ATTACHMENTS

BRIEFINGS SESSION AGENDA

18 JUNE 2019

Attachment No. 1
Draft Local Integrated Transport Plan (LITP)

Attachment No. 2
- Report of submissions from the public;
- Summary of the suggested amendments from the Department of Local Government, Sport and Cultural Industries; and
- Town of Bassendean Dogs Local Law 2019.

Attachment No. 3
- Old Perth Road Bollard Location Plan; and
- Traffic Management Plan Old Perth Road Markets.

Attachment No. 4
- Site plan James Street;
- Site plan Penzance Street;
- Draft letter to residents;
- Minister for transport, planning, lands letter;
- JSG Mini shelter; and
- PTA Provision of Bus Shelter letter.

Attachment No. 5
- Planning Report – Proposed Development – Car Park Ashfield Station;
- Public Transport Authority – Specification – Stations and Buildings Landscape Architecture;
- Town of Bassendean Revised Drawing with increased landscaping; and
- Town of Bassendean Alternative Design

Attachment No. 6:
Sustainability Frameworks: A Review and Comparative Analysis Comparative Matrix (WALGA/City of Perth)

Attachment No. 7:
Minutes of the Audit and Governance meeting held on 5 June 2019

Attachment No. 8:
Minutes of the Bassendean Local Emergency Management Committee meeting held on 5 June 2019.

Attachment No. 9:
Minutes of Design Bassendean meeting on 5 June 2019.

Attachment No. 10:
AshfieldCAN *'Urban-Landscapeplaces-Botanic'* conceptual plans for the park

ATTACHMENT NO. 1

Town of Bassendean

Bassendean Transport Study

Phase 2 Local Integrated Transport Plan: A plan for the future

Phase 2

Issue version 4 | 12 June 2019

Job number 260965-00

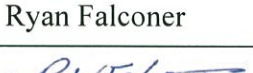
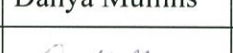
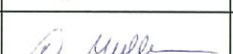
Arup
Arup Pty Ltd ABN 18 000 966 165

Arup
Level 14 Exchange Tower
2 The Esplanade
Perth WA 6000
Australia
www.arup.com

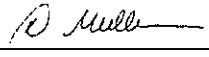
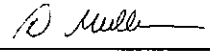
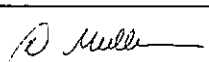
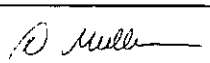
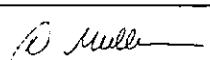
ARUP

Document Verification

ARUP

Job title		Bassendean Transport Study		Job number 260965-00
Document title		Phase 2 Local Integrated Transport Plan: A plan for the future		File reference
Document ref		Phase 2		
Revision	Date	Filename	180911_Bassendean Transport Study_Phase 2 Local Integrated Transport Plan Report_WORK IN PROGRESS.docx	
Work in progress	11 Sept 2018	Description	Work in progress – gaps relating to executive summary, stakeholder/ community consultation feedback and implementation plan. For consideration by Town.	
			Prepared by	Checked by	Approved by
		Name	Ryan Falconer	Danya Mullins	Danya Mullins
		Signature			
Work in progress	8 Oct 2018	Filename	181008_Bassendean Transport Study_Phase 2 Local Integrated Transport Plan Report_Work in Progress v2_issued.docx		
		Description	Addresses feedback received from the Town (11 September 2018).		
			Prepared by	Checked by	Approved by
		Name	Ryan Falconer	Danya Mullins	Danya Mullins
		Signature			
Work in progress	19 Oct 2018	Filename	181019_Bassendean Transport Study_Phase 2 Local Integrated Transport Plan Report_Work in Progress_external issue.docx		
		Description	Issue version for external stakeholders – METRONET, Public Transport Authority, Main Roads WA, City of Bayswater, City of Swan		
			Prepared by	Checked by	Approved by
		Name	Ryan Falconer	Danya Mullins	Danya Mullins
		Signature			
Work in progress	3 Dec 2018	Filename	181203_Bassendean Transport Study_Phase 2 Local Integrated Transport Plan Report_Work in Progress v3.docx		
		Description	Updated LITP based on stakeholder feedback and discussions with Town staff		
			Prepared by	Checked by	Approved by
		Name	Ryan Falconer	Danya Mullins	Danya Mullins
		Signature			
				Issue Document Verification with Document	✓

Document Verification

Job title		Bassendean Transport Study			**Job number** 260965-00
Document title		Phase 2 Local Integrated Transport Plan: A plan for the future			**File reference**
Document ref		Phase 2			
Revision	**Date**	**Filename**	190510_Bassendean Transport Study_Phase 2 Local Integrated Transport Plan Report_Final draft.docx		
Issue version 4	10 May 2019	**Description**	Incorporates feedback from meeting with key stakeholders/ government agencies. Report produced for circulation and comment by elected members.		
			Prepared by	Checked by	Approved by
		Name	Danya Mullins	Danya Mullins	Danya Mullins
		Signature			
Issue version 4	12 Jun 2019	**Filename**	190612_Bassendean Transport Study_Phase 2 Local Integrated		
		Description	Incorporates feedback from elected members (29 May 2019).		
			Prepared by	Checked by	Approved by
		Name	Danya Mullins	Danya Mullins	Danya Mullins
		Signature			
		Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name			
		Signature			
		Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name			
		Signature			
				Issue Document Verification with Document	✓

Contents

Abbreviations

CPTED – Crime Prevention Through Environmental Design

DDA – Disability Discrimination Act

FRH – Functional Road Hierarchy

HV – Heavy Vehicles

LATM – Local Area Traffic Management

LGA – Local Government Authority

LPS – Local Planning Strategy

MEL – Morley-Ellenbrook Line

MRS - Metropolitan Region Scheme

PRR – Primary Regional Road

PSP – Principal Shared Path

PTA – Public Transport Authority

RAV – Restricted Access Vehicles

ROM – Regional Operations Model

SWOT – Strengths, Weaknesses, Opportunities and Threats

TOD – Transit-Oriented Development

VPD – Vehicles Per Day

WAPC – Western Australian Planning Commission

Executive summary

To be written on completion of report, following community consultation.

1 Introduction

The Town of Bassendean engaged Arup to complete a holistic and integrated study of the movement network internal to and influencing Bassendean. This Phase 2 report, the *Local Integrated Transport Plan* should be read in conjunction with the Phase 1 *Transport Assessment Report*. The Phase 1 report details background research and contextual analyses, outcomes from a first round of engagement with government stakeholders and the community, and a Strengths, Weaknesses, Opportunities and Threats (SWOT) review.

The express purposes of the overall study include:

1. Informing a review of the Town of Bassendean's current Local Planning Strategy (LPS), particularly in respect to State directions to provide increased residential density development within identified core activity centres and along major transit corridors

2. Informing planning of Transit-Oriented Development (TOD) around the Ashfield, Bassendean and Success Hill train stations

3. Providing a platform for the development of subsequent and future transport strategies, policies and plans for the Bassendean Local Government Area (LGA).

Each of these particular purposes are considered integral to the Town ultimately achieving its key objective of **enhancing connectivity between places and people** (*cf.* Objective 3.2 - Strategic Community Plan 2017 – 2027).

Arup's objectives undertaking the study (study area shown in **Figure 1**) include:

- Assessing the existing movement network holistically identifying operational difficulties for all modes of transport by location and time-of-day (as applicable)

- Identifying local network performance issues and whether these are associated with local government or State infrastructure

- Identifying cross-boundary network performance issues and the influences of land use and transport in adjacent LGA (City of Bayswater and City of Swan, especially)

- Defining preferred future operating conditions for the Town of Bassendean's multimodal transport network, focusing on 2031 and trends towards Perth @3.5 million residents (notionally, 2050)

- Defining extraneous factors (wider State policy and mega-trends) that will influence transport and access within the town and exploring the nature of these impacts

- Identifying and addressing network and transport policy SWOT in view of the contextual analysis and influencing factors, to shape forward-facing transport and land use strategy.

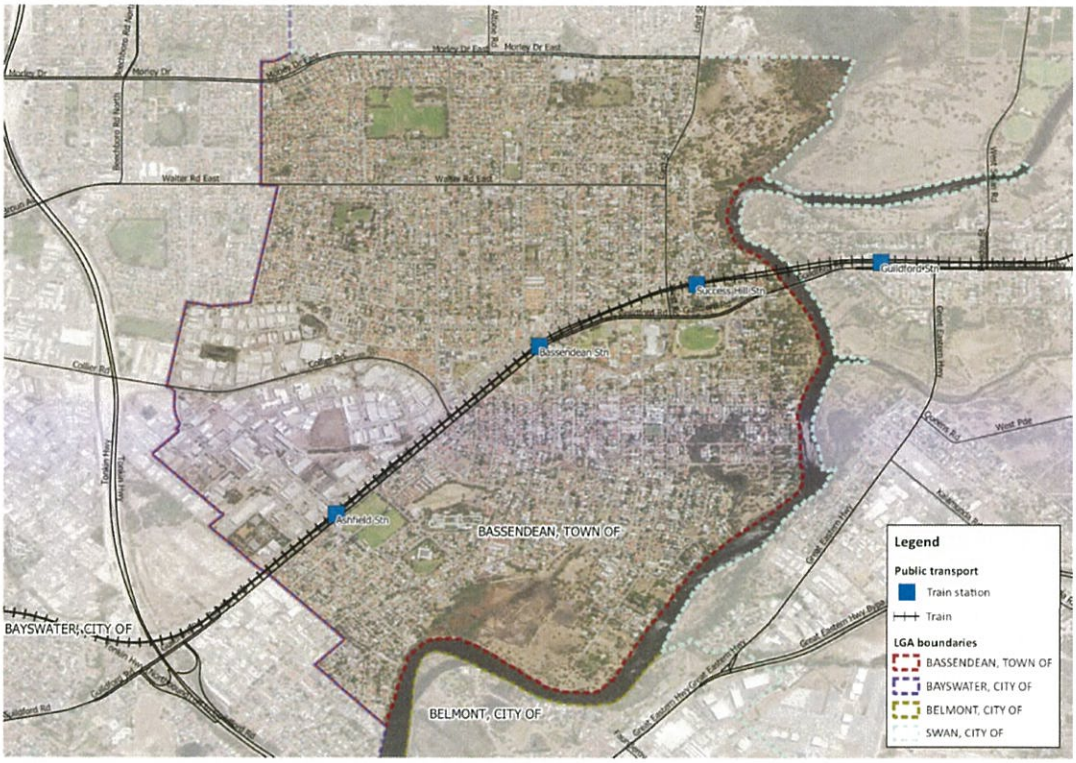


Figure 1 - Project study area: Town of Bassendean and surrounds

The study is driven by the following, desirable outcomes that align with the Town's articulated purposes for the work:

- Enhancement of the town's identity and character
- Sustainable and resilient multimodality, which both avoids ingraining primacy of motor vehicle traffic within the town and integrates flexibility into the movement network given ongoing change within the transport sector.

The current report, which is the main deliverable for Phase 2 of work, includes:

- A recap of Phase 1 findings
- Overview of two transport projects in the Town that were not reviewed as part of Phase 1
- A long-list of potential strategies and actions for application in Bassendean conceived to respond to Phase 1 SWOT. These include strategies proposed by other government stakeholders
- Strategy development involving drafting of recommended high-level parking policy reform and provisional testing of key actions supported-in-principle by Council to test deliverability
- Completion of a Functional Road Hierarchy (FRH) review (addressing specific, potential strategies and actions as relevant). The review encompassed analyses of the form and function of collector and arterial roads in Bassendean, and assessed the merits of potential streetscape and capacity improvements, and reclassifications
- Findings from a second round of engagement with government stakeholders to table the short-listed strategies and actions for feedback
- Summary, proposed implementation programme and conclusions.

A second round of community consultation is planned to test views on the short-listed strategies and actions. This is to occur in June 2019 following Council endorsement of this final draft report.

Appendix A features notes from meetings with external government stakeholders and **Appendix B**, the set of plans presented to the community during Phase 2 engagement. The following stakeholders have been engaged with during this process:

- Main Roads WA
- METRONET/ Public Transport Authority (PTA)/
- Transperth
- City of Bayswater
- City of Swan
- Department of Planning, Lands and Heritage.

The following process flow-chart reflects the overall study design and the current status of Phase 2.

Phase 1 - Transport Assessment

Stakeholder engagement
Community engagement
Presentation to elected members
SWOT/ contextual analyses
Transport Assessment Report

Phase 2 - Local Integrated Transport Plan

Definition of provisional strategies and actions

Presentation to elected members and refinement of long-list based on feedback

Strategy development and preliminary testing including review of current Functional Road Hierarchy (FRH)

Review by Town of Bassendean

Stakeholder consultation

Community consultation

Finalisation of LITP

Current step

2 Phase 1 Overview

Phase 1 of the study included detailed review of multimodal transport, access and parking provisions across the town, featuring:

- Review of a broad range of relevant prior studies and strategic policy documents
- Analysis of data from various previous transport-related community engagement sessions supplied to Arup by the Town
- Several site visits
- Review of network data including public transport patronage and catchment information, patronage forecasting, road traffic counts, road network forecasts generated by Main Roads WA's Regional Operations Model (ROM), and crash data
- Consultation with external government stakeholders including:
  - Main Roads WA
  - METRONET
  - Public Transport Authority (PTA)/Transperth
  - City of Bayswater
  - City of Swan.
- A presentation to Council focusing on preliminary SWOT, and emerging transport trends that should be reflected (as relevant) in preferred strategies and actions
- Engagement with the Bassendean community using the *Your Say* on-line platform.

The main findings of Phase 1 were a set of SWOT variables, which are shown in **Table 1**.

Table 1 – Summary SWOT variables

Strengths	
Public transport	• Three train stations in the town • Bus interchange, kiss-and-ride and park-and-ride provisions at Bassendean train station, providing for multimodal transfers • Delay to bus services owing to congestion on the road network is limited to the staggered junction of Altone Road, Morley Drive and Ivanhoe Street
Active transport	• Strong east-west link (Midland line Principal Shared Path [PSP]), which will shortly be completed • Much of the local street network is relatively quiet and comfortable for cycling • Old Perth Road environment has a distinct 'main street' feel • Delivery of Whitfield Street bicycle boulevard (may also be a threat)
Road network	• Grid network across much of the town, which provides a relatively high degree of connectivity and route choice • Relatively little peak-hour congestion across the network • Limited through-traffic because of natural connectivity breaks caused by Swan River • Restricted Access Vehicles (RAV) and a lot of Heavy Vehicle (HV) traffic assigns to Tonkin Highway rather than through Bassendean
Parking	• Relatively few parking problems in Bassendean at the current time • Relatively limited demand for on-street parking on local streets outside the Bassendean town centre (providing space for on-road cycling)
Weaknesses	
Public transport	• Road geometry at the staggered junction of Altone Road, Morley Drive and Ivanhoe Street causes delays for buses • Community views that bus and rail services should be better integrated at Bassendean train station • Limited bus service to the southern side of the LGA • Constrained southern catchment defined by Swan River, which limits bus routing options and service frequency • No vehicular rail crossings adjacent to Bassendean train station to improve access to the southern catchment and increase bus-train transfers • Low patronage at Success Hill (second lowest on network), walk-on catchment limited due to proximity to Swan River and overlapping catchment with Bassendean. Suboptimal cost versus benefit operating equation for PTA
Active transport	• Disability Discrimination Act (DDA) non-compliant overpasses at Ashfield and Success Hill train stations • Substandard cycling and walking facilities on south side of Midland line between Collier Road and Old Perth Road • Limited and poor crossing facilities along Guildford Road including traffic signal phasing that suits through-traffic movements • Desire line between Success Hill train station and Bassendean Oval not catered for • At-grade rail crossings contribute to vehicles queuing across PSP • Substandard lighting in the vicinity of Ashfield and Success Hill train stations • Poor crossing environment along Collier Road • Poor quality underpass below the Midland line with active transport users required to cross Guildford Road at-grade • Crossing facilities along Old Perth Road are less satisfactory east of James Street • Relatively poor connections to Sandy Beach Reserve

Road network	• Severance effects of Midland rail line • Limited access to Success Hill north and south precincts • Constrained intersection geometry at limited at-grade rail crossings • Suboptimal cross-section along Walter Road East (e.g. lack of median, geometric constraint at Iolanthe Road relative to midblock capacity) • Historical uncertainty regarding desired function of Walter Road East (potential transit corridor) • Unsuitable cross-section along Guildford Road including lack of Channelisation for right turns and medians • West Road and Guildford Road bridges function as network pinch-points • Suboptimal intersection treatments: especially at Guildford Road/Colstoun Road • Localised congestion associated with tidal commuter flows • Traffic queues associated with the Guildford/ Tonkin interchange extending back to Bassendean's boundary • Cul-de-sac treatments across local network that have addressed-rat-running issues but at the consequence of making private vehicle travel less direct •
Parking	• Lack of formal kiss-and-ride facilities at Ashfield train station • Parking supply at Bassendean Village includes facilities within the road reserve • Relative inflexibility in Scheme requirements for parking as well as over-specification of non-residential land use categories and definition of parking minima (but no maxima) • Lack of requirements in the Scheme for non-residential bicycle parking supply and end-of-trip facilities provisions

Opportunities

Public transport	• Delivery of TOD along key bus corridors and in station catchments to satisfy Perth and Peel @3.5 million aspirations • Greatly improved train service associated with METRONET's 'full investment' planning (shorter operating headways and longer trainsets) • Improved cross-rail connectivity possible as an outcome of Midland line at-grade crossing removal program • Micro-transit service that improves bus-rail transfer from south of the rail line • Potential to downsize park-and-ride facilities at Bassendean train station giving rise to development opportunities within close proximity of the station
Active transport	• Delivery of strategic links north of Bassendean train station and along Walter Road East • New connection across Swan River between Sandy Beach Reserve and Max Hunt Reserve in Belmont • Opportunity to improve wayfinding simultaneously with route upgrades
Road network	• Improvements to traffic flows and intersection operations at West Road/Guildford Road associated with West Road bridge widening • Potential for better network connectivity associated with new Swan River crossings (also a threat, depending on where these are located) • Delivery of a new design for Walter Road East featuring reduced traffic lanes and improved walking and cycling infrastructure, and befitting TOD • An improved cross-section and intersection treatments along Guildford Road including channelisation and a median to assist two-stage turning manoeuvres and active transport crossings • Enhanced linkages deliverable as part of Midland line at-grade crossing removal program. Improved traffic safety and intersection operations associated with same
Parking	• TOD opportunity on the existing Wilson street public parking site

	• Potential for parking supply and management reform through Scheme revisions: especially in the town centre • Potential for future public parking stations in lieu of private, off-street parking. This can aid TOD • Morley-Ellenbrook Line (MEL) may create an opportunity to redevelop part of the existing Bassendean train station park-and-ride site • Incentivisation for WAFL patrons to choose other means to travel to the Oval on game-days • Supporting a multimodal, climate change management and population health agenda by including minimum non-residential bicycle parking and end-of-trip facilities requirements in an update to the Scheme • Including car share and ride-hailing parking provisions in local planning strategy and policy • Integrating modular and adaptable parking designs into new structures • Integrating criteria for electric vehicle recharging into development plans and new streetscape concepts
Threats	
Public transport	• Delivery of MEL may draw patrons away from the three stations in the town, reducing urgency of station area upgrades • In time, congestion on the road network may increase (if various road projects induce traffic), leading to delays for bus services • Uncertainty regarding timing of grade-separation of rail level crossings and impacts on surrounding land uses • Dilution of development potential and public transport patronage between all three stations, leading to suboptimal TOD outcomes • Platform proximity issues between Bassendean and Success Hill train stations associated with possible enablement works for six-car trainsets • Increased patronage on the Midland line from east of Bassendean (particularly from Midland), limiting capacity for growth (AM peak in the city-bound direction) at Success Hill, Bassendean and Ashfield train stations
Active transport	• Cadastral boundaries along the Swan River foreshore limit opportunity to deliver a foreshore path • Delivery of proposed cycling projects that are underutilised and have unintended effects on the local network
Road network	• Redesign of Guildford Road in a manner that induces traffic, adds to severance of active transport, limits access to side streets, requires removal of mature trees and impacts significantly on the banks of Swan River • Major road projects elsewhere in sub-region that induce traffic through Bassendean: e.g. Lord Street extension to Lockridge • Impact on Aboriginal heritage site adjacent to Swan River if Lord Street widening project is pursued • Future Local Area Traffic Management (LATM) projects undertaken without consideration of wider network effects • Traffic impacts associated with development of Lot 10 Railway Parade, which may not have been accounted for adequately
Parking	• Retaining current Scheme requirements leading to and increasing oversupply of parking and associated operational inefficiencies, as well as compromising multimodality objectives for Bassendean (especially station precincts and the town centre) • Ongoing overspill from Bassendean Oval on game-days that is not managed effectively • Ignoring the reasonably forecast implications of automation and electrification of vehicles, and growth of MaaS

3 Additional Projects

3.1 Bassendean Station Access Project – Broadway

The PTA engaged GTA Consultants to conduct a study defining the preferred treatment for a bicycle route via Broadway (Iolanthe Street to Railway Parade), as part of the Access to Stations initiative. Following an optioneering process, GTA Consultants recommended to PTA delivery of on-street lanes with painted buffers separating them from general traffic lanes.

The study itself was supported-in-principle by the Bassendean Town Council at its Ordinary Council meeting held in March 2018.

The route has since been identified in the PTA's draft Station Access Strategy for Bassendean prepared by AECOM. AECOM recommended construction of a 2.5-metre wide shared path on the northern side of Broadway. The PTA will fund construction of the bicycle.

Arup did not identify the route to be key as part of findings and recommendations during Phase 1 of this project; however, the proposition to improve cycling infrastructure in the town and station access in particular, is supported.

3.2 *Your Move* Bassendean

The *Your Move* behaviour change programme is conducted by the State Department of Transport and involves various community engagement techniques to encourage and facilitate more sustainable travel practices, such as replacing car trips with walking, cycling or public transport. The Department of Transport will be commencing the programme in the second half of 2018. While the programme will not have direct bearing on the findings and recommendations made by Arup relating to policy and infrastructure, it does have shared purpose: contributing to sustainable and resilient multimodality, which both avoids ingraining primacy of motor vehicle traffic within the town and integrates flexibility into the movement network given ongoing change within the transport sector.

4 Proposed Strategies and Actions, and Implementation Programme

4.1 Summary of actons and strategies

Table 2 includes the proposed actions and strategies arranged thematically, and responsible authority/ies. The thematic categories are:

- Parking **(P)**
- Public transport **(PT)**
- Active transport **(AT)**
- Road network **(RN)**
- Land development **(LD)**
- Government procurement **(GP)**.

The table includes the broad response from Council for each action/strategy along with qualification (if applicable). A number reference is provided for each action and the gaps in the numbering reflect the fact that a number of actions were not fully supported by elected members and have therefore been removed and will not be considered further.

