



ENVIRONMENTAL SCOPING DOCUMENT

Proposal name:	High Street Upgrade
Proponent:	Commissioner for Main Roads Western Australia
Assessment number:	2181
Location:	High Street, Fremantle
Local Government area:	City of Fremantle
Public review period:	Environmental Review Document – 4 weeks

1. Introduction

The Western Australian Environmental Protection Authority (EPA) has determined that the above Proposal is to be assessed under Part IV of the *Environmental Protection Act 1986* (EP Act).

The purpose of this Environmental Scoping Document (ESD) is to define the form, content, timing and procedure of the environmental review, required by s. 40(3) of the EP Act. The Commissioner for Main Roads Western Australia (Main Roads) has prepared this draft ESD according to the procedures in the EPA's Procedures Manual.

1.1. Form

The EPA requires that the form of the report on the environmental review required under s. 40 (Environmental Review Document, ERD) is in accordance with the Environmental Review Document template.

1.2. Content

The EPA requires that the environmental review includes the content outlined in Sections 2 to 6 of this ESD.

1.3. Timing

Table 1 sets out the timeline for the assessment of the proposal agreed between the EPA and the proponent.

Table 1 Assessment Timeline

Key assessment milestones	Completion Date
Proponent submits draft Environmental Scoping Document	26 November 2018
Proponent submits draft Environmental Review Document based on draft Environmental Scoping Document	5 December 2018
EPA considers Environmental Scoping Document	13 December 2018
Proponent releases Environmental Review Document for public review for 4 weeks	17 December 2018
Close of public review period	18 January 2019
EPA provides submissions to Proponent	19 January 2019
Proponent summarises submissions and provides Response to Submissions	24 January 2019
EPA prepares draft assessment report and completes assessment	21 February 2019
EPA finalises assessment report (including consultation on draft conditions) and gives report to WA Minister for Environment	28 February 2019

1.4. Procedure

The EPA requires the proponent to undertake the environmental review according to the *Environmental Impact Assessment Administrative Procedures* (2016) and the *Procedures Manual* (2018).

The final ESD will be appended to the ERD.

The environmental review will include relevant policy and guidance including:

- Environmental Protection Authority (2018a). *Statement of Environmental Principles, Factors and Objectives*. December 2018.
- Environmental Protection Authority (2018b). *Instructions on How to Prepare an Environmental Review Document*. April 2018.

2. The Proposal

The subject of this ESD is the proposal by Main Roads to construct the High Street Upgrade Project (the Proposal), within the City of Fremantle.

The current layout of High Street, from Carrington Street to the Stirling Highway intersection, provides direct access to several local roads and driveways, which creates stop-start conditions and heightened safety risks. This results in congestion and unpredictable journey times to and from Fremantle and the Fremantle Port.

The objective of this proposal is to improve road user safety and the general flow of traffic for all road users travelling into and out of Fremantle. Features of the proposed plan include:

- Constructing a roundabout at the intersection of High Street and Stirling Highway.
- Constructing a new westbound carriageway.
- Establishing a single lane service road for residents north of High Street.
- Realigning the approaches to Stirling Highway and High Street.
- Constructing new parking bays along the service road and formalising and increasing the parking on Wilkinson Street to ease parking pressures near the Frank Gibson Park Netball Courts.
- Establishing a wide median to preserve a number of mature trees.
- Constructing pedestrian crossings of High Street and Montreal Street, and Stirling Highway and Forest Street to improve connectivity for pedestrian and cyclists accessing local schools, parks, shopping and recreation facilities.
- Constructing and installing associated road infrastructure, including drainage, signs, roadside furniture, noise walls, lighting and the relocation of utilities and services.

