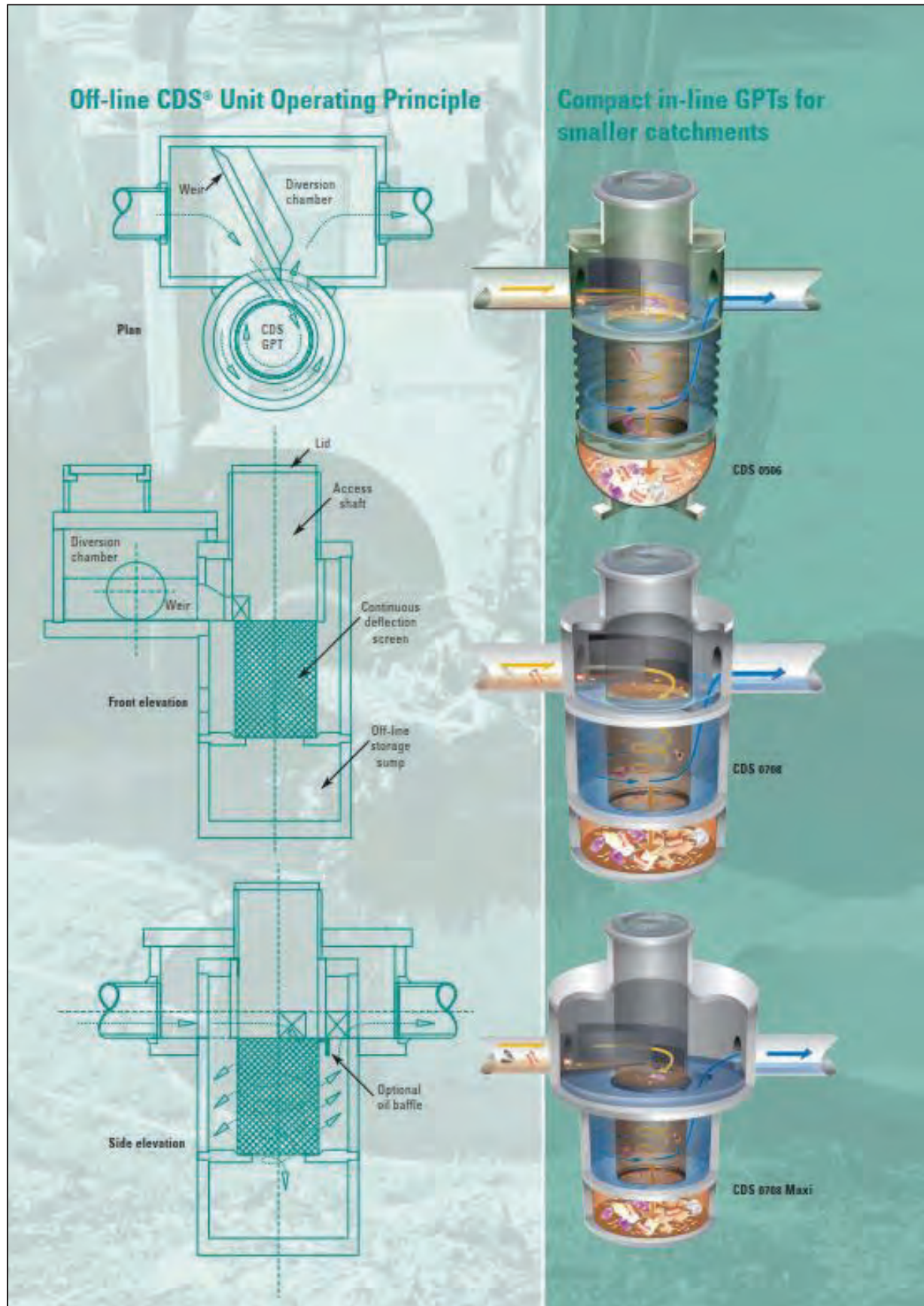
### Maintaining CDS® GPTs

CDS® units have the lowest life-cycle costs due to their non-blocking functionality, large off-line storage and multiple cleaning options.

There are 3 methods of emptying CDS® GPTs:

- Removable basket
- Material grab
- Suction method

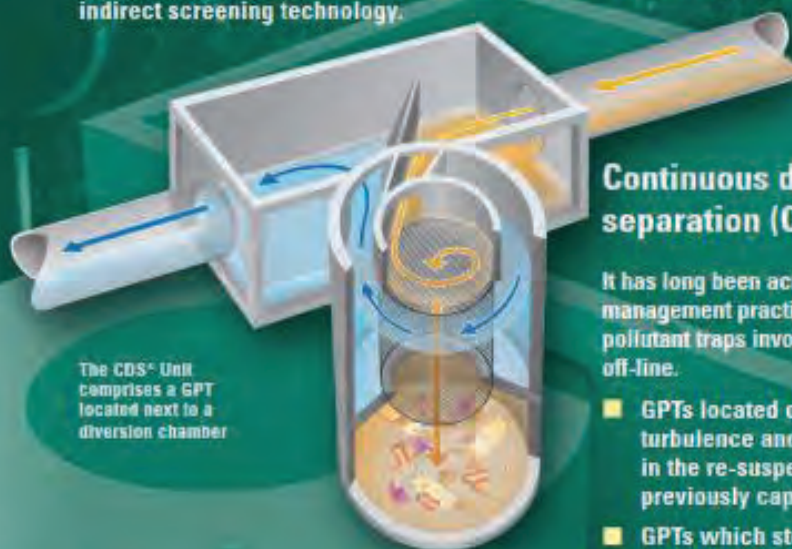
With no requirement to unblock screens, confined space entry is minimised. Large off-line sump volumes (up to 10m³ available) also minimise cleaning frequency, reducing maintenance costs and hence life-cycle costs over the next 50 years.





## Patented screening technology

CDS<sup>®</sup> gross pollutant traps (GPTs) are designed to capture and retain gross pollutants, litter, grit, sediments and associated oils, utilising patented CDS<sup>®</sup> indirect screening technology.



The CDS<sup>®</sup> Unit comprises a GPT located next to a diversion chamber

### Continuous deflective separation (CDS)

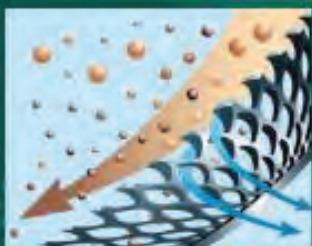
It has long been acknowledged that best management practice for stormwater pollutant traps involves locating the devices off-line.

- GPTs located on-line suffer badly from turbulence and eddies, often resulting in the re-suspension and loss of previously captured pollutants.
- GPTs which store pollution in the screening area suffer decreasing screen area and therefore decreasing flow rates, as they fill up.
- GPTs which function by direct filtration have a treatable flow rate decay that is proportional to the percentage of screen blockage.
- GPTs that utilise a vortex only, without a screen, cannot guarantee neutrally buoyant pollution removal.

Only CDS<sup>®</sup> units combine the advantages of being off-line, having non-blocking functionality, vortex forces and storing pollution outside the screening area. For these reasons, no other device is "equivalent" to a CDS<sup>®</sup> Unit.



Direct screening



Indirect screening (CDS)

**The only off-line GPT with non-blocking screens and storage outside the screening area**





**Rocla**  
Water Quality

## CDS<sup>®</sup> Unit Gross Pollutant Traps

For further information on CDS<sup>®</sup> products and solutions

Call Rocla on  
**131 004**

For an information kit email  
**solutions@rocla.com.au**

Or visit our website  
**www.waterquality.rocla.com.au**

- Sydney
- Dapto
- Dubbo
- Newcastle
- Glen Innes
- Grafton
- Canberra
- Melbourne
- Avoca
- Traralgon
- Wodonga
- Brisbane
- Toowoomba
- Mackay
- Cairns
- Adelaide
- Perth

**CDS<sup>®</sup>**  
TECHNOLOGIES

**Quality Endorsed Company**  
ISO 9001  
SAI No. 2177  
SAI Global

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## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (GPT01)

Job No: 16291  
 Cost Base Date: July 2017  
 GFA (m2): 19,787.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Gross Pollutant Trap	Item	1	228,344	228,344
	<b>SUB-TOTAL TRADE WORKS</b>	<b>Item</b>	<b>1</b>	<b>228,344</b>	<b>228,344</b>
2	Design Development Contingency	%	10.0	228,344	22,834
3	Temporary works	%	2	251,178	5,024
4	Preliminaries and Supervision	%	8	256,202	20,496
5	Builder's Margin	%	5	276,698	13,835
6	Cost Escalation (FEB - JUL)	%	1	290,533	2,905
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>Item</b>	<b>1</b>	<b>293,438</b>	<b>293,438</b>
7	Construction Contingency	%	20	293,438	58,688
8	Design and Consultant Fees	%	9	352,126	31,691
9	Project Management Fees	%	3	383,817	12,394
	<b>SUB-TOTAL DESIGN &amp; CONSTRUCT COST</b>	<b>Item</b>	<b>1</b>	<b>396,211</b>	<b>396,211</b>
10	Authority and Head works Charges	Excl			
	<b>TOTAL DESIGN &amp; CONSTRUCTION COST AS AT JUL 2017</b>	<b>Item</b>	<b>1</b>	<b>396,211</b>	<b>396,211</b>

## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (GPT01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 19,787.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>1</b>	<b>Gross Pollutant Trap</b>				
1.1	Gross pollutant Trap inclusive of stormwater connections, excavation and associated backfilling works - ROCLA CDS1015	Item	1	50,000.00	50,000
	<u>Stepped Excavation</u>				
1.2	10 x 10 x 2.5	m3	250	50.00	12,500
1.3	5 x 5 x 2.5	m3	63	50.00	3,125
1.4	300mm Crushed Rock Base	m2	25	30.00	750
1.5	Stormwater connections	No	2	2,000.00	4,000
1.6	Refer to LR Pardo & Associates technical report for identification of rock.	Note			
1.7	We have allowed for rippable rock removal during GPT excavation works	Note			
1.8	Allowance for trenching in rock	m3	500	120.00	60,000
1.9	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
1.10	WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within LR Pardo & Associates Technical Report No. 171011 Joseph Rd/1 dated 16/06/2017	Note			
1.11	Assume 100% of GPT excavation is contaminated: 313m3 x 100% = 313m3 approx	Note			
1.12	Allow 5% at Cat A [\$850/t]	m3	16	1,700	26,605
1.13	Allow Nil at Cat B	m3	Nil		
1.14	Allow 95% at Cat C [\$140/t]	m3	297	240	71,364

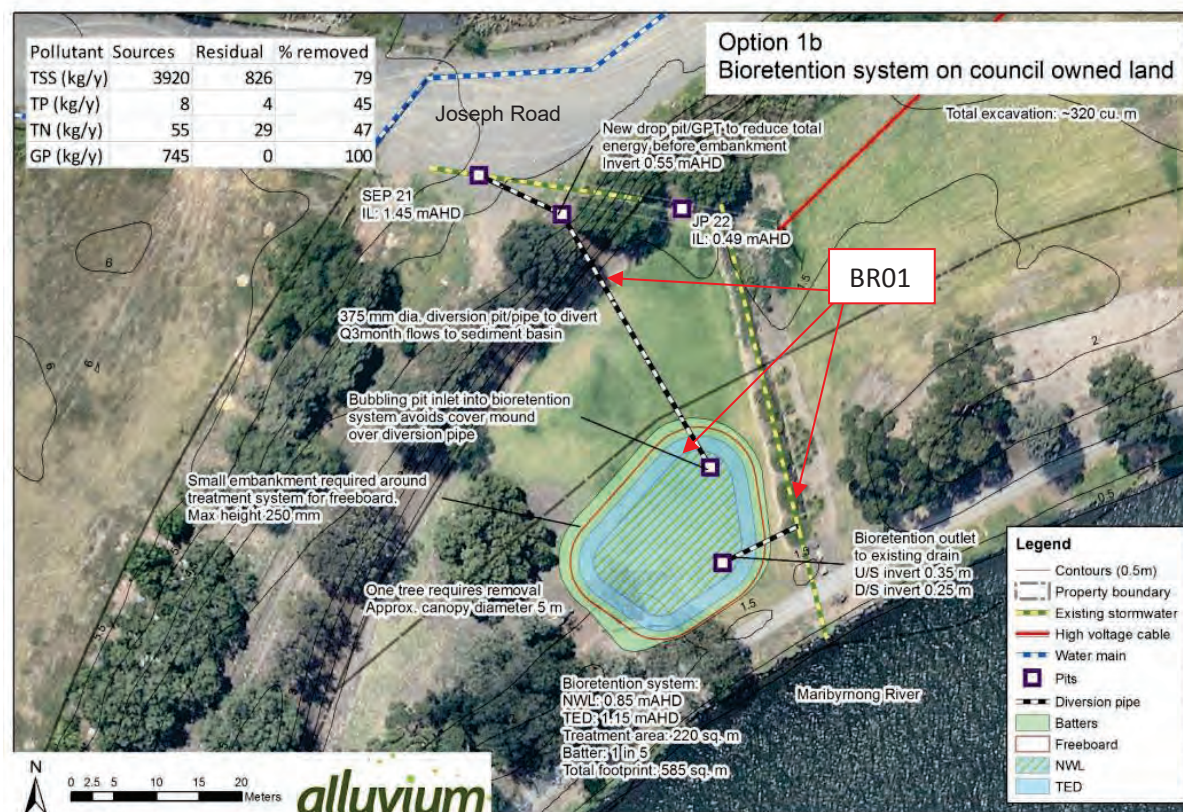
**228,344**

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## PROJECT AREA: BR01

Description: Bio-Retention System  
 Drawing Ref: Joseph Road Precinct Preferred WSUD Concepts  
 (Alluvium Consulting)  
 Date: 12 May 2017  
 Revision: 1



## ESTIMATE SUMMARY



16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (BR01)

Job No: 16291  
 Cost Base Date: July 2017  
 GFA (m2): 19,787.00

Date Printed: 17/06/2019

	Section	Unit	Quantity	Rate	Cost (\$)
1	Bio-Retention Basin (BR01)	Item	1	236,082	236,082
	<b>SUB-TOTAL TRADE WORKS</b>	<b>Item</b>	<b>1</b>	<b>236,082</b>	<b>236,082</b>
2	Design Development Contingency	%	10.0	236,082	23,608
3	Temporary works	%	2	259,690	5,194
4	Preliminaries and Supervision	%	8	264,884	21,191
5	Builder's Margin	%	5	286,075	14,304
6	Cost Escalation	Excl			
	<b>TOTAL CONSTRUCTION COST AS AT JUL 2017</b>	<b>Item</b>	<b>1</b>	<b>300,379</b>	<b>300,379</b>
7	Archaeological Contingency	Excl			
8	Construction Contingency	%	20	300,379	60,076
9	Design and Consultant Fees	%	9	360,454	32,441
10	Project Management Fees	%	3	392,895	11,787
	<b>SUB-TOTAL DESIGN &amp; CONSTRUCT COST</b>	<b>Item</b>	<b>1</b>	<b>404,682</b>	<b>404,682</b>
11	Authority and Head works Charges	Excl			
	<b>TOTAL DESIGN &amp; CONSTRUCTION COST AS AT JUL 2017</b>	<b>Item</b>	<b>1</b>	<b>404,682</b>	<b>404,682</b>