Table 2 – Long-list transport variables

Proposal		Explanation	Responsible authority	Council response
Parking				
P1	Preparation of town-wide parking strategy to replace 2011 plan	As per Phase 1 report. Intent is for the Town's Local Planning Strategy and Local Planning Scheme to set criteria for efficient and effective supply and management of parking in the Town of Bassendean, especially in the town centre and surrounds, and in proximity to train stations. Additionally, parking policy should reflect coming trends in transport, access and parking, providing where possible for flexibility in design and operations	Town of Bassendean	Supported
P2	Supply pilot electric vehicle recharging infrastructure	Supply kerbside Level 2 (fast AC) rechargers in at least one location along Old Perth Road and in consultation with Transperth, a Level 1 (basic AC) recharger located in the Bassendean station park-and-ride. Level 2 chargers can provide major battery recharge in 2-3 hours and Level 1, 6-7 hours	Town of Bassendean/Public Transport Authority	Supported
Public transport				
PT1	Improve pedestrian and cyclist access to Success Hill train station	The Town desires Success Hill train station retained to benefit the local community and for walking and cycling access to be improved. A grade-separated crossing of Guildford Road connecting Bassendean Oval with the southern catchment of the station is preferred. This could align at Lamb Street as an alternative to the at-grade crossing provided currently	Town of Bassendean/Public Transport Authority/Main Roads WA	Supported
PT2	Plan for extended platforms at Bassendean train station and potential active transport link aligned with Park Lane	Subject to geometric design considerations, lengthened platforms could open up opportunity for new active transport connections - especially to the south side of Guildford Road – better connecting the community to rail services	Public Transport Authority	Supported
PT3	Implement a micro-transit or mobility partnership trial in Bassendean with emphasis on southern catchment	The catchment south of the rail line is difficult to serve by conventional bus services because of severance issues, and Transperth's route 55 service provides only basic coverage. A micro-transit pilot or mobility partnership with a private operator could improve transit coverage and direct station access at a more reasonable price to the public sector	Public Transport Authority/Town of Bassendean	Limited support – financial implications for Town given likely low utilisation of regular shuttle. Mobility partnership with private operator supported by State government may be supported
PT5	Establish a mobility hub at junction of Kenny Street/Guildford Road	The draft Bassendean Station Access Strategy proposes kiss-and-ride bays at this junction. This 'hub' could integrate other facilities such as a potential shuttle stop (as applicable), bike facilities and extended pedestrian bridge from Bassendean station. Together, this infrastructure could encourage greater use of public transport; particularly, more boardings and alightings at Bassendean train station. Implementation of this proposal will depend on - among other things - land owner agreements as part of the identified site is held currently in freehold title	Town of Bassendean/Public Transport Authority	Limited support – land tenure and engineering feasibility of a pedestrian bridge
PT6	Channelise Ivanhoe Street on approach to Morley Drive to mitigate delays for buses	The approach features currently one stand-up lane. Transperth has reported some delays to buses in this location because of right-turning vehicles holding up left-turning buses in peak hours. Channelisation would split the approach into two lanes (one lane each for left and right-turning vehicles). Junction modelling would be required to test the effects of channelisation and help prove benefits versus costs	Town of Bassendean	Supportive – modelling of the junction will be considered as a future works programme. Council is supportive also of additional channelisation integrated with landscaped medians along Ivanhoe Street at intersecting streets
PT7	Advocate for sinking of Midland line to facilitate at-grade connectivity and new development opportunities in the vicinity of Bassendean station	The Midland line is subject to review in late 2018 as part of METRONET's rail/ road grade-separation programme.	METRONET/Public Transport Authority/Town of Bassendean	Supported
Active transport				
AT1	Design and deliver improved active transport link along Second Avenue between Railway Parade and Walter Road East, according with Town Bike Plan and Station Access Strategy intent	Link missing from strategic network (as proposed). While Second Avenue is a quiet/ local on-street route, it reflects a gap in existing/ proposed infrastructure. More formalised treatments could include a wider (shared) path or 'greenway' as per the Town's current Bike Plan and the draft Bassendean Station Access Strategy involving improved wayfinding and crossing facility at Walter Road East	Town of Bassendean/Department of Transport	Supported

Proposal		Explanation	Responsible authority	Council response
AT2	Advocate/support redesign of Ashfield and Success Hill pedestrian bridges to achieve DDA compliance	Current designs are non-compliant and require remediation	Public Transport Authority/Town of Bassendean	Supported
AT3	Extend Bassendean pedestrian bridge to Kenny Street mobility hub site	Implementation of the proposal will depend on - among things - land owner agreements as part of the identified mobility hub site is held currently in freehold title, and engineering feasibility. Current overpass lands on north side of Guildford Road, leaving pedestrians to cross Guildford Road at-grade. Path width on north side of Guildford Road is very constrained. Infrastructure would support development of a mobility hub at Kenny Street	Public Transport Authority/Town of Bassendean	Limited support – land tenure and engineering feasibility of extending bridge
AT4	Assess current design of Wilson Street subway and consider for replacement/ closure	Existing subway is narrow and rates poorly from a Crime Prevention Through Environmental Design (CPTED) perspective. Furthermore, the path returns to the surface on the north side of Guildford Road, leaving active transport users to cross Guildford Road at-grade	Public Transport Authority/ Department of Transport/ Town of Bassendean	Supported
AT5	Deliver active transport route along Swan River between Guildford Road and Sandy Beach Reserve, tying in with potential bridge to City of Belmont	There is a desire line for recreational and utilitarian travel between the Midland PSP and a potential future Swan River crossing at Sandy Beach Reserve (or proximity). Deliverability is a challenge because of current land tenure along the Swan River foreshore	Town of Bassendean	Limited support – land tenure and design solution may be challenging to define and expensive to construct. May be considered as a longer-term strategy and would need further investigation to understand feasibility and cost

Proposal		Explanation	Responsible authority	Council response
AT8	Create Town of Bassendean micro-funding account for small active transport improvements	Provide minor financial support for small businesses looking to improve their bicycle parking and end-of-trip facilities. Opportunities to link such a fund to State grants should be explored	Town of Bassendean	Supported
Road network				

Proposal		Explanation	Responsible authority	Council response
RN1	Guildford Road (western Town boundary to West Road): • Consult with Main Roads WA on signalising the Colstoun Road/Guildford Road intersection • Consult/advocate for retention of key local street links under suitable traffic management	Proposals for traffic signals at this intersection has been a long-standing consideration/aspiration by the Town in order to provide safe traffic movement and access to the Ashfield locality. Any future review of the role and function of Guildford Road should consider maintaining existing access to key local streets from Guildford Road. [NB: It is understood that Main Roads WA are presently undertaking a design review of Guildford Road between the Tonkin Highway and where it crosses the Swan River at Guildford but the details of this are yet unknown. The above considerations together with the retention of existing mature trees along Guildford Road are considered paramount by the Town]	Main Roads WA/Town of Bassendean Main Roads WA/Town of Bassendean	Support for signalisation of Guildford Road/Colstoun Road intersection including connection of the PSP to the south side of Guildford Road and the Ashfield bridge
RN2	Guildford Road (West Road to Swan River): • Consult with Main Roads WA in respect to reasonable signal phasing at intersection of Guildford Road/West Road associated with any planned West Road bridge widening and intersection upgrade • Consult with Main Roads WA regarding road cross-section, and any planned bridge structure over Swan River and any planned intersection treatment at Guildford Road/North Road/Earlsferry Court	In anticipation of any future considerations by Main Roads WA to upgrade the West Road bridge across the Perth - Midland railway and/or to replace or upgrade the existing road bridge across the Swan River, Council will be seeking input from Main Roads WA into these further considerations going forward.	Main Roads WA/Town of Bassendean	Council desires to input into any future considerations by Main Roads WA to upgrade the West Road bridge, the existing bridge across the Swan River and any associated intersection treatment at Guildford Road/North Road/Earlsferry Court
RN3	Convert Walter Road East from four travel lanes to two with median division	Capacity along Walter Road East is constrained already by the single-lane roundabout at Iolanthe Street. Furthermore, Walter Road East terminates to the east at Lord Street and is not forecast by Main Roads WA's Regional Operations Model to accommodate significantly more traffic by 2031. In the interests of improving traffic conditions (e.g. introducing channelisation and median storage) and creating a safer, more efficient active transport linkage, Walter Road East should be converted to a two-lane street with median division to provide protected right-turns	Town of Bassendean/Department of Planning, Lands and Heritage	Supported - Council resolved in this respect at its Ordinary Council Meeting held on 28 August 2018. Implementation would require further design assessment and modelling in consultation with Department of Planning, Lands and Heritage (Walter Road East is an Other Regional Road reserved in the Metropolitan Region Scheme)
RN5	Advocate for traffic signal and boom gate synchronisation at Collier Road/Guildford Road	The Midland PSP connection across Collier Road is blocked often when vehicles queue waiting to turn from Collier Road on to Guildford Road and northbound on Collier Road when the rail boomgates are lowered. Boomgate and traffic signal operations should be synchronised to permit queues to clear and reduce incidences of this blocking	Main Roads WA/Public Transport Authority	Supported – interim measure ahead of more suitable grade-separation treatment as part of METRONET programme
RN6	Assess potential to signalise intersection of Railway Parade/Lord Street	Main Roads WA has advised the Town previously that this intersection is not suitable for signalisation because of proximity to the West Road/Guildford Road intersection; however, this should be revisited because of potential local network permeability and operational benefits, and feasibility of signalling infrastructure such as gantry arms and/ or advanced warning flashing lights on approach to address sight line issues	Town of Bassendean/Main Roads WA	Limited support – engineering feasibility and modelling required to ascertain impacts. Consideration will be given to modelling the impacts as part of a future works package
RN7	Investigate deliverability of road underpass between Wilson Street and Second Avenue	An additional street link across Guildford Road and the Midland line would benefit the town centre allowing local traffic to bypass busier junctions such as Guildford Road/West Road. Additionally, the connection would provide potential for bus services to connect between Bassendean train station and the southern catchment. The location is likely to have limited appeal for through-traffic, mitigating risks of high traffic volumes on local streets. An initial review of engineering feasibility demonstrates significant constraints achieving vertical clearances without major property impacts, especially on the north side of the rail	Town of Bassendean	Limited support – engineering feasibility and traffic modelling required to ascertain impacts. Consideration will be given to modelling the impacts as part of a future works package

Proposal		Explanation	Responsible authority	Council response
RN8	Investigate converting junction of Walter Road East/Lord Street/Seventh Avenue to four-way signalised control with conversion of Success Road access to left-in/left-out	The Town has engaged with the local community and SHAG re improving access to the urban cell north of Success Hill train station, which is limited to one vehicular access point (all movements, unsignalised access at Success Road/Lord Street). Some residents have raised concerns about peak hour delays at this location. Signals at Walter Road East/Lord Street/Seventh Avenue would yield several benefits: • Deliverability of an east-west walking and cycling connection between the Success Hill precinct and Walter Road East • Improved road access to the Success Hill precinct, which is also important for emergency ingress/egress • Controlled traffic turning manoeuvres • Reduced vehicular conflicts at Lord Street/Success Road, which could be converted to left-in/left-out • Gaps in traffic travelling southbound along Lord Street, which may improve peak hour operation at Railway Parade/Lord Street • Low likelihood of additional traffic infiltration through Success Hill because there are no through routes. A local traffic modelling study would be required to resolve the merits of this proposal.	Town of Bassendean/Main Roads WA	Limited support-modelling required to ascertain impacts and test alternative configurations, concerns relating to redistribution of traffic and compromise of plans for alternative cross-section for Lord Street (RN9). Consideration will be given to modelling the impacts as part of a future works package.
RN9	Convert Lord Street south of Morley Drive to boulevard with median division	Despite property acquisitions by WAPC, and preferences of City of Swan and Main Roads WA to convert Lord Street to two lanes each way over this segment, heritage issues and outcomes preferred for the local community may mean that such infrastructure is not constructed. Rather, the Town should consider an alternative design for Lord Street introducing a boulevard treatment to support two-stage crossings by active transport users and more amenity for property owners, without reduced capacity compared to status quo. Provisions could be retained through the design process for future addition of infrastructure such as bus priority measures, noting that Lord Street is identified as a high frequency transit corridor in Perth and Peel @3.5M.	Town of Bassendean/Department of Planning, Lands and Heritage	Supported - Council resolved in this respect at its Ordinary Council Meeting held on 28 August 2018. Implementation would require further design assessment and modelling in consultation with Department of Planning, Lands and Heritage (Walter Road East is an Other Regional Road reserved in the Metropolitan Region Scheme)
RN10	Consider basis for reducing speed limit in town centre and on local roads to maximum 40 km/h	Speed limits of 50 km/h or higher can contribute to less use of streets by pedestrians and cyclists, and present safety risks that are not present at lower speed limits. Lower speed limits have merit in centres and on local roads befitting their function. Adopting self-explaining street design and management principles in addition to signposting the 40km/h limit would be necessary to be effective.	Town of Bassendean/Main Roads WA	Supported
RN11	Review and update Town LATM and Bike Plans	These existing plans are six years old and require refresh. Updated reports should integrate self-explaining streets, and movement and place concepts. As part of the review of the LATM Plan, the continued role of cul-de-sac treatments strategically across the network should be considered given their impact on local accessibility.	Town of Bassendean	Supported
Land development				
LD1	Focus development/ uplift around main transit assets including Ashfield, Bassendean and Success Hill train stations, and major bus routes including Ivanhoe Street and Walter Road East	This proposal is being considered through the Town's current review of its 2015 Local Planning Strategy, which is being aligned with the State's Perth and Peel @3.5 Million planning framework. Delivery of infill as transit-oriented development requires a supportive movement network, which prioritises active transport modes and access to public transport services. Planning for the Morley to Ellenbrook rail line is being undertaken by METRONET. The effects of the new line and station catchments on rail stations in the Town of Bassendean are yet to be fully identified. As a temporary measure, it will see increased park and ride supply and demand at Ashfield station which would need to be considered as part of any short to medium term development planning around that station.	Town of Bassendean/State Government	Supported
LD2	Investigate mixed-use redevelopment of the Bassendean park-and-ride site contingent on agreement with Public Transport Authority regarding possible reduction in park-and-ride demand associated with Morley-Ellenbrook		Public Transport Authority/Town of Bassendean	Supported
Government procurement				
GP1	Establish new fleet procurement protocols in line with transport vision for Bassendean	Vehicle procurement should be limited to (subject to achieving Council's minimum ANCAP rating specifications): • Electric or hybrid vehicles • LNG vehicles • Other low emissions vehicles according with the Australian Green Vehicle Guide[1].	Town of Bassendean	Supported

[1] http://www.greenvehicleguide.gov.au/pages/Information/RankingAndMeasurement

4.2 Strategy development

A range of preliminary analyses were conducted within the scope of the project[2] to develop key strategies further and test deliverability. Furthermore, several proposed strategies and actions were analysed as part of a review of the FRH in Bassendean (collector and arterial roads), including:

- **PT6** – Channelise Ivanhoe Street on approach to Morley Drive to mitigate delays for buses
- **RN3** - Convert Walter Road East from four travel lanes to two with median division
- **RN9** - Convert Lord Street south of Morley Drive to boulevard with median division.

The FRH review is included in **Section 4.3**.

4.2.1 Parking (P)

P1: Preparation of town-wide parking strategy to replace 2011 draft

Arup reviewed parking issues and opportunities in Bassendean at a high level. This is in the absence of recent parking data (utilisation, duration-of-stay), or a detailed parking inventory being available for review[3].

In 2011, the Bassendean Town Council adopted its current Parking Strategy. Being seven years old, the strategy does not reflect the current metropolitan or local planning frameworks (e.g. Perth and Peel @3.5M, the Town's Strategic Community Plan 2017 – 2027) and needs to be reviewed. An overarching recommendation from this Local Integrated Transport Plan is that a new town-wide parking strategy be prepared to provide a framework for parking provision addressing:

- Provision of bicycle parking and end-of-trip facilities
- Regime for service/ commercial vehicle parking in activity centres and mixed use precincts
- Optimising parking supply by providing for parking on a precinct basis at key locations (Bassendean Town Centre, Bassendean Oval and Ashfield Town Centre). This allows for reciprocal parking, provides a mechanism for collection of cash-in-lieu and involves identifying new sites for public parking stations
- Adapting parking enforcement methods to utilise smart technologies.

Increased residential density and mixed use development in Bassendean will lead to stronger demand for on- and off- street parking. Locations where residential

[2] Project limitations are addressed in Section 6.1 of the report. In particular, the scope did not include local network traffic modelling. Selected engineering feasibility assessments were of a provisional, high-level nature, only.

[3] It is anticipated that such data will be collected as part of the 2011 strategy update, which Arup understands that the Town will be initiating in the current financial year.

density is proposed include rail station precincts, key bus corridors and the Bassendean Town Centre. A balance needs to be achieved between supplying parking to meet reasonable demands while also acknowledging that an oversupply of parking will compromise the Town's TOD objectives.

Key parking-related challenges and opportunities for Bassendean, as it develops with more density and greater mix of land uses, are likely to include:

- Changes in travel patterns and rail station patronage at Ashfield and Bassendean stations arising from the Morley-to-Ellenbrook rail project, noting that (as a temporary measure to offset a loss in parking supply at Bayswater Station) the park and ride supply at Ashfield Station is to increase.
- Parking overspill from rail stations into adjacent activity centres and residential areas
- Oversupply of parking in activity centres particularly if parking is only considered for individual developments rather than on a precinct-level basis (common user facilities)
- Onerous and inflexible parking standards stifling new development
- Poor urban-design outcomes where parking dominates streets and detracts from pedestrian amenity and/or heritage character.

These issues are the primary focus of this plan and explored under the following themes:

- Key strategy update criteria
- Rail station/ TOD precincts
- Residential areas and heritage precincts.

Arup anticipates the aforementioned themes informing the 2011 Strategy update.

Key strategy update criteria

The 2011 Draft Strategy was never finalised and while many of the recommendations are consistent with TOD objectives it appears that a number of the policy changes recommended were not implemented. A new strategy should (*inter alia*):

- Review the 2011 Strategy to determine the status of recommendations and their ongoing relevancy
- Establish baseline parking supply and demand through surveys and development of a parking inventory
- Review the balance between supply and demand to determine the need for changes to time restrictions and understand locations where parking overspill is occurring (and problematic)
- Identify new parking provision standards (maximums rather than minimum rates) for a more streamlined list of land uses through:
  - Identifying capacity of the network to absorb additional traffic

  - Benchmarking against successful TODs (as relevant) with similar characteristics

  New parking rates were not defined in the 2011 Draft Strategy but this was a key recommendation.

- Developing a suite of policy reform – applicable to the Town's Local Planning Scheme and/or supporting local planning policy – including:
  - Prescribing maximum parking provision rates for non-residential uses based on analysis and evaluation as described above. Different rates may apply depending on proximity to rail stations
  - Reducing land use categories for simplicity and to support changes in use without a need to revisit parking requirements
  - Providing greater clarity on grounds when cash-in-lieu will be accepted and consider extending the timeframe for holding funds (currently 18 months) to allow time for business case preparation, funding to be sourced, design and construction
  - Introducing a clause(s) for bicycle parking including minimum rates for non-residential developments and requirements for end-of-trip facilities
  - Establishing criteria for adaptive reuse, provision of electric vehicle recharging facilities and pick-up/set-down provisions.
- Identifying a site for development of a common user parking facility in the Town Centre (which may be funded or part-funded via cash-in-lieu) and prepare a business case
- Developing a regime for monitoring and enforcing parking, which uses appropriate parking technologies.

Rail station/TOD precincts

Parking at rail stations is managed and controlled by the PTA. The Town is responsible for managing parking around stations (including street parking). Delivery of the Morley-to-Ellenbrook rail line will change travel patterns in Bassendean and station catchments, and these changes are likely to impact both demand for formal station facilities and non-station parking assets.

The route and station locations are being evaluated currently as part of planning and engineering feasibility works. New stations will be located to the west and north of the Town of Bassendean and may lead to reduced patronage and park-and-ride demand at Bassendean station. A reduction in parking demand could provide opportunities for existing park-and-ride to be redeveloped partially as TOD helping the Town to meet infill targets (see **LD2**).

This redevelopment opportunity was explored as part of the draft Station Access Strategy for Bassendean; particularly in the context of the Morley-to-Ellenbrook rail project. The preferred strategy involved retaining current park-and-ride supply and supplementing this with use of parking south of Guildford Road (e.g. the Wilson Street car park). The use of free, all-day parking in this location by rail station patrons was recommended in the 2011 Draft Parking Strategy recommended; however, Arup believes that this should be discouraged due to

impacts on local businesses, the accessibility of the Town Centre and potential for redevelopment of these parking sites in future as TOD.

Further consultation should be undertaken with METRONET as the route definition and business case for the Morley-to-Ellenbrook project progress. Any option that reduces the catchment of Bassendean station should be seen as an opportunity to release parking areas for redevelopment and impetus for TOD.

Ashfield attracts very little park-and-ride or kiss-and-ride traffic, featuring no formal parking facilities. The draft Ashfield Station Access Strategy considered a future scenario involving an increase in demand for informal parking through use of on-street bays on surrounding streets. The associated amenity and parking availability issues for surrounding residences and businesses were highlighted as key issues why such patterns of use should not be encouraged. Significantly, such patterns of use could eventuate anyway and accordingly, the new Parking Strategy should define a parking management regime to mitigate such risks.

Success Hill station experiences the second lowest level of patronage on the metropolitan network. This is a product of many factors including the limited and constrained catchment, low dwelling densities, some walking and cycling accessibility issues, proximity of other stations and lack of vehicular arrival facilities (bus stands and park-and-ride/ kiss-and-ride).

The Town's elected members have stressed the importance of enhancing accessibility to and boardings at Success Hill station. Elsewhere on the rail network, a common strategy to increase boardings has been to add vehicular arrival facilities. In this case, there is limited access to the external road network, and minimal support from elected members and the wider community to improve access to the station other than for walking and cycling modes. Furthermore, there are space constraints limiting opportunities for new arrival facilities such as parking.

For these reasons, Arup does not recommend consideration of park-and-ride and kiss-and-ride at Success Hill. Rather, active transport accessibility should be improved (see **AT1**). This is consistent with the draft Station Access Strategy recommendations.

Residential areas and heritage precincts

Under the Town's Local Planning Scheme No. 10, residential parking provisions are prescribed by the Residential Design Codes of Western Australia (R Codes). The R Codes specify parking maximums, applying lower maximums in locations close to rail stations. The R Codes provide a reasonable basis to guide future parking provision in the Town as it works to fulfil density targets. Planning reform should consider introducing opportunities for proponents to unbundle parking from the sale of units so that the take-up of parking is a conscious choice and the costs associated with that choice are clear.

Use of informal/street parking around train stations was acknowledged in the Station Access Strategies. Parking around the stations should be monitored and enforced, and a regime for management should be developed where parking overspill is creating amenity issues or a parking shortfall in residential neighbourhoods.

Design guidance should be developed for the provision of parking to ensure that it is provided in a manner sympathetic to built form and character in the Town's heritage precincts. The guidance should include advice to developers/ planners on grounds for cash-in-lieu where there are limitations to supplying parking because of heritage issues.

4.2.2 Public Transport (PT)

PT1: Improve pedestrian and cyclist access to Success Hill train station

Providing an improved active transport connection between Success Hill train station and Bassendean Oval is an important objective of the Town. This connection is envisaged to improve the walkability of the station catchment. Presently, the pedestrian access is via Thompson Road and Lamb Street, and an at-grade crossing of Guildford Road via the traffic signals at Lord Street/West Road/Guildford Road. This crossing requires pedestrians to cross two left-turn slip lanes and actuate the pedestrian crossing lantern.

An alternative proposal is a grade-separated crossing facility. Arup conducted a preliminary investigation of an overpass. An underpass was not considered for comparative cost and engineering feasibility reasons. The provisional analysis (**Figure 2**) shows two potential span options. Option 1 involves an overpass located immediately north of the current car park at Bassendean Oval while Option 2 is an overpass close to the intersection with West Road.

Option 2 is significantly space-constrained, requiring a less efficient design and is located very close to the existing at-grade crossing location. Option 1 is comparatively more feasible, spanning between land zoned residential (land tenure not reviewed) on the north side of Guildford Road and land to the south reserved Primary Regional Road (PRR) under the Metropolitan Region Scheme (MRS). Overhead power lines are constraints requiring remedial action should this or a similar scheme be pursued.

The overpass proposal represents a more significant investment proposition compared to the recommendations in AECOM's draft Station Access Strategy for Success Hill, which included route upgrades via Thompson Road and Lamb Street including improved lighting.

Figure 2 – Success Hill-Bassendean Oval overpass options (provisional feasibility analyses)

PT2: Plan for extended platforms at Bassendean train station and active transport link aligned with Park Lane

Other consultants completing studies on behalf of the Town of Bassendean have recommended active transport connections over Guildford Road aligned with Park Lane. The benefits of such a connection include a grade-separated crossing facility of Guildford Road (not provided presently at nearby Old Perth Road), and in future, more direct connectivity to the Wilson Street parking area, which is under Council ownership and favoured for redevelopment.

An overpass connection, preferred compared to an underpass for cost and engineering feasibility reasons, would need to tie into extended platforms at Bassendean train station. Platform extensions are likely anyway as part of the State Government's METRONET programme, to support longer trainsets operating on the Midland line. In Arup's view, while such an overpass would provide improved access directly to the station platforms, the project should be considered as an alternative (not in addition) to an extension of the existing train station overpass across Guildford Road (discussed below under **PT5**), at least, for the medium-term.

A provisional engineering analysis (**Figure 3**) shows a range of potential span options. The work demonstrates that a span could be delivered but further engineering and cost investigations are required, as is consultation with the Public Transport Authority.

Figure 3 – Park Lane-Bassendean train station overpass options (provisional feasibility analyses)

PT3: Implement a micro-transit or mobility partnership trial in Bassendean with emphasis on southern catchment

Council has limited appetite for improved public transport accessibility to the southern catchment of the town despite the low level-of-service provided by the 55 route, currently (**Figure 4** and **Table 3**). This is because:

- The catchment size and immediate-to-medium-term ridership potential is limited, meaning any traditional Transperth or micro-transit service would require considerable subsidy to provide a reasonable level-of-service
- While bridge connections to Belmont may provide context for through-running Transperth services, the bridge and approaches would impact on the Swan River foreshore environment and affect the amenity of residents on quiet residential streets.

Alternatively, Council is willing to consider exploring a mobility partnership approach with support of the Department of Transport. Such schemes, which have been piloted in various international contexts, may include government subsidy of trips operated by private rail-hailing service providers originating at or destined for train stations within the town.