The development envelope approach being used for this proposal provides some flexibility for the location of the Proposal footprint, to allow for changes to the Proposal design and to avoid or minimise impacts, see Figure 1. Although the development envelope does provide a level of flexibility, the Proposal's characteristics and the associated impacts will be limited to the key characteristics of the Proposal, as set out in Tables 2 and 3. Although the development envelope approach will be used for this proposal, the ERD will identify and show the individual trees to be retained and those that are expected to be cleared.

A concept design for the Proposal is shown in Figure 2.

It is noted that the key Proposal characteristics may change as a result of the findings of studies and investigations conducted and the application of the mitigation hierarchy to the Proposal.

2.1. Background

In 2002, the Metropolitan Freight Network Review considered options for managing freight demand, improving the sustainability of freight transport, reducing future problems and focusing government intervention to reduce the impact of freight in Western Australia. The Review produced a Six Point Plan which identified major, high priority actions to safe guard freight movement in Western Australia. The Plan included recommendations to upgrade High Street between Stirling Highway and Carrington Street in Fremantle.

In November 2007 the then Department for Planning and Infrastructure (DPI) commissioned a study to prepare a preliminary road design concept. As part of that study in 2008/2009 DPI undertook a comprehensive community consultation program to identify a preferred alignment option for the upgrade. Since taking ownership of the project in late 2011, Main Roads has collaborated with the City of Fremantle to further refine the concept design.

In 2014, a project was proposed to upgrade High Street from Carrington Street to Stirling Highway, and Stirling Highway to Canning Highway. This project involved:

- The upgrade of High Street to a 4-lane dual carriageway, with the ultimate design being a 6-lane dual carriageway.
- Realignment of the intersection of High Street and Stirling Highway, creating a continuous route between Leach Highway and Stirling Highway.
- Upgrade of the pedestrian and cyclist access from Marmion to Carrington Street along the route, including at the major intersections.

In May 2017, the state and federal government committed funding for the High Street upgrade project. In March 2018, a draft concept for the upgrade of High Street, between Stirling Highway and Carrington Street, was released for public comment. The adjacent residents, local community, road users and other key stakeholders were asked about their experiences travelling along High Street and their key concerns and priorities for the upgrade. Following this consultation, Main Roads prepared an updated concept to progress to the next phase of the project. The proposed upgrade has a smaller footprint than the 2014 proposal, has improved accessibility for pedestrians and cyclist and improved parking. The current design was released in a public newsletter in August 2018.

The Proposal's background and alternatives will be discussed in the ERD.

2.2. Project Purpose

The primary purpose of this project is to improve road safety along High Street between Carrington Street and Stirling Highway and improve the intersection of Stirling Highway and High Street in order to cater for expected traffic growth to 2031.

Table 2 Summary of the Proposal

Proposal title	High Street Upgrade
Proponent name	Commissioner of Main Roads Western Australia
Short description	Main Roads proposes to upgrade High Street between Stirling Highway and Carrington Street, in Fremantle. The Proposal consists of the construction of a roundabout at the Stirling Highway and High Street Intersection, a new westbound carriageway of High Street between Stirling Highway and Carrington Street, pedestrian crossing points, a new service road for residents north of High Street and local road realignments. The Proposal also includes the installation of noise walls, drainage, lighting, electricals, utilities and associated road infrastructure.

Table 3 Location and Proposed Extent of Physical and Operational Elements

Element	Location	Proposed extent
<i>Physical elements</i>		
Clearing and disturbance for road and intersection upgrades, drainage basins, pedestrian crossing points, services relocations, noise walls and associated road infrastructure.	High Street between Carrington Street and Stirling Highway intersection and Stirling Highway from High Street to Marmion Street in the City of Fremantle (Figure 1).	Clearing up to 0.63 hectares of native vegetation within a 20.1 ha development envelope.
Construction of noise walls.	Sections of High Street between Carrington Street and Stirling Highway intersection and Stirling Highway from High Street to Marmion Street in the City of Fremantle (Figure 1).	Location and dimensions to be discussed and shown in the ERD (proposed extent).