## ESTIMATE DETAIL

## 16291 - Joseph Road Precinct

## Joseph Road Precinct - 17 June 2019 (BR01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 19,787.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>1</b>	<b>Bio-Retention Basin (BR01)</b>				
1.1	Scope have been allowed for as per Alluvium Consulting WSUD Concept Report (Appendix A)	Note			
	<u>Excavation</u>				
1.2	Strip topsoil (100mm to site area)	m2	586	10	5,860
1.3	Allowance for bulk excavation including formation of retention basin batters (assumed 450mm deep)	m3	264	45	11,867
	<u>Contamination</u>				
1.4	The below allowances relate to to remediation of the precinct outside of the development allotments and includes disposing of contaminated soil off-site	Note			
1.5	WTP have not measured detailed quantities of contamination. We would expect that the environmental consultant will provide detailed quantities at a later date. As a result, we have updated our previous methodology based on the information provided within Ground Science Geotechnical Investigation G3622.1 dated 21 March 2018	Note			
1.6	Unclassified contamination present within 1000mm depth of Bio Retention Basin footprint.	Note			
1.7	Allow 5% at Cat A [\$850/t]	m3	13	1,700	22,415
1.8	Allow Nil at Cat B	m3	NIL		
1.9	Allow 95% at Cat C [\$140/t]	m3	251	240	60,124
	<u>Landscaping</u>				
1.10	Allowance for liner to basin footprint	m2	586	30	17,580
1.11	Allowance for subsoil drainage to basin footprint	m2	586	25	14,650
1.12	Filtration media layer to bio-retention basin treatment area (assumed 500mm thick)	m3	133	65	8,613
1.13	Crushed rock backfill to bio-retention basin (assumed 50mm thick)	m2	265	75	19,875
1.14	Bark mulch back fill to batters (assumed 50mm thick)	m2	321	40	12,840
1.15	Allowance to spread previously stripped topsoil to batters/surrounding areas (assumed 200mm thick)	m3	321	40	12,840



## ESTIMATE DETAIL

16291 - Joseph Road Precinct

Joseph Road Precinct - 17 June 2019 (BR01)

Job No: 16291

Cost Base Date: July 2017

GFA (m2): 19,787.00

Date Printed: 17/06/2019

Item	Section	Unit	Qty	Rate	Cost \$
<b>1</b>	<b>Bio-Retention Basin (BR01)</b>				<i>(Continued)</i>
1.16	Allowance for planting to Bio-retention basin footprint (4 - 6 plants per m2) <u>Stormwater</u>	m2	586	35	20,510
1.17	375 dia RCP diversion pipe including trenching	m	66	135.00	8,910
1.18	Allowance for new pits	No	5	4,000	20,000

**236,082**

# Joseph Road Precinct - Cost Reconciliation

Trades	Estimate - 1 March 2019	Estimate - 17 June 2019	Difference	Comments
Demolition	\$ 1,472,825	\$ 1,446,192	(\$26,633)	Changes due to reduction of RD09 work area
Contamination	\$ 4,267,864	\$ 4,059,464	(\$208,400)	""
Groundworks	\$ 1,372,915	\$ 1,286,350	(\$86,565)	""
Roadworks	\$ 3,368,965	\$ 3,182,877	(\$186,088)	""
Pavements	\$ 1,509,405	\$ 1,471,705	(\$37,700)	""
Street Furniture	\$ 387,650	\$ 384,100	(\$3,550)	""
Street lighting	\$ 200,000	\$ 185,000	(\$15,000)	""
Traffic Signalisation	\$ 582,590	\$ 582,590	\$0	""
Traffic Signalisation - Traffic Management	\$ 70,000	\$ 70,000	\$0	""
Landscaping	\$ 218,660	\$ 215,780	(\$2,880)	""
Power	\$ 1,352,060	\$ 1,282,085	(\$69,975)	""
Stormwater	\$ 957,188	\$ 957,188	\$0	""
Sewer	\$ -	\$ -	\$0	""
Water	\$ -	\$ -	\$0	""
Gas	\$ -	\$ -	\$0	""
Communications	\$ 1,000,000	\$ 1,000,000	\$0	""
CCTV	\$ -	\$ -	\$0	""
<b>SUB-TOTAL TRADE WORKS (EXCL GST)</b>	<b>\$ 16,760,122</b>	<b>\$ 16,123,331</b>	<b>(\$636,791)</b>	""
	\$ -	\$ -		
Design Development Contingency	\$ 1,676,012	\$ 1,612,333	(\$63,679)	Generic increase due to an overall reduction in trade cost in the above trades
Temporary works	\$ 368,723	\$ 354,714	(\$14,009)	""
Preliminaries and Supervision	\$ 1,504,388	\$ 1,447,230	(\$57,158)	""
Builder's Margin	\$ 1,015,462	\$ 976,880	(\$38,582)	""
Cost Escalation (FEB - JULY)	\$ 201,782	\$ 193,680	(\$8,102)	""
<b>TOTAL CONSTRUCTION COST (EXCL GST)</b>	<b>\$ 21,526,489</b>	<b>\$ 20,708,168</b>	<b>(\$818,321)</b>	
	\$ -	\$ -		
Construction Contingency	\$ 3,258,664	\$ 3,135,916	(\$122,748)	Generic increase due to an overall reduction in trade cost in the above trades
Design and Consultant fees	\$ 2,230,663	\$ 2,145,967	(\$84,696)	""
Project Management fees	\$ 814,189	\$ 789,956	(\$24,233)	""
<b>SUB-TOTAL DESIGN &amp; CONSTRUCTION COST (EXCL GST)</b>	<b>\$ 27,830,005</b>	<b>\$ 26,780,007</b>	<b>(\$1,049,998)</b>	
	\$ -	\$ -		
Authority and Head works Charges	\$ -	\$ -	\$0	
Decimal Rounding	\$ -	\$ 7	(\$2)	Minor rounding
<b>TOTAL DESIGN &amp; CONSTRUCTION COST (EXCL GST)</b>	<b>\$ 27,830,000</b>	<b>\$ 26,780,000</b>	<b>(\$1,050,000)</b>	





# Joseph Road Precinct Public Realm Plan

7 July 2017



Maribyrnong  
CITY COUNCIL

## Concept Design Report



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# 1. Public Realm Plan

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1. Public Realm Plan

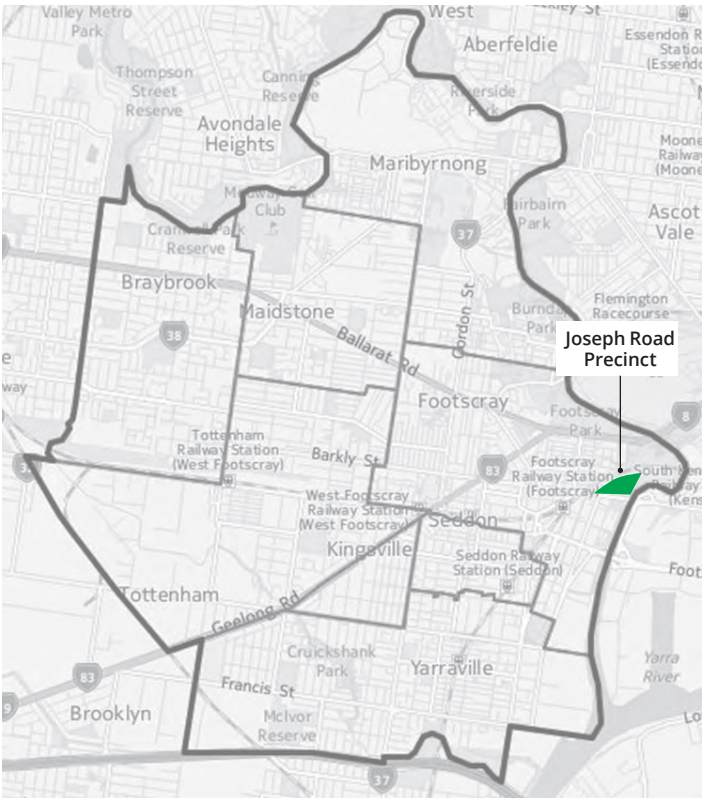
1.1. Introduction

The Joseph Road Precinct is approximately 15 hectares, located 5km from the Melbourne CBD. It is bounded by Hopkins Street to the south, the Maribyrnong River to the east and the Werribee/ Sunbury railway line to the north-west.

The public realm is made up of road reserves and public streets including all assets and services within the Joseph Road Precinct that are vested in Council or VicRoads.



Melbourne map indicating City of Maribyrnong locality



City of Maribyrnong boundary map

Design objectives

The public realm design objectives for the Joseph Road Precinct are to

- Provide connections through the precinct and to surrounding areas,
- Provide a seamless transition in activity levels and function between Footscray central and Melbourne CBD,
- Have regard to the built form outcomes of the Precinct,
- Create a public realm that complements active ground floor uses, provides for safe and pleasant pedestrian circulation, and encourages wider public access and usage,
- Prioritise pedestrians, cyclists and encourage active transport modes,
- Provide an accessible and equitable public realm,
- Provide services and infrastructure required for the level of development in ways that do not limit opportunities for quality green infrastructure in the streetscape; and,
- Consider and manage grading of the site and stormwater drainage in a positive way to contribute towards a resilient city.



Diagram of design objectives

Existing site photos



Wightman Street



Warde Street



Whitehall Street



Hallenstein Street



Neilson Place



South Joseph Road


















North Joseph Road

1.2. Public Realm Legend

Materials and surfaces for the Joseph Road precinct will be consistent with the Maribyrnong City Design Manual for Footscray area. This legend applies to the the functional layout plan as shown in pg.08

Refer to Chapter 4 of this report for further information on the materials palette.

	EXTENT OF WORKS
	PAVEMENT - ASPHALT Asphalt footpath (type N) as per SF 010
	PAVEMENT - BLUESTONE
	PAVEMENT - STONE COBBLE Sawn bluestone pitcher
	VEHICLE CROSSING WITH BLUESTONE KERB
	CROSSING Pram crossing asphalt transition, bluestone transition flush kerb as per SF 003
	KERB Sawn bluestone and concrete channel. As per SF 008
	STONE FLUSH EDGE Sawn bluestone kerb extension. 300 x 150 x 40mm sawn bluestone units as per SF 012
	SPOON DRAIN 600mm width concrete spoon drain
	SEAT 'Promenade' with back rest as per SF 201
	BYCYCLE RACK Standard hoop polished stainless steel as per SF 401
	WASTE AND RECYCLING UNITS As per general SF 301 and recycling SF 301
	TREE SURROUND IN FOOTPATH Bluestone surround with granitic gravel, as per SF602
	TREE SURROUND IN ROAD RESERVE Concrete edging with granitic gravel as per SF605

	WAYFINDING AND SIGNAGE as per SF701
	PROPOSED GROSS POLLUTANT TRAP
	PROPOSED ADVANCED TREE
	PROPOSED GARDEN BED
	PROPOSED LIGHTING Street Light - Footscray
	EXISTING LIGHTING
	BOLLARD Bollard - stainless steel as per S501
	EXISTING CONCRETE EDGE TO BRIDGE
	EDGE OF EXISTING CONCRETE BRIDGE TO BE REMOVED
	TITLE AND PROPERTY BOUNDARY
	EASEMENTS
	JOSEPH ROAD PRECINCT BOUNDARY



1. Public Realm Plan

1.3. Public Realm Plan

The public realm plan for the Joseph Road precinct includes proposed street concepts for the following

- Wightman Street
- Whitehall Street
- Warde Street
- Hallenstein Street
- Neilson Place
- South Joseph Road
- Hopkins Street
- North Joseph Road

It also includes the connection and relationship to the Maribyrnong River and public open space in the precinct.

The plan makes reference to the current designs of the private open space networks.

Please refer to the site analysis report for further information on the proposed surrounding developments.





1.4. Public Realm Plan - Without Trees





## 2. Street Concepts

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2. Street Concepts

2.1. Wightman Street

Wightman Street provides access to a number of existing light industrial properties. The design accommodates the existing built form and vehicle cross over proposed locations. There are no current development plans with frontages facing the street. The western end of the street terminates with the Williamstown Rail line.

The proposed design includes re-instated kerbs and pavements consistent with the Maribyrnong Design Manual. Streetscape trees and planters have been provided where possible.

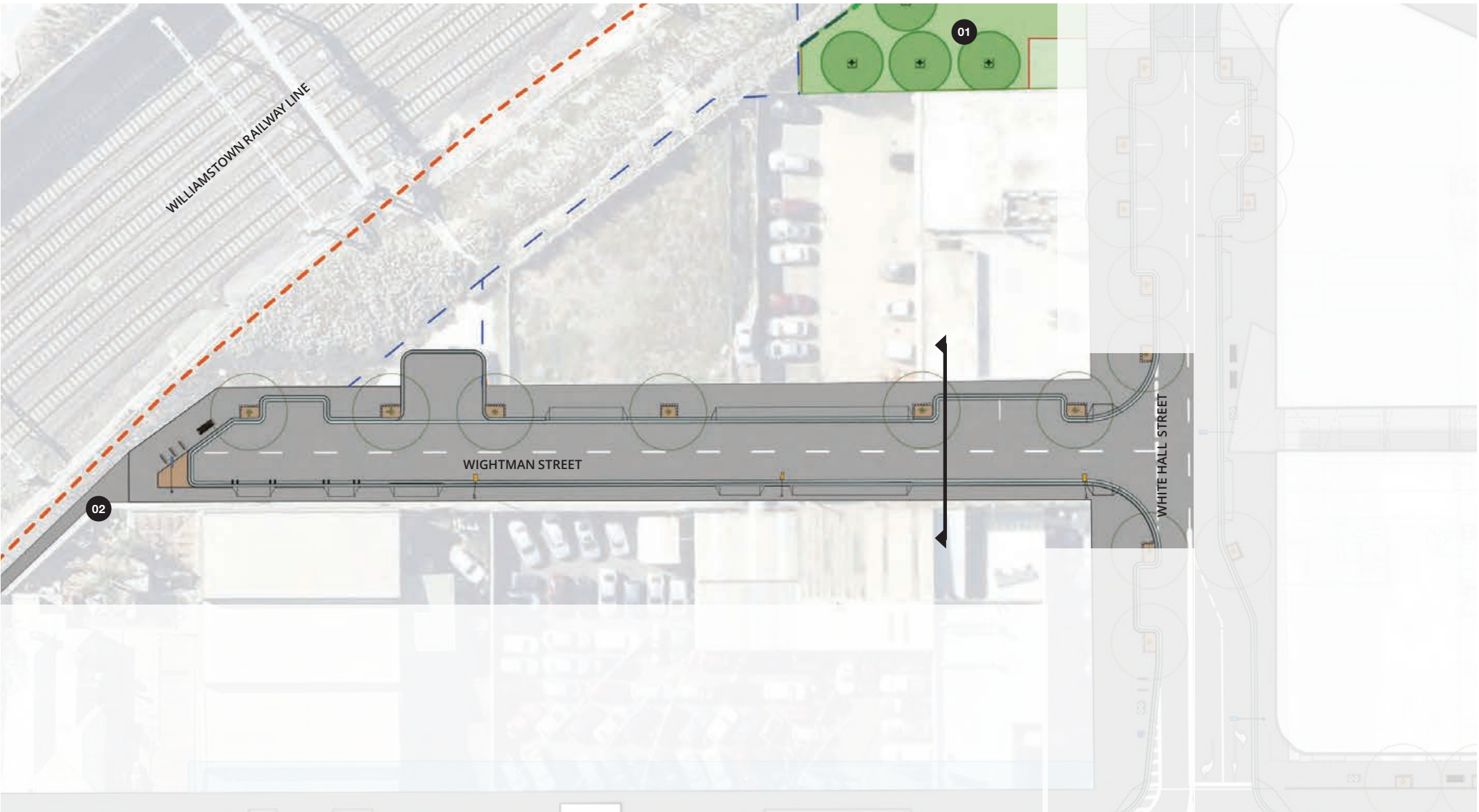
Proposed Street Details

Carriageway width	3.3m
Parallel parking bays	3
Vehicle cross overs	7
Trees in footpath	
(Council details SF-602)	6
Trees in road reserve	
(Council details SF-605)	0
Benches	1
Bins (Waste & recycle unit)	0
Bike hoops	3
Wayfinding and signage	0

The location of street furniture is indicative and final locations are to be approved by Council.