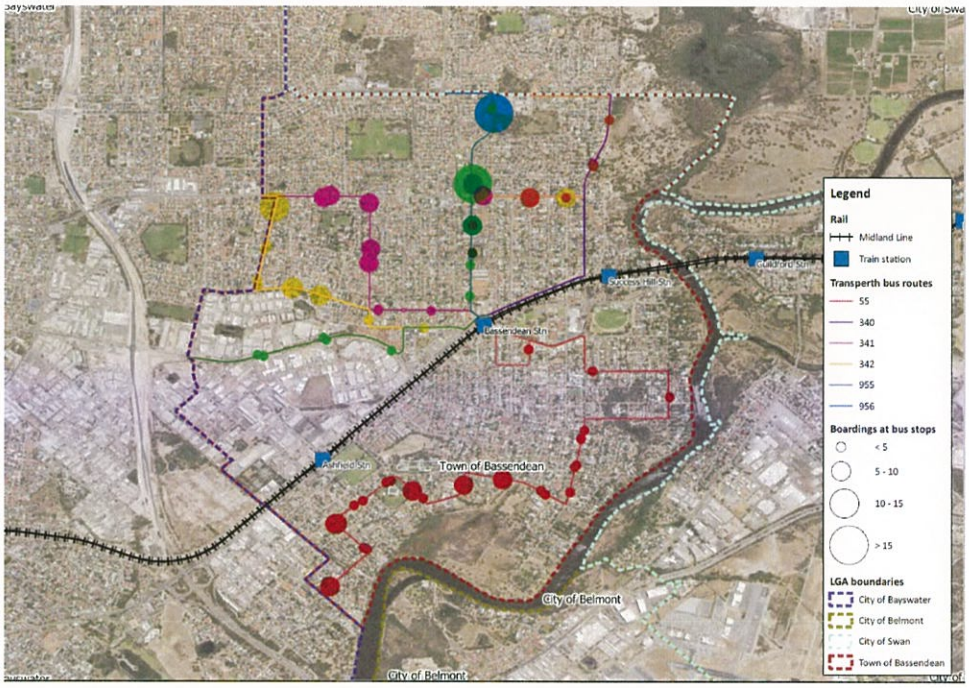


Figure 4 – Bus route/stop utilisation in Town of Bassendean (March 2017)

Table 3 – Comparative weekday boarding and alighting (March 2017)

Catchment	Route	Stops	Boardings	Alightings
North	340	At Bassendean Stn	132	141
		Not at Bassendean Stn	5	5
		Total	**136**	**146**
	341	At Bassendean Stn	171	175
		Not at Bassendean Stn	77	106
		Total	**248**	**281**
	342	At Bassendean Stn	128	130
		Not at Bassendean Stn	83	86
		Total	**211**	**216**
	955	At Bassendean Stn	412	393
		Not at Bassendean Stn	82	90
		Total	**494**	**483**
	956	At Bassendean Stn	395	500
		Not at Bassendean Stn	43	40
		Total	**438**	**540**
South	55	**Total**	**137**	**122**

PT5: Establish a mobility hub at junction of Kenny Street/Guildford Road

Elected members supported the proposition to construct kiss-and-ride bays on the southern side of Guildford Road at the intersection with Kenny Street, where there is Council land that can be utilised for this purpose (**Figure 5**). This is consistent broadly with AECOM's recommended provision for Bassendean train station as part of the relevant Draft Station Access Strategy.

There was less support for development of a more comprehensive mobility hub in this location, which could include shuttle stops, bicycle lockers, an expanded pick-up/set-down area for taxis/ride-hailing services and a new landing for the station overpass. Shuttle stops are not required absent a micro-transit shuttle service (**PT3**) while the latter two are difficult to facilitate owing to space constraints and current land tenure; however, they may be retained as longer-term aspirations (see also **PT2**).

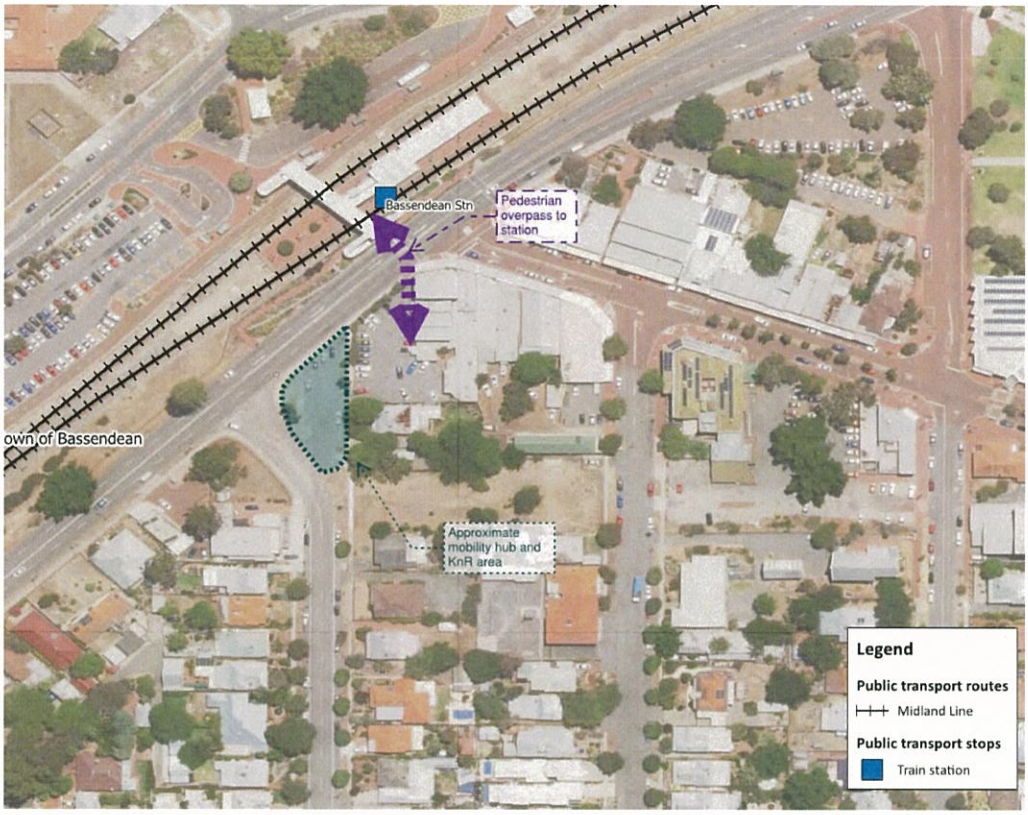


Figure 5 – Revised Kenny Street mobility hub concept

PT6 (and RN3 and RN9): Channelise Ivanhoe Street on approach to Morley Drive to mitigate delays for buses

The proposal was supported in-principle by elected members; however, particular needs will be subject to future study including traffic analyses/modelling. In contrast, there was strong support for an assessment of the feasibility of re-treating Ivanhoe Street (Broadway to Morley Drive), Walter Road East (Beechboro Road to Lord Street) and Lord Street (Morley Drive to Anzac Terrace) as two-lane, median-divided (and tree-lined) boulevards with improved pedestrian, cycling and vehicle turning facilities. These re-treatments are analysed further in **Section 4.3** as part of the FRH review.

Various examples of similar such treatments include Cinnabar Drive in Eglinton, WA (**Figure 6**), Scarborough Beach Road in Mount Hawthorn, WA (**Figure 7**) and Englorie Park Drive in Glen Alpine, NSW (**Figure 8**). In 2015/2016, Scarborough Beach Road east of Main Street, for example, accommodated average weekday traffic of 14,300 vehicles.

Figure 6 – Cinnabar Drive, Eglinton, WA

Figure 7 – Scarborough Beach Road, Mount Hawthorn, WA

Figure 8 – Englorie Park Drive, Glen Alpine, NSW

4.2.3 Active Transport (AT)

AT4: Assess current design of Wilson Street subway and consider for replacement/closure

The existing Wilson Street subway provides an active transport connection between Second Avenue and Wilson Street; however, it requires users to cross Guildford Road at-grade. While there is a median refuge for two-stage crossings, the crossing itself is uncontrolled. The nearest alternative crossing locations are at Bassendean train station (requiring also a crossing of Guildford Road at-grade via signals at Old Perth Road) and Lord Street (signalised crossing).

A preliminary review of feasibility of extending the subway shows a long tunnel and ramping structure, as well as relocation of utilities would be required (**Figure 9**). The resulting tunnel would also be uncomfortable for users and present CPTED issues. A wider tunnel (including widening of the existing subway) may address CPTED concerns in-part, but at significant cost.

The difficulty of extending the tunnel and opportunity to install a grade-separated crossing at Park Lane (**PT2**), mean that an improvement of the Wilson Street crossing should be limited to minor design upgrades of the at-grade facility. Elected members advised Arup that minor upgrades would be preferable to closure of the facility on the basis that an alternative (e.g. the Park Lane facility) is provided also.

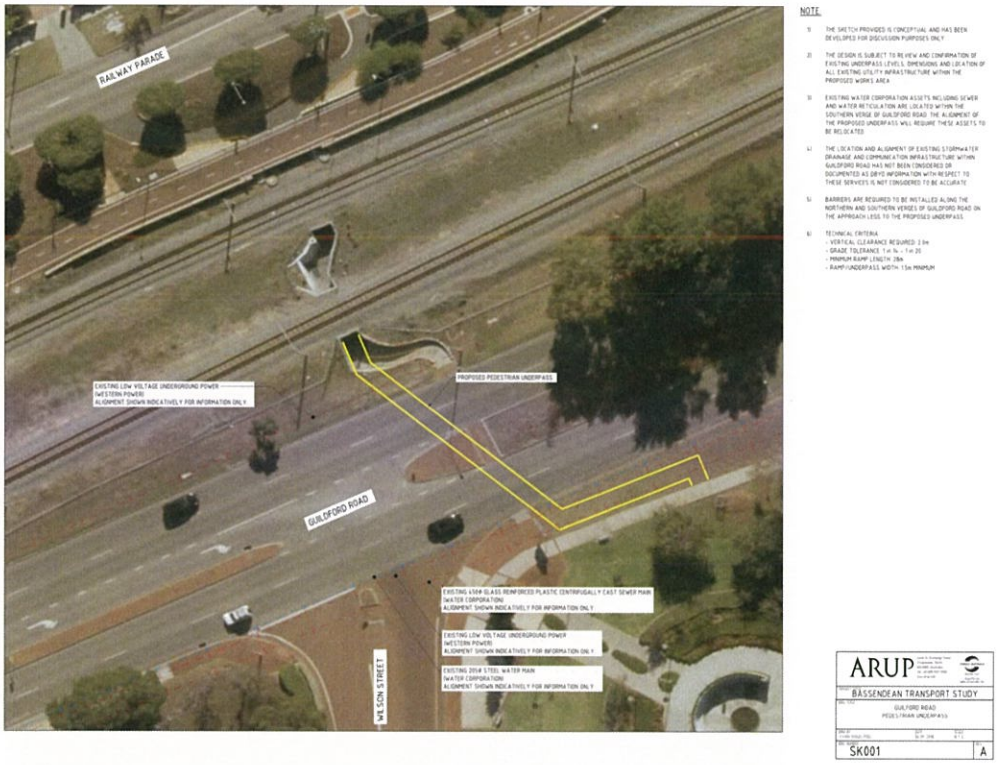


Figure 9 – Wilson Street subway preliminary concept

AT6: Convert water pipe over Swan River north of Guildford Road to active transport crossing

A community member proposed during Phase 1 of the current project that the existing water pipe, aligned between River Street in Bassendean and Swan Street in Guildford, could have a pathway installed on its top. The proposition requires further feasibility analysis in consultation with Water Corporation; however, the alignment would suit active transport trips across the river with relatively minimal investment in new pathway infrastructure (**Figure 10**). Nonetheless, Arup considers this to be a low priority given the proximity of the Midland PSP.

Figure 10 – Proposed water pipe pathway alignment

4.2.4 Road Network (RN)

RN1 and RN2: Guildford Road Corridor

Guildford Road is a Primary Regional Road (PRR) reserved in the Metropolitan Region Scheme (MRS) under the care-and-control of Main Roads WA. It is understood that Main Roads WA is currently reviewing the design of the Guildford Road corridor between the Tonkin Highway and where it crosses the Swan River at Guildford.

Figure 11 shows the particular sections of and locations along Guildford Road where local access, amenity and active transport connectivity should be addressed as part of the design review. More particularly, the following key issues require consideration in the design review (see over):

- Guildford Road west of Lord Street has an existing, inefficient four-lane undivided cross-section. Performance improvements are likely following installation of a median and turning channels. It is in the Town's interests to see local network access retained in key locations including Pearson Street, Colstoun Road, Shackleton Street, Bridson Street and Kenny Street
- Guildford Road east of Lord Street is part of a strategic district road connection including Lord Street and Great Eastern Highway identified by both City of Swan and Main Roads WA. Nonetheless, this entire corridor is constrained by the limited capacity along Lord Street and through Guildford Town Centre, and the indirectness of the link (requiring turns at Guildford Road and Great Eastern Highway). Other sub-regional road links are more efficient and programmed for upgrades; particularly, Tonkin Highway and Great Eastern Highway Bypass
- Upgrades to Guildford Road may induce sub-regional traffic through Bassendean, compromise opportunities for transit-oriented development, which are intended to deliver on the Town's infill targets as per Perth @3.5 million, and impact on local accessibility and amenity including a large number of mature trees.

It should be noted that any collaboration with Main Roads WA in the current design review of Guildford Road is outside of the scope of this plan but is recommended as a priority for the Town going forward. Furthermore, as part of the design review it is recommened that the the Town request Main Roads WA to review relevant data in respect to at least the following:

- Land use assumptions including preservation and enhancement of access to Ashfield, Bassendean and Success Hill train stations commensurate with Bassendean's infill program
- Assumptions regarding public transport supply including Morley-Ellenbrook Line, Forrestfield Airport Link, station locations, patronage, and park-and-ride provisions
- Mode share assumptions
- Other network assumptions (e.g. upgrades to other strategic road infrastructure such as Guildford Road through Guildford Town Centre and the proposed Benara Road connection across Swan River supported by City of Swan)
- Calibration of ROM forecasts including with forecasts generated by STEM, which is being used to assess impacts associated with other major transport projects including MEL
- Micro-simulation and/or other tools used to assess the function of Guildford Road
- Assessment of alternative treatments for Guildford Road.

[This space has been left blank intentionally]

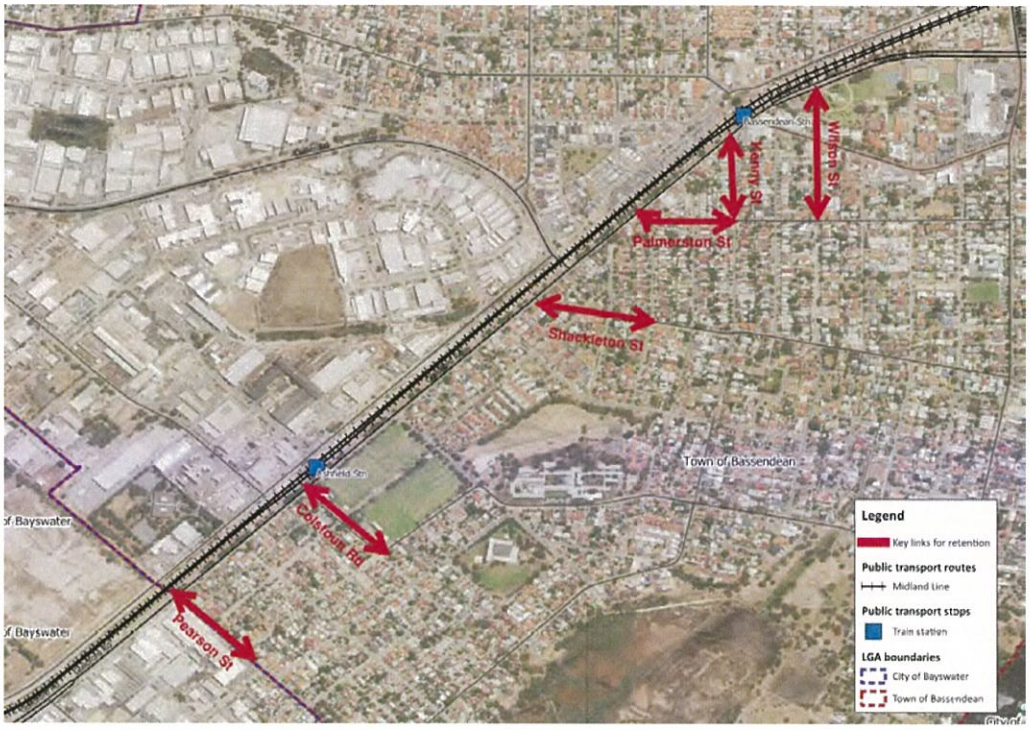


Figure 11 – Guildford Road corridor key locations and sections

RN7: Investigate deliverability of road underpass between Wilson Street and Second Avenue

Elected members voiced limited support for a potential new local street connection between Wilson Street and Second Avenue. The merits of such a street connection would include:

- Local connection across the rail and Guildford Road (potentially) as an alternative to Collier Road and Lord Street, which are arterials separated by 1.3 kilometres, providing access from the town centre to the northern catchment
- Local benefit with probability of limited use by district (through) traffic, which would be more likely to use existing arterials. This would limit impacts on existing residences

- Provision of an improved active transport connection compared to the existing subway (**AT4**).

Arup undertook a preliminary investigation of two underpass alternatives, including clearance of the rail, only and clearance of both the rail and Guildford Road (**Figure 12** and **Figure 13**). Preliminary feasibility analyses show:

1. Considerable regrading required of Guildford Road and likely signalisation of the new four-way junction of the underpass, Guildford Road and Wilson Street. On the north side of the tracks, significant regrading would be required also and either resumption of a number of properties or installation of significant retaining walls and revised property access provisions. Some of the works could be mitigated through altered configuration of Second Avenue and Railway Parade (e.g. partial road closures); however, the overall impacts of works are anticipated to outweigh benefits significantly
2. Impacts on Guildford Road would be avoided and there appears to be sufficient length of Wilson Street to ramp down to achieve vertical clearance; however, access to Guildford Road from Wilson Street would be compromised. Alternative access may be possible across the Wilson Street car-parking site or BIC Reserve, but these would impact on both existing land use and future redevelopment potential. Issues north of the rail line would be similar to option (1).

A bridge alternative was not considered to the same level of detail. The rail line is on a rise relative to Railway Parade and Guildford Road, requiring track-works and/ or higher span to achieve minimum clearance. Bridge ramps would also impact significantly on the local network and existing properties, yielding again benefits outweighed by costs.

Arup does not recommend pursuing **RN7** further at this time.

BASSENDEAN TRANSPORTATION STUDY - PROPOSED RAILWAY UNDERPASS - OPTION A

Figure 12 – Rail, only underpass preliminary concept

Figure 13 – Rail and Guildford Road underpass preliminary concept

RN10: Consider basis for reducing speed limit in town centre and on local roads to maximum 40 km/h

Various research projects have demonstrated road safety benefits associated with speed limit reductions in urban contexts and concluded that such reductions tend to have marginal impacts on travel times. In particular, 30-40 km/h speed limits on local streets have strong support in the literature and professionals in Perth are advocating for these lower limits based on sound engineering and road safety practice[4].

Nevertheless, speed limits under 50 km/h remain uncommon; even in urbanised areas. The 40 km/h speed limit on select streets in Perth CBD is one of the limited examples across the Perth metropolitan area.

Arup recommends that the Town of Bassendean discusses with Main Roads WA, the approval authority for speed controls on public roads, a pilot of a maximum 40 km/h limit on streets beginning with an area surrounding the town centre (**Figure 14**). The pilot will need to consider installing new speed limit signage together with adopting self-explaining street design and management principles to reinforce the reduced limit. Over time and contingent on driver conformity, the scheme could be broadened to local streets across the town beginning with the southern catchment.

Such a speed control scheme is commensurate with Council's strong pro-active transport and safe streets agenda.

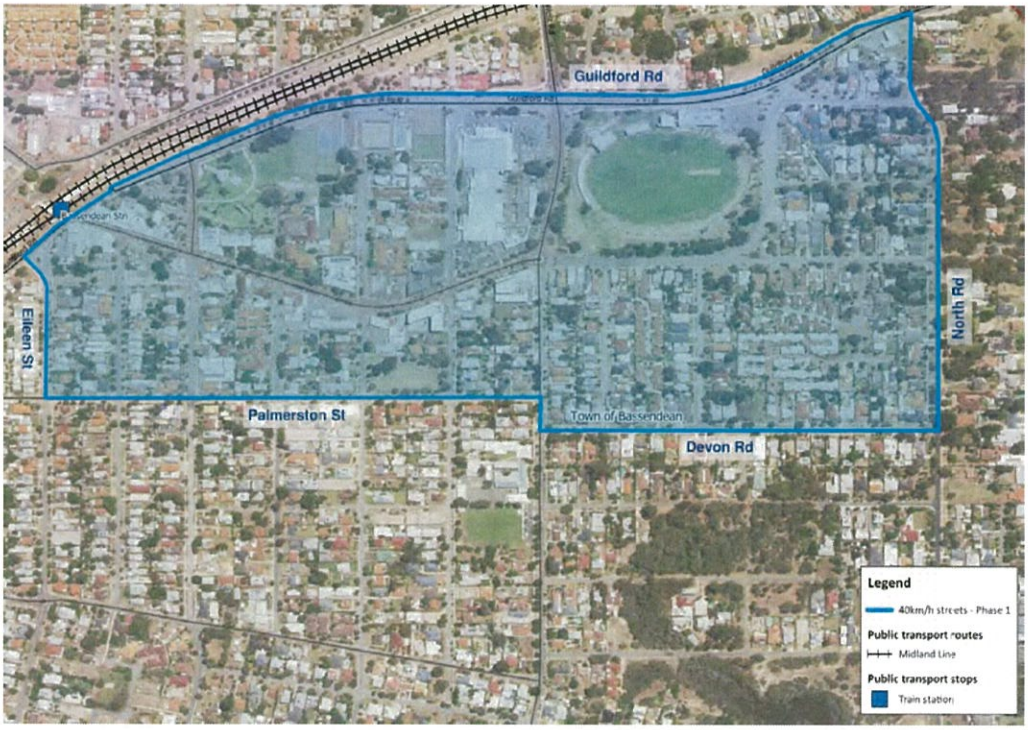


Figure 14 – Proposed pilot area for maximum 40 km/h speed zone trial

[4] Archer J., Fotheringham N., Symmons M. and Corben B. (2008) *The Impact of Lowered Speed Limits in Urban and Metropolitan Areas*, Monash University Accident Research Centre, January; http://vtpi.org/tdm/tdm105.htm; https://www.perthnow.com.au/news/traffic/30kmh-limit-will-save-lives-ng-b88906633z

LD2: Investigate redevelopment of the Bassendean park-and-ride site

The Town is committed to facilitating increased activity intensities in close proximity to the three train stations. Presently, the Bassendean station park-and-ride facility, provided at-grade, occupies prime land to the north of the station/ Midland line.

Arup conducted a first-principles assessment of potential park-and-ride demand reassignment from Bassendean station to new stations on the Morley-Ellenbrook Line as part of Phase 1 of the current project, based on the Minister's preferred alignment (actual alignment still to be resolved). While some reassigned demand could be replaced by future infill development in Bassendean, demand for park-and-ride bays at Bassendean station may reduce by up to 70% based on these calculations.

Part of the site (the northeast portion) is reserved Railway in the Metropolitan Region Scheme while the balance is zoned Urban. It is shown in the Bassendean Town Planning Scheme as road reserve. **Figure 15** shows the potential site area available for redevelopment if this scale of reduction eventuates. This does not allow for any modular or other structured parking solution in future, which could reduce park-and-ride land take as well.

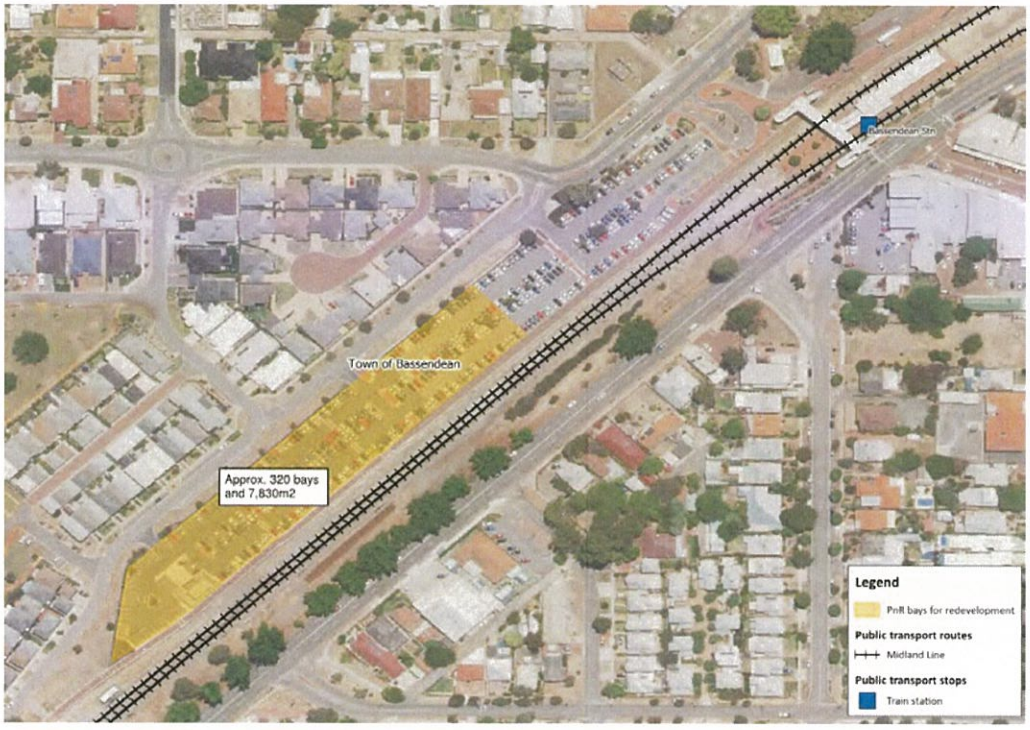


Figure 15 – Bassendean train station park-and-ride redevelopment option

4.3 Functional Road Hierarchy review

The review encompassed analyses of the form and function of collector and arterial roads (excepting Guildford Road – see **RN1** and **RN2**) in Bassendean, and assessed the merits of potential streetscape and capacity improvements, and reclassifications. The roads included in the review were (**Figure 16**):

Local Distributor

- Old Perth Road (Guildford Road to West Road)
- Wilson Street (Guildford Road to Old Perth Road)
- Palmerston Street
- Shackleton Street/Bridson Street
- West Road (north of Reid Street)
- Hardy Road
- Reid Street/Haig Street/Colstoun Road
- Ivanhoe Street
- Iolanthe Street (south of Walter Road East)

Distributor (A)

- Collier Road
- Morley Drive
- Lord Street
- Walter Road East

Existing street cross-sections, functional dynamics (based on Movement and Place principles[5]), and speed limits were compared to observed Vehicles Per Day (VPD), modelled base VPD generated by Main Roads WA's Regional Operations Model (ROM), and future (years 2021 and 2031) ROM forecasts. Furthermore, these data were compared to:

- FRH descriptive information
- Equivalent classifications and associated principles, and design and operational criteria in Liveable Neighbourhoods.