3. Preliminary key environmental factors and required work

The preliminary key environmental factors for the Proposal are:

1. Terrestrial Fauna
2. Air Quality
3. Social Surroundings (Noise)

Table 4 outlines the work required for each preliminary key environmental factor and details the following elements for each factor:

- **EPA factor and EPA objective** for that factor.
- **Relevant activities** – the Proposal activities that may have a significant impact on that factor.
- **Potential impacts and risks** to that factor.
- **Required work** for that factor.
- **Relevant policy and guidance** – EPA (and other) guidance and policy relevant to the assessment.

Table 4 Preliminary key environmental factors and required work

Terrestrial Fauna	
EPA objective	To protect terrestrial fauna so that biological diversity and ecological integrity are maintained (EPA 2018a).
Relevant activities	<ul style="list-style-type: none"> • Clearing of native vegetation, which provides habitat for terrestrial vertebrate fauna.
Potential impacts and risks	<ul style="list-style-type: none"> • Loss of habitat for terrestrial vertebrate fauna (including habitat used by terrestrial fauna taxa of listed conservation significance).
Required work	<p>The ERD will address the following:</p> <ol style="list-style-type: none"> 1. Describe survey work undertaken for terrestrial fauna and fauna habitat within the impact area and surrounds in accordance with relevant policy/guidelines. Confirm surveys undertaken by suitably qualified and experienced environmental practitioners. <p>Confirm surveys have been undertaken in accordance with relevant guidelines, and in particular, identify and justify how the surveys have been undertaken in accordance with the EPA (2016a) document <i>Technical Guidance - Terrestrial Fauna Surveys</i> and the EPA (2016b) document <i>Technical Guidance – Sampling Methods for Terrestrial Vertebrate Fauna</i> for the fauna taxa specified below.</p> <p>Provide a summary of the surveys undertaken, including the survey effort, timing and personnel.</p> <p>In particular, consideration will be given to:</p> <ul style="list-style-type: none"> - <i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo), which has been classified as 'Threatened Fauna' under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (C'th) and declared as 'Specially Protected Fauna' under the <i>Wildlife Conservation Act 1950</i> (WA). - <i>Calyptorhynchus banksia</i> ssp. <i>naso</i> (Forest Red-tailed Black Cockatoo), which has been declared as 'Specially Protected Fauna' under the <i>Wildlife Conservation Act 1950</i> (WA). - the breeding and/or foraging habitat for the above taxa within the impact area and surrounds, at a local scale, including

	<p>consideration of the habitat spatial extent and habitat connectivity, and including identification of large mature trees that may provide habitat for the above taxa.</p> <ol style="list-style-type: none"> 2. Describe by text and mapping the terrestrial fauna values recorded by the surveys within the impact area and surrounds. 3. Describe by text and mapping the expected environmental effects of the Proposal to terrestrial fauna values at a local and regional scale, including direct and indirect and cumulative effects, with particular emphasis on the fauna taxa and fauna habitats listed above, and including identification of large mature trees to be removed/retained. The description of the expected environmental effects will include written text and/or tables, as appropriate. 4. Provide an assessment of the significance of the potential environmental effects to terrestrial fauna values. Consideration will be given to the EPA’s objective for terrestrial fauna in relation to the representation, diversity, viability and ecological function of the identified environmental values at a local and regional scale. 5. Demonstrate the anticipated impacts (actual footprint of the Proposal), particularly which large mature tuart trees and habitat trees for Black Cockatoos will be cleared, within the development envelope. It will also be demonstrated which mature trees will be retained. 6. Outline how the ‘Mitigation Hierarchy’ (avoid, minimise, rehabilitate) has been applied to the Proposal for the potential effects to terrestrial fauna values. 7. Describe the management, mitigation and monitoring in relation to potential environmental effects and that the application of environmental offsets for any significant residual environmental effects will be considered (after application of the mitigation hierarchy). 8. Describe the proposed management and/or monitoring in relation to the potential environmental effects. 9. Consider the application of environmental offsets for any significant environmental effects to terrestrial fauna values (after applying the Mitigation Hierarchy), having regard to relevant policy/guidance on the application of environmental offsets, and if appropriate, provide an outline of any proposed environmental offsets to be applied. 10. Include copies of reports and spatial data relevant to the Proposal and the surveys.
<p>Relevant policy and guidance</p>	<ul style="list-style-type: none"> • Environmental Protection Authority (2016a) <i>Technical Guidance - Terrestrial Fauna Surveys</i>. December 2016. • Environmental Protection Authority (2016b) <i>Technical Guidance – Sampling Methods for Terrestrial Vertebrate Fauna</i>. December 2016. • Environmental Protection Authority (2016c) <i>Environmental Factor Guideline - Terrestrial Fauna</i>. December 2016. • Government of Western Australia (2011). <i>Western Australian Environmental Offsets Policy</i>. September 2011. • Government of Western Australia (2014). <i>Western Australian Environmental Offsets Guidelines</i>. August 2014.