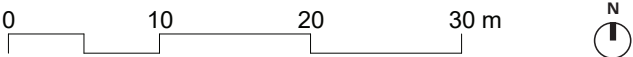


Key Plan



- LEGEND
- 01 Public open space
  - 02 Public pedestrian/cycle connection
  - Joseph Road precinct boundary
  - Railway title/property boundary

Plan 1:500 @ A3



SCALE 1:500 @ A3



2. Street Concepts

2.1.1 Wightman Street Section



Section 1:75 @ A3

2. Street Concepts

2.2. Whitehall Street

Whitehall Street provides north-south connection from Hopkins Street to Warde Street. Developments are currently under construction on the east side of the street (18-24 Hopkins Street). This development will provide active frontages-yet to be confirmed facing onto Whitehall Street. On the southern corner of Hopkins Street the development will provide active frontages (showrooms).

The design proposal aims to nurture an active street by providing widened public realm and a consistent avenue of street scape trees.

The northern end of Whitehall Street meets with a proposed public open space.

Proposed Street Details

Carriageway width	3.3m
Parallel parking bays	6
Vehicle cross overs	2
Trees in footpath	
(Council details SF-602)	11
Trees in road reserve	
(Council details SF-605)	0
Benches	2
Bins (Waste & recycle unit)	2
Bike hoops	2
Wayfinding and signage	1

The location of street furniture is indicative and final locations are to be approved by Council.

LEGEND

01

Publicly accessible private open space

02

Public open space

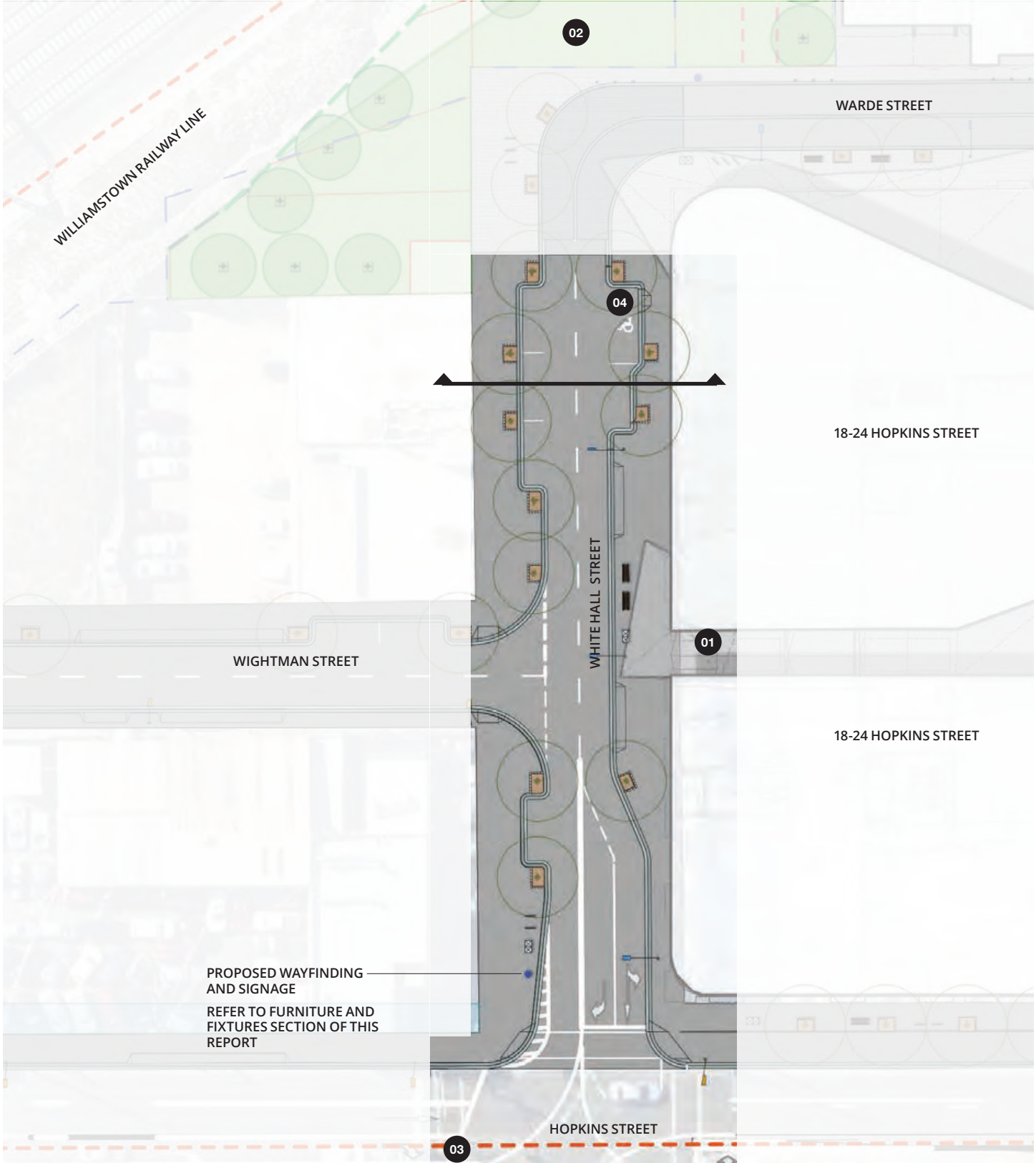
03

Whitehall St. and Hopkins St. intersection

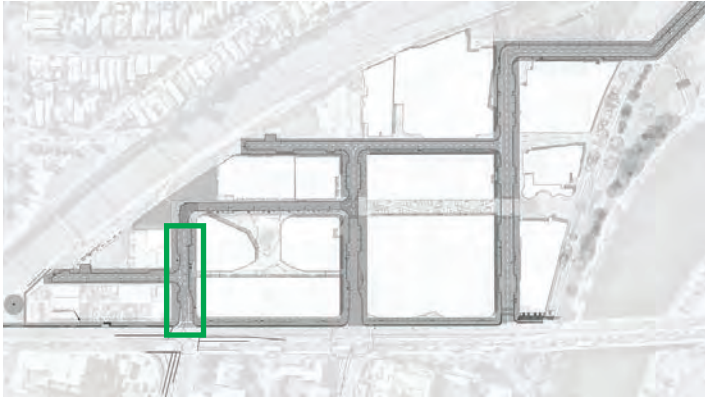
04

DDA accesible parking

Joseph Road precinct boundary



Plan 1:500 @ A3



Key Plan



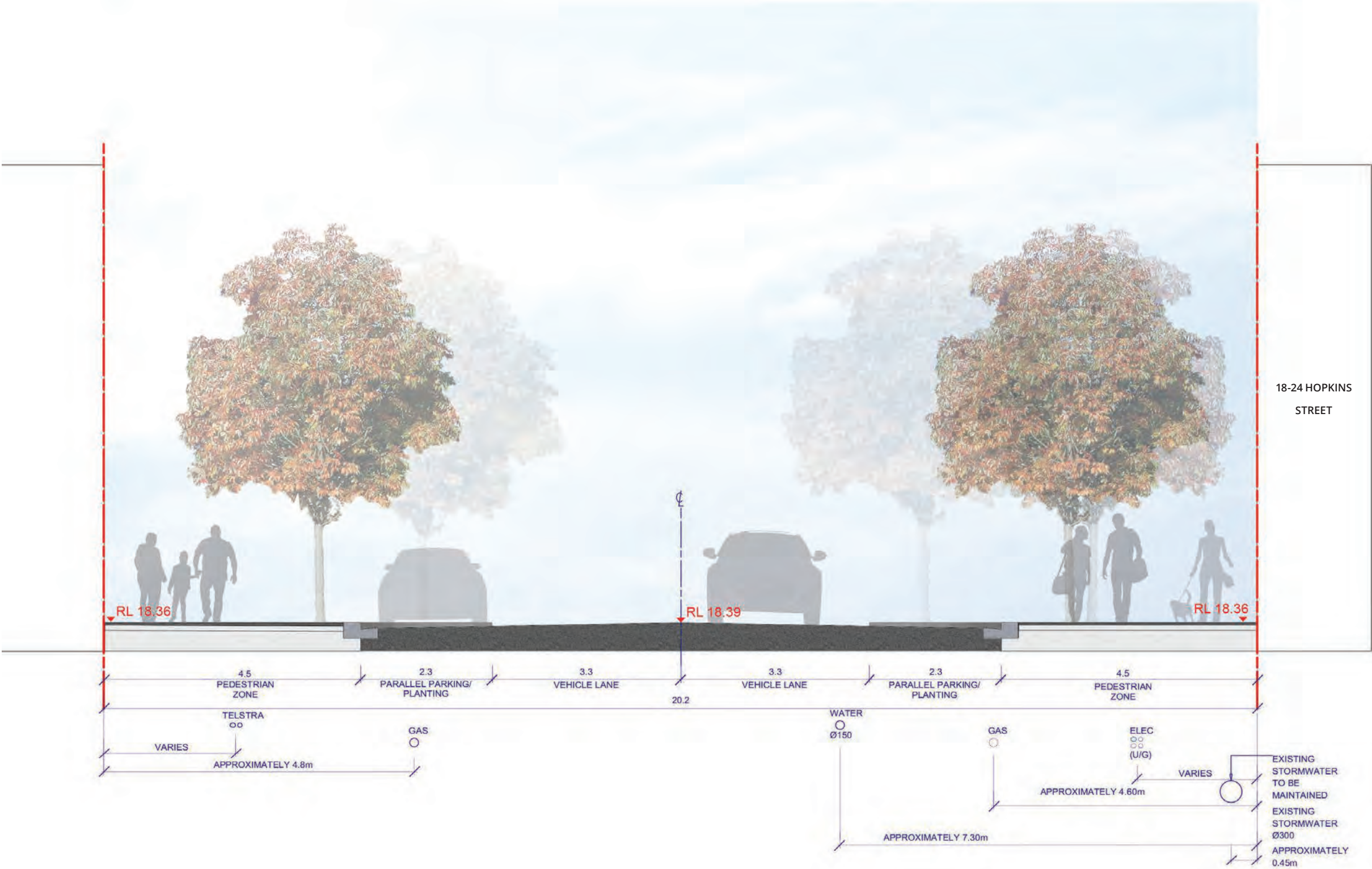
SCALE 1:500 @ A3





2. Street Concepts

2.2.1 Whitehall Street Section



2. Street Concepts

2.3. Warde Street

Warde Street is proposed to become a shared vehicle and pedestrian zone. This will provide pedestrian priority link East-West through the development making a key connection to the Maribyrnong River and the river side.

A flush transition, without barrier kerbs, between the pedestrian only footpath and the shared zone will assist to establish the street as a pedestrian priority zone. Vehicles movements will be reduced to a maximum speed limit to accommodate pedestrians. Street furniture will define the edge of the pedestrian only zone and compliment the active edges provide by the development.

A speed limit of 10Km/h will be applied. To be approved by VicRoads.

Proposed Street Details

Carriageway width	3.1m
Parallel parking bays	0
Vehicle cross overs	1
Trees in footpath	
(Council details SF-602)	10
Trees in road reserve	
(Council details SF-605)	0
Benches	7
Bins (Waste & recycle unit)	2
Bike hoops	9
Wayfinding and signage	1

The location of street furniture is indicative and final locations are to be approved by Council.

- LEGEND
- 01

Publicly accessible private open space
- 02

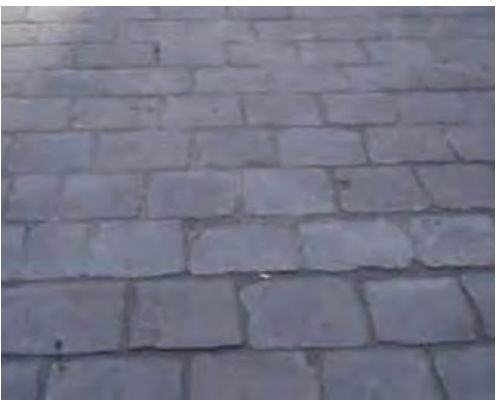
Public open space
- 03

Raised transition threshold into shared zone -Sawn bluestone pitchers
- 04

Pavement -bluestone
- 05

Flush transition between pedestrian only footpath and shared zone - Row of bluestone setts
- 06

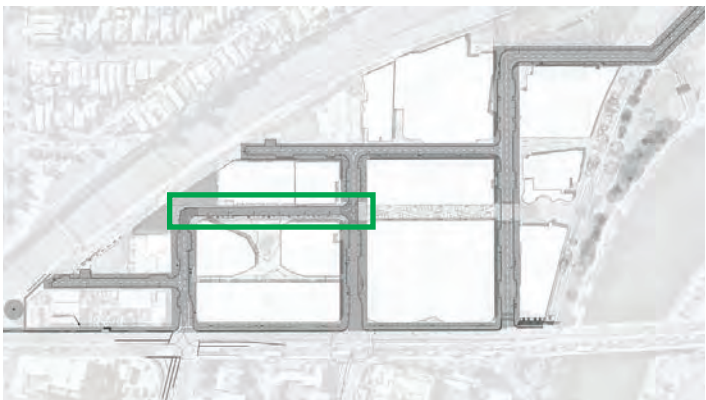
Shared zone - asphalt surfacing to carriageway



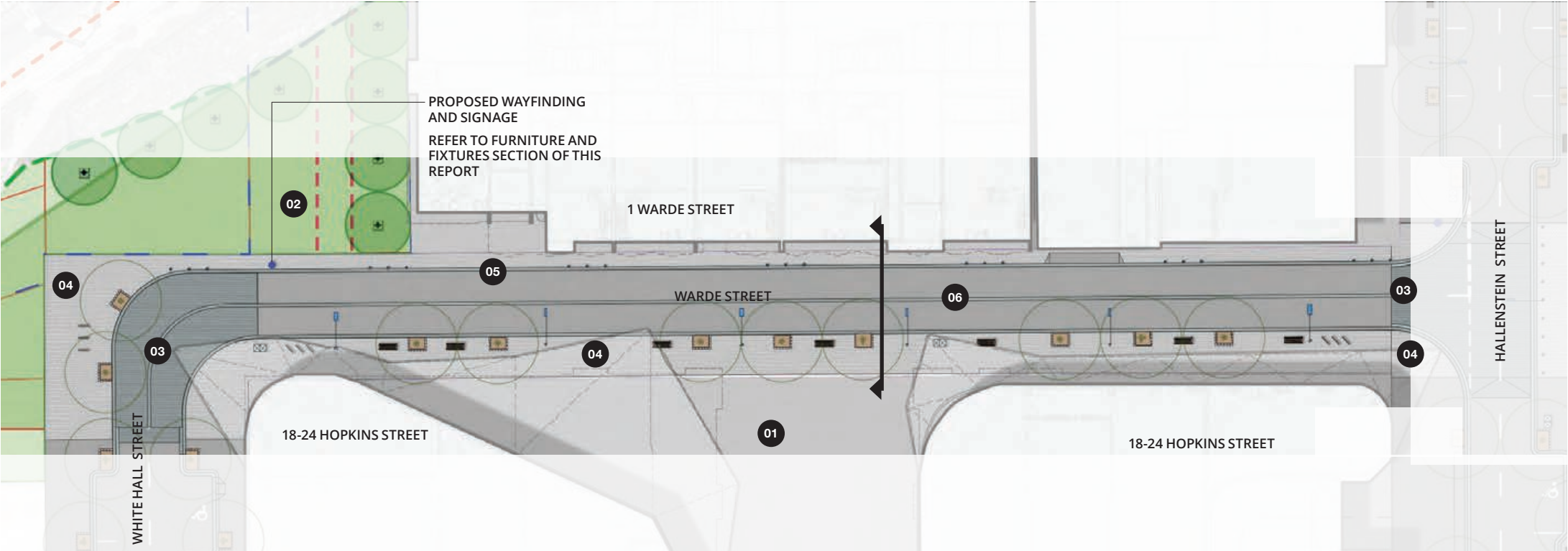
Sawn bluestone pitcher at raised transition thresholds