The full results of the analyses are shown in **Appendix C** and a summary of findings in **Figure 17**. In particular, the analysis provides support for re-treatment of Walter Road East and Lord Street south of Morley Drive (**RN3** and **RN9**), subject to more detailed traffic assessment and modelling, and supporting concept design.

Of the Local Distributor streets reviewed, only Iolanthe and Ivanhoe Streets are recommended for moderate improvement (where feasible, given road reserve constraints (see Figure 17 and Appendix C). The other Local Distributors, all

[5] Movement and Place principles relate to balancing street treatments and modal priorities based on mobility (e.g. through-traffic) and access (e.g. lot access for vehicles, plus walkability and cycling safety and amenity, and public transport provisions). More information is available through VicRoads: https://www.vicroads.vic.gov.au/traffic-and-road-use/traffic-management/smartroads.

located south of the railway line, have forms and functions consistent generally with the relevant criteria in the FRH.

They all (excepting Old Perth Road), feature two-lane, undivided cross-sections and direct property access. Furthermore, they provide limited through-traffic functions because of constraints imposed by Guildford Road and the Midland line, and Swan River, meaning they are unlikely to attract significant additional traffic volumes in future.

Old Perth Road has a median-divided two-lane cross-section and features embayed parking. It works well as a town centre street with its current design.

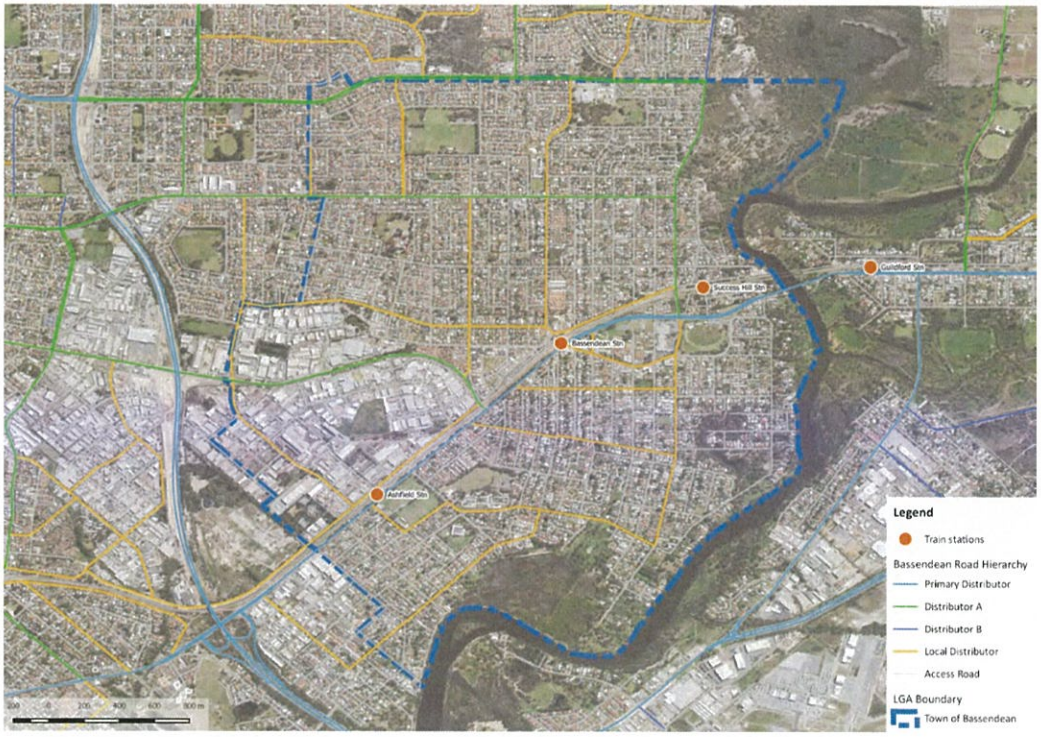


Figure 16 – Current road hierarchy: Town of Bassendean

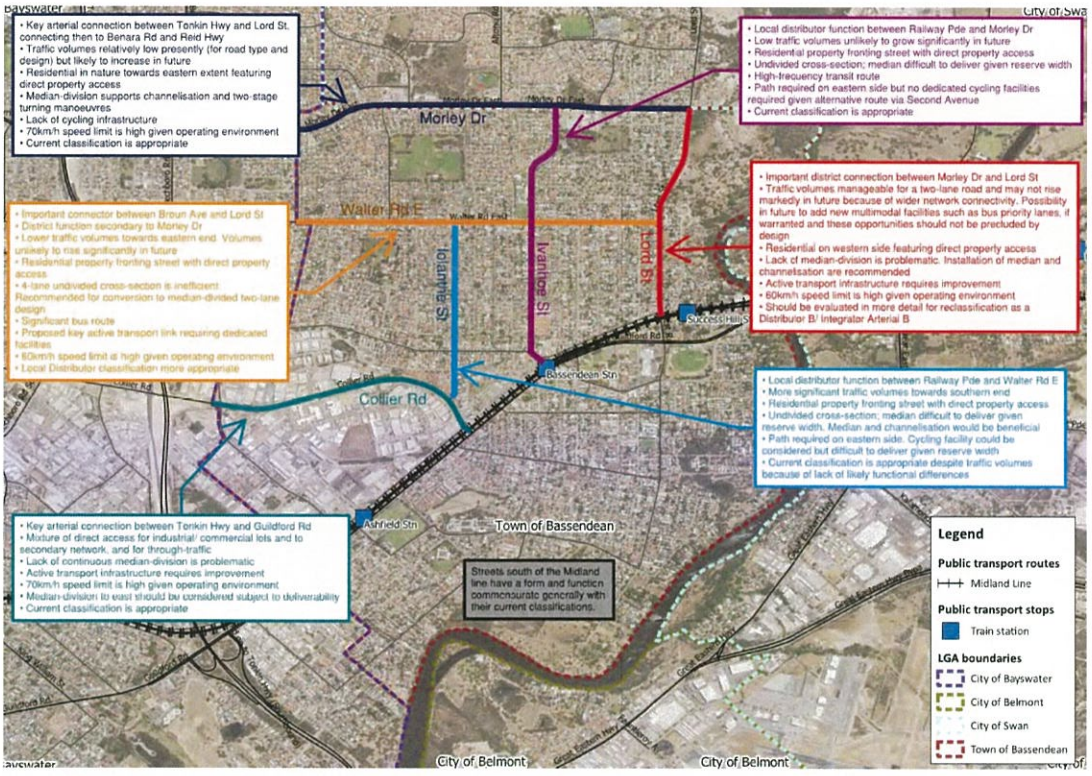


Figure 17 - Summary of FRH review

5 Phase 2 Consultation Summary

5.1 External government stakeholders

A second round of consultation with key stakeholders took place in late 2019. The purpose of these discussions was to provide an overview of the information that was collated as part of Phase 1 of the study but principally to solicit feedback (and get buy-in) on objectives, targets and draft actions. A summary of the key consultation outcomes are provided below.

5.1.1 Main Roads WA

Consultation included a session where Arup tabled the draft actions from the LITP for feedback and a session where representatives from MRWA briefed the Town on the Guildford Road planning review that they have undertaken.

MRWA did not provide support for any alternative to their own proposal for Guildford Road which comprises a five lane cross section (two lanes in each direction with right turn pockets at strategic locations). The cross section is largely consistent with the Metropolitan Region Scheme amendment adopted in the 1990s. A briefing was subsequently set up for the Town to gain a more fulsome understanding of the MRWA proposal for Guildford Road including a basis of their design and the process that would be followed should the plan be implemented. The plan is as yet unfunded and MRWA has advised that it is envisaged that the need and extent of further stakeholder consultation, including the general community, will be determined as part of the Western Australian Planning Commission's consideration of the review that MRWA has undertaken.

Other points of discussion with MRWA the form and function of Lord Street.

5.1.2 City of Swan

The City was generally supportive of the proposals tabled but clarified the following:

- Possible implications of RN1 Guildford Road on the Guildford Town Centre would be a sensitive community issue and community views have not yet been sought
- Noted Bassendean Council resolution in August 2018 that Lord Street (south of Morley Drive) will be retained as two lanes with median division. Noted that network design and operations (arterial links, particularly), need to balance local requirements with district and sub-regional functionality.

5.1.3 City of Bayswater

Consultation with the City of Bayswater primarily focused on the future form and function of Guildford Road (RN1 treatment). Their sentiment was that further

consideration should be given to additional channelisation at intersections and construction of a central median.

They outlined concerns regarding the impacts of the Tonkin Gap project (now a MRWA committed project) on the performance of the Guildford Road/ Tonkin Highway interchange. The City also noted the uncertainty regarding timing of level crossing removals and the final configuration of grade-separations. It was also acknowledged that heavy vehicle access and traffic impacts associated with Tonkin Highway Industrial Estate may need further consideration jointly between the City and the Town.

5.1.4 Department of Planning, Lands and Heritage

Th Department provided some feedback in relation to the provisional concepts for Lord Street (south of Morley Drive) and Walter Road East that were tabled. Specific feedback provided by officers was as follows:

- The reservation for Lord Street has been planned to accommodate a dual lane-dual carriageway road (4 lanes plus median) since the 1970s
- The City of Swan has planned it to this standard up to Morley Drive
- The WAPC has already acquired the land for the widening of ORR Lord Street (except for Lot 115 & Lot 41 Lord St and corner truncations on the western side at lots 14 Railway Pde, 23 & 53 Anzac Tce)
- Lord Street (Railway Parade to Morley Drive) is identified as a High priority transit route in the *Perth and Peel @3.5million Central regional planning framework*
- Lord Street (north of Morley Drive) is identified as a high frequency transit route in the *Perth and Peel @3.5million North-East sub-regional planning framework*
- We support and have provided sufficient width for the provision of trees within the road reserve
- We requested that the road is constructed to meet the Other Regional Road function
- The City should consider the needs of all road users when constructing the road.

DPLH is of the view that detailed modelling and design assessments are required to test these concepts further, and that the needs of all road users (and potential future-proofing requirements), must be included in these assessments. Such assessments may be contemplated as steps following the Bassendean LITP.

5.1.5 PTA/ METRONET

A summary of the key outcomes from discussions with PTA/ METRONET is as follows:

- Success Hill station: acknowledged the Town's position to support the station (despite the low patronage levels) and that any investigations/plans to improve access to the station should be done collaboratively with PTA/ METRONET
- Plan for extended platforms at Bassendean train station and potential active transport link aligned with Park Lane: General concept is supported. Metronet is looking at platform extensions as part of line upgrades, supporting longer train sets and all-stops operations. Potential option for a second passenger entrance to the station noted. Future work will need to include consideration of station operations, particularly the "closed" (i.e. SmartRider fare-gated) platforms and associated infrastructure and staffing costs etc.
- Park-and-ride supply (LD2) needs protection based on requirements for the network. The MEL project may create opportunities for some site redevelopment in an integrated way and PTA/ Metronet is willing to work with the Town to contemplate these.
- The PTA will be considering potential treatment of the rail line at Collier Road in the next 12 months as part of its planning for removing level crossings on the network. This will consider a range of treatments (raising/ lowering rail or a hybrid solution).

5.1.6 Transperth

Transperth advised that it supports future work initiated by the Town that assesses intersection performance at Morley Drive/ Ivanhoe Street, but it is not considered a high priority. Transperth is supportive generally of transit-oriented development and willing to consider a development option integrating structured parking solutions but notes that the impacts of the MEL project on park and ride demand are yet unknown and demand is likely to remain unchanged for the short to medium term.

Difficulties in providing more direct access to Bassendean train station because of infrastructure constraints were acknowledged; however, Transperth supports generally improvements to pedestrians and cyclist infrastructure connecting from the southern side of the rail.

5.2 Bassendean community

A second round of community consultation is planned mid-year 2019 to test views on the the short-listed strategies and actions. While the strategies and actions have been informed by the first round of consultation with the community they have also been shaped by the technical analysis, engagement with stakeholders and feedback from elected members at the Town. It is important to understand community views before this strategy is adopted by the Town.

The Town is currently undertaking consultation as part of the Local Planning Strategy and while transport views could be raised through this process, it is not the intention that this consultation will test the specific transport strategies and action. Accordingly, it is proposed that the second round of engagement will comprise:

- Setting up the 'Your Say' online engagement tool on the Council's website so that the draft strategy (including executive summary and implementation plan) can be viewed and commented on.
- Hosting a two-day community information display where the community can drop in to view a display of plans and provide feedback. This is planned to take place on a weekday and weekend day in June.

Following receipt of comments, the plan will be finalised and able to be endorsed by the Town.

6 Summary, Implementation Programme and Conclusions

The implementation plan will be finalised following a final round of community engagement. The draft plan of actions is listed below.

	Proposal		Responsibility	Priority
Parking	P1	Preparation of town-wide parking strategy to replace 2011 plan	Town of Bassendean	Short
	P2	Supply pilot electric vehicle recharging infrastructure	Town of Bassendean/Public Transport Authority	Short
Public Transport	PT1	Improve pedestrian and cyclist access to Success Hill train station	Town of Bassendean/Public Transport Authority/Main Roads WA	Medium
	PT2	Plan for extended platforms at Bassendean train station and potential active transport link aligned with Park Lane	Public Transport Authority/ Transperth	Medium
	PT6	Channelise Ivanhoe Street on approach to Morley Drive to mitigate delays for buses	Town of Bassendean	Medium
	PT7	Advocate for sinking of Midland line to facilitate at-grade connectivity and new development opportunities in the vicinity of Bassendean station	METRONET/Public Transport Authority/Town of Bassendean	Short (ongoing)
Active Transport	AT1	Design and deliver improved active transport link along Second Avenue between Railway Parade and Walter Road East, according with Town Bike Plan and Station Access Strategy intent	Town of Bassendean/Department of Transport	Short
	AT2	Advocate/support redesign of Ashfield and Success Hill pedestrian bridges to achieve DDA compliance	Public Transport Authority/Town of Bassendean	Medium
	AT4	Assess current design of Wilson Street subway and consider for replacement/ closure	Public Transport Authority/ Department of Transport/ Town of Bassendean	Short
	AT8	Create Town of Bassendean micro-funding account for small active transport improvements	Town of Bassendean	Short

	Proposal		Responsibility	Priority
Road network	RN1	Guildford Road corridor design and operations (western Town boundary to West Road): • Seek to collaborate with Main Roads WA to develop new road cross-section that balances local access needs and amenity, transit-oriented development, multimodal safety and comfort, and strategic network objectives • Signalisation of Colstoun Road/ Guildford Road intersection • Advocate for retention of key local street links under suitable traffic management	WAPC/ Main Roads WA/Town of Bassendean	Short (ongoing advocacy)
	RN2	Guildford Road corridor design and operations (West Road to Swan River): • Consult with Main Roads WA regarding road cross-section, bridge structure over Swan River and intersection treatment at Guildford Road/North Road/Earlsferry Court	Main Roads WA/Town of Bassendean	Short
	RN3	Convert Walter Road East from four travel lanes to two with median division	Town of Bassendean/Department of Planning, Lands and Heritage	Medium
	RN5	Advocate for traffic signal and boom gate synchronisation at Collier Road/Guildford Road	Main Roads WA/Public Transport Authority	Short– interim measure ahead of more suitable grade-separation treatment as part of METRONET programme
	RN6	Assess potential to signalise intersection of Railway Parade/Lord Street	Town of Bassendean/Main Roads WA	Short – engineering feasibility and modelling required to ascertain impacts with a view to deciding whether this proposal should be adopted

	Proposal		Responsibility	Priority
	RN7	Investigate deliverability of road underpass between Wilson Street and Second Avenue	Town of Bassendean	Short – engineering feasibility and modelling required to ascertain impacts with a view to deciding whether this proposal should be adopted
	RN8	Investigate converting junction of Walter Road East/Lord Street/Seventh Avenue to four-way signalised control with conversion of Success Road access to left-in/left-out	Town of Bassendean/Main Roads WA	Short – engineering feasibility and modelling required to ascertain impacts with a view to deciding whether this proposal should be adopted
	RN9	Convert Lord Street south of Morley Drive to boulevard with median division	Town of Bassendean/Department of Planning, Lands and Heritage	Short: planning studies and analysis Medium/ Long: implementation/ works
	RN10	Consider basis for reducing speed limit in town centre and on local roads to maximum 40 km/h	Town of Bassendean/Main Roads WA	Short
	RN11	Review and update Town LATM and Bike Plans	Town of Bassendean	Short
Land Development	**LD1**	Focus development/ uplift around main transit assets including Ashfield, Bassendean and Success Hill train stations, and major bus routes including Ivanhoe Street and Walter Road East	Town of Bassendean/State Government	Short
	LD2	Investigate mixed-use redevelopment of the Bassendean park-and-ride site contingent on agreement with Public Transport Authority regarding possible reduction in park-and-ride demand associated with Morley-Ellenbrook	Public Transport Authority/Town of Bassendean	Medium
Governme	**GP1**	Establish new fleet procurement protocols in line with transport vision for Bassendean	Town of Bassendean	Short

6.1 Limitations

The Bassendean Transport Study was commissioned as a strategic review of the existing multimodal transport and access, and parking context in the LGA and across boundaries to identify SWOT, and define thereafter strategic actions and priorities to support the aims of the project (see **Section 1**). Project scope did not include traffic modelling excepting review of base year network metrics (calibration data, traffic forecasts and volume-to-capacity ratios) and base case forecasts for 2021 and 2031 produced by ROM. Provision was made for scenario-testing in ROM but the long- and short-listing process of strategies and actions did not identify any variables suitable to evaluate at this resolution.

In addition, scope did not include provision for engineering feasibility assessments, full concept designs or cost estimation. These are activities pending to advance project recommendations from proposal to delivery.

Appendix A

External Stakeholder meeting notes

Meeting Notes

ARUP

Project title	Bassendean Transport Study	Job number	260965-00
Meeting name and number	Stakeholder meeting - Transperth / 6	File reference	
Location	Transperth, Public Transport Centre, East Perth	Time and date	1330 25 October 2018
Purpose of meeting	Review and discussion regarding draft Bassendean LITP initiatives		
Present	Gary Merritt (GM), Transperth Lom Piggott (LP), Transperth Ryan Falconer (RF), Arup		
Apologies	N/A		
Circulation	Those present Anthony Dowling, Town of Bassendean Danya Mullins, Arup		

Draft LITP proposal	Comment
PT6 – Channelise Ivanhoe Street on approach to Morley Drive to mitigate delays for buses	Ivanhoe Street will remain an important route for Transperth services for the foreseeable future. Transperth notes that the Ivanhoe Street approach to Morley Drive is less critical than the Altone Road approach from the north (the latter features school traffic and right-turning demands have more impact on left-turning buses). Transperth supports future work initiated by the Town that assesses intersection performance at Morley Drive/ Ivanhoe Street, but it is not considered a high priority.
LD2 – Investigate mixed-use redevelopment of the Bassendean park-and-ride site contingent on agreement with Public Transport Authority regarding possible reduction in park-and-ride demand associated with Morley-Ellenbrook	Transperth emphasises the importance of park-and-ride to support access to rail, which is unlikely to diminish in the short-medium term, based on network planning and forecasting completed by the State Government. Potential impacts of Morley-Ellenbrook rail on park-and-ride demand remain unclear and site redevelopment opportunities will need to be reconsidered once alignment and station locations (as well as station access provisions) are committed and funded.

Prepared by	Ryan Falconer
Date of circulation	30 October 2018
Date of next meeting	Not applicable

Meeting Notes

Project title	Job number	Date of Meeting
Bassendean Transport Study	260965-00	25 October 2018

	Transperth is supportive generally of transit-oriented development and willing to consider a development option integrating structured parking solutions. Further dialogue is encouraged with the Town on this matter.
General	Transperth focuses on preservation and enhancement of the network, and is amenable to local initiatives that respect this objective. Noted that bus services accessing the southern catchment of Bassendean (55 service) are unlikely to increase in the foreseeable future because of ridership potential. Difficulties are acknowledged providing more direct access to Bassendean train station because of infrastructure constraints; however, Transperth supports generally improvements to pedestrians and cyclist infrastructure connecting from the southern side of the rail.

Meeting Notes

ARUP

Project title	Bassendean Transport Study	Job number	260965-00
Meeting name and number	Stakeholder meeting – City of Bayswater / 2	File reference	
Location	City of Bayswater, 61 Broun Avenue, Morley	Time and date	1000 26 October 2018
Purpose of meeting	Review and discussion regarding draft Bassendean LITP initiatives		
Present	Matt Turner (MT), City of Bayswater Bryce Coelho (BC), City of Bayswater Ryan Falconer (RF), Arup		
Apologies	N/A		
Circulation	Those present Anthony Dowling (AD), Town of Bassendean Danya Mullins (DM), Arup		

Notes issued following receipt of additional comments from City on 30/10/18.

Draft LITP proposal	Comment
RN1 Guildford Road corridor design and operations (western Town boundary to West Road)	Consideration should be given to further channelization at intersections and construction of a central median.
General	Noted that Main Roads WA's upgrade to Tonkin Highway (the 'Tonkin Gap' project), will impact on the Tonkin/ Guildford interchange. There are existing traffic queuing issues in this location, and queues will be affected by the project. The City notes uncertainty regarding timing of level crossing removals and the final configuration of grade-separations. Heavy vehicle access and traffic impacts associated with Tonkin Highway Industrial Estate may need further consideration.

Prepared by	Ryan Falconer
Date of circulation	30 October 2018
Date of next meeting	Not applicable

Meeting Notes

ARUP

Project title	Bassendean Transport Study	Job number	260965-00
Meeting name and number	Stakeholder meeting – Public Transport Authority/ Metronet / 4	File reference	
Location	Public Transport Centre, East Perth	Time and date	1400 26 October 2018
Purpose of meeting	Review and discussion regarding draft Bassendean LITP initiatives		
Present	Owen Thomas (OT), Public Transport Authority Annabelle Fisher (AF), Public Transport Authority Ryan Falconer (RF), Arup		
Apologies	N/A		
Circulation	Those present Anthony Dowling (AD), Town of Bassendean Danya Mullins (DM), Arup		

Draft LITP proposal	Comment
PT1 – Improve pedestrian and cyclist access to Success Hill train station	Metronet/ PTA noted that Success Hill is a low patronage station with its future role requiring further consideration. This includes cost implications associated with station upgrades (including future Midland line platform extensions and related upgrades) and service frequencies in future (when all-stopping train operations are implemented on the Midland line). It is important that Metronet/ PTA are party to further discussion and investigations that the Town contemplates supporting station access.
PT2 – Plan for extended platforms at Bassendean train station and potential active transport link aligned with Park Lane	General concept is supported. Metronet is looking at platform extensions as part of line upgrades, supporting longer train sets and all-stops operations. Potential option for a second passenger entrance to the station noted. Future work will need to include consideration of station operations, particularly the "closed" (i.e. SmartRider fare-gated) platforms and associated infrastructure and staffing costs etc.
LD2 – Investigate mixed-use redevelopment of the Bassendean park-and-ride site contingent on agreement with Public	Park-and-ride supply needs protection based on requirements for the network. The MEL project may create opportunities for some site redevelopment and PTA/ Metronet is willing to work with the Town to contemplate these. Park-and-ride requirements may be integrated with the development.

Prepared by	Ryan Falconer
Date of circulation	30 October 2018
Date of next meeting	Not applicable

Transport Authority regarding possible reduction in park-and-ride demand associated with Morley-Ellenbrook	
PT7 – Advocate for sinking of Midland line to facilitate at-grade connectivity and new development opportunities in the vicinity of Bassendean station	The PTA will be considering potential treatment of the rail line at Collier Road in the next 12 months as part of its planning for removing level crossings on the network. The relative opportunities and difficulties of raising and lowering rail will be considered, as will alternatives such as raising or sinking road and hybrid combinations of the two. Noted that impacts on variables such as heritage structures and costs will require assessment as part of optioneering. Also noted that the viability of undergrounding the rail network at station locations requires significant associated benefits to demonstrate value for money and offset capital and ongoing increases in operating costs. This is difficult to justify in traditional urban areas of Perth and is generally not a priority for the PTA.