Air Quality	
EPA objective	To maintain air quality and minimise emissions so that environmental values are protected.
Relevant activities	<ul style="list-style-type: none"> • Pollution generated from vehicles during construction. • Pollution generated from vehicles utilising the road during operation.
Potential impacts and risks	<p>During construction of the proposed project, potential emissions to air include products of fuel combustion from vehicles and equipment used in construction and transportation activities and dust and odour emissions from the construction activities.</p> <p>During operation, potential emissions to air also include products of fuel combustion from vehicles and dust (i.e. particulate matter) generated by vehicle movement.</p>
Required work	<p>The ERD will address the following:</p> <ol style="list-style-type: none"> 11. Identify the appropriate air quality criteria and guidelines applicable to this assessment. 12. Investigate the existing environment including topography, meteorology, background air quality and sensitive receptors. 13. Outline how the 'Mitigation Hierarchy' (avoid, minimise, rehabilitate) has been applied to the Proposal for the potential effects to air quality. 14. Outline and justifying the emission sources from the project, including traffic volume projections and associated road network and vehicle emission rates. 15. Describe dispersion modelling undertaken for the assessment of predicted local air quality impacts from the project during operation. 16. Describe the expected environmental effects. This will include written text and/or tables, as appropriate. 17. Expand/update the GHD High Street Fremantle Upgrade Project Air Assessment to include previous measurements of air quality pollutants by the Department of Water and Environmental Regulation on the corner of Canning and Stirling Highways in 2007/2008. 18. Expand/update the GHD High Street Fremantle Upgrade Project Air Assessment to clarify the assumptions on the NO₂/NO_x ratio and the use of meteorological data from a different site than South Lake. 19. Assess the significance of the potential environmental effects to air quality. Consideration will be given to the EPA's objective for air quality. 20. Describe the proposed management and/or monitoring proposed in relation to the potential environmental effects. Provide management and/or monitoring plans, if appropriate (to be included as an Appendix). 21. Provide information in the Air Quality study on the following raw data: <ul style="list-style-type: none"> - Vehicle emission rates adopted for this assessment - Vehicle traffic counts - Vehicle traffic counts used to predict future traffic flow - Meteorological data used for modelling - Ambient monitoring data used to estimate background air quality for modelling - All data related to sensitive receptors including name, location and type of sensitive receptors - Fleet configuration and assumptions 22. Within the Air Quality study, discuss and explain suitability of the following model assumptions: <ul style="list-style-type: none"> - Future road vehicle numbers - Future road vehicle emission rates

	<ul style="list-style-type: none"> - Sulphur dioxide not considered as an emission of interest in this assessment - NO₂/NO_x ratio of 15% - Selection of Swanbourne (Year 2010) as the representative meteorological year. <p>23. Provide meteorological and model output files</p>
Relevant policy and guidance	<p>The following guidelines will be considered in the assessment for air quality:</p> <ul style="list-style-type: none"> • Environmental Protection Authority (2016d). <i>Environmental Factor Guideline – Air Quality</i>. December 2016. • <i>National Environment Protection (Ambient Air Quality) Measure</i>. • <i>National Environment Protection (Air Toxics) Measure (Air Toxics NEPM)</i>.