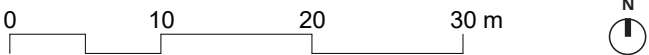
Row of bluestone setts at edge of shared zone



Key Plan



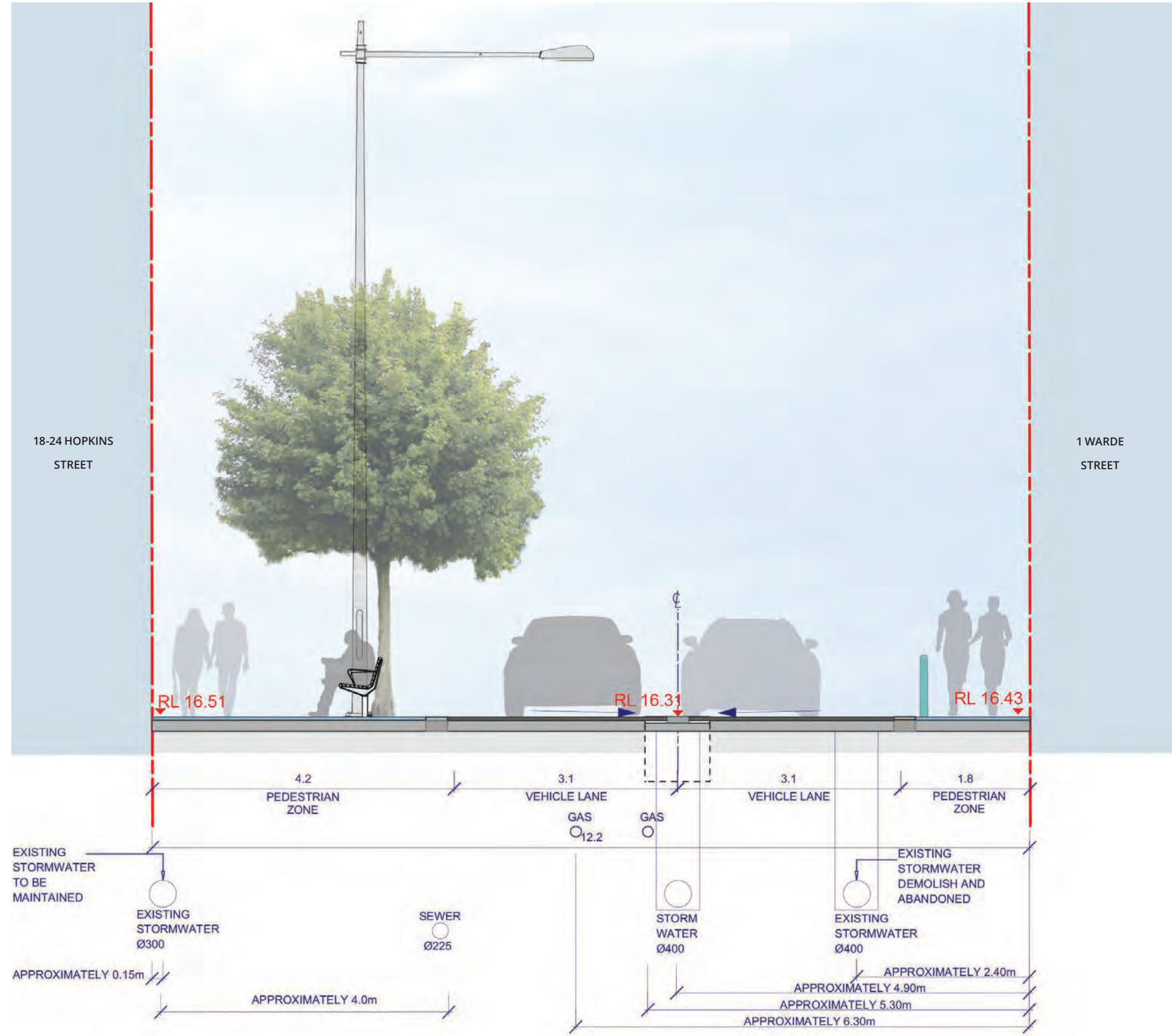
Plan 1:500 @ A3



SCALE 1:500 @ A3



2.3.1 Warde Street Section





2. Street Concepts

2.4. Hallenstein Street

Hallenstein Street will create a pedestrian friendly zone through to Neilson Place in the north. A widened footpath will provide clear pedestrian movement zones as well as room for streetscape furniture and street trees.

Street trees are arranged in two rows, one in verge and the other within the pedestrian zone. This approach provides Hallenstein Street with a consistent green canopy as well as on street car parking.

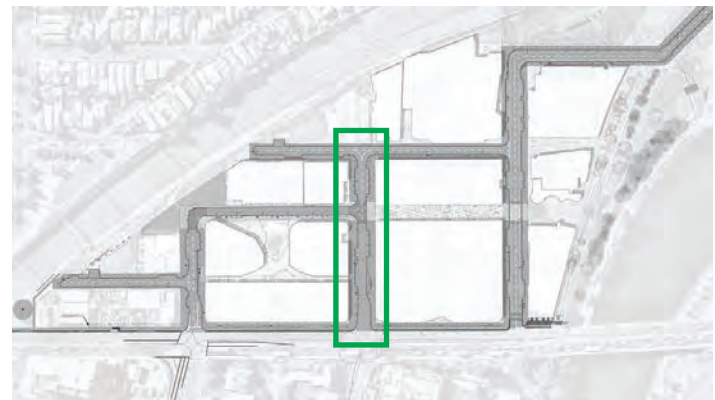
Proposed Street Details

Carriageway width	3.3m
Parallel parking bays	15
Vehicle cross overs	3
Trees in footpath	
(Council details SF-602)	20
Trees in road reserve	
(Council details SF-605)	1
Benches	5
Bins (Waste & recycle unit)	4
Bike hoops	5
Wayfinding and signage	2

The location of street furniture is indicative and final locations are to be approved by Council.

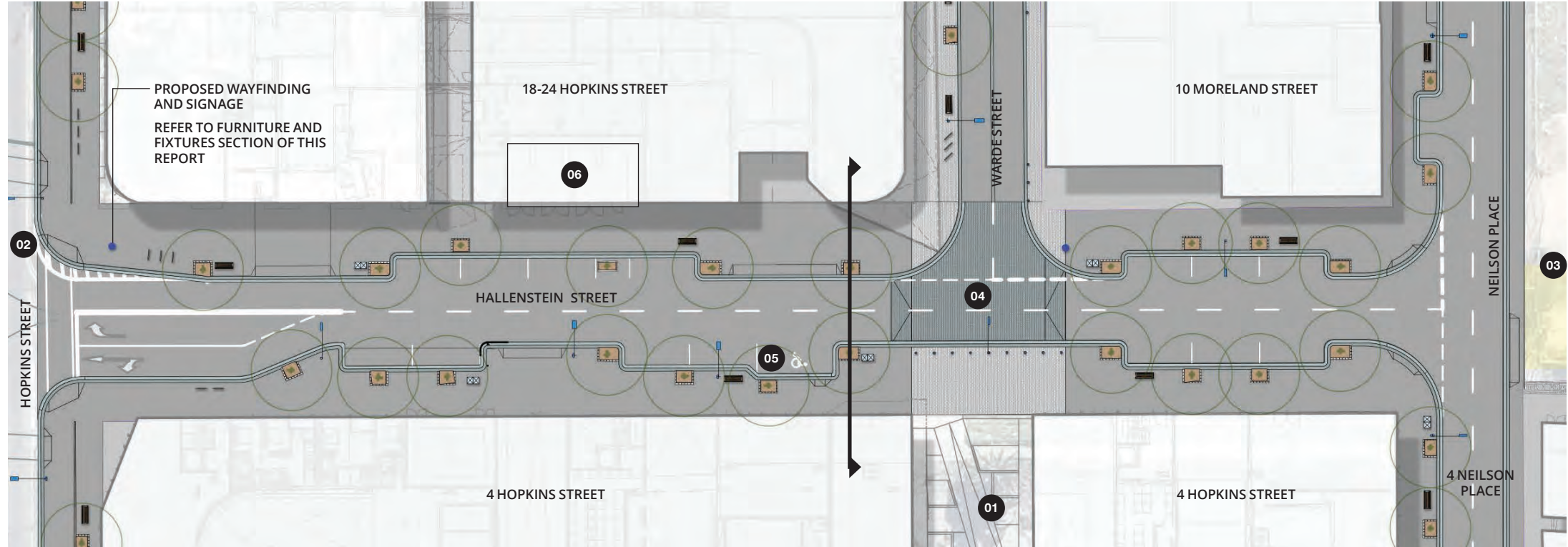


Hallenstein Street Visualisation

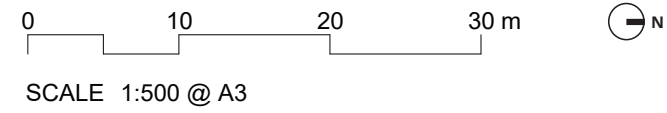


Key Plan

- LEGEND**
- 01 Publicly accessible private open space - Connection to Maribyrnong River
  - 02 Hallenstein St. and Hopkins St. intersection
  - 03 Easement
  - 04 Sawn Bluestone paver to ramp and raised transition threshold at intersection with Warde Street
  - 05 DDA accessible car park
  - 06 Substation



Plan 1:500 @ A3

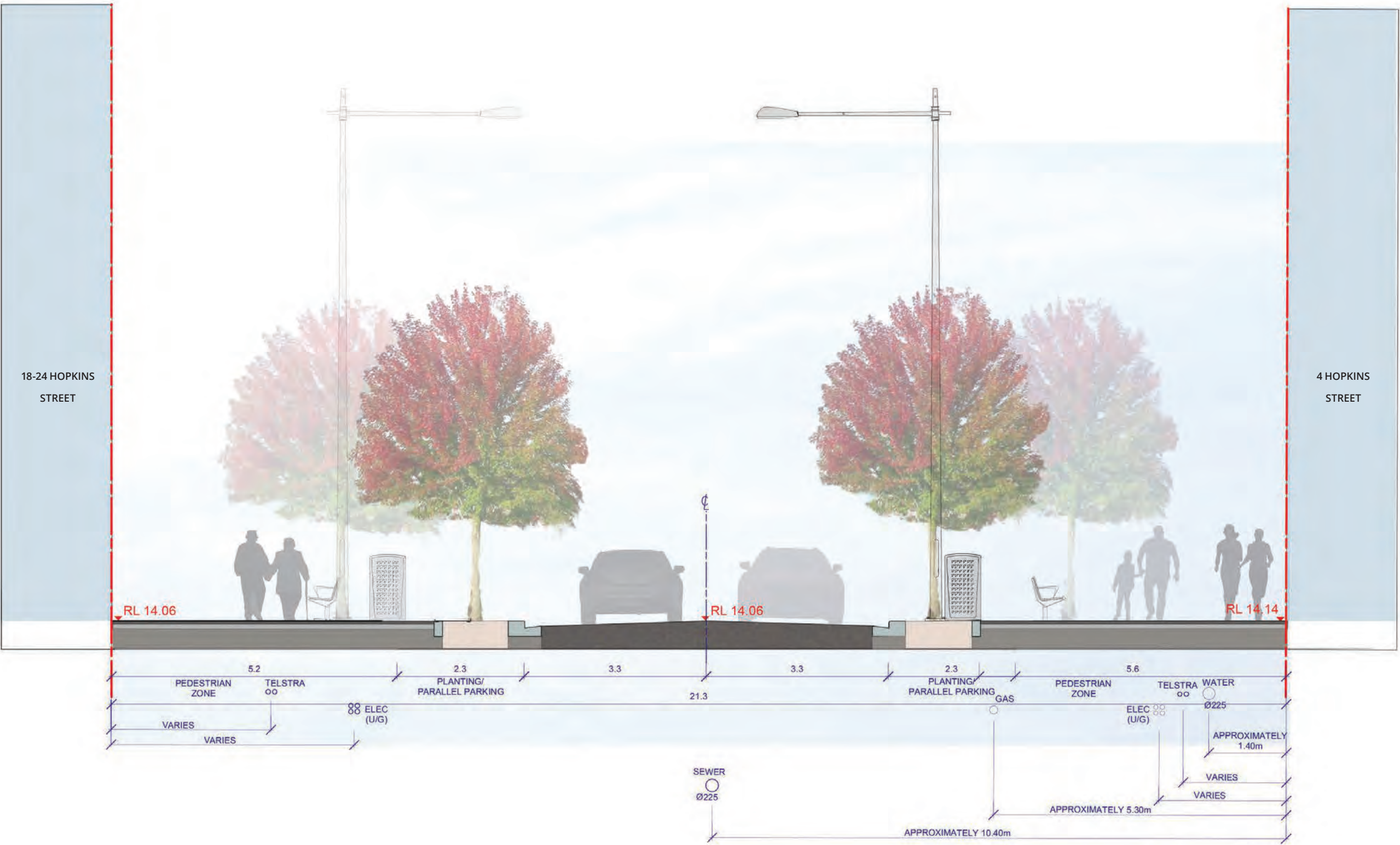


SCALE 1:500 @ A3



2. Street Concepts

2.4.1 Hallenstein Street Section



Section 1:50 @ A3

2.5. Neilson Place

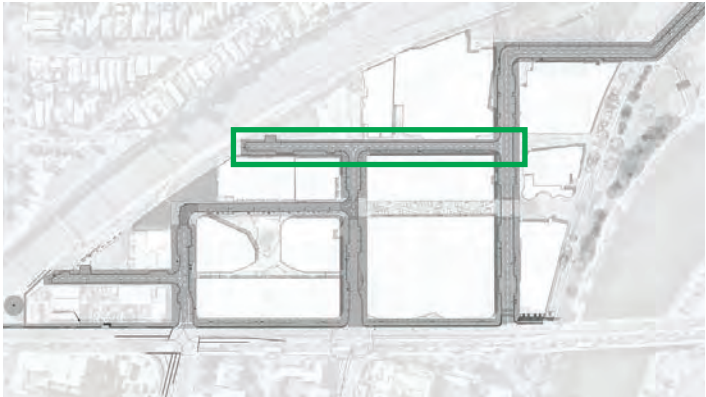
Neilson Place has a reduced width however is required to provide for both east and west bound vehicle movements. To provide a consistent green canopy along the length of the street, it is proposed to shift the carriageway north and provide trees along the south side with the most solar access.

Between Hallenstein Street and Joseph Road there will be no on street car parking, however, some will be provided west of Hallenstein Street. Cross over access into the proposed developments will be provided.

No. 2 Neilson Place will provide active frontages with retail opportunities provided in the east.

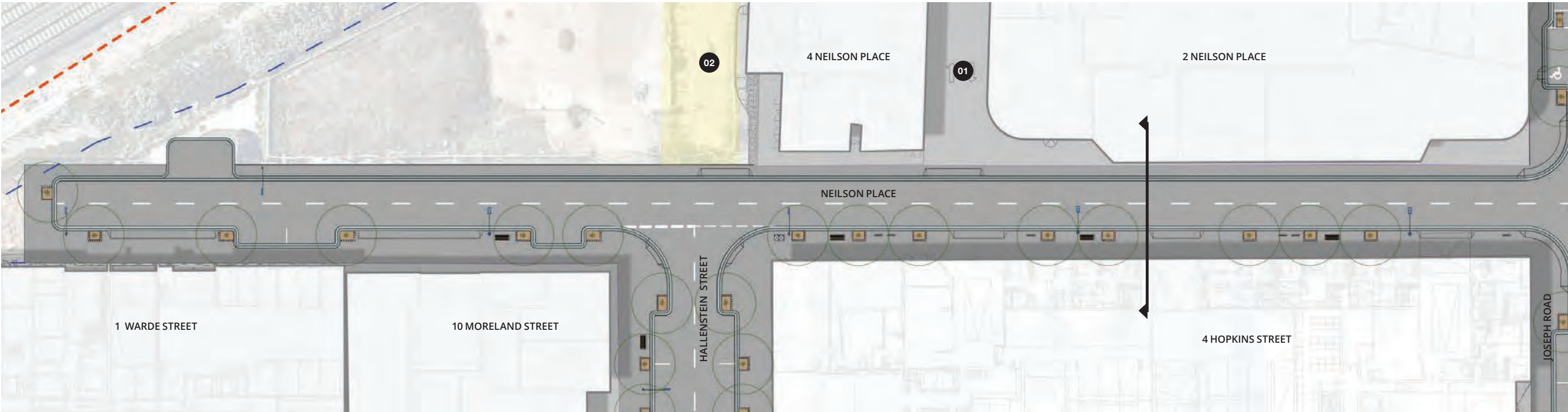
The location of street furniture is indicative and final locations are to be approved by Council.