Meeting Notes

ARUP

Project title	Bassendean Transport Study	Job number	260965-00
Meeting name and number	Stakeholder meeting – City of Swan / 5	File reference	
Location	2 Midland Square, Midland	Time and date	0900 30 October 2018
Purpose of meeting	Review and discussion regarding draft Bassendean LITP initiatives		
Present	Paul Nuttall (PN), City of Swan Aaron MacNish (AM), City of Swan Ryan Falconer (RF), Arup		
Apologies	Leon van der Linde (LL), City of Swan		
Circulation	Those present Anthony Dowling (AD), Town of Bassendean Danya Mullins (DM), Arup		

Draft LITP proposal	Comment
AT6 Convert water pipe over Swan River north of Guildford Road to active transport crossing	Supported by City of Swan. Noted that a ramping structure would be required on the eastern side of the river to address level changes.
RN1 Guildford Road corridor design and operations (western Town boundary to West Road)	Noted that possible impacts on Guildford Town Centre have not yet been discussed with local community and sensitivity is required regarding how concepts are presented and the community is involved.
RN9 Convert Lord Street south of Morley Drive to boulevard with median division	Noted Bassendean Council resolution in August 2018 that Lord Street (south of Morley Drive) will be retained as two lanes with median division. Advised that the Department for Planning, Lands and Heritage is a key stakeholder in the design and operations of Lord Street given its reservation. Noted that network design and operations (arterial links, particularly), need to balance local requirements with district and sub-regional functionality.
General	City of Swan supportive otherwise of proposed initiatives.

Prepared by	Ryan Falconer
Date of circulation	30 October 2018
Date of next meeting	Not applicable

Meeting Notes

ARUP

Project title	Bassendean Transport Study	Job number	260965-00
Meeting name and number	Stakeholder meeting – Department of Planning, Lands and Heritage / 6	File reference	
Location	Room 140-5.06, 140 William Street	Time and date	1300 16 November 2018
Purpose of meeting	Review and discussion regarding draft Bassendean LITP initiatives – Lord Street and Walter Road East		
Present	Damien Martin (DM), DPLH Shanthi Golestani (SG), DPLH Parwez Jahmeerbacus (PJ), DPLH Anthony Dowling (AD), Town of Bassendean Ryan Falconer (RF), Arup		
Apologies	Simon Stewert-Dawkins (SS), Town of Bassendean		
Circulation	Those present Danya Mullins (DM), Arup		

On 16 November 2018, AD and RF briefed DPLH staff in attendance on the basis for and progress on development of a Local Integrated Transport Plan (LITP) for the Town of Bassendean. The following matters were emphasised:

1. The LITP will inform a review of the Town's current Local Planning Strategy
2. Following a Strengths, Weaknesses, Opportunities and Threats (SWOT) assessment of the multimodal transport environment in Bassendean (Phase 1 of work, completed in July), a long-list of transport initiatives was developed by Arup in consultation with Council officers and subsequently, this list was presented to and discussed with elected members. The initiatives discussed in the current, work-in-progress LITP reflects feedback from elected members
3. The initiatives include proposals for Lord Street (south of Morley Drive) and Walter Road East (both Other Regional Roads) to be assessed further for potential reclassification as lower-order roads within the Functional Road Hierarchy given their current and potential future functions within the network, and for consideration to be given to changing their existing cross-sections. Potential alternative cross-sections may feature single traffic lanes, tree-lined medians and channelization in appropriate locations, providing for more active transport-friendly environments, slower travel speeds and helping to facilitate adjoining land use densification
4. Arup noted that these are provisional concepts, only developed within the scope of the current study and they are subject to subsequent and sufficiently-detailed modelling, analysis and design assessments. Nevertheless, the concepts are informed by network studies undertaken by

Prepared by	Ryan Falconer
Date of circulation	19 November 2018
Date of next meeting	To be determined

others (e.g. Cardno on behalf of City of Swan) and existing design constraints such as intersection treatments and lack of median division along Walter Road East

5. AD referred to initial concept designs for alternative two- and four-lane cross-sections for Lord Street prepared previously by City of Swan (links to these were provide to DPLH following the meeting)
6. DPLH acknowledged the proposals but advised that further, more detailed assessment would be required to justify any changes. In addition, staff advised that needs of all road users require consideration as do future-proofing requirements for increasing capacity and/or transit prioritisation measures as part of further work
7. It was agreed that the Town should continue to engage with the Department to discuss these concepts with a view to agreeing the nature of additional assessment.

Appendix B

Final Plans presented for community consultation

B1

Plans to be included following endorsement by Council.

Appendix C

Functional Road Hierarchy Review Analysis

	Road	Morley Dr	Lord St	Walter Rd East	Collier Rd		Ivanhoe St	Iolanthe Street
					Section outside ToB boundary	Within ToB boundary		
Operating environment	Lanes	4	2	4	4		2	2
	Divided/ undivided	Divided	Undivided	Undivided (short sections of median)	Divided	Undivided (short sections of median)	Undivided	Undivided
	Channelisation	Yes at major intersections	At Walter Road E and Guildford Road, only	No	Yes at major intersections		Only at Walter Road E	Only at Collier Road
	Road reserve width (m)	33	17.7	20	30.1		20.1	20.1
	Cycling/ path facilities	Footpath both sides	Footpath both sides south of Walter Road E. Footpath west side, only north of Walter Road E	Footpaths both sides	Footpath on both sides	Shared path on north side. Isolated sections of footpath on south side	Footpath on western side	Footpath on western side
	On-street parking	No	No	No	No	No	No	No
	Speed limit (km/h)	70	60	60	70		50	50
	Bus operations (buses per day)	72 (Altone Rd to Ivanhoe St), 19 (Gallagher St to Lord St)	49 (Morley Dr to Walter Rd E), 16 (Walter Rd E to Railway Pde)	25 (ToB boundary to Penzance St), 33 (Ivanhoe St to Lord St)	84 (immediately east of ToB boundary)	84 (ToB boundary to Iolanthe St)	116 (Morley Dr to Walter Rd E), 149 (Walter Rd E to Railway Pde)	N/A
	Adjoining land use types	Residential	Residential	Residential	Industrial/ light industrial, medium density residential	Industrial/ light industrial	Residential, public purpose	Residential, parks and recreation
Weekday VPD	Observed (avg)	11,950	12,100	12,567	13,100	9,600	2,487	8,690
	Forecast ROM (avg)	21,750	14,600	17,700	21,100	15,100	N/A	16,100
	Difference	9,800	2,500	5,133	8,000	5,500	N/A	7,410
	% difference (forecast vs. observed)	82%	21%	41%	61%	57%	N/A	85%
Main Roads Functional Road Hierarchy (FRH)	Category	District Distributor A (DA)					Local Distributor (LD)	
	Predominant purpose	High capacity traffic movements between industrial, commercial and residential areas					Movements of traffic within local areas and connect access roads to higher order distributors	
	Indicative traffic volume (AADT)	> 8,000					< 6,000	
	Recommended operating speed (km/h)	60-80					50-60 (desired speed for built-up area)	
Liveable Neighbourhoods: Movement Network	Category (corresponding to FRH)	Integrator A (IA)					Neighbourhood Connector (NC)	
	Indicative function	Form a finer grain of routes than the primary distributors, with frequent connections to local streets. Low percentage of trucks. Usually bus routes. On-street bike lanes and separate dual-use paths are usually required.					Streets with mostly residential frontage that typically provide the lower-order sub-arterial network. These streets service and link neighbourhoods and activity centres	
	Indicative volume range (vpd)	15,000 - 35,000 (outside centres)					< 7,000 (NC-A), < 3,000 (NC-B)	
	Max speed (km/h)	70 (outside centres)					50	
	Indicative street reserve width (m)	53.6					27.6 (NC-A), 21.6 (NC-B)	
	Recommended functional characteristics	2 x 8.3 (incl. bike lane) and 2 x 5.5 service street with parking					2 x 7.3 incl. parking, on-street bike lane, median plus shared path on one verge and footpath on the other side (NC-A) 11.6 including parking, plus shared path on one verge (NC-B)	
Analysis	Compliance with FRH criteria for current categories	DA-type roads are preferred not to have residential access. Morley Dr exhibits significant residential frontage access along its full length.	DA-type roads are preferred not to have residential access - Lord St exhibits significant frontage access along its length in the Town of Bassendean. Lord St serves a mix of functions, including as a distributor of traffic on to the local network, and for moderate district flows. Contraints on widening and limitations to further district traffic attraction given constraints elsewhere on the arterial network to the south, mean there is merit to improving the multimodal evironment and facilitating higher densities south of Morley Dr. Lord Street still likely to retain function for district traffic; however, reclassification as a Distributor B should be considered given its other existing and intended roles.	DA-type roads are preferred not to have residential access - Walter Rd E exhibits significant frontage access along its length in the Town of Bassendean. Walter Rd E serves a mix of functions, including as a distributor of traffic on to the local network, and for limited district flows; especially towards its eastern end. Intersection treatments (e.g. at Iolanthe St) restrict functional capacity of the road. The existing cross-section (four-lane undivided) creates some weaving issues and delays mid-block, and is suboptimal for active transport users. Overall, Morley Dr to the north is a more significant east-west link in the network. Walter Road E is an existing, important bus route and is likely to remain so in the longer-term. These factors require reconsideration of the current FRH classification.	Collier Rd has important functions for both industrial lot access and district traffic flows. While observed volumes are manageable, Collier Rd is one of the limited arterial connections across the rail to Guildford Rd and to Tonkin Hwy. The FRH criteria specify that measures for the control and safety of pedestrians should be implemented on DA-type roads: e.g. pedestrian signals were warranted. Currently, no footpath exists along the length of the south side of Collier Rd within the Town, and there is a lack of appropriate road crossing facilites between Jackson St and Guildford Road. Existing classification should be preserved.	LD-type streets operate generally as feeder routes between local access streets and arterials, and make good provisions for direct lot access and multimodal travel. Ivanhoe Street exhibits some of these characteristics, lacking cycling infrastructure and footpaths on both sides. It is an important bus route and is likely to remain so in the longer-term. Existing classification should be preserved.	LD-type streets operate generally as feeder routes between local access streets and arterials, and make good provisions for direct lot access and multimodal travel. The volume of vehicles using the street is higher than both indicative FRH and LN flows although these higher volumes are exhibited south of Anzac Tce. Iolanthe St is a relatively significant north-south route connecting Collier Rd and Walter Rd E, enabling traffic to travel between residential areas and the commercial/ industrial area in the vicinity of Collier Rd. Reclassification of Iolanthe Street as a DA could be considered; however, the functional impact of doing so may be minor given the existing direct property access permitted and limited road reserve width.
	Discussion regarding preferred form and function	The form of Morley Dr reflects generally its classification and intended function under the FRH. This corresponds to guidance set out in LN for Integrator A-type roads. Vehicular traffic along the road is approximately 25% lower than the indicative range for IA roads as per LN, but is anticipated to grow given infrastructure projects such as the Lord Street upgrade (Benara to Reid) and Caversham Link (Benara to Morrison). It is thus preferable Morley Dr is retained as a higher-order road. Improved cycling facilities are recommended given current absence of provisions. Median-division is recommended.	Lord St is not forecast to attract significantly more traffic in the medium- long-term. Volumes are anticipated to be within the carrying capacity of a two-lane divided road. The existing 60km/h speed limit, daily traffic volumes, level of frontage access and mix of functions mean reclassification as a District Distributor B should be considered, corresponding to an Integrator B in LN. This would also support some additional residential density along the corridor in reflection of the Town's response to Perth @ 3.5M. Median-division and improved channelisation, and off-street cycling infrastructure are recommended. Any design response should retain the opportunity for additional multimodal facilities in future such as bus priority measures.	Modelled traffic volumes are around 40% higher than observed for Walter Rd E, with observed values falling comfortably within the capacity of a two-lane road. ROM forecasts for 2021 and 2031 show limited growth along the route. The low observed values, significant frontage access and mix of functions indicate that a Distributor B functional classification should be considered. This would also support additional density along the corridor, which is a key feature of the Town's response to Perth @ 3.5M. Median-division and improved channelisation, and dedicated cycling infrastructure are recommended.	The form of Collier Rd is consistent generally with its existing and intended function, and therefore its classification under the FRH. In order to better align with the corresponding principles for an IA road in LN and to meet the criteria for DA roads in the FRH, improved pedestrian provisions are recommended, including protected pedestrian crossings and a footpath along the south side of the road. Median-division is recommended (subject to impacts on the overall cross-section, landscaping and utilities). 70kph speed limit is high through this environment.	The low observed traffic volumes and local access role of Ivanhoe St demonstrate that its current classification is appropriate. This would also support additional density along the corridor, which is a key feature of the Town's response to Perth @ 3.5M. In order to better comply with FRH criteria and LN principles, median division should be considered, although the width of the road reserve limits the potential width. Second Avenue to the east is proposed as an alternative cycling route so dedicated cycling facilities are not recommended beyond a new, minimum two-metre (shared) path on the eastern side. Any new facilities are subject to review of potential impacts on the overall cross-section, landscaping and utilities.	Iolanthe St has a mix of functions, including for local access, despite carrying relatively high volumes towards Collier Rd. Limitations on capacity elsewhere on the local network, including Walter Rd E may mean fairly limited growth in volumes over time. While Iolanthe St exhibits some features of a DA-type street, the constrained road reserve would render difficult upgrades to improve turning opportunities and capacity, generally. Nevertheless, improved signage, medians/ island refuges for pedestrians, and a footpath on the east side of the road are recommended subject to review of potential impacts on the overall cross-section, landscaping and utilities.

ATTACHMENT NO. 2

Dogs Local Law

Date of Submission	Screen Name	Submission	Comment
Feb 13 19 11:54:15 pm	Gogo22	Agreed	Nil
Feb 15 19 09:42:32 am	Smc	1. This entire proposal is flawed. If a dog wants to escape a property. A dog will find a way to escape. People should not have to spend thousands of dollars to build a 8 foot tall fence around their house. Punishing owners with penalties will not help. Fix the underlying issue. Make people attend dog training. Puppy school and dog school. Have more dog training.	As the suggested inclusions/amendments are not permissible under Local Law provisions, the submission was deemed to not warrant amendment to the proposed Local Law.
Mar 04 19 08:04:30 pm	PRCFMH	Noting that "Part 4 - Dogs in Public Places" has been removed, where (i.e. in what literature) and how (i.e. by means of notifying residences) will the following be defined: 1. dog exercise areas? 2. reserves where dogs are prohibited absolutely? 3. reserves where dogs are allowed but on leash only? A related document that requires updating is the current information sheet "Ranger Services Information Sheet RS1 – Dog Behaviour in a Public Space and Dog Exercise Areas" (RS1). This document shows of the fourteen reserves listed, Point Reserve is the only reserve where dogs are prohibited. Some dog owners disregard Point Reserve as a dog prohibited reserve – this is an unequivocal fact that the council is aware of. Thirteen of the fourteen reserves in the Town of Bassendean are available for dogs and their owners to exercise, on leash or otherwise – this equates to about 93%. This is a gross misrepresentation of the population of Bassendean. Residents who wish to enjoy the reserves in Bassendean without interference from dogs are disadvantaged and underrepresented. The additional improvement to be made to RS1 is the confusion around Sandy Beach Reserve. This reserve, arguably our premier reserve, remarkably is not mentioned in the document. I now understand that it is an on leash only reserve however most dog owners who utilise the reserve disregard this fact which is clearly supported by visiting in the morning or late afternoon where dogs are running free through the barbeque area and playgrounds etc. This reserve should be available to all community members and resolved as a dog prohibited reserve.	The content of this submission is in relation to the removal of 'Dog Exercise Areas' from the Local Law which has been done as it is no longer a process of Local Law, rather a Council Decision. This submission was assessed and it was deemed to not warrant amendment to the proposed Local Law as the issue raised has been amended under the Dog Act and is not provided for under the Local Law as per State Legislation.

Town of Bassendean Dogs Local Law 2018

1. **Enacting clause**
   Dog local laws are enacted using the powers granted by the *Dog Act 1976* and the *Local Government Act 1995.*

   It is suggested that both the *Local Government Act 1995* and *Dog Act 1976* should be mentioned in the enacting clause. The Local Government Act should also be mentioned in the title clause, in the line between "Dog Act 1976" and "Town of Bassendean".

2. **Penalty for dog excrement offence (Clause 2.3)**
   Clause 3.2(2) provides that the unmodified penalty for every offence in the local law is $5,000. This means it is possible for a person to receive a penalty of $5,000 if they fail to clean up after their dog.

   While the Dog Act permits penalties of up to $5,000 for an offence, it is suggested that a lower penalty be imposed for clause 2.3. The standard penalties in the WALGA model are $1,000 and a modified penalty of $100.

   It is suggested that the simplest way to resolve the matter is to add a subclause to clause 2.3 stating:

   (4) Notwithstanding clause 3.2, the penalty for an offence under this clause is $1,000.

3. **Minor edits**
   The following minor edits are suggested:

   - Table to contents -
     - It is suggested that the page numbers be removed from the contents page. These numbers will clash with the existing page system in the *Government Gazette*. As long as the contents page lists the clause numbers and clause titles, this should provide sufficient guidance to readers.
     - An entry for clause 1.4 is missing.
     - "Schedule 1" should not be in italics.
   - Clause 1.1 – The citation should be in italics.
   - Clause 1.2 – The citation of the repealed local law should be in italics as well as the words "Government Gazette".
   - Clause 1.3 –
     - Remove quote marks from definitions.
     - Citations should be bold and in italics.
     - In the definition for ***district*** change "the Local Government of the Town of Bassendean" to "the district of the local government" or alternatively "the district of the Town of Bassendean".
   - Clause 2.1 – At subclause (2) change the word 'sub clause' to 'subclause'.
   - Clause 3.1 –
     - Remove quote marks from definitions.
     - At the definition of ***infringement notice***, change 'clause 3.3' to read 'clause 3.4'.

- Clause 3.2 – At subclause (2) change the word 'convictions' to 'conviction'.
- Clause 3.4 - At subclause (1) remove the word 'can'.
- Clause 3.6 – At paragraph (b) change 'The' to 'the'.
- Schedule 1 – delete the fourth column as it is blank.

DOG ACT 1976

TOWN OF BASSENDEAN

DOGS LOCAL LAW 2019

TABLE OF CONTENTS

DOG ACT 1976

LOCAL GOVERNMENT ACT 1995

Town of Bassendean

DOGS LOCAL LAW 2019

Under the powers conferred by the *Dog Act 1976* and the *Local Government Act 1995* and under all other powers enabling it, the Council of the Town of Bassendean resolved on 25 June 2019 to make the following local law.

PART 1 - PRELIMINARY

1.1 Citation

This local law may be cited as the *Town of Bassendean Dogs Local Law 2019*.

1.2 Commencement

This local law will come into operation on the fourteenth day after the day on which it is published in the *Government Gazette.*

1.3 Repeal

The *Town of Bassendean Dogs Local Law* published in the *Government Gazette* on 16 August 2001 and as amended on 3 October 2006 is repealed.

1.4 Definitions

(1) In this local law, unless the context otherwise requires:

Act means the *Dog Act 1976*;

Authorised person means a person appointed by the local government to perform all or any of the functions conferred on an authorised person under this local law;

CEO means the Chief Executive Officer of the local government;

District means the district of the local government;

Local Government means the Town of Bassendean;

Regulations means the *Dog Regulations 2013*; and

Thoroughfare has the meaning given to it in section 1.4 of the *Local Government Act 1995*.

(2) A term that is used in this local law and is not defined in subclause (1) has the same meaning that is given to it in the Act or, if not defined in the Act, the same meaning given to it in the *Local Government Act 1995*.

1.5 Application

This local law applies throughout the district.

PART 2 - KEEPING OF DOGS

2.1 Dogs to be confined

(1) An occupier of premises on which a dog is kept must -

(a) cause a portion of the premises on which the dog is kept to be fenced in a manner capable of confining the dog;

(b) ensure the fence used to confine the dog and every gate or door in the fence is of a type, height and construction which having regard to the breed, age, size and physical condition of the dog is capable of preventing the dog at all times from passing over, under or through it;

(c) ensure that every gate or door in the fence is kept closed at all times when the dog is on the premises (unless the gate is temporarily opened in a manner that ensures that the dog remains confined) and is fitted with a proper latch or other means of fastening it;

(d) maintain the fence and all gates and doors in the fence in good order and condition; and

(e) where no part of the premises consists of open space, yard or garden or there is no open space or garden or yard of which the occupier has exclusive use or occupation, ensure that other means exist on the premises (other than the tethering of the dog) for effectively confining the dog within the premises.

(2) An occupier who fails to comply with subclause (1) commits an offence.

(3) Notwithstanding subclause (1) and (2), the confinement of dangerous dogs is dealt with in the Act and the Regulations.

2.2 Limitation on the number of dogs

(1) This clause does not apply to premises which have been granted an exemption under section 26(3) of the Act.

(2) The limit on the number of dogs which may be kept on any premises is, for the purpose of section 26(4) of the Act, 2 dogs over the age of 3 months and the young of those dogs under that age.

2.3 Offence to excrete

(1) A dog must not excrete on:

(a) any thoroughfare or other public place; or

(b) any land which is not a public place without the consent of the occupier.

(2) Subject to subclause (3), if a dog excretes contrary to subclause (1), every person liable for the control of the dog at that time commits an offence.

(3) The person liable for the control of the dog does not commit an offence against subclause (2) if any excreta is removed immediately by that person.

(4) Notwithstanding clause 3.2, the penalty for an offence under this clause is $1,000.

PART 3 - ENFORCEMENT

3.1 Interpretation

In this Part:

Infringement Notice means the notice referred to in clause 3.4; and

Notice of Withdrawal means the notice referred to in clause 3.7(1).

3.2 Offences and general penalty

(1) A person who fails to do anything required or directed to be done under this local law, or who does anything which under this local law that person is prohibited from doing, commits an offence.

(2) A person who commits an offence under this local law is liable, on conviction, to a penalty not less than $500 and not exceeding $5,000, and if the offence is of a continuing nature, to an additional penalty not exceeding $500 for each day or part of a day during which the offence has continued.

3.3 Modified penalties

(1) The offences contained in Schedule 1 are offences in relation to which a modified penalty may be imposed.

(2) The amount appearing in the third column of Schedule 1 directly opposite an offence is the modified penalty payable in respect of that offence.

3.4 Issue of infringement notice

(1) Where an authorised person has reason to believe that a person has committed an offence in respect of which a modified penalty may be imposed, the authorised person may serve on the alleged offender a notice in the form of Form 8 of Schedule 1 of the Regulations, informing the alleged offender that, if he or she does not wish to be prosecuted in court for the offence, he or she may pay to the local government within the time specified in the notice, the amount prescribed as the modified penalty.

(2) An infringement notice may be served on an alleged offender personally, or by leaving it at or posting it to her or his address as ascertained from the alleged offender, at the time of or immediately following the occurrence giving rise to the allegation of the offence, or as recorded by the local government under the Act.

3.5 Failure to pay modified penalty

Where a person who has received an infringement notice fails to pay the modified penalty within the time specified in the notice, or within such further time as may in any particular case be allowed by the CEO, he or she is deemed to have declined to have the offence dealt with by way of a modified penalty.

3.6 Payment of modified penalty

An alleged offender on whom an infringement notice has been served may, within the time specified in that notice or within such further time as may in any particular case be allowed by the CEO, send or deliver to the local government the amount of the penalty, with or without a reply as to the circumstances giving rise to the allegation, and then –

(a) the local government may appropriate that amount in satisfaction of the penalty and issue an acknowledgment; or

(b) the local government, or an authorised person acting on behalf of the local government, may withdraw the infringement notice under clause 3.7 and refund the amount so paid.

3.7 Withdrawal of infringement notice

(1) An infringement notice may, whether or not the modified penalty has been paid, be withdrawn by the local government, or an authorised person acting on behalf of the local government, by the sending of a notice in the form of Form 9 in Schedule 1 of the Regulations to the alleged offender at the address specified in the notice or his or her last known place of

residence or business and in that event, any amount received by way of modified penalty must be refunded and any acknowledgement of the receipt of that amount must for the purposes of any proceedings in respect of the alleged offence be regarded as not having been issued.

(2) A person appointed under section 29(1) of the Act to exercise the powers of an authorised person to serve infringement notices under clause 3.4(1) is not eligible to be appointed under that section to exercise the powers of an authorised person to withdraw infringement notices under clause 3.7(1).

Schedule 1

[Cl 3.3]

OFFENCES IN RESPECT OF WHICH MODIFIED PENALTY APPLIES

Offence	Nature of Offence	Modified penalty $
2.1	Failing to provide means for effectively confining a dog	200
2.3	Dog excreting in prohibited place	100

Dated the _____ day of _____ 2019.