Social Surroundings (Noise)

EPA objective	To protect social surroundings from significant harm.
Relevant activities	<ul style="list-style-type: none"> • Noise emissions from vehicles during construction. • Noise emissions from vehicles utilising the road during operation.
Potential impacts and risks	<ul style="list-style-type: none"> • Increase in noise due to a change in road alignment and configuration.
Required work	<p>The ERD will address the following:</p> <ul style="list-style-type: none"> 24. Describe the road traffic noise model, which was based on existing and future predicted traffic flows, that was developed to predict noise levels for a number of scenarios. 25. Document the noise monitoring along the proposed alignment to determine ambient noise levels in areas of noise sensitive receptors. 26. Assess noise monitoring data against relevant criteria. 27. Outline how the 'Mitigation Hierarchy' (avoid, minimise, rehabilitate) has been applied to the Proposal for potential noise impacts. 28. Identify management and mitigation measures for noise during construction and operational phases of the proposal. 29. Demonstrate the potential noise impacts along the routes and the location and dimensions of the proposed noise walls to mitigate impacts. 30. Show the visual implications of the proposed noise walls from various points along the Proposal.
Relevant policy and guidance	<p>The following guidelines will be considered in the assessment for Social Surroundings (Noise):</p> <ul style="list-style-type: none"> • Environmental Protection Authority (2016d). <i>Environmental Factor Guideline – Social Surroundings</i>. December 2016. • Government of Western Australia (2009). <i>State Planning Policy 5.4 – Road and rail transport noise and freight considerations in land use planning</i>.

	<ul style="list-style-type: none">• Government of Western Australia (2014). <i>Implementation guidelines for state planning policy 5.4.</i>• <i>Environmental Protection (Noise) Regulations 1997.</i>
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4. Other Environmental Factors or Matters

It is noted that other factors or matters may be identified during the course of the environmental review that were not apparent at the time that this ESD was prepared. If this situation arises, the proponent will consult with the EPA to determine whether these factors and/or matters are to be addressed in the ERD, and if so, to what extent.

5. Stakeholder Consultation

Main Roads has undertaken extensive consultation with stakeholders who are affected by, or are interested in the Proposal. This includes the decision-making authorities (see section 6), other relevant state and Commonwealth government agencies and local government authorities, the local community and environmental non-government organisations.

Main Roads will document the following in the ERD:

- Identified stakeholders.
- The stakeholder consultation undertaken and the outcomes, including decision-making authorities' specific regulatory approvals and any adjustments to the Proposal as a result of consultation.
- Any future plans for consultation.

6. Decision-making Authorities

At this stage, the EPA has identified the authorities listed in Table 4 as decision-making authorities (DMAs) for the Proposal. Additional DMAs may be identified during the course of the assessment.

Table 5 Decision-making Authorities

Decision-making Authority	Relevant Legislation
1. Minister for Lands	<i>Land Administration Act 1997</i>
2. Minister for Planning	<i>Planning and Development Act 2005</i>
3. Western Australian Planning Commission	<i>Planning and Development Act 2005</i>
4. Chief Executive Officer of the Department of Water and Environmental Regulation	<i>Environmental Protection Act 1986</i>
5. City of Fremantle	<i>Planning and Development Act 2005</i>
6. Chief Executive Officer of the Department of Planning, Lands and Heritage	<i>Land Administration Act 1997</i>