Proposed Street Details	
Carriageway width	3.3m
Parallel parking bays	3
Vehicle cross overs	7
Trees in footpath	
(Council details SF-602)	14
Benches	4
Bins (Waste & recycle unit)	1
Bike hoops	6
Wayfinding and signage	0

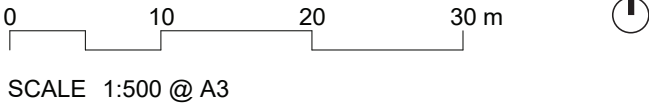


Key Plan

- LEGEND
- 01 Access to private car park
  - 02 Easement
  - Joseph Road precinct boundary
  - Railway title/property boundary

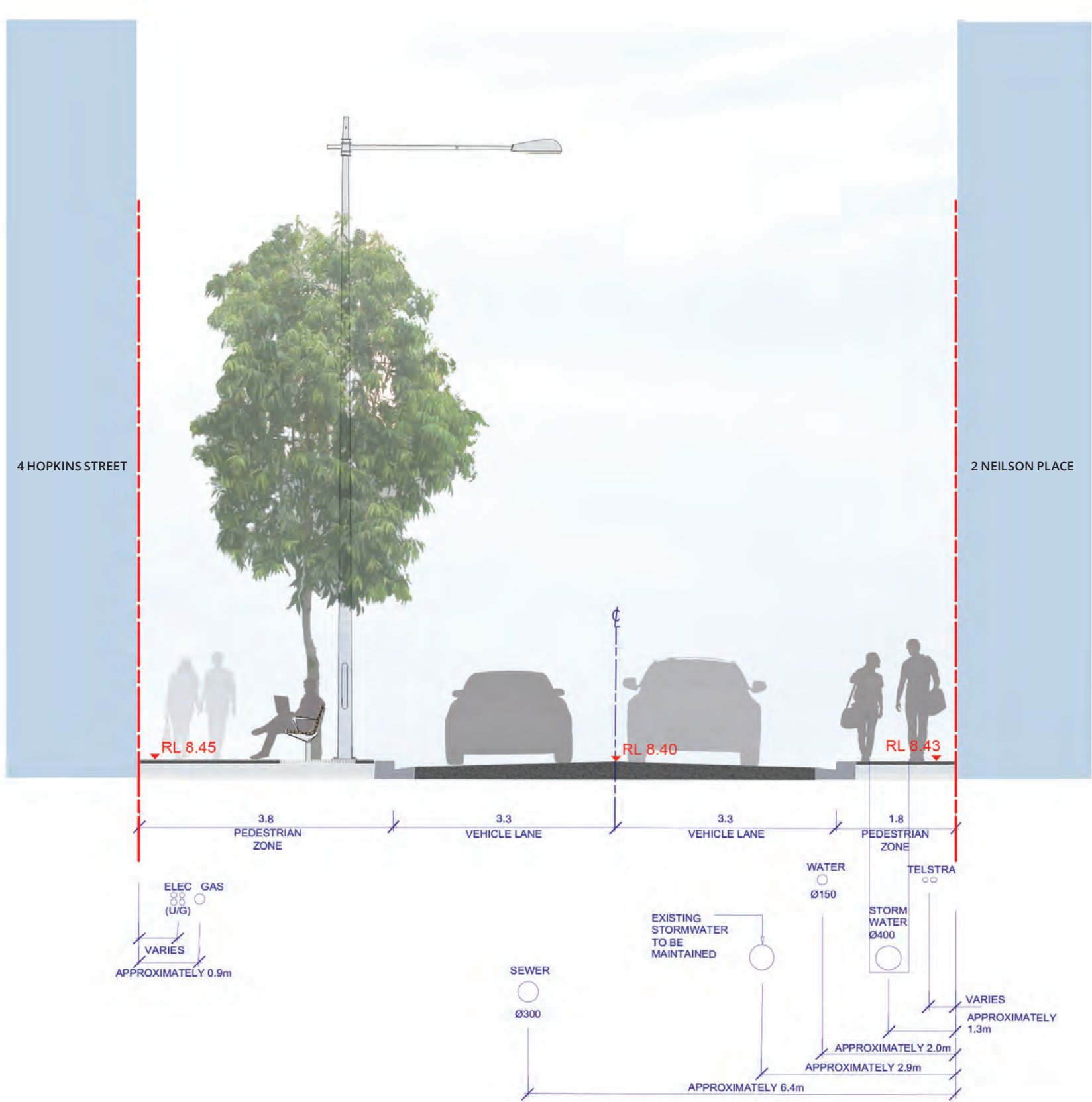


Plan 1:500 @ A3





2.5.1 Neilson Place Section



Section 1:50 @ A3



## 2.6. South Joseph Road

South Joseph Road will be a new main street for the Joseph Road precinct. The design for the street will provide on street parking to encourage visitors and residents to park and walk to key destinations. A consistent avenue of trees will provide a lush green canopy, the arrangement similar to Hallenstein Street will contribute to creating a unique identity for Joseph Road precinct.

A raised pedestrian crossing will prioritise pedestrian movements and create a direct link from the Maribyrnong River to the pedestrian mall at 4 Hopkins Street, Warde Street shared zone and to Footscray Metropolitan Activity Centre.

Separated cycle lanes will provide cyclist priority along Joseph Road to Maribyrnong River.

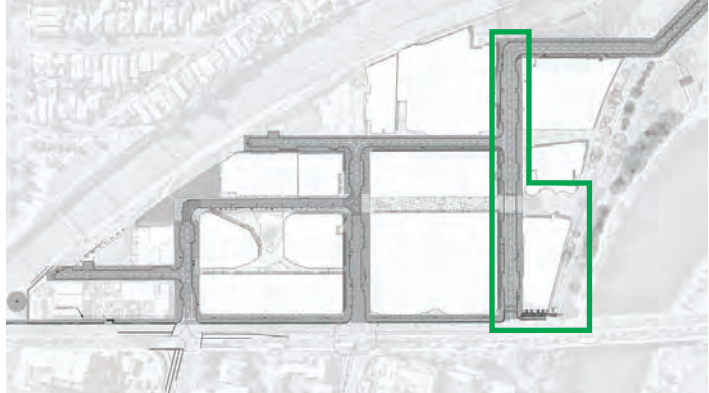
The location of street furniture is indicative and final locations are to be approved by Council.

### Proposed Street Details

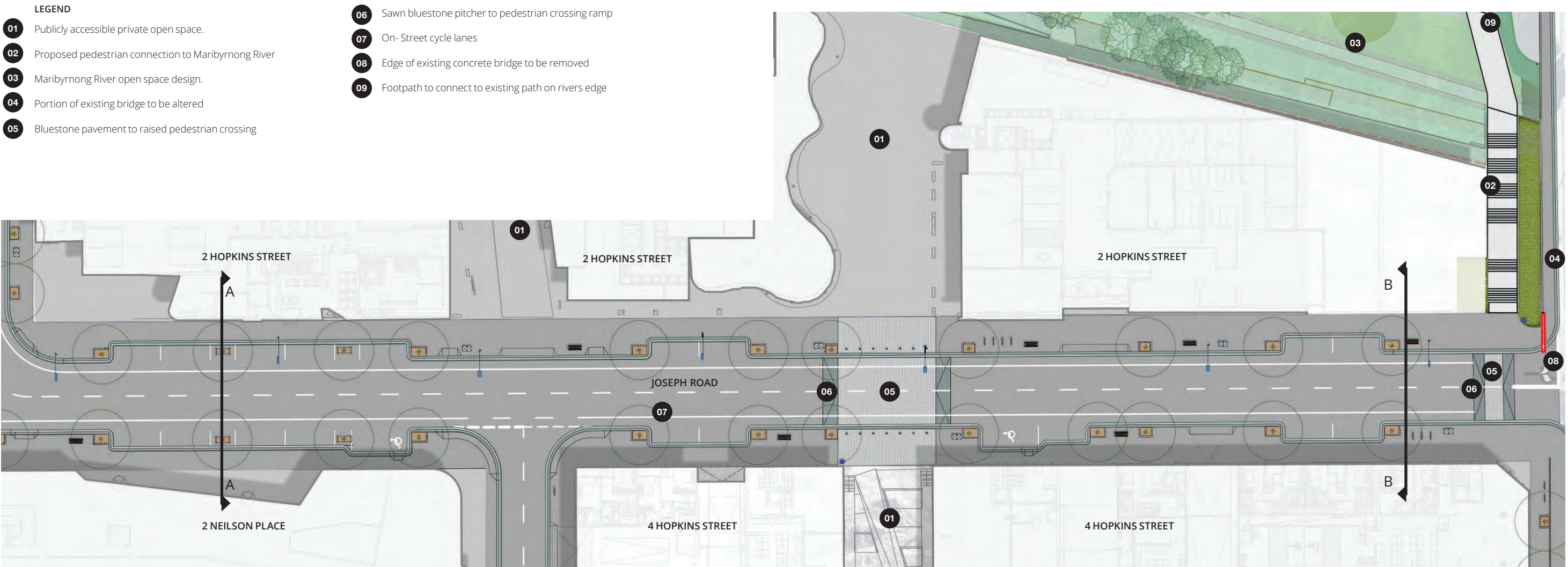
Carriageway width	3.3m
Parallel parking bays	20
Vehicle cross overs	3
Trees in footpath (Council details SF-602)	19
Trees in road reserve (Council details SF-605)	4
Benches	7
Bins (Waste & recycle unit)	5
Bike hoops	7
Wayfinding and signage	2



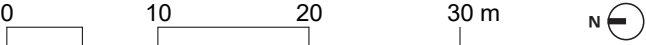
Visualisation of proposed design for South Joseph Road