The Common Seal of the }
Town of Bassendean }
was affixed by authority of a }
resolution of the Council in the }
presence of: }

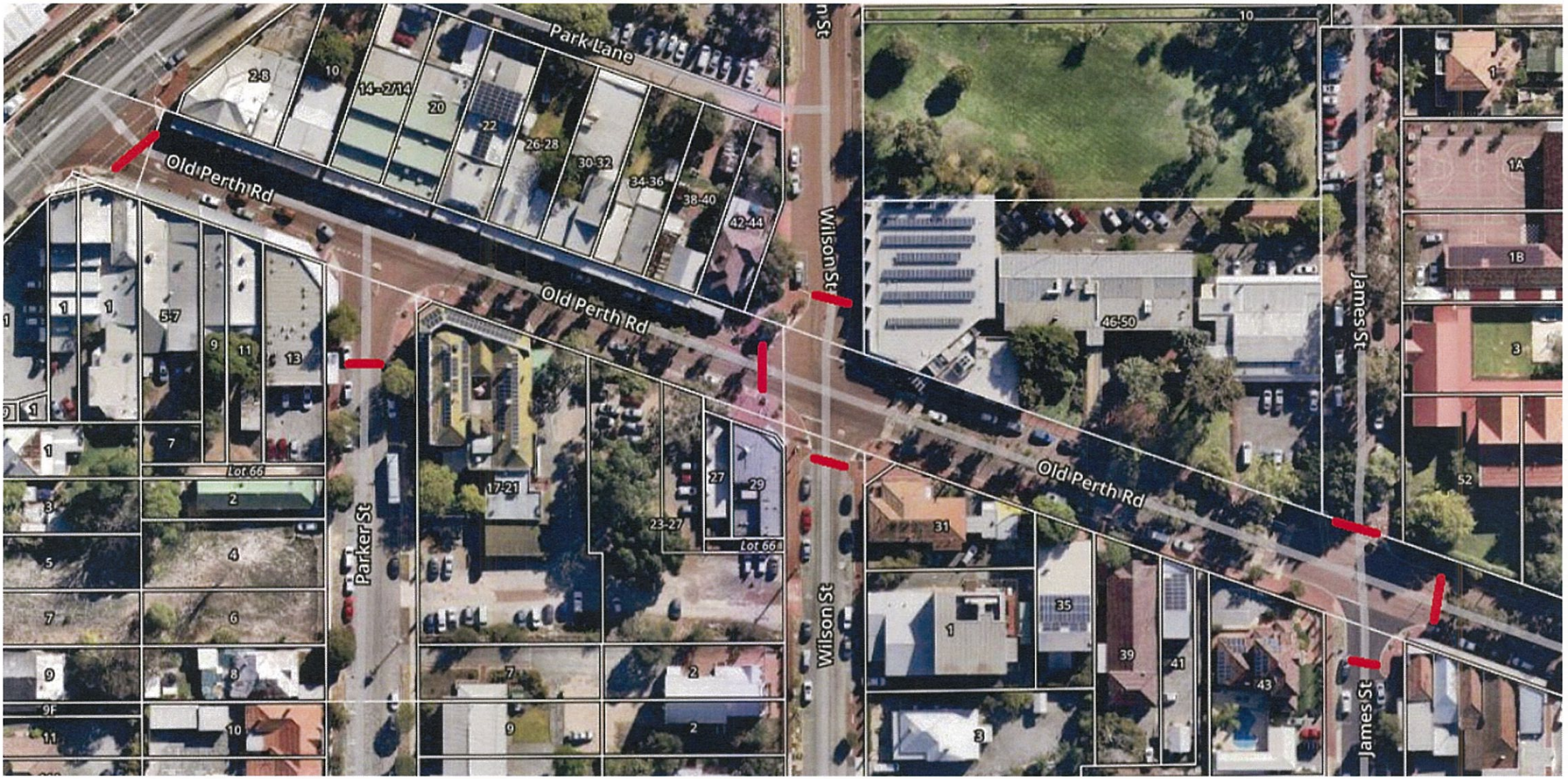
_____

CR RENEE JOY MCLENNAN
MAYOR

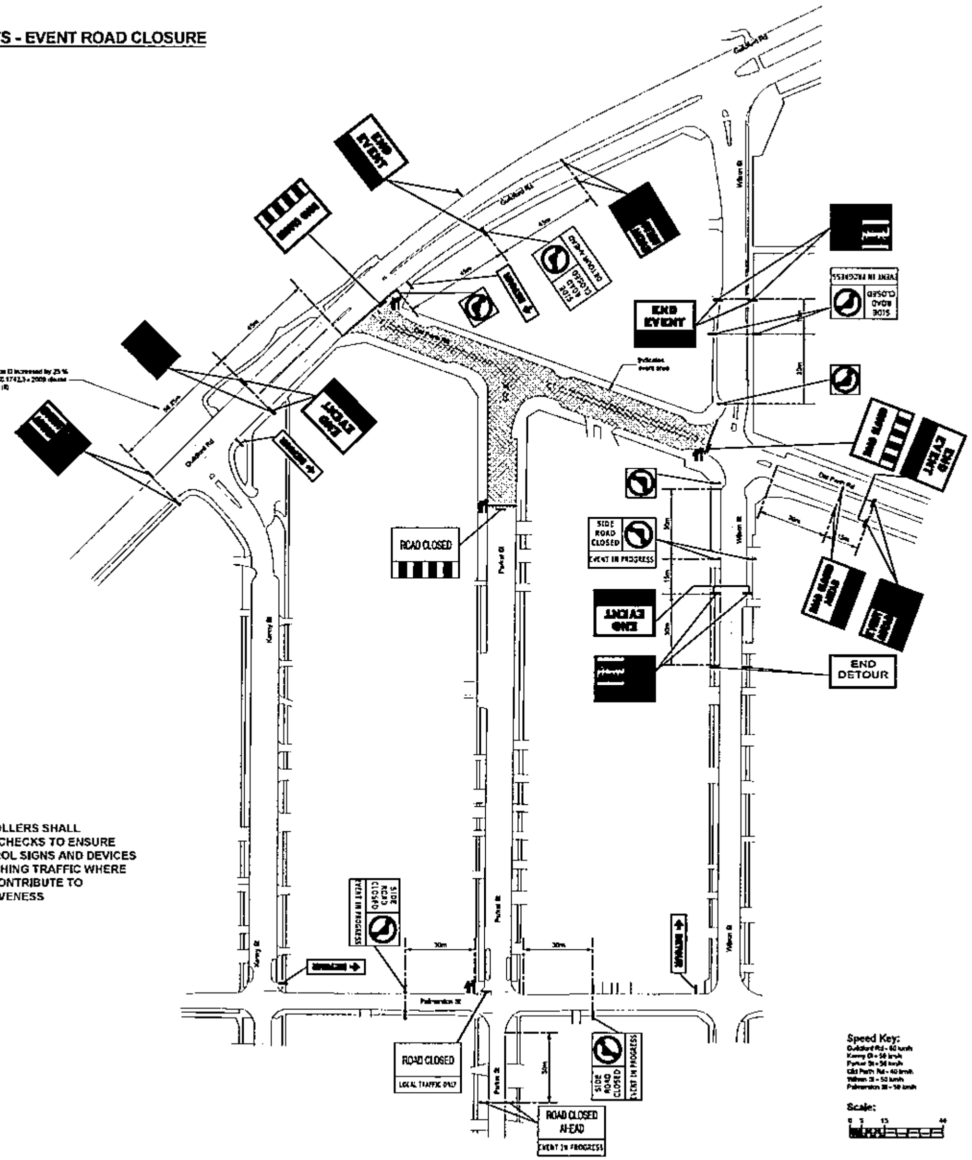
_____

MS PETA MABBS
CHIEF EXECUTIVE OFFICER

ATTACHMENT NO. 3


Park Lane
Old Perth Rd
Old Perth Rd
Old Perth Rd
Wilson St
Wilson St
James St
James St
Parker St
Lot 66
Lot 66
2-8
10
14-2/14
20
22
26-28
30-32
34-36
38-40
42-44
1
1
1
5-7
9
11
13
1
7
2
3
4
5
6
7
8
9
9F
10
11
17-21
23-27
27
29
7
9
2
2
10
1
1A
1B
3
52
46-50
31
1
35
39
41
43
3

OLD PERTH ROAD MARKETS - EVENT ROAD CLOSURE



NOTES

- NOTE 1 - TRAFFIC CONTROLLERS SHALL CONDUCT REGULAR SITE CHECKS TO ENSURE THAT ALL TRAFFIC CONTROL SIGNS AND DEVICES ARE VISIBLE TO APPROACHING TRAFFIC WHERE PARKED VEHICLES MAY CONTRIBUTE TO BLOCKING THEIR EFFECTIVENESS

Notes;

0.0 DRAWING IS NOT TO SCALE

1.0 PEDESTRIANS WATCH YOUR STEP: sign should be used where the route for pedestrians across incomplete works could be hazardous because of roughness, level differences, or loose or other surface material.

2.0 PEDESTRIANS (arrow): sign shall be used at a work site where it is necessary to direct pedestrians via a particular path.

3.0 USE OTHER FOOTPATH: sign shall be used where works make it necessary to carry use of the footpath on one side of the road.

4.0 LOOK BOTH WAYS, TWO-WAY TRAFFIC sign to be used where one roadway of a divided road is temporarily closed. The sign shall be placed at non-signalized pedestrian crossings on both sides of the open roadway.

5.0 FOOTPATH CLOSED: shall be used at a footpath which is out of use. The footpath should be closed with barriers.

6.0 POWER LINE WORKS IN PROGRESS: signs shall supplement and not replace the appropriate standard signs and devices. Shall not to be use as advanced warning sign.

7.0 HIGH-VISIBILITY CLOTHING FOR WORK PERSONNEL: sign to ensure high visibility clothing meeting the requirements of AS/NZS 4602 for Types D, N or D/N garments shall be worn by all personnel working in or adjacent to traffic, including traffic at work site.

Value of Dimension 'D'

Speed of Traffic (km/h)	Dimension 'D' (m)
45 or less	0 to 5
46 to 55	15
56 to 65	45
Greater than 65	Equal to speed of traffic in km/h

Recommended Maximum Spacing of Cones Merge Taper

Purpose and Usage	Traffic Speed (km/h)	Maximum Spacing
Merge Taper	50 or less	4m
	51 – 70	9m
	>70	12m

Recommended Taper Length (m)

Approximate Speed of Traffic (km/h)	Traffic Control at Beginning of Taper	Lateral Shift Taper	Merge Taper
45 or less	10	0	15
46 to 55	15	15	30
56 to 65	30	30	60
66 to 75	N/A	70	115
76 to 85	N/A	80	130
86 to 95	N/A	90	145
96 to 105	N/A	100	160
Greater than 105	N/A	110	180

Contraflow Head Office

Contraflow

N

	Name	Accreditation	Date	Signature
Designed by:	Scott Farrell	AWTM-15-0180-01	16.03.2017	
Drafted by:	Chris Wilson	Post Nova Civil Eng	16.03.2017	
Checked by:	Michelle Day	AWTM-14-0535-01	16.03.2017	

Drawing No.	59139 - TCD - 001
Title	Road Closure and Detour Arrangement - Event Markets
Location	Old Perth Rd
Client / Local Authority	Town of Bassendean
Revision & Issue	1 - 1 (Rev 1 - 16.08.2017)

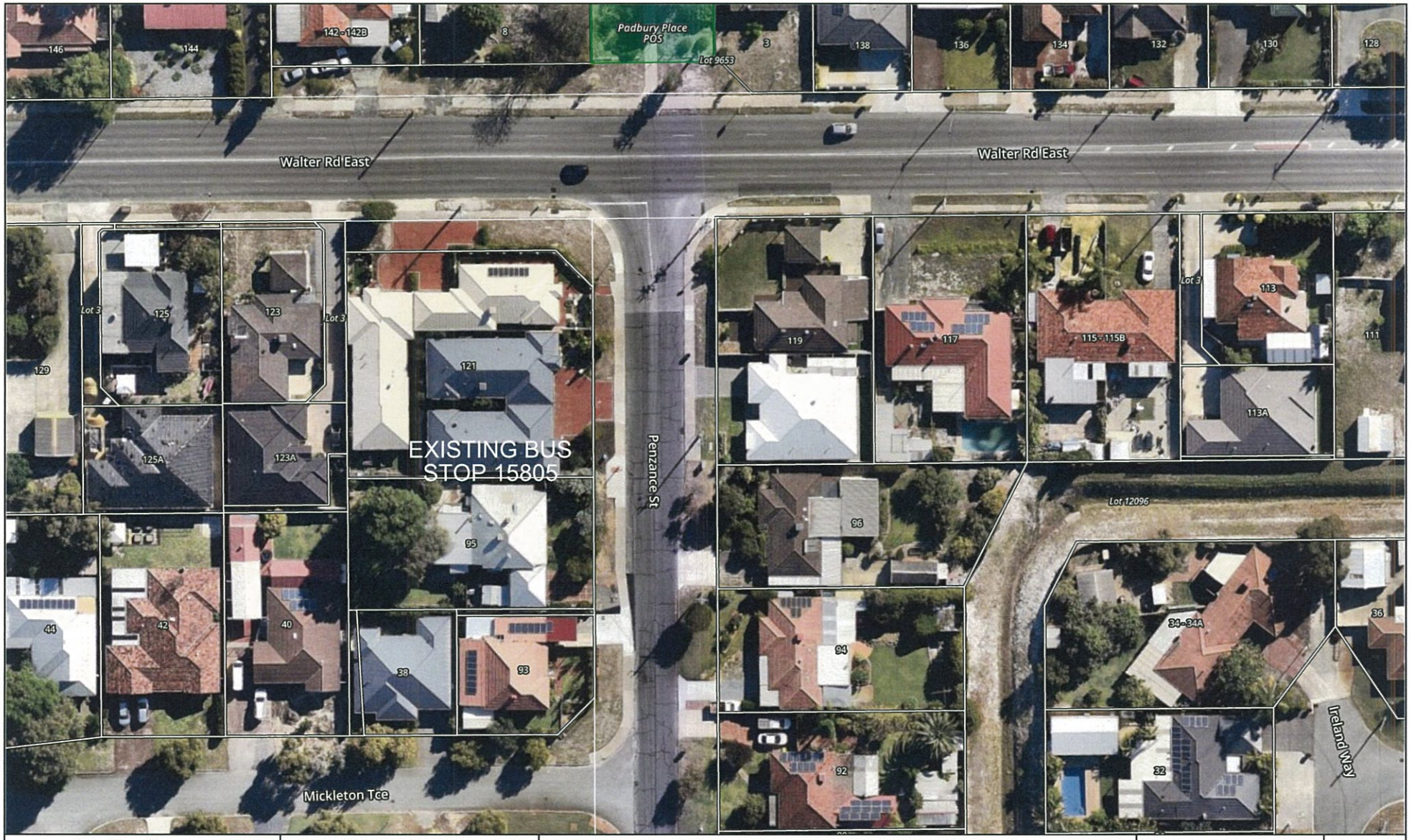
ATTACHMENT NO. 4

Town of Bassendean
35 Old Perth Road
Bassendean WA 6054
Phone: 9377 8000
Fax: 9279 4257
Email: mail@bassendean.wa.gov.au

25/03/2019

Scale: 1:400

N
W E
S



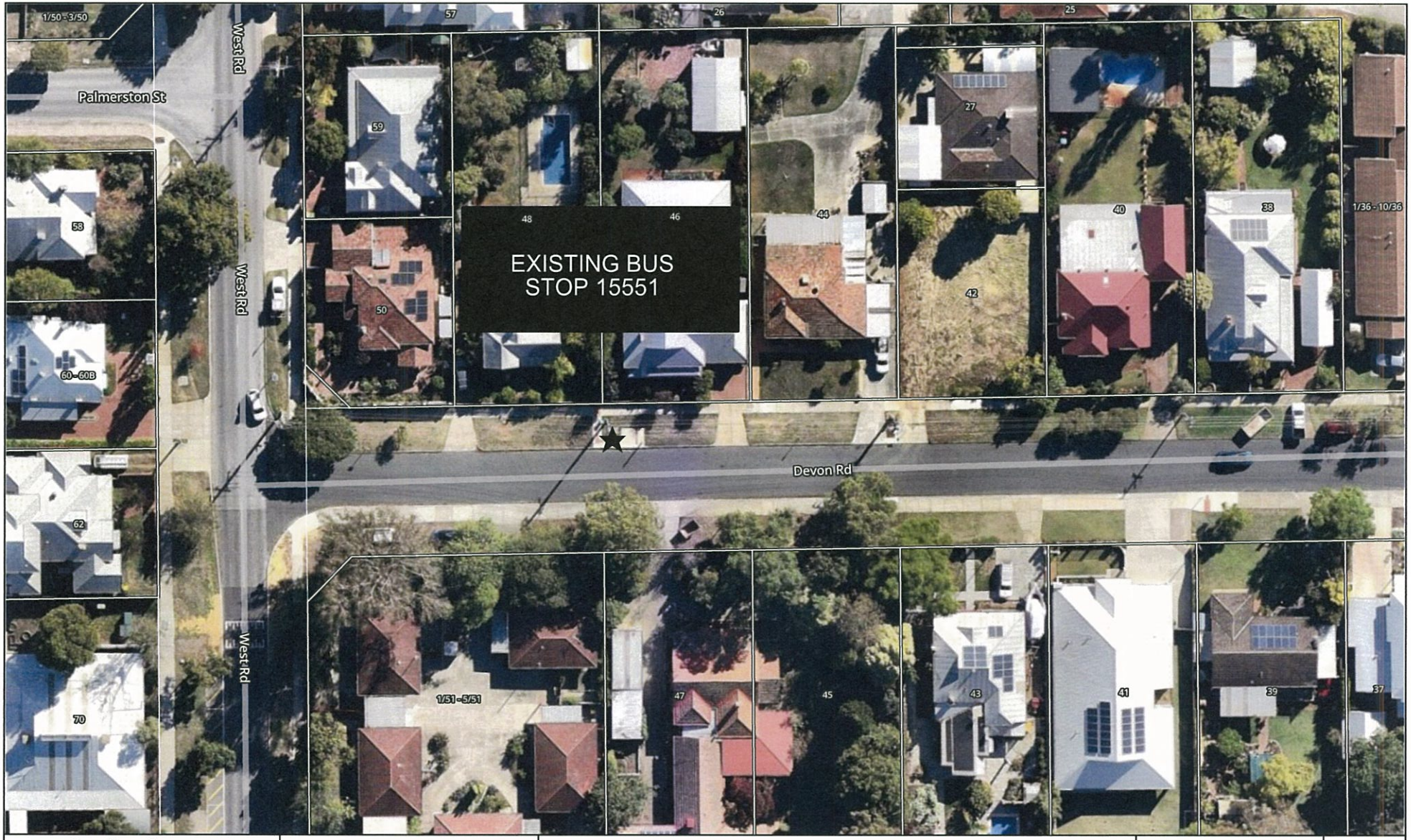
Town of Bassendean
35 Old Perth Road
Bassendean WA 6054
Phone: 9377 8000
Fax: 9279 4257
Email: mail@bassendean.wa.gov.au

PENZANCE STREET
BUS STOP 15805

15/05/2019

Scale: 1:600

N W E S



Town of Bassendean
35 Old Perth Road
Bassendean WA 6054
Phone: 9377 8000
Fax: 9279 4257
Email: mail@bassendean.wa.gov.au

DEVON ROAD
BUS STOP 15551

21/05/2019

Scale: 1:500

N
W E
S

Our ref:

To the Owner/Occupier
(Residents/Community -proposed shelter location)
BASSENDEAN WA 6054

Dear Sir/Madam

RE: BUS SHELTER PENZANCE STREET, BASSENDEAN.

The Town of Bassendean is considering replacing/installing a bus shelter in Penzance Street prior to Walter Rd East, Bus Stop No.15805

In 2016 the Public Transport Authority (PTA) removed a number of shelters within the Town as they did not comply with Disability Standards for Accessible Public Transport. The bus stop boarding area was upgraded to comply with assessable standards, along with the low patronage numbers in line with their procedures

Since the removal of the shelter, the Town has received a number of requests to replace the shelter at the above mentioned site.

Community consultation is part of the process to determine the level of support, or opposition, from residents and community.

The proposed bus shelter will provide protection from the environmental elements and will be visually permeable to detract antisocial behaviour through passive surveillance.

Please complete the attached survey form and return it to the Town in the enclosed reply-paid envelope.

The closing date for the return of the survey forms is TBA.

Should you have any further queries on this matter please feel free to contact the Towns Engineering Design Officer on 9377 9025 during normal office hours.

Yours faithfully,

PHILIP ADAMS
A/g MANAGER ASSET SERVICES

6 June 2019

Town *of* Bassendean

SURVEY FORM REPLACEMENT OF BUS SHELTER IN :
PENZANCE STREET
JAMES STREET
DEVON ROAD, BASSENDEAN

ATTENTION: **Ag MANAGER ASSET SERVICES / ENGINEERING DESIGN OFFICER**

Name and Address Details (these will be confidential and used only in the event Council Officers need to contact you).

Name: _____

Address: _____

Email: _____

Contact No: _____

Do you support the installation of a bus shelter in James Street Bus Stop No. 15550:

YES / NO

(please circle your response)

Do you use Transperth Bus Services

YES / NO

(please circle your response)

1. Comments:

_____

_____

_____

_____

_____

_____

_____

_____

Thankyou for your time.

Minister for Transport; Planning; Lands

Our ref: 72-13134

Hon Dave Kelly MLA
Member for Bassendean
Email: dave.kelly@mp.wa.gov.au

Dear Mr Kelly

QUERIES IN RESPECT TO A BUS SHELTER ON JAMES STREET, BASSENDEAN

Thank you for your letter dated 27 July 2018 on behalf of the residents of the Hyde Retirement Village who have raised a concern about the removal of a bus shelter on James Street, Bassendean, along with your other queries about the bus stop and bus shelter at this location.

I am advised by the Public Transport Authority (PTA) that this bus shelter was impacted by its Bus Stop Accessibility Works Program (BSAWP) in 2015. The BSAWP aims to upgrade over 600 bus stops each financial year so that they comply with the requirements of the Disability Standards for Accessible Public Transport (Disability Standards), as required by the Disability Discrimination Act 2000.

Prior to any works proceeding at this location, it was identified that the existing old concrete bus shelter was in poor condition and the PTA consulted with the Town of Bassendean as to whether it should be demolished and removed, or kept in situ. The Town of Bassendean confirmed in writing that it should be removed in the knowledge that the PTA did not support the provision of a new bus shelter at this location due to extremely low patronage levels. The new boarding area at the bus stop was subsequently constructed without provision for a bus shelter.

In respect to your specific queries, I can advise that this bus stop has an average of three passenger boardings per day and regardless of where the bus shelter is located, the overall passenger boarding area of the public bus stop must comply with the Disability Standards.

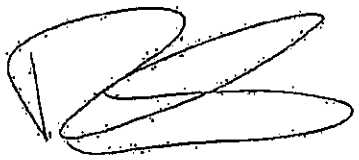
While the passenger boarding statistics for this bus stop do not meet the PTA's general funding criterion for funding support for a bus shelter, as it services a nearby retirement village, I have requested the PTA to support any application received from the Town of Bassendean.

Level 9, Dumas House, 2 Havelock Street, West Perth, Western Australia, 6005
Telephone: +61 8 6552 5500 Facsimile: +61 8 6552 5501 Email: minister.saffioti@dpc.wa.gov.au

In regards to second-hand bus shelters, the PTA currently has a few refurbished shelters previously used at the temporary Roe Street Bus Station that are available for purchase (inclusive of installation) at a cost of $5,000 (plus GST), should the Town of Bassendean wish to pursue this option.

Thank you for taking the time to raise these matters with me.

Yours sincerely



HON RITA SAFFIOTI MLA
MINISTER FOR TRANSPORT

31 AUG 2010

Government of **Western Australia**
Public Transport Authority

Your ref :.....
Our ref :15550 .....
Enquiries :93262195.....

11 April 2019

Mr Simon Stewert-Dawkins.
Director Operational Services
Town of Bassendean
35 Old Perth Rd
Bassendean WA 6054

Dear Simon

Provision of Bus Shelters

Further to our recent conversation I can confirm that the Public Transport Authority (PTA) will fund 100% the provision of a new bus shelter for bus stop 15805 located on Penzance St before Walter Rd, Bassendean. This approval is conditional on the procurement occurring prior to 30 June 2019 and Town of Bassendean assuming ownership of and responsibility for ongoing maintenance.

Additionally I can also confirm that the PTA has also committed to co-funding a new bus shelter for bus stop 15550 located on James St near Old Perth Rd, Bassendean.

To enable an order to be placed for the new bus shelter for Penzance St it would be appreciated if the details of the type of shelter selected from the PTA's Bus Shelter Panel can be forwarded to my colleague Rick Jones (rick.jones@pta.wa.gov.au). Rick will coordinate the manufacture and installation of the bus shelter.

Yours sincerely

Brad Holden
SIGNAGE AND INFORMATION DEVELOPMENT CO-ORDINATOR

Public Transport Centre, West Parade, Perth, Western Australia 6000
PO Box 8125, Perth Business Centre, Western Australia 6849
Telephone (08) 9326 2000 email enquiries@pta.wa.gov.au
www.pta.wa.gov.au
ABN - 61 850 109 576

Dave Kelly

MINISTER FOR WATER; FISHERIES; FORESTRY; INNOVATION AND ICT; SCIENCE
STATE LABOR MP FOR BASSENDEAN
Ashfield | Bassendean | Bayswater | Beechboro | Eden Hill | Kiara | Lockridge | Morley | Success Hill

6 Old Perth Road
BASSENDEAN WA 6054
9279 9871
dave.kelly@mp.wa.gov.au
Dave Kelly - Bassendean Labor MP
@Davekellymp

Hon Rita Saffioti
Minister for Transport; Planning; Lands
9th Floor, Dumas House
2 Havelock Street
WEST PERTH WA 6005

Dear Minister,

I have been approached by over 20 residents of the Hyde Retirement village regarding the removal of the bus shelter on James Street in Bassendean. The bus shelter was removed by the Public Transport Authority in 2016 as it was not compliant with the Disability Discrimination Act.

The bus shelter was strategically positioned in front of the retirement village. In addition to serving its purpose as a bus stop, the shelter was also an important asset for the residents. It served as a meeting point, a way to enjoy the outdoor and take a break when required.

The shelter was not reinstalled due to the low number of boarding passengers at the bus stop. Instead, a seat was installed a few metres further on the land owned by Hyde Retirement Village. The residents have disputed the boarding figures and have been requesting a new shelter since. The seat does not protect the residents from harsh weather conditions and deters them from using public transport.