Figures

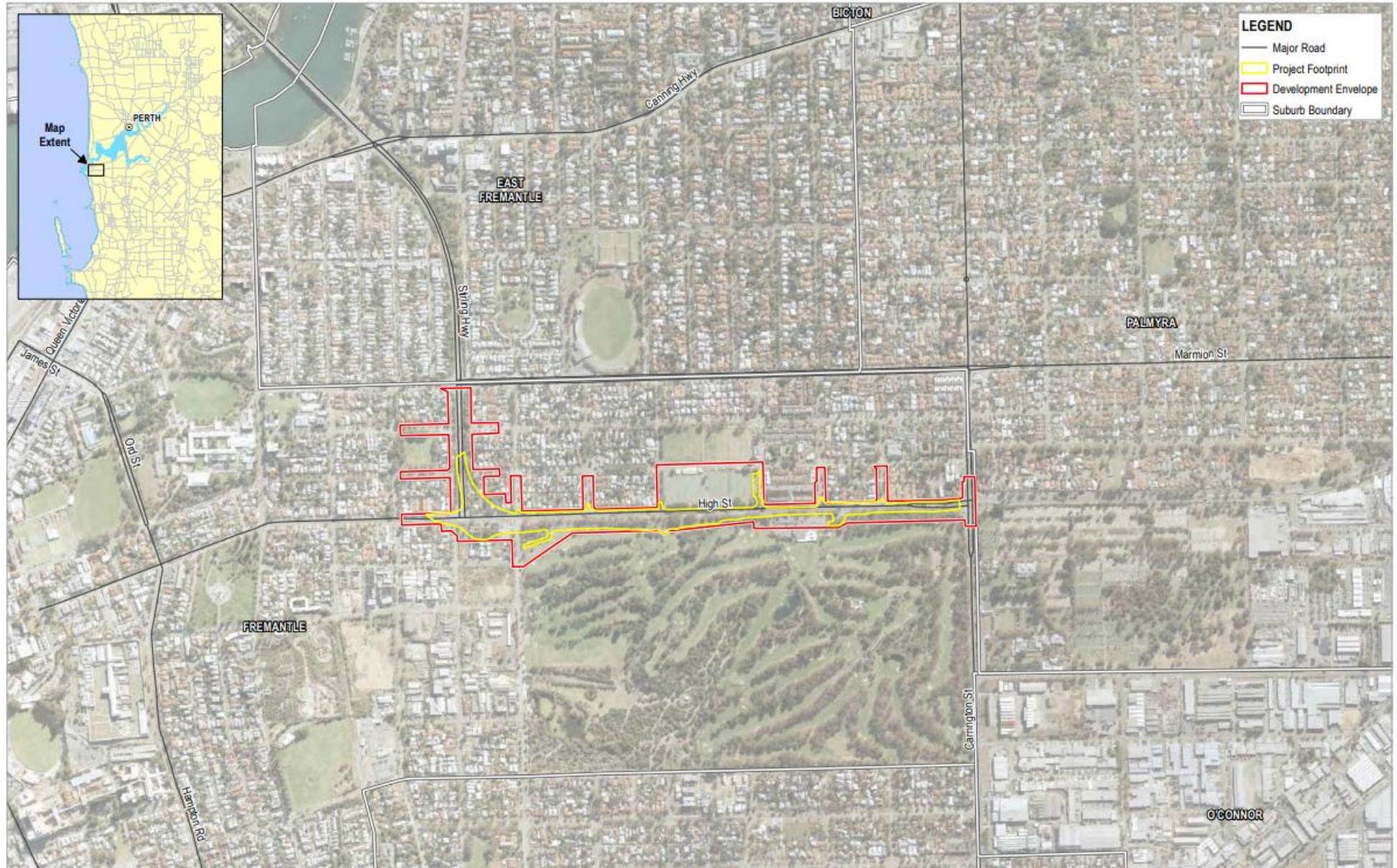


Figure 1 – High Street Upgrade Locality Map