Key Plan



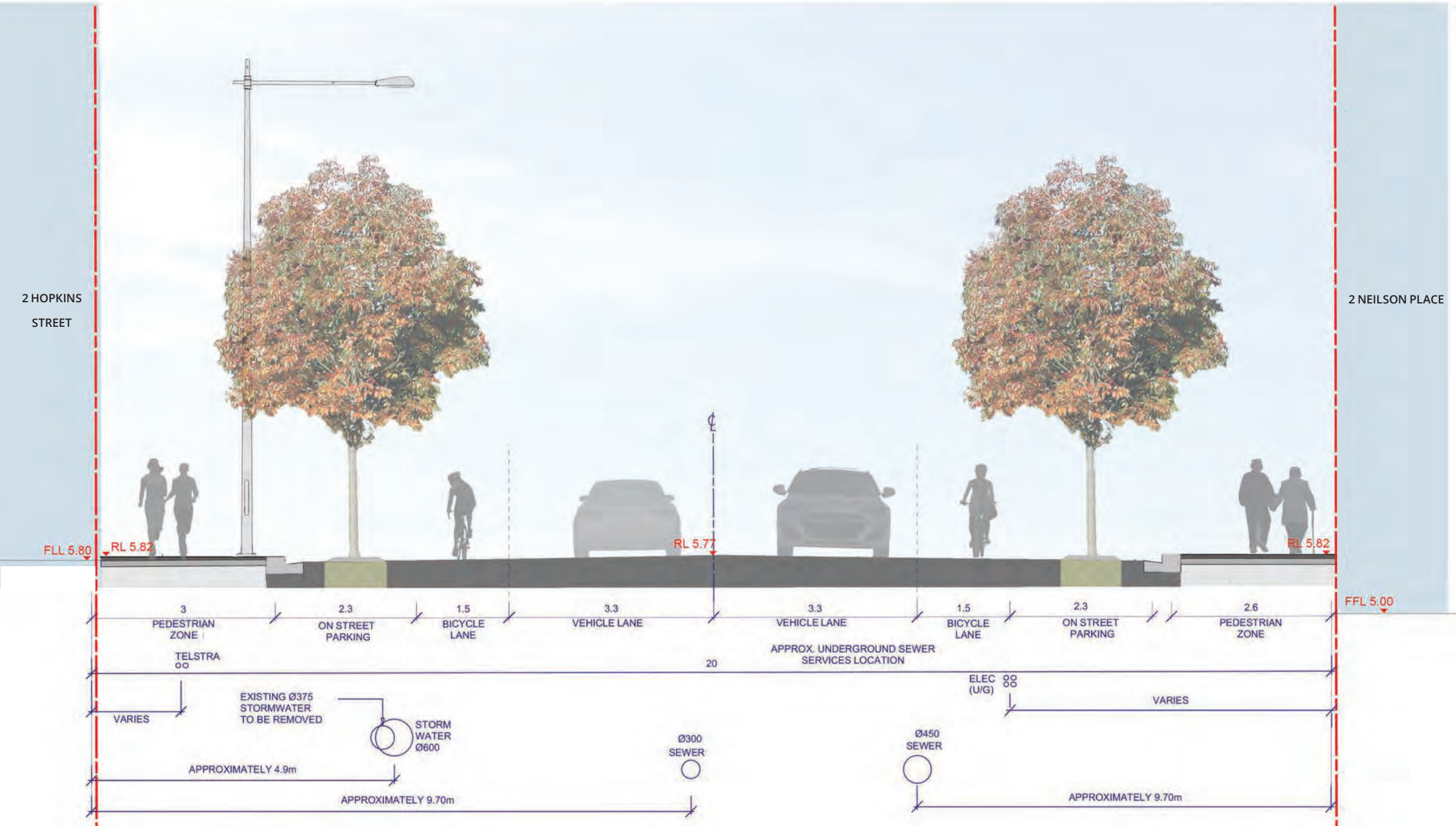
Plan 1:500 @ A3



SCALE 1:500 @ A3



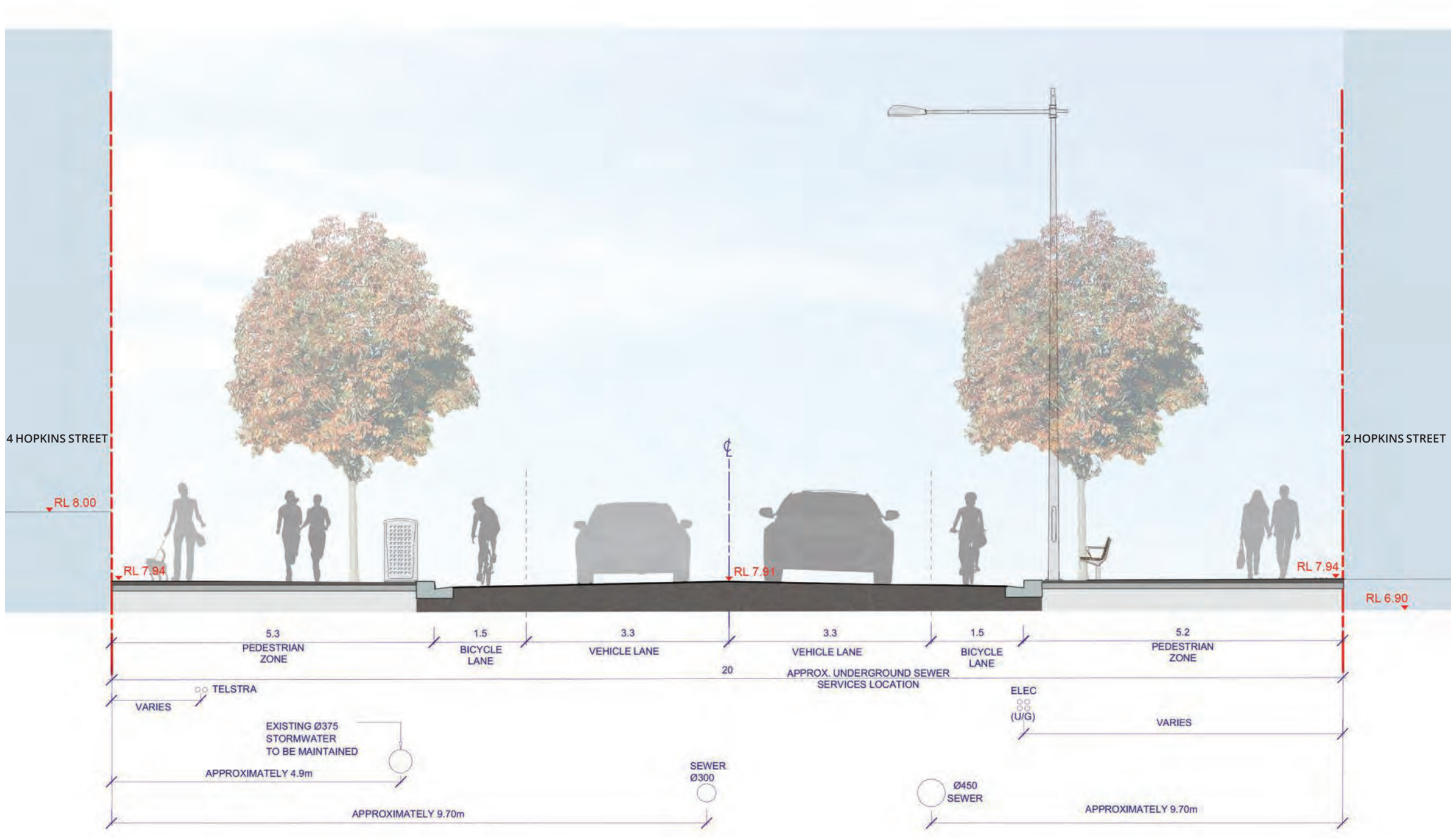
2.6.1 South Joseph Road Section A-A



Section A-A 1:50 @ A3



2.6.2 South Joseph Road Section B-B



Section B-B 1:50 @ A3



# 2.7. North Joseph Road

North Joseph Road will provide a green connection to Maribyrnong River. On road bicycle lanes will travel east and west until the turn toward the river.

**Proposed street details**

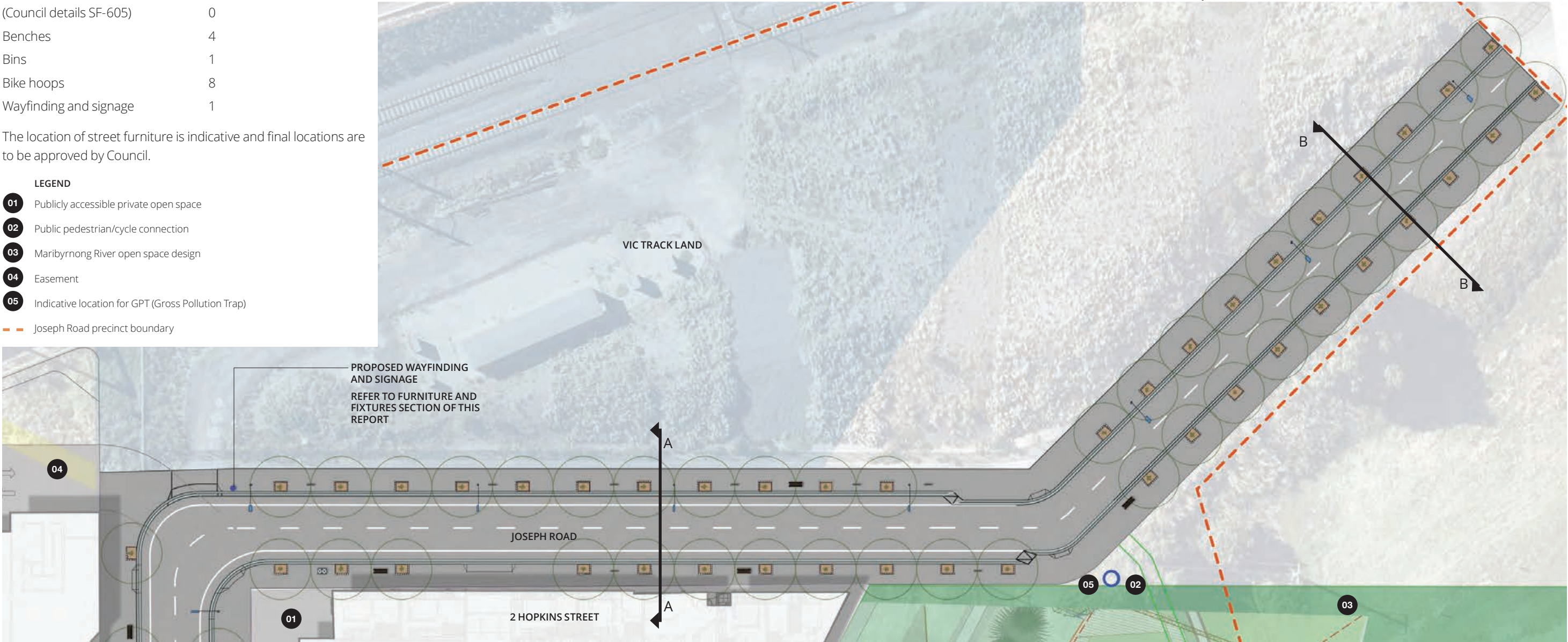
Carriageway width	3m
Parallel parking bays	0
Vehicle cross overs	2
Trees in Footpath	
(Council details SF-602)	43
Trees in road reserve	
(Council details SF-605)	0
Benches	4
Bins	1
Bike hoops	8
Wayfinding and signage	1

The location of street furniture is indicative and final locations are to be approved by Council.

- LEGEND**
- 01 Publicly accessible private open space
  - 02 Public pedestrian/cycle connection
  - 03 Maribyrnong River open space design
  - 04 Easement
  - 05 Indicative location for GPT (Gross Pollution Trap)
  - Joseph Road precinct boundary



Key Plan



Plan 1:500 @ A3

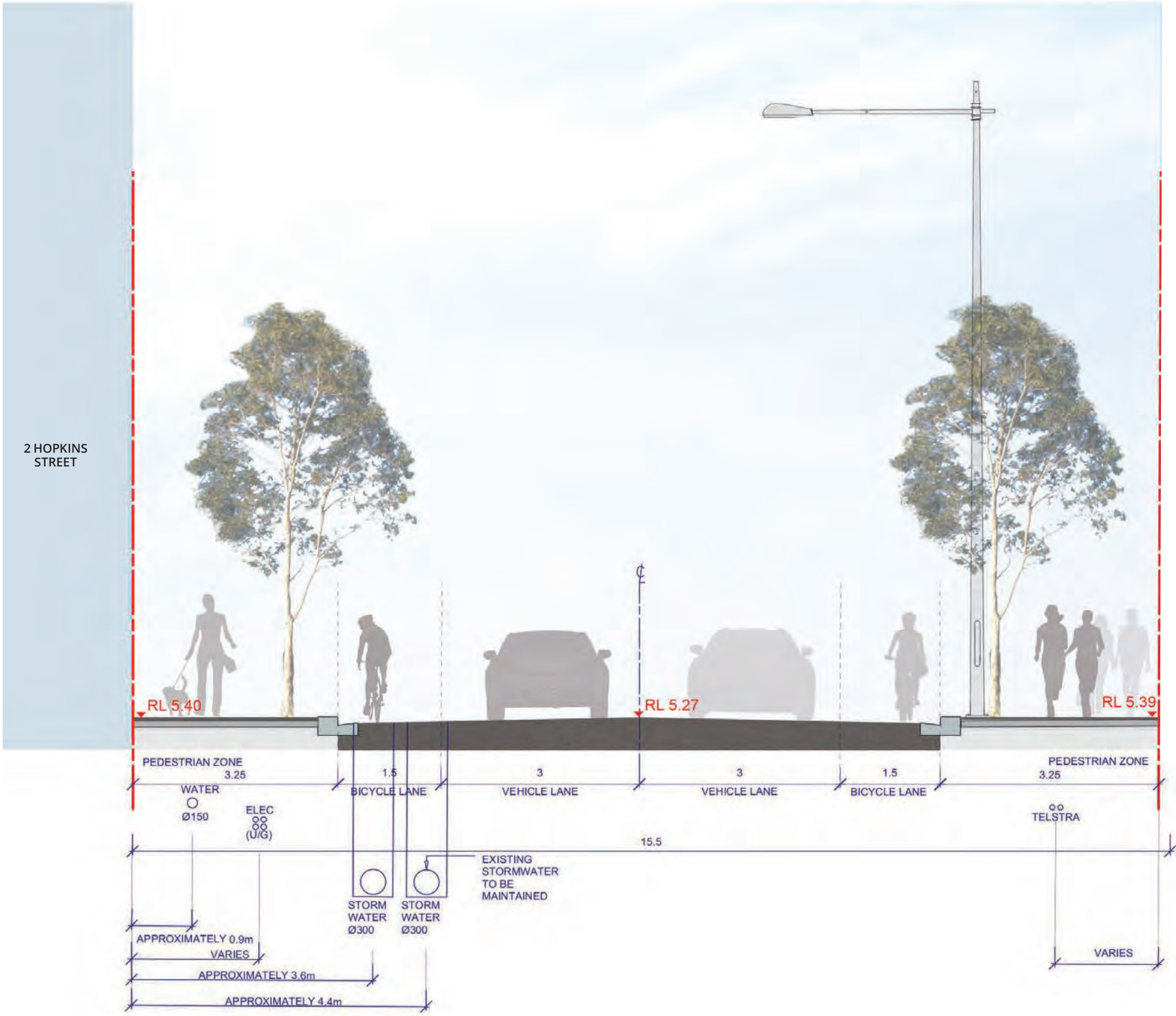
0 10 20 30 m

SCALE 1:500 @ A3



2. Street Concepts

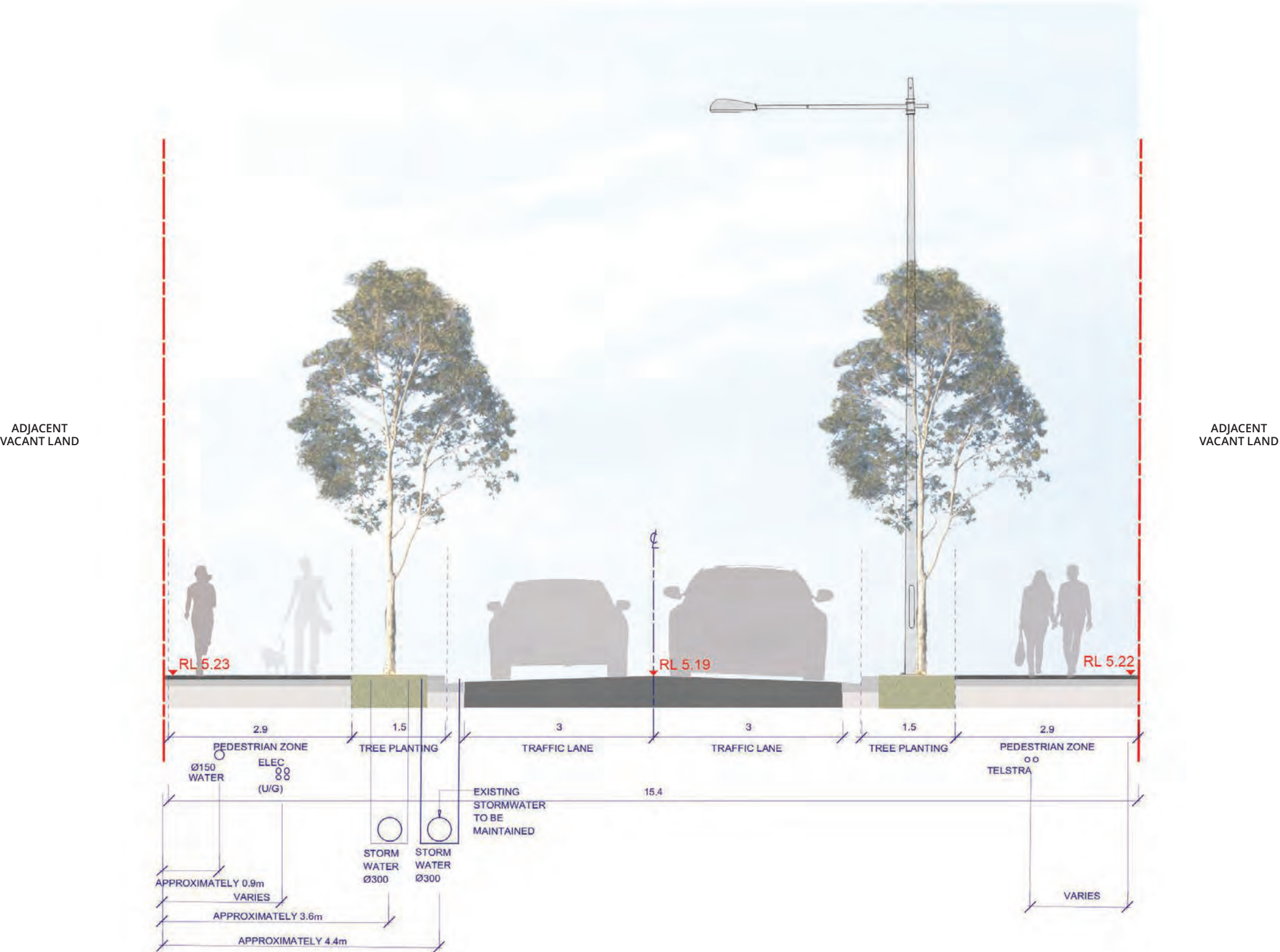
2.7.1 North Joseph Road Section A-A



Section A-A 1:50 @ A3

2. Street Concepts

2.7.2 North Joseph Road Section B-B



Section B-B 1:50 @ A3



2.8. Hopkins Street

Hopkins Street is a large multi-lane road providing arterial access into the city from Footscray Metropolitan Activity Centre. The design for Hopkins Street is to provide a designated shared bicycle pathway. The location of existing underground services has meant the location of trees is located in the north, providing a consistent green avenue to frame Hopkins Street. West of Whitehall Street, where the 3m setback is not confirmed, trees have not been provided. However, the current design would allow for the planting of trees in the future.

Developments fronting Hopkins street will have active frontages from showrooms/offices.

The intersection with Hallenstein Street is proposed to have a signalised junction (by Aurecon) providing for improved pedestrian circulation.

Future pedestrian crossing amenity will be provided at Cowper Street.

Proposed Road Details		
Carriageway width	3.3m	
Parallel parking bays	0	
Vehicle cross overs	3	
Trees in footpath		
(Council detail SF-602)	22	
Trees in road reserve		
(Council detail SF-605)	0	
Benches	4	
Bins (waste and recycle units)	4	
Bike hoops	14	
Wayfinding and signage	0	

The location of street furniture is indicative and final locations are to be approved by Council.