I am working with Town of Bassendean to explore a way to achieve a positive outcome on this matter. I would be grateful if you could advise me on the following:

1. What is the current number of boardings for this bus stop?
2. If a bus shelter is installed on the private land of the Hyde Retirement Village, would the Town of Bassendean still be required to comply with the Disability Discrimination Act?
3. Would it be possible for the Town of Bassendean to enter a co-funding agreement with the PTA for the purchase of the bus shelter?
4. Does the PTA have a second-hand bus shelter which would be suitable for the area?

I have attached the relevant documents for your information. Thank you for your attention to the matter. If you wish to discuss this matter further please do not hesitate to contact me at the office on 9279 9871.

Yours sincerely

Hon Dave Kelly MLA
State Labor MP for Bassendean
Minister for water; fisheries; Forestry; Innovation and ICT; Science
27 July 2018

WA Labor Labor for Bassendean

Style Code

JSG Mini

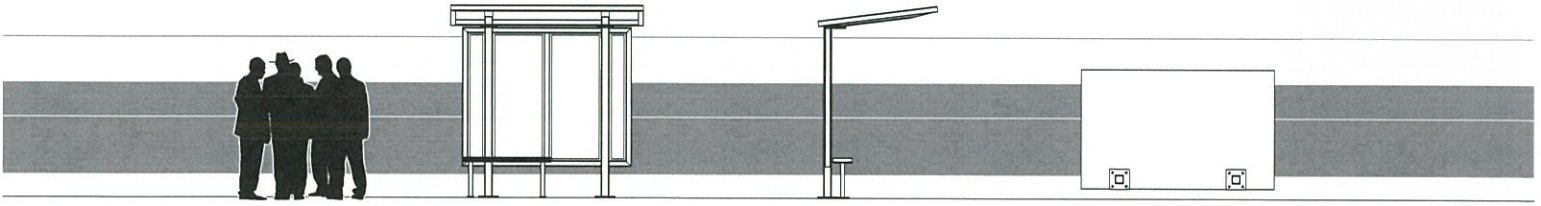
Key Features:

- aluminium or steel construction
- signbond roof sheeting
- mesh panel windows
- size / colour options available
- standard sizing -

  2400 x 1490mm roof size
  2395mm total height
  1700 x 250mm footprint

- Proudly WA Mad e
- Built to Australian Standards
- PTA approve d
- ISO 9001

sales@jasonsigns.com.au



ATTACHMENT NO. 5

Government of **Western Australia**
Public Transport Authority

PLANNING REPORT

PROPOSED DEVELOPMENT – CAR PARK
ASHFIELD STATION

March 2019

PO Box 223, Guildford WA 6935 T 0488910869 liz@tpiplanning.com.au
Longstanding member of the Local Government Planners Association ABN 19618886070

Prepared for: Public Transport Authority

Prepared by: Town Planning Innovations
PO Box 223
Guildford WA 6935
Telephone: 0488910869
Email: liz@tpiplanning.com.au

Job Reference: 46-2019

➢ DOCUMENT CONTROL

Version	Report file name	Authorised	Reviewed	Print Date
1	DA Report 2019 Ashfield	Liz Bushby	For client issue	13 March 2019
2	DA Report 2019 Ashfield	Liz Bushby	Client re-issue	16 March 2019
3	DA Report 2019 Ashfield	Liz Bushby	Final	23 March 2019

CONTENTS

LIST OF FIGURES AND ATTACHMENTS

1.0 INTRODUCTION

This proposal is for construction of a new car park adjacent to the existing Ashfield Station. The purpose of the car park is to provide park'n'ride facility for commuters utilising the passenger rail network.

This report examines planning considerations, zoning, site characteristics, and provides supporting information and an explanation of the proposed development.

2.0 SITE DETAILS

2.1 Location

The car park is proposed on Lot 2630 which is located between Railway Parade and Guildford Road in Ashfield, to the north and north-west of the existing Ashfield Station.

The nearest intersection to the proposed car park is Railway Parade and Wood Street in Ashfield - FIGURE 1.

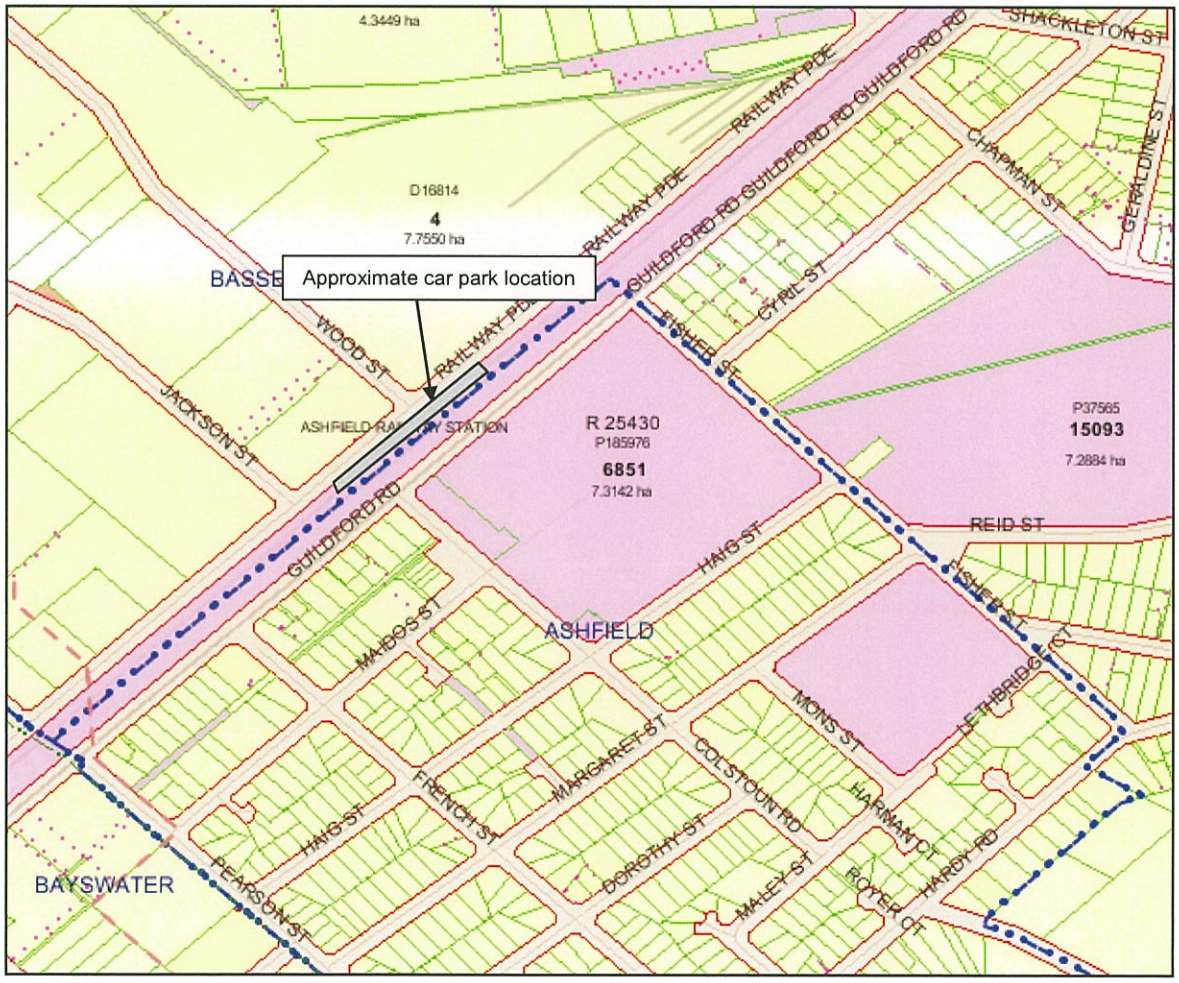


FIGURE 1 - LOCATION PLAN

2.2 Legal Description and Ownership

Lot 2630 forms part of Reserve 12520. The lot is owned by the State of Western Australia and it is a reserve without a management order. Accordingly the development application form has been endorsed by the Department of Planning, Lands and Heritage (Lands Officer) on behalf of the State.

The purpose of the reserve on the Certificate of Title is for 'railway' and the Public Transport Authority is the responsible authority for the reserve.

The legal land description is summarised in the table below.

Lot Number	Certificate of Title (Volume, Folio)	Plan	Reserve Number	Street Address	Owner	Responsible Agency
2630	LR3024/45	2052	12520	Not Available	State of Western Australia	Public Transport Authority

The Certificate of Title is included as Attachment 1.

3.0 STATE STRATEGIES & POLICIES

3.1 State Planning Strategy 2050

The State Planning Strategy 2050 is the Government's strategic planning response to the challenges Western Australia is likely to face. It contemplates a future in which high standards of living and an excellent quality of life are enjoyed by present and future generations of Western Australians.

The State Planning Strategy 2050 offers an integrated whole-of-Government view of the strategic planning needed to respond to the challenges and opportunities these factors present for the land use planning and development of Western Australia.

The Strategy outlines the Government's intention to undertake a collaborative approach in planning for the State's land availability, physical and social infrastructure, environment, economic development and security.

The Strategy is based on a framework of planning principles, strategic goals and State strategic directions. Relevant to this application it recognises that infrastructure is needed to support development.

One of the strategic goals is '*to integrate infrastructure networks to achieve efficiencies and synergy in pursuit of economic growth*'.

A key strategic direction for delivery of co-ordinated infrastructure is recognition of the need to manage the movement of people, goods and services through an integrated network connected locally, regionally, nationally and globally.

3.2 Ashfield Precinct Plan (2010)

Planning for a major activity centre at Ashfield was investigated as part of the then Department of Planning (DoP) Maylands-Guildford Activity Corridor Project. The Department, in conjunction with LandCorp, completed a preliminary investigation that identified the potential for transit orientated development in Ashfield.

The Ashfield Precinct Plan has been developed as a strategic vision and urban design document to guide future development within the precinct.

Identification of significant potential for Ashfield is based on:

- being strategically located within the middle ring of Perth, midway along the Perth-Midland rail line and adjacent to a regional highway linking the major activity centres at Morley and Perth Airport;
- containing large areas of relatively underutilised land;
- having significant amounts of strategically located industrial land; and
- due to the above characteristics, being a legitimate candidate for the development of transit oriented development centred on the Ashfield train station.

The concepts depicted in the Precinct Plan have been developed through extensive stakeholder consultation and are non-binding.

The main features of the plan include the potential relocation of the Ashfield train station, developing a new commercial main street at Pearson Street, the redevelopment of the CSBP industrial site, the realignment of Guildford Road and a general increase of residential densities.

Key elements of the precinct plan are shown in Figure 2. It is understood from discussions with the Town of Bassendean that relocation of the Ashfield Station may be less viable in context of the Forrestfield-Airport Link proceeding as a connection to the Midland Line near Bayswater Station as part of the first stage of METRONET.

It is recognised that plans for METRONET have significantly progressed and a number of projects, such as the Forrestfield Airport Link and Bayswater Station upgrade were not realised at the time the Ashfield Precinct plan was developed.

FIGURE 2 – ASHFIELD PRECINCT PLAN

3.3 Perth and Peel@3.5million (March 2018)

To realise the vision encapsulated in Directions 2031 and the State Planning Strategy, the Western Australian Planning Commission created a series of detailed planning frameworks within a unified, long term growth strategy for land use and infrastructure for the Perth and Peel regions.

The Perth and Peel @3.5million strategic suite of documents has been developed to identify how valued lifestyles can be maintained and how to realistically accommodate a sustainable increased population.

3.3.1 Central Sub Regional Plan (March 2018)

Together with the Perth and Peel @3.5million document, the strategic suite consists of four sub-regional planning frameworks for the Central, North-West, North-East and South Metropolitan and Peel Sub-regions.

The subject land being in the Town of Bassendean falls within the Central sub region.

The framework aims to bring people and places of activity within easy reach of each other and make better use of the existing infrastructure and amenities.

The framework broadly sets out proposals to achieve more consolidated urban form and development within the sub-region. It targets increases in the density adjacent to station precincts.

The Perth and Peel @3.5million document has been developed in collaboration with other State Government agencies and takes into account a number of important initiatives such as long-term transport planning for Perth and Peel to provide a network of strategic road and public transport linkages (including METRONET) to support a city of 3.5 million and beyond.

4.0 ZONING

4.1 Metropolitan Region Scheme

The subject lot is reserved for 'Railways' under the Metropolitan Region Scheme.

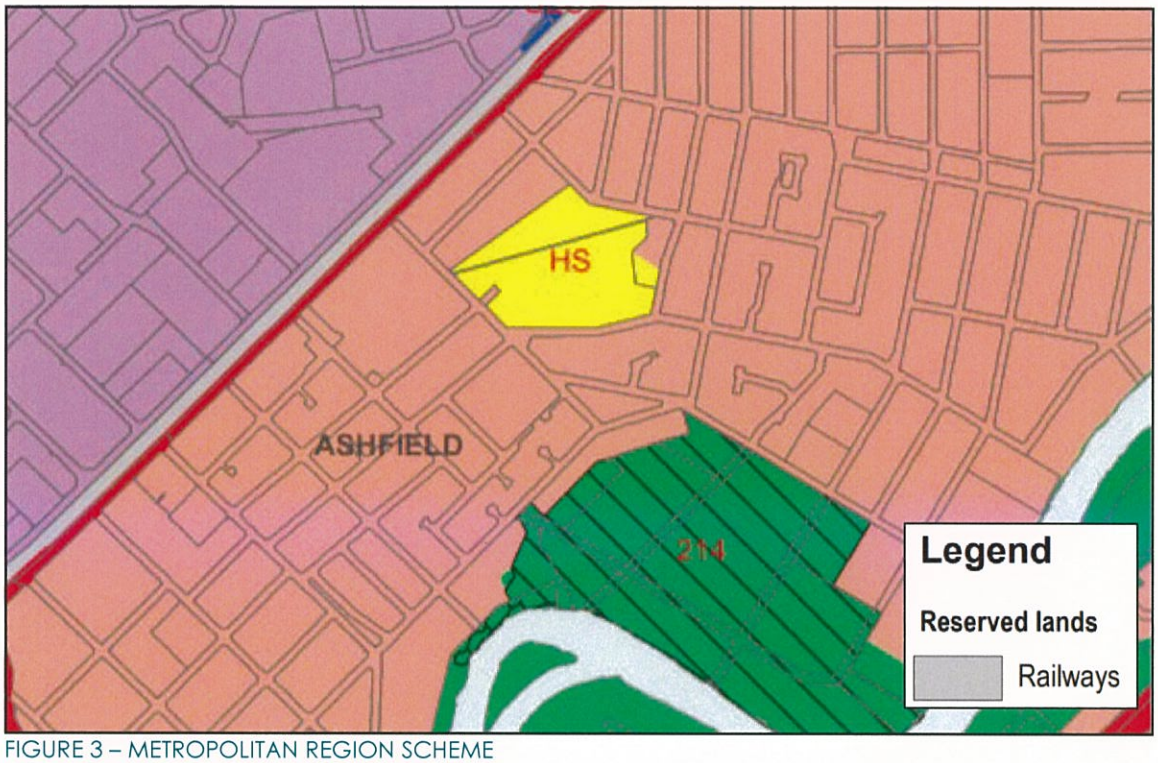


FIGURE 3 – METROPOLITAN REGION SCHEME

This report has been prepared to support a development application lodged with the Western Australian Planning Commission seeking approval for the car park under the Metropolitan Region Scheme.

Clause 18 of the Metropolitan Region Scheme outlines the requirement for development approval by the Commission.

4.2 Town of Bassendean Local Planning Scheme No 10 ('the Scheme')

The Town of Bassendean Local Planning Scheme No 10 map simply reflects the 'Railway' reservation applicable to Lot 2360 under the Metropolitan Region Scheme – refer Figure 4.

Clause 2.2.1 of the Scheme states that '*the lands shown as "Regional Reserves" on the Scheme Map are lands reserved under the Metropolitan Region Scheme and are shown on the Scheme Map for the purposes of the Planning and Development Act 2005. These lands are not reserved under the Scheme.*'

Clause 2.2.2 of the Scheme states that '*the approval of the local government under the Scheme is not required for the commencement or carrying out of any use or development on a Regional Reserve.*'

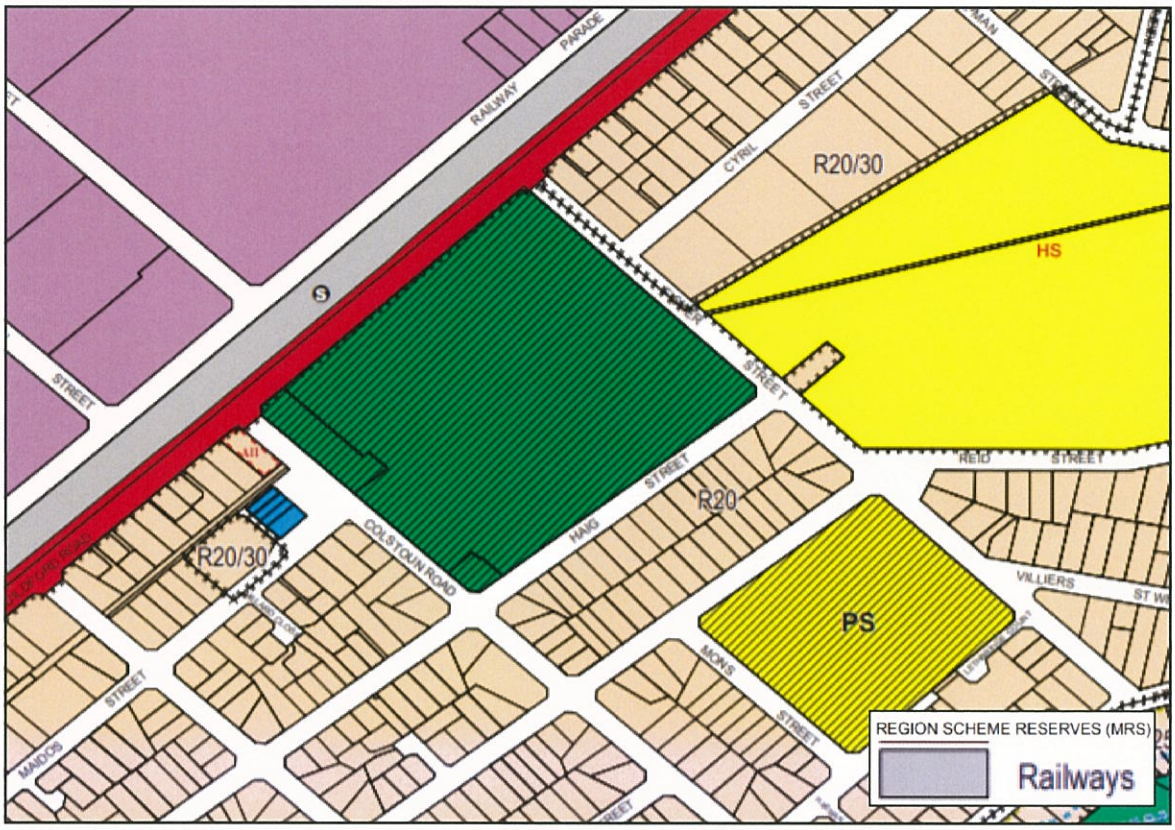


FIGURE 4 – TOWN OF BASSENDEAN LOCAL PLANNING SCHEME NO 10

The majority of the development is within the MRS reserve. A small portion encroaches into the Railway Road reserve which is identified as 'no zone' under the Town of Bassendean Local Planning Scheme No 10.

The train line as well as Guildford Road separates the proposed car park from the established residential area in Ashfield.

5.0 RELEVANT LOCAL PLANNING DOCUMENTS

5.1 Town of Bassendean Local Planning Strategy

The Town of Bassendean Local Planning Strategy sets out the vision for the Town of Bassendean for the next 15 – 20 years, with particular emphasis on the areas of population, future housing, industrial land and commercial zones.

The Strategy was endorsed by the Western Australian Planning Commission on the 9 December 2014.

The existing Local Planning Strategy recognises Ashfield as a precinct located between the Ashfield Railway Station, Transit Orientated Development area and the River Precinct.

The Strategy identifies that the majority of housing within the precinct comprises of middle aged homes of an average quality and that there is prospect for redevelopment.

It recognises that lot sizes in this precinct are predominantly 700m2 - 800m2 however, the areas in closer proximity to the riverfront are characterised by generally larger lot sizes of 1000m2 and upwards.

The existing Strategy states that the State Government Ashfield Precinct Plan Initiative could be contemplated, however, unless all elements of this plan are given commitment it is important to maintain a difference between land that is within the 800m walkable catchment of the Ashfield railway station, and the land beyond this walkable catchment.

The Town has recently engaged Creating Communities and has indicated that community consultation will proceed with the view of commencing a review of the existing Local Planning Strategy.

Irrespective that the Local Planning Strategy will be reviewed, it is clear that there may be opportunities for increased densities and redevelopment within walking distance of the Ashfield Station.

5.2 Town of Bassendean Local Planning Policies

The Town of Bassendean has a number of Local Planning Policies that encourage retention of trees on development sites and the use of local species as follows:

- Local Planning Policy No 6 encourages 1 tree per every 6 car parking bays.

  Whilst the Policy technically only applies to Industrial lots it is generally understood that the Town has a preference for landscaping to be incorporated into any car park design.

- Local Planning Policy for protection of street trees. This Policy seeks to protect street trees during development of any adjacent lots.

- Local Planning Policy No 13 states the Town's position for trees on development sites.

- Local Planning Policy No 18 actively encourages the use of local native plants and sets the standards for landscaping plans.

5.3 Town of Bassendean Street Tree Master Plan

The Town of Bassendean Street tree Master Plan includes tree species information.

It uses a range of criteria to provide a list of street trees suitable for the Town's streetscapes and has been adopted as the Street Tree Master Plan. In developing the Street Tree Master Plan, Council has taken into consideration the mix of existing trees in each street that have been in planted over a number of years, the cultural or natural association of these trees to the area.

6.0 EXISTING DEVELOPMENT

The portion of Lot 2360 in the vicinity of the proposed car park has been developed with the Ashfield Station which includes a pedestrian overpass that provides access from Railway Parade and Guildford Road to the station platform.

No changes to the existing Station or Pedestrian overpass are being examined as part of this project which focuses on overall car parking provision for Meltham Station, Bayswater Station and Ashfield Station.

ASHFIELD STATION – VIEW FROM RAILWAY PARADE

7.0 PROPOSED DEVELOPMENT

7.1 Introduction and Strategic Context

METRONET is Perth's most ambitious public transport program and provides the catalyst to turn land around new stations to desirable places for investment in housing, jobs and services for growing communities.

A team from across WA Government is working together to consider what people need for work, living and recreation within these future urban centres with a train station at its heart.

The Bayswater Station Upgrade is a significant METRONET project and will provide an exciting opportunity to attract investment to the Bayswater town centre and help it grow into a place in which people want to live, work and visit. It is also an extremely complex project with many engineering, traffic and access challenges to address.

FIGURE 5 – PERSPECTIVE OF BAYSWATER STATION UPGRADE

There are two existing Public Transport Authority (PTA) car parks adjacent to Whatley Crescent which service the Bayswater Station. Both car parks will be removed to accommodate the new rail alignment and redevelopment of Bayswater Station.

There is an existing north eastern car park next to Railway Parade in Bayswater which will be retained, modified and reduced in size to accommodate the potential future duplication of the rail that would be required for the tie in of the Ellenbrook Line at Bayswater Station (if this were to proceed).

Due to the lack of available land around the Bayswater Station precinct it is not possible to readily introduce new at-grade parking bays in close proximity to the Station without acquiring additional land outside of the rail reserve.

Therefore to offset the loss of existing PTA parking bays at Bayswater Station it was determined by METRONET and PTA that new at-grade parking bays could be introduced at the nearby Meltham Station and Ashfield Station where land is more readily available along the rail reserve.

7.2 Description of Proposed Development

This application proposes construction of a new car park within Lot 2360 with capacity to accommodate approximately 88 car parking bays (subject to detailed design).

Construction of new car parks at both the Meltham Station and Ashfield Station are a high priority as they are required to cater for existing train users and be completed before construction commences at Bayswater Station.

The proposal includes SmartRider PVMs for passengers coming from the car parks and caters for motorcycle parking. The car park will have CCTV security cameras and lighting to maximise the safety of all users.

7.2.1 Overall Car parking provision

There is a total of 347 existing car parking bays at the Bayswater and Meltham Stations.

New park'n'ride car parks are proposed at both the Ashfield Station and Meltham Station to partially offset the loss of car parking at Bayswater Station. Car parking figures are included on the site plan – refer Attachment 2.

FIGURE 6 – LOCATION OF MELTHAM, BAYSWATER AND ASHFIELD STATIONS

The car parks at Ashfield Station and Meltham Station are to be constructed by the end of 2019 before site works commence at Bayswater Station.

7.2.2 Train Service changes

The distance between Ashfield Station, Meltham Station and Bayswater Station is not significant, and it is likely that a number of public transport users travel a greater distance to Bayswater Station as it currently is an 'all stop' station.

PTA is implementing changes so that the Meltham Station and Ashfield Station will become all-stops stations from July 2019 which will make parking for rail patrons at these stations more attractive than if the stations were to remain as skip stop stations.

Although users are encouraged to walk, ride or catch bus services to train stations there is a need to cater for some limited car parking.

Currently no car parking is provided at Ashfield Station therefore the proposal will provide some upgrading within the existing rail corridor.

7.2.3 Landscaping

There are some existing trees in the verge adjacent to Railway Parade which are proposed to be retained, adjacent to the ramp of the existing pedestrian overpass.