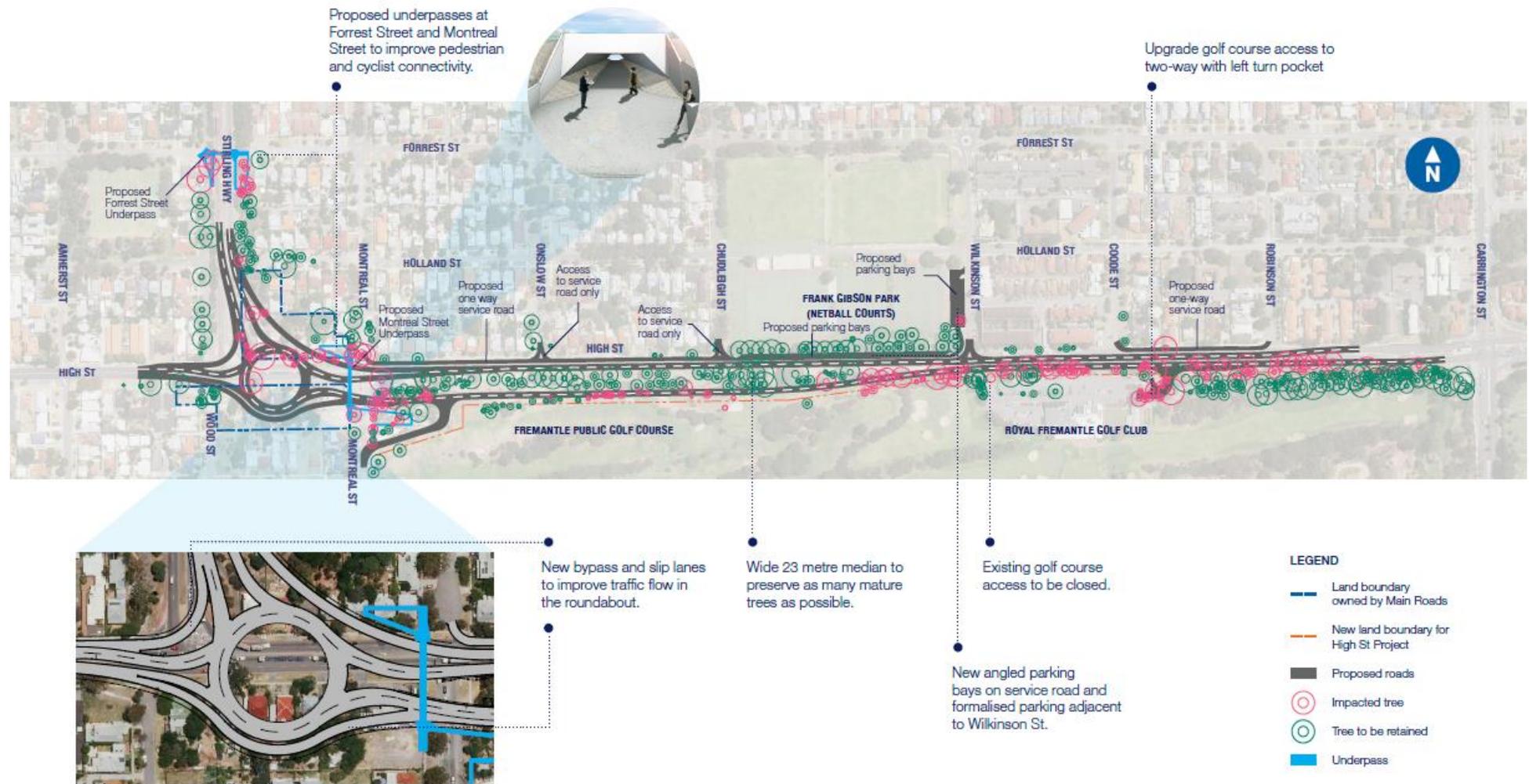


Figure 2 - High Street Upgrade – Concept Design