- LEGEND
- 01

Public pedestrian/cycle connection
- 02

Pedestrian connection to Maribyrnong River
- 03

New Hallenstein St. and Hopkins St. intersection
- 04

Existing Whitehall St. and Hopkins St. intersection
- 05

Potential future signalised pedestrian crossing
- 06

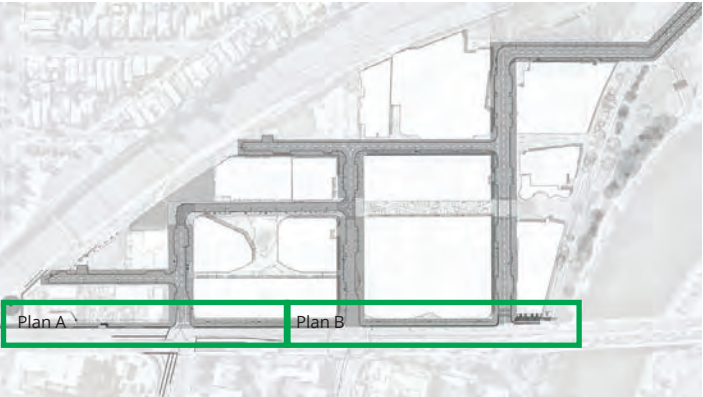
Maribyrnong River open space design
- 07

Existing bus stop to be retained
- 08

Potential future bicycle path widening and tree planting
- 09

Existing bus stop to be consolidated with bus stop noted as 07. Final approval from all relevant authorities including VicRoads is required
- 10

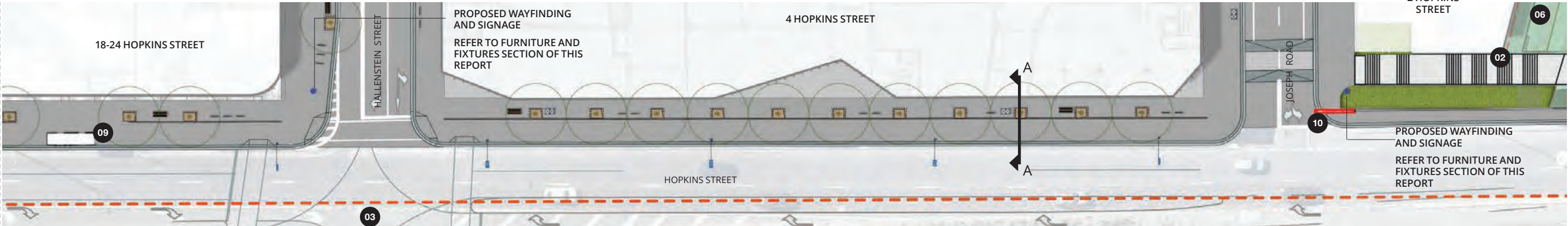
Edge of existing concrete bridge to be removed
- Joseph Road precinct boundary



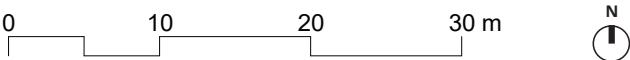
Key Plan



Plan A 1:500



Plan B 1:500 @ A3

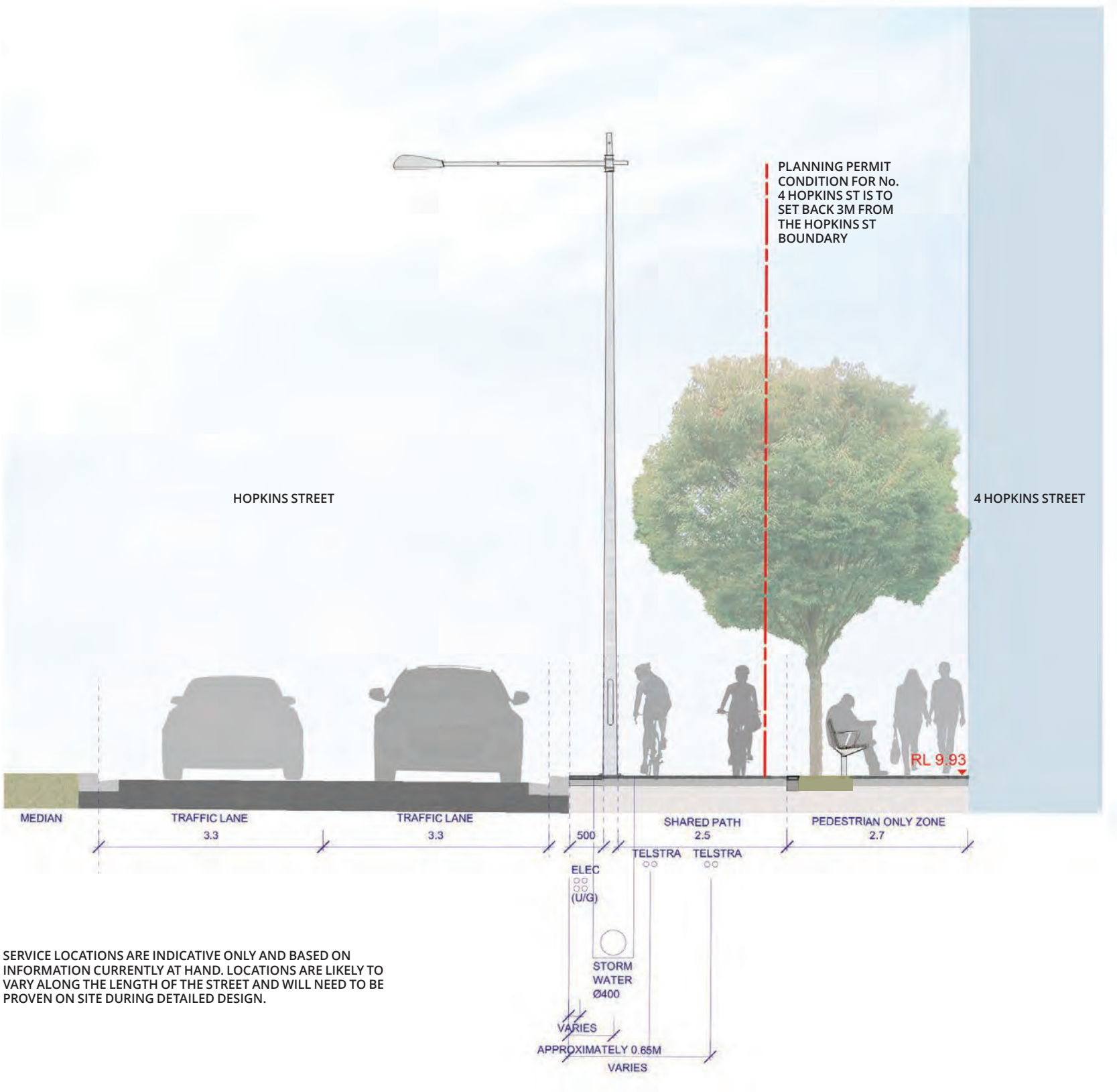


SCALE 1:500 @ A3



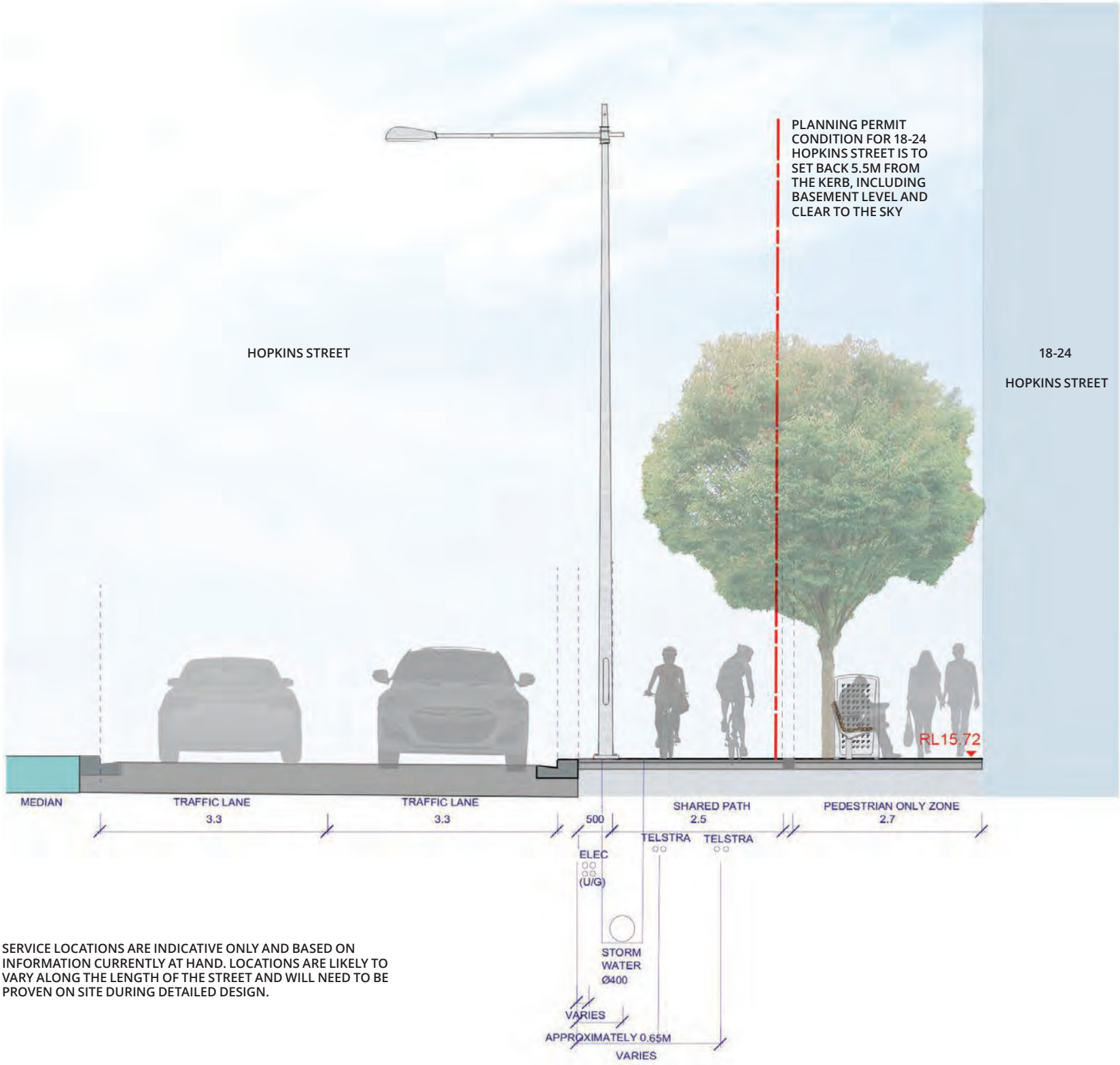
2. Street Concepts

2.8.1 Hopkins Street Section A-A



Section 1:75 @ A3

2.8.2 Hopkins Street Section B-B



Section 1:75 @ A3



## 3. Planting Palette

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3. Planting Palette

3.1. Proposed Street Tree Species

The street tree selection for Joseph Road is based upon the nominated species as per the City of Maribyrnong Street Planting Strategy Adopted August 27, 2013.

The design objectives of the proposed tree planting schedule are as follows:

- A consistent boulevard of trees from South Joseph Road and continued along North Joseph Road,
- Consistency of tree canopy east-west (Neilson Street and Wightman Street) and north-south, Hallenstein Street and Whitehall Street); and,
- South Joseph Road, Hallenstein Street and Whitehall Street have the opportunity to include two types of streetscape trees.



City of Maribyrnong Street Planting Strategy, 2013 Cover Page

Tree Planting Schedule

Botanical Name	Common Name	Pot Size (mm)	"Native/ Exotic"	Spacing (mm)
<b>Hopkins Street</b>				
Zelkova serrata 'Green Vase'	Green Vase Zelkova	200L	E	–
<b>Whitehall Street</b>				
Fraxinus pennsylvanica 'Urbanite'	Urbanite Ash	200L	N	–
<b>South Joseph Road</b>				
Fraxinus pennsylvanica 'Urbanite'	Urbanite Ash	200L	N	–
<b>Hallenstein Street</b>				
Acer freemanii 'Jeffersred' Autumn Blaze	'Jeffersred' Autumn Blaze Maple	200L	E	–
<b>North Joseph Road</b>				
Corymbia citriodora	Lemon-scented Gum	200L	N	–
<b>Warde Street</b>				
Acer campestre	Field Maple	200L	N	–
<b>Neilson Place</b>				
Waterhousea floribunda 'Green Avenue'	Green Avenue Lilypily	200L	N	–
<b>Wightman Street</b>				
Waterhousea floribunda 'Green Avenue'	Green Avenue Lilypily	200L	N	–



Waterhousea floribunda 'Green Avenue' Green Avenue Lilypily



Zelkova serrata 'Green Vase' Green Vase Zelkova



Acer campestre Field Maple



Acer freemanii 'Jeffers Red'



Corymbia citriodora Lemon Scented Gum



Fraxinus pennsylvanica 'Urbanite' Urbanite Ash



3. Planting Palette

3.2. Ground Covers and Grasses Species Master List

The species for ground covers and grasses have been selected from a masterlist of recommended species for Maribyrnong.

The majority of these plants are native or indigenous plants. These plants are more suited to the environment, establish and maintain urban habitat for birds and insects and sustain biodiversity within the urban landscape.

Botanic Name	Common Name
Grasses and Ground Covers	
<i>Anigozanthos flavidus</i>	Kangaroo Paw
<i>Austrostipa elegantissima</i>	Feather Spear Grass
<i>Austrostipa scabra ssp falcata</i>	Slender Spear Grass
<i>Dianella longifolia</i>	Pale Flax Lily
<i>Dianella brevicaulis</i>	Spreading Flax Lily
<i>Dichanthium sericeum</i>	Silky Blue Grass
<i>Lomandra longifolia</i>	Spiny-headed Mat-rush
<i>Poa morrisii</i>	Silky Tussock Grass
<i>Poa sieberiana</i>	Grey Tussock Grass
<i>Themeda triandra</i>	Kangaroo Grass
Small Plants	
<i>Brachyscome multifida</i>	Cut Leaf Daisy
<i>Bracteantha viscosa</i>	Sticky Everlasting
<i>Calocephalus citreus</i>	Lemon Beauty Heads
<i>Calotis scapigera</i>	Tufted Burr Daisy
<i>Chrysocephalum apiculatum</i>	Common Everlasting
<i>Chrysocephalum semipapposum</i>	Clustered Everlasting
<i>Craspedia variabilis</i>	Common Billy Buttons
<i>Doodia media ssp. Australis</i>	Common Rasp Fern
<i>Einadia nutans</i>	Climbing Saltbush
<i>Enychylaena tomentosa</i>	Ruby Saltbush
<i>Leucophyta brownii</i>	Cushion Bush
<i>Linum marginale</i>	Native Flax
<i>Pelargonium australe</i>	Austral Storks Bill
<i>Pycnosorus chrysnaethes</i>	Golden Billy Buttons
<i>Pycnosorus globosus</i>	Drumsticks Vittadinia cuneata
<i>Drumsticks Vittadinia cuneata</i>	Woolly New Holland Daisy
<i>Wahlenbergia communis</i>	Tufted Bluebell



Poa sieberiana Silky Tussock Grass



Dianella brevicaulis Spreading Flax Lily



Austrostipa elegantissima Feather Spear Grass



Pycnosorus globosus Vittadinia cuneata



Lomandra longifolia Spiny-headed Mat-rush



Pycnosorus chrysanthus Golden Billy Buttons



Brachyscome multifida Cut Leaf Daisy



Leucophyta brownii Cushion Bush



Austrostipa scabra ssp falcata Slender Spear Grass



Chrysocephalum apiculatim Common Everlasting



Anigozanthus falvidus Kangaroo Paw









## 4. Materials Palette

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### 4.1. Materials, Surfaces and Edges

Materials and surfaces for the Joseph Road development will be consistent with the Maribyrnong City Design Manual. Joseph Road Development sits within the Footscray Central Activities Area and the typical details for this area apply.

This will assist in integrating the new development into its surrounding context.



**Pedestrian Pavements**

Standard Detail No.: SF-010

Materials: Asphalt type N



**Kerb**

Standard Detail No.: SF-008

Materials: Bluestone - Sawn finish



**Tree Surround in Footpath**

Standard Detail No.: SF-602

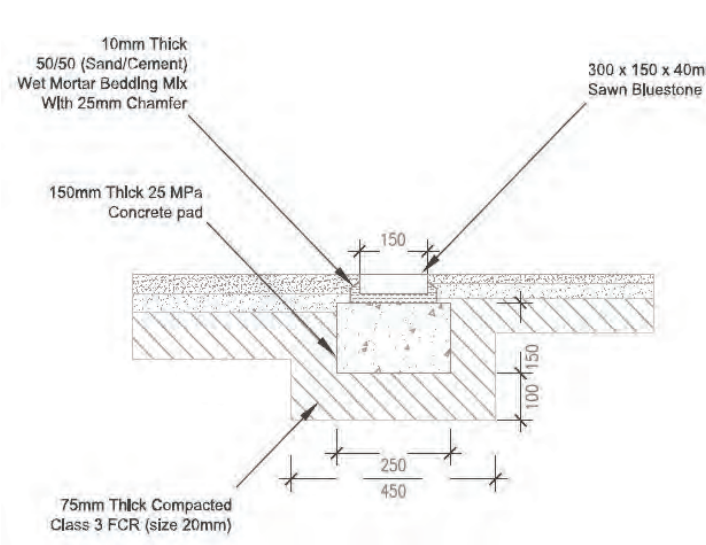
Materials: Bluestone - Sawn finish, granitic gravel



**Vehicle Cross Overs**

Standard Detail No.: SF-002 (402.01)

Materials: Sawn bluestone



**Bluestone Kerb Extension**

Standard Detail No.: SF-012

Materials: Bluestone



**Tree Surround in Road Reserve**

Standard Detail No.: SF-605

Materials: Concrete wheel stop and edge strip, granitic gravel





## 4.2. Furniture and Fixtures

Furniture and fixtures for the Joseph Road development will be consistent with the Maribyrnong City Design Manual. Joseph Road Development sits within the Footscray Central Activities Area and the typical details for this area apply.

This will assist in integrating the new development into its surrounding context.



**Bicycle Rail - Footscray Hoop**

Standard Detail No.: SF-401

Materials: Grade 304 stainless steel tube 50.8mm OD x 2.0mm wall 44.5mm OD x 2.77mm wall welded steel tube. Stiffener fitted to inside of stainless steel tube.



**Bollard**

Standard Detail No.: SF-501

Materials: Stainless steel posts with stainless steel fittings, flat bollard cap and base 3mm 316 grade stainless steel



**Wayfinding and Signage**

Standard Detail No.: SF-701

Materials: Stainless steel tubing, Marine grade 316, SDES 150mm Signage and 1.99mm aluminium map panel



**Waste Unit and Butt Out Bin**

Standard Detail No.: SF-302

Materials: Cast Aluminium Frame with punch perforated 304 Grade stainless steel sheet panels



**Standard Seat - Promenade with Back Rest**

Standard Detail No.: SF-201

Materials: Polished cast Aluminium frame with hardwood timber slats



**Light Pole**

Standard Detail No.: SF-901

Materials: Cast Aluminium Light Pole









## 5. Strategic & Site Analysis

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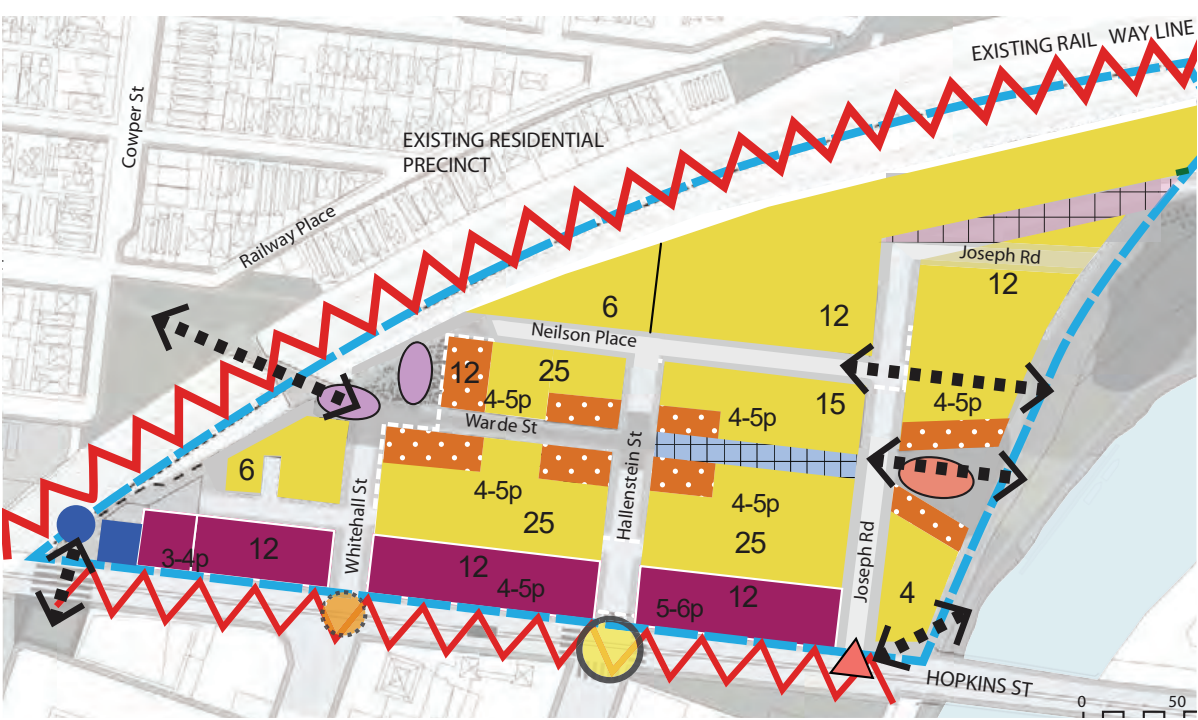
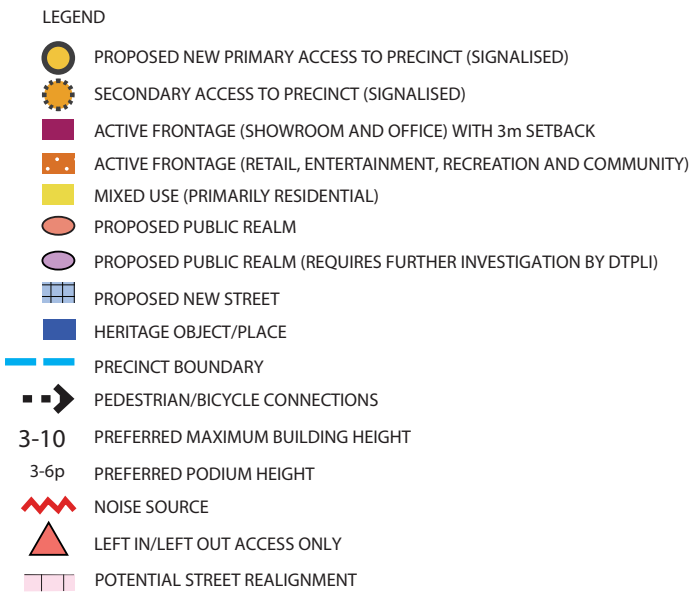


5.1. Background Documents

5.1.1 Relevant background documents

- 2016**  
City Design Manual, March
- 2015**  
Footscray Access and Mobility Strategy
- 2014**  
Open Space Strategy, October 2014  
Footscray River Edges Masterplan, 2014  
Footscray Structure Plan, March
- 2013**  
Street Planting Strategy, Maribyrnong City Council. Adopted 27 August 2013
- 2013**  
VicRoads Network and Operating Plan  
Footscray Central Activity Area
- 2012**  
Maribyrnong Integrated Transport Strategy, for Maribyrnong City Council
- 2011**  
Housing Strategy, December 2011. *To ensure the housing needs of the City's residents are met in terms of location, diversity, affordability and design*
- 2008**  
Highpoint Activity Structure Plan, Maribyrnong City Council

5.1.2 Footscray CAA Structure Plan 2013



5.2. Development Applications

01

1 Warde Street  
Architect: Elenburg Fraser  
Status: Permit Issued

ELENBERG FRASER



Development Application Render

02

2 Hopkins Street  
Architect: Plus Architecture  
Status: Plans Endorsed, Permit Issued

plus  
architecture

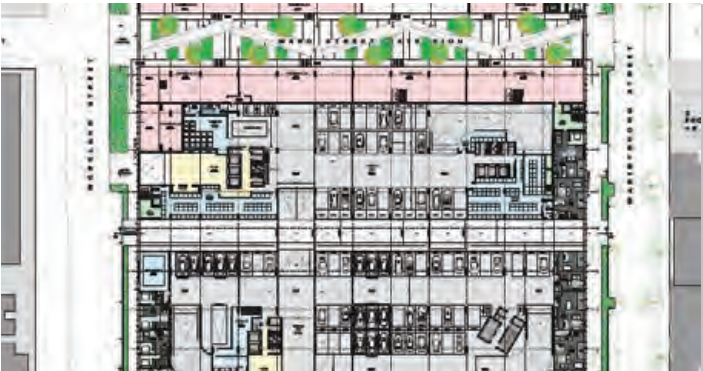


Development Application Render

03

4 Hopkins Street  
Architect: Kavellaris Urban Design  
Status: Permit Issued

KUD  
KAVELLARIS URBAN DESIGN



Development Application Ground Floor Plan



Key Plan

04

4 Nielson Place  
Architect: Peddle Thorp  
Status: Permit Issued

PEDDLE THORP

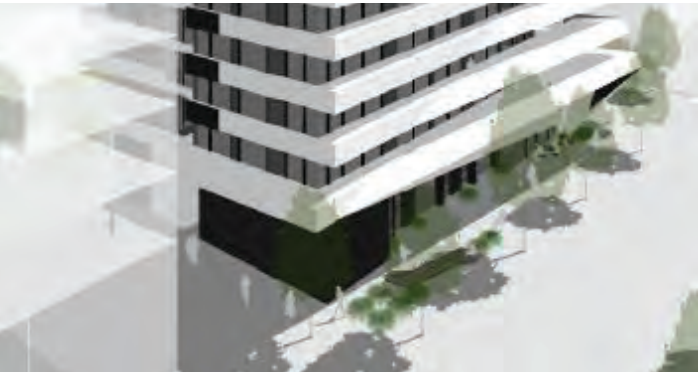


Development Application Render

05

10 Moreland Street  
Architect: Architecton  
Status: Plans Endorsed, Permit Issued

ARCHITECTON



Development Application Render

06

18-24 Hopkins Street  
Architect: Peddle Thorp  
Status: Under Construction

PEDDLE THORP



Development Application Render

07

2 Neilson Place  
Architect: Architecton  
Status: Plans Endorsed, Permit Issued

ARCHITECTON

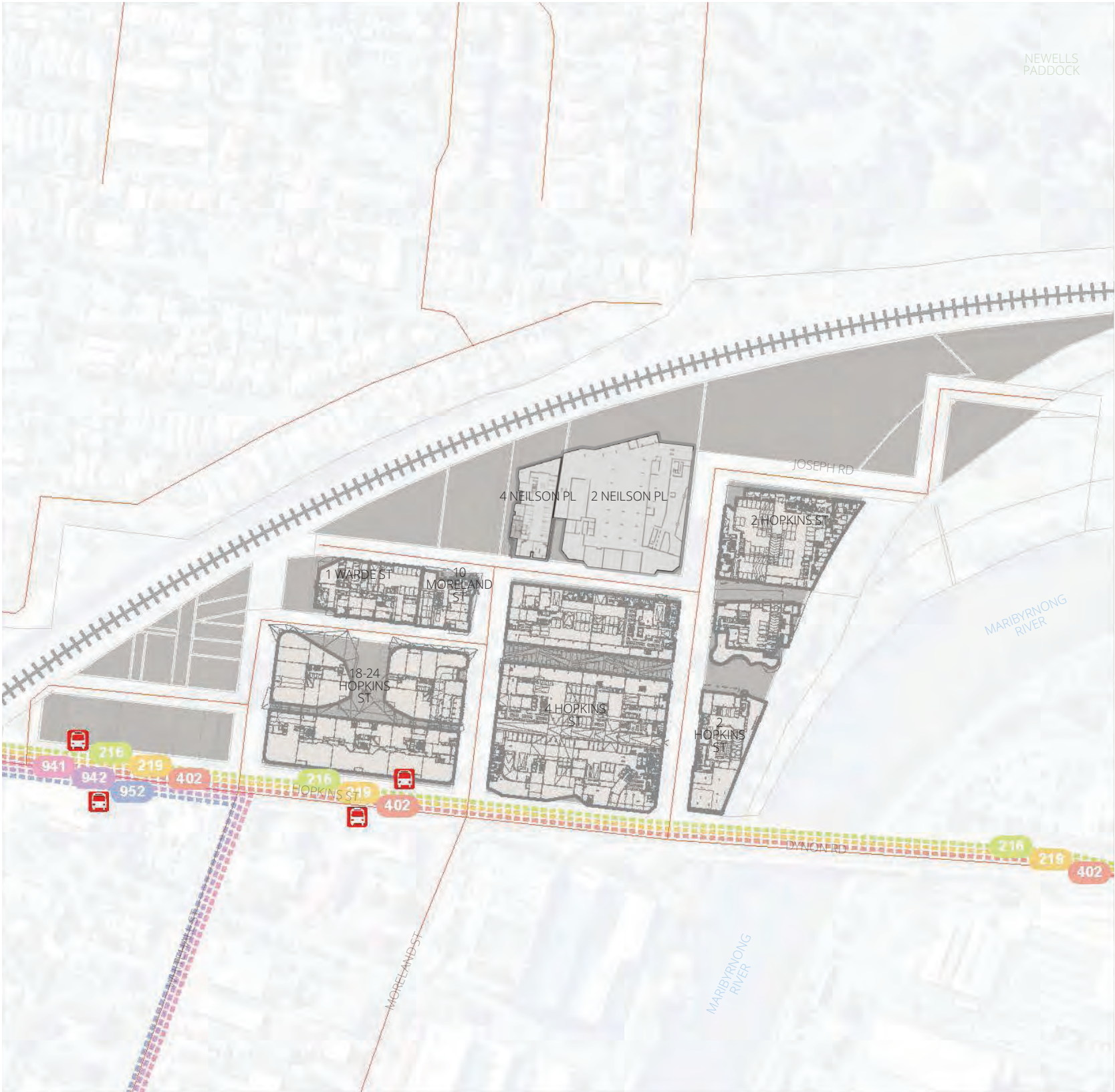


Development Application Render



5.3. Existing Bus Routes

Route No.	Route Description	Locations of Stops within Study Area	Frequency (Mins)
216	Caroline Springs - Brighton Beach	Dynon Rd (Sims St), Hopkins St (Hallenstein St), Hopkins St (Whitehall St)	10 (peak) 40 (off peak)
219	Sunshine South - Gardenvale	Dynon Rd (Sims St), Hopkins St (Hallenstein St), Hopkins St (Whitehall St)	20 (peak) 40 (off peak)
402	Footscray - East Melbourne via North Melbourne	Dynon Rd (Sims St), Hopkins St (Hallenstein St), Hopkins St (Whitehall St)	10 (peak) 20 (off peak)
941	Night Bus - City - Footscray - Sunshine North - Taylors Lakes - Watergardens	Hopkins St (Whitehall St)	60 (2 services)
942	Night Bus - City - Footscray - Sunshine - Deer Park - St Albans	Hopkins St (Whitehall St)	60 (6 services)
952	Night Bus - City - Footscray - Maribyrnong - Airport West - Gladstone Park - Broadmeadows	Hopkins St (Whitehall St)	60 (9 services)



Local Bus Networks - Joseph Road Precinct