EXISTING TREES TO BE RETAINED ALONG RAILWAY PARADE

It is recognised that the Town of Bassendean has a priority to increase the overall tree canopy within the local government area.

The PTA seeks to work collaboratively with the Town of Bassendean officers to achieve a good development outcome and consider that landscaping works can be undertaken which will still achieve the goals of the Town such as improved streetscape and visual relief of hardstand areas.

It is understood that tree planting and increasing tree canopies is a high priority for local Councillors. Potential for planting trees has been reviewed with PTA and we advise as follows:

(i) The proposed car park is in the close proximity to the railway line located north of the Ashfield Station. Train safety and protection of this railway corridor from any vegetation encroachment is of paramount importance.

(ii) There is a need to maintain clear sightlines for CCTV cameras and not reduce required lighting levels.

The cameras and lighting are installed for public safety which is a high priority, particularly for train users using the car park at night and having regard that the car park is adjacent to an industrial area where casual surveillance from existing businesses will only occur during the day.

(iii) Landscaping is therefore proposed along the Railway Parade verge to contribute towards the existing streetscape (at PTA's cost). Trees are proposed at the rate of 1 tree per 6 car parking bays consistent with the ratio applied to Industrial development.

(iv) Street tree planting offsets the limited planting opportunities in the railway reserve, and has the added benefit of providing aesthetic value as viewed from both the car park and railway station.

(v) A new avenue of street tree planting will positively contribute towards an improved streetscape along Railway Parade.

PTA believe that the landscaping proposal will still meet the objectives of the Town, and that new street trees will positively improve the ambience of the area.

OVERHEAD POWERLINES ALONG RAILWAY PARADE

PTA agree that use of local native trees is most appropriate and the species can be selected from those recommended in the Town of Bassendean Street Tree Master Plan. As there are overhead powerlines along Railway Parade small trees are going to be most practical for this location. PTA may need to obtain approval from Western Power for planting within the 132kV easement.

The Town of Bassendean Street Tree Master Plan recommends the following trees under powerlines:

- *Callistemon species* (Bottlebrush; hybrid varieties only)
- *Corymbia ficifolia* (Red Flowering Gum; hybrid varieties only)
- *Eucalyptus victrix* 'Snow Queen' (Coolibah)
- *Prunus cerasifera* (Purple-leaved Plums)

PTA seeks to work with officers to achieve a practical workable landscaping solution that will still achieve an increase of tree canopy in the area whilst acknowledging the physical restrictions associated with the need to protect the railway corridor and limit vegetation heights under powerlines for safety reasons.

Expediting construction of the car park prior to commencement of works at Bayswater Station is vitally important to the METRONET project, so we seek the assistance of the Town to progress landscaping details through conditions of development approval.

7.2.4 Access and Traffic

Access to the proposed car park for travellers along Guildford Road is via Railway Parade or Collier Road. Collier Road also provides access from a Morley direction and Railway Parade connects through to Bayswater Station.

FIGURE 7 - EXISTING ROAD NETWORK

The Public Transport Authority has engaged a consultant to undertake traffic analysis and additional traffic information is expected to be available in coming months.

It is expected that the trip generation will be minimal given the number bays and utilisation of these bays for long term commuter purposes.

7.2.5 Existing pathway linkages

There is a local pedestrian footpath along the southern side of Guildford Road, which links with the overhead pedestrian bridge which connects from the south side of Guildford Road, to the Ashfield Station platform, and to Railway Parade.

There is a Perth to Midland bike route which is shared by cyclists and pedestrians. It generally runs parallel to the Perth to Midland railway line.

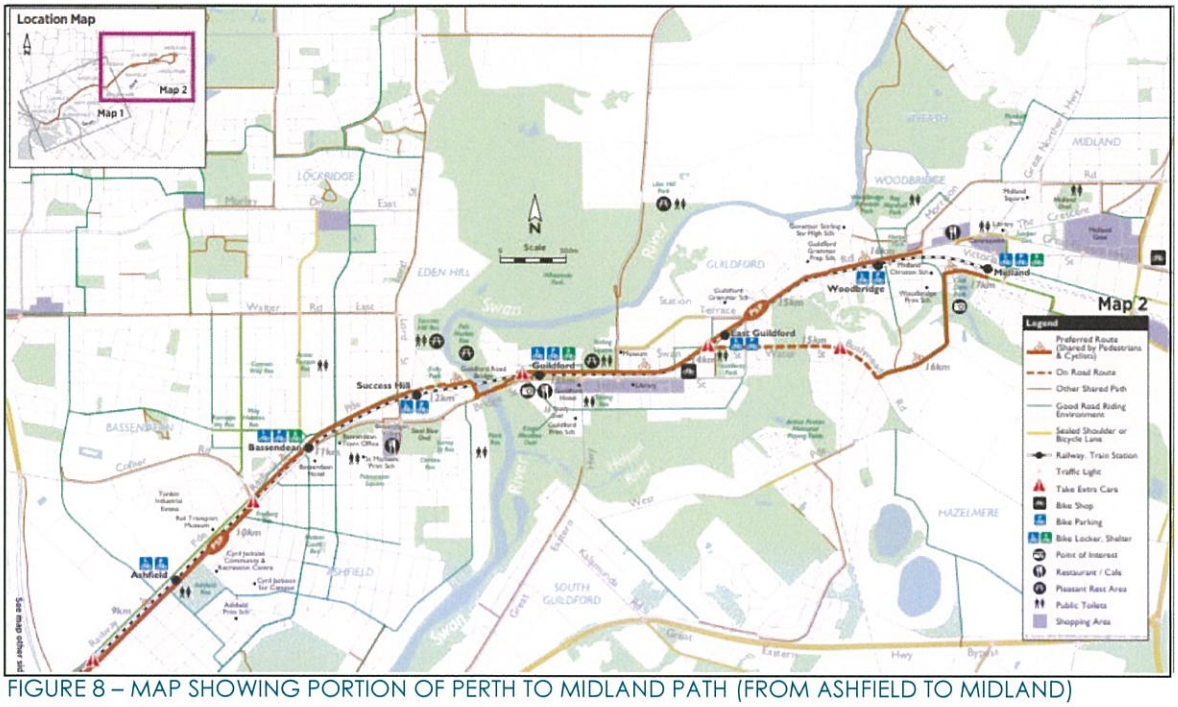


FIGURE 8 – MAP SHOWING PORTION OF PERTH TO MIDLAND PATH (FROM ASHFIELD TO MIDLAND)
SOURCE: DEPARTMENT OF TRANSPORT

In Ashfield the shared pathway is on the northern side of Guildford Road and will therefore not be impacted by any works under this development application.

There are also local footpaths which traverse the southern and northern side of Railway Parade. The pathway south of Railway Parade which is adjacent to the proposed car park will be retained and will continue to form part of the pedestrian route connecting to the railway station.

7.2.6 Streetscape and Amenity

The existing streetscape along Railway Parade is of an Industrial nature, comprising of older established industrial buildings and minimal street trees. The proposed development provides an opportunity to improve the appearance of the railway reserve and the streetscape of Railway Parade.

There is an existing good quality path along the southern portion of Railway Parade west of Wood Street, and north of Railway Parade east of Wood Street. The existing paths will be retained with the exception that a portion will be traversed by one of the proposed crossovers.

8.0 CONCLUSION

The proposal will allow development ancillary to the Ashfield Station to proceed, and assist to accommodate train users before, during and after construction of the Bayswater Station upgrades.

Currently there are not any car parking facilities at Ashfield so the development will result in improvements to Ashfield Station.

ATTACHMENT 1

Certificate of Title

WESTERN AUSTRALIA

REGISTER NUMBER	
2630/P2052	
DUPLICATE EDITION	DATE DUPLICATE ISSUED
N/A	N/A

VOLUME LR3024 FOLIO 45

RECORD OF QUALIFIED CERTIFICATE OF CROWN LAND TITLE

UNDER THE TRANSFER OF LAND ACT 1893
AND THE LAND ADMINISTRATION ACT 1997
NO DUPLICATE CREATED

The undermentioned land is Crown land in the name of the STATE OF WESTERN AUSTRALIA, subject to the interests and Status Orders shown in the first schedule which are in turn subject to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 2630 ON PLAN 2052

STATUS ORDER AND PRIMARY INTEREST HOLDER:
(FIRST SCHEDULE)

STATUS ORDER/INTEREST: RESERVE WITHOUT MANAGEMENT ORDER

PRIMARY INTEREST HOLDER: STATE OF WESTERN AUSTRALIA

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:
(SECOND SCHEDULE)

1. RESERVE 12520 FOR THE PURPOSE OF RAILWAY

Warning: (1) A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required. Lot as described in the land description may be a lot or location.
(2) The land and interests etc. shown hereon may be affected by interests etc. that can be, but are not, shown on the register.
(3) The interests etc. shown hereon may have a different priority than shown.

----------END OF CERTIFICATE OF CROWN LAND TITLE----------

STATEMENTS:

The statements set out below are not intended to be nor should they be relied on as substitutes for inspection of the land and the relevant documents or for local government, legal, surveying or other professional advice.

SKETCH OF LAND:	P2052
PREVIOUS TITLE:	LR3024-45
PROPERTY STREET ADDRESS:	NO STREET ADDRESS INFORMATION AVAILABLE.
LOCAL GOVERNMENT AUTHORITY:	TOWN OF BASSENDEAN, CITY OF BAYSWATER
RESPONSIBLE AGENCY:	PUBLIC TRANSPORT AUTHORITY OF WESTERN AUSTRALIA

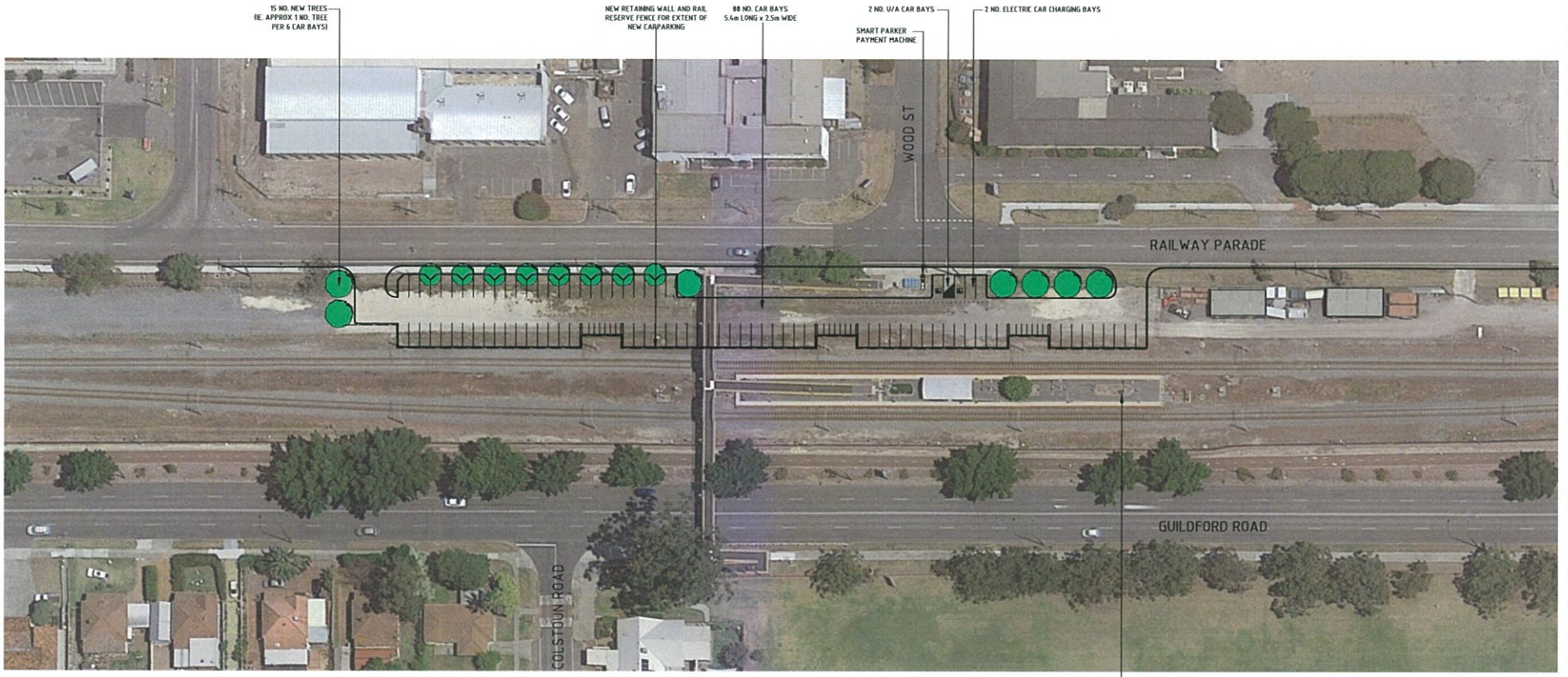
NOTE 1: M371998 CORRESPONDENCE FILE 03199-1988-01RO

ATTACHMENT 2

Site Plan

	MELTHAM	BAYSWATER	ASHFIELD	TOTAL
EXISTING PTA CAR BAYS	103 (INC. 3 NO. U/A BAYS)	244 (INC. 5 NO. U/A BAYS)	0	347
REMOVED PTA CAR BAYS	-1	-244 (INC. 5 NO. U/A BAYS)	0	-245
NEW PTA CAR BAYS	101 (INC. 1 NO. U/A BAYS)	64 (INC. 1 NO. U/A BAYS)	88 (INC. 2 NO. U/A BAYS)	253
TOTAL	203 (INC. 4 NO. U/A BAYS)	64 (INC. 1 NO. U/A BAYS)	88 (INC. 2 NO. U/A BAYS)	355 (NET GAIN OF 8)

PROPOSED NEW CARPARK F



PARKING PLAN
SCALE 1:200

REV	DATE	AMENDMENT	DSN	DRN	CHKD	APP
C	01.03.19	ISSUED FOR 100% CONCEPT DESIGN	AA	FC	AA	
B	23.11.18	ISSUED FOR 100% CONCEPT DESIGN	AA	JS	AA	
A	25.10.18	ISSUED FOR 100% CONCEPT DESIGN	AA	JS	AA	

ORIG SIZE A1
0 10 20 30 40 50 100mm
AT ORIGINAL PLOT SIZE

CONIGLIO AINSWORTH ARCHITECTS
177A York Street
Subiaco WA 6008
www.coniglioainsworth.com.au
T 08 6380 1611
F 08 6380 1788

REFERENCE DRGS

SCALE : 1:200 (@ A1)
DATUM : HORIZONTAL: PCG94 VERTICAL: AHD71
DOC REVIEW NOTE No.

DESIGNED CAA
DRAWN JS
CHECKED AA
APPROVED FOR ISSUE
EXECUTIVE DIRECTOR PTA Division / External Company
DATE

CONCEPT DESIGN

Government of Western Australia Public Transport Authority

BAYSWATER STATION
ASHFIELD STATION CAR PARKING PLAN
SHEET 01 OF 01

PTA Drawing No: 12-A-114-AR0097 REV : C

CAD DRAWING PATHNAME Y:\2018 Projects\1813 Bayswater Station CD\1813 B Documentation\1813 B2 Project Definition Drawings\Sheets\12-A-114-AR0097_C.dwg

Document #: IPA-15575219
Date: 23.04.2019
Officer: CHRISTIAN BUTTLE
File: DABC/BDVAPPS/2019-065

Public Transport Authority

SPECIFICATION

Stations and Buildings Landscape Architecture

Document History and Governance

Document Governance

	Role
Document Owner	Manager Facilities & Infrastructure - N&I

Document History

Rev	Date	Prepared by	Reviewed by	Authorised by	Comments
1.00	23/04/2019	Project Engineering Manager - N&I: S. Kalantary	Principal Engineer N&I – Sam Burnett	Manager Facilities & Infrastructure, Raymond Victor	Initial version.

Table of Contents

List of Tables

Related Documents

Table 1: PTA Specifications and Standards

Document Number	Name
8803-000-002	Specification: Maintainability and Constructability
8803-900-003	Specification: Lighting Design, Installation & Maintenance Requirements
8803-000-008	Specification - Station Functional Planning and Urban Design
8880-700-640	Specification: Design and Installation of Cable Routes
8803-000-005	Specification: Stations and Buildings - Civil Works
8880-700-004	PTA Urban Asset Security Closed Circuit Television (CCTV) Design

Table 2: Codes and Standards

Document Number	Name
AS 1428.1-2009	Design for Access and Mobility- General requirements for access - New building work
AS/NZS 1477:2017	PVC Pipes and Fittings for Pressure Applications
AS 2303:2018	Tree Stock for Landscape Use
AS/NZS 2032:2006/Amdt1:2008	Installation of PVC Pipe Systems
ISO 14686:2003	Hydrometric determinations - Pumping tests for water wells - Considerations and guidelines for design, performance and use
AS/NZS 2890 (Part 1-6)	Parking Facilities
AS/NZS 3000:2018	Electrical Installations (known as Wiring Rules)
HB 197:1999	An introductory guide to the slip resistance of pedestrian surface materials
AS 3743-2003	Potting Mixes
AS/NZS 4129:2019	Fittings for Polyethylene (PE) Pipes for Pressure Applications
AS/NZS 4130:2018	Polyethylene (PE) Pipes for Pressure Applications
AS/NZS 4131:2010/Amdmt:2018	Polyethylene (PE) Compounds for Pressure Pipes and Fittings
AS 4373-2007	Pruning of Amenity Trees
AS 4419:2018	Soils for Landscaping and Garden Use
AS 4454-2012/Amdt 2-2018	Composts, Soil Conditioners and Mulches
AS 4586-2013/Amdt 1-2017	Slip Resistance Classification of New Pedestrian Surface Materials
AS 4970-2009/Amdt 1-2010	Protection of Trees on Development Sites
	NATSPEC Guide for Supply of Trees
	Main Roads WA's Guideline for Vegetation Placement Within the Road Reserve
	Main Roads WA's Guideline for Vegetation Placement Adjacent to PSPs
	NATSPEC Guide for Supply of Trees
	Health (Pesticides) Regulations 2011

Document Number	Name
	Florabank "Guidelines and Code of Practice",
Guidelines01-RIWA Seed Standards	Seed Standards - Association of Western Australia's (RIAWA) Seed Collection Guidelines
02_RIWA Accreditation guidelines.	Accreditation guidelines - Association of Western Australia's (RIAWA) Seed Collection Guidelines

1. Document Purpose

This document specifies the scope and performance requirements that apply to the design, spatial planning and functionality of landscape works at stations and for associated buildings delivered within station precincts.

2. Minimum Requirements for Design Consideration

The station and station precincts' landscape works include the design of all hard and soft landscaping generally outside the rail reserve. This involves all landscaping and irrigation for the project work including, but not limited to:

- Station forecourts, entrances plazas and public domain areas.
- Rail reserves within the station precinct and service facility areas.
- Streetscapes adjoining the station precinct.
- Principal Shared Path (PSP) and shared pathway access ways to the station.
- Short-term parking facilities.
- Car parks.
- Drainage basins and swales.
- Landscaping and stabilisation of all earthworks.
- Treatment of and enhancement of all areas within the station boundary.

The works contractor/designer shall obtain approvals from Public Transport Authority (PTA), Local Government Authority or Main Roads WA, as appropriate, for all landscape works. The relevant standards shall also be considered as minimum general requirements.

The design will:

a. Ensure the station site is visually enhanced and integrated into the local landscape and adjoining land use, including future proposed developments;

b. Ensure the landscape architecture strengthens and enhances the station architecture and urban design, as well as surrounding developments and streetscapes to create a holistic station precinct;

c. Enhance the community benefits of the station precinct for surrounding communities and rail patrons;

d. Provide accessible and inclusive landscapes for people with disabilities;

e. Soften the visual impact of the station and rail infrastructure without hampering the security camera views and lighting levels due to over growth;

f. Stabilise and ecologically enhances the station precinct; and

g. Minimise ongoing management and maintenance costs by using native plants with minimum or no irrigation requirements.

The design shall be undertaken by a landscape architect, who shall supervise the implementation of the landscape works and monitor compliance with the design and monitor its success.

The design shall comply with all relevant environmental conditions, commitments and permit requirements.

The landscape design itself shall:

a. Incorporate the State Government's 'Wildflower Way' initiative, and

b. Effectively integrate with all other components of the project works, including station architecture and urban design, vegetation retention and clearing, earthworks, erosion and sediment control, topsoil management, soil and batter protection, rehabilitation works, fencing, noise and screen walls, public art, roads, principal shared paths, shared paths, footpaths and drainage infrastructure.

The design shall consider all pertinent issues relating to the construction site and the project works, including but not limited to:

a. Physical conditions and issues – soils, geology, land form, drainage, hydrology, erosion, wetlands, salinity, services (above and belowground), railway infrastructure, bus infrastructure, signage, roads, car parks, paths and fences;

b. Biological conditions and issues – flora (native species, rare and endangered species, exotic and weed species), and fauna (native species, rare and endangered species, exotic and declared species, dieback and other diseases, pathogens or other pests);

c. Social conditions and issues – land use (including identification of reserves and institutions), future land use (including identification of future surrounding land use) heritage sites (natural, aboriginal and cultural), accessibility and inclusion, and traffic patterns for vehicles, pedestrians and cyclists;

d. Aesthetic conditions and issues – classified landscapes (cultural/natural), local and regional landscape character types, views into and out of the rail and road reserve, landscape elements, precincts and types, paths, nodes, edges and landmarks, visual harmony and discord of colours, textures and scale within the landscape setting, enclosure and exposure, loss of visual amenity and the management of visual impacts; and

e. All stakeholder issues.

Landscape design and station master planning shall maximise the retention of remnant endemic vegetation within the site, including ensuring that design solutions take into account the importance of retaining existing vegetation for visual amenity, ecological habitat and to minimise the urban heat island effect of the development. The designer shall also ensure protection of the retained vegetation in accordance with AS 4970 Protection of Trees on Development Sites.

The landscape design shall maintain the required groundwater hydrology where needed to maintain existing vegetation and habitats in sensitive areas, within or adjacent to the site.

3. Tempory Landscape Works - Specifications

The design shall identify temporary landscaping works as soon as practical (or as required during construction) following completion of final earthworks in any given work lot within the construction site to meet community relations requirements.

Temporary landscaping works shall:

a. Prevent any gravel, sand, silt, dust, sediment or clay being moved by wind or rain, or disturbance by movement of machinery, plant or personnel until such time as permanent landscaping works are undertaken and completed;

b. Ensure modifications to existing reticulation systems are made wherever necessary to ensure there is no compromise to the irrigation water supply to existing landscapes as a consequence of its project works;

c. Include the establishment of tree protection zones and the fencing of vegetation to be retained in accordance with AS 4970 Protection of Trees on Development Sites); and

d. Include mulching and watering, if and when required, during the construction works to ensure the health of the retained vegetation.

4. Landscape Works - Specifications

4.1 General

Landscaping/revegetation shall be undertaken as soon as elements of the project works are sufficiently advanced to enable landscaping works to be implemented without undue damage from subsequent activities.

4.2 Design Requirements

The landscaping design shall:

a. Enhance the urban design of the station precinct and the built form of the station;

b. Integrate the station landscape and urban design with adjacent land uses and developments;

c. Enhance the aesthetics of structures and other built elements within the station precinct;

d. Enhance and provide input into the urban aesthetics of any built structures such as noise and screen walls and public art items;

e. Ensure the design provides accessible and inclusive access outcomes;

f. Ensure the design is consistent with Crime Prevention Through Environmental Design (CPTED) principles without hampering lighting levels due to over growth;

g. Enhance the visual amenity of the site for rail and bus users, pedestrians and cyclists;

h. Enhance the visual amenity of the site for adjoining landowners and provide screening to compensate for loss of privacy for adjoining landowners;

i. Assess the probable visual impact of the station and infrastructure built form and provide design solutions to mitigate the visual impact of the development and strengthen the urban design of surrounding areas;

j. Maximise the retention of site vegetation and consider the protection of retained vegetation in accordance with AS 4970 Protection of Trees on Development Sites;

k. Address environmental objectives for bushland and/or wetland restoration, creation or enhancements;

l. Utilise low-growing native planting combined with tree planting to ensure CPTED principles and passive surveillance is maintained;

m. Provide shade to reduce potential heat island effects and to be positioned to provide amenity for patrons and the broader community;

n. Maximise the absorption of rainfall and surface water flows on the construction site by the reshaping of land form, finished levels and surfaces, and work with civil engineers to incorporate Water Sensitive Urban Design principles;

o. Minimise sloping areas within the landscape, and provide retaining walls or additional stabilisation to areas with a greater slope than 1:3;

p. Ensure the surface treatment below fencing, noise and screen walls, retaining walls, lighting and signs is practical for ongoing maintenance and is not left as bare soil;

q. Ensure the treatment below seats, furniture, bins and the like is hard landscaped and extends sufficiently around the features to ensure the remain accessible and inclusive;

r. Ensure planting and mulch is clear of all light pole bases so as to remove the corrosive potential of the finish. Poles that will become PTA assets shall comply with PTA standard details, including relative levels of planting and mulch;

s. Ensure planting does not obscure signage, lighting or Closed Circuit Television (CCTV) assets;

t. Ensure planting does not impede access along pathways, shared paths and PSPs;

u. Ensure planting around pathways, shared paths and PSP's does not drop nuts or husks which may be hazardous obstacles to cyclists;

v. Ensure all construction spoils, roadbase, limestone, etc., is excavated from all areas of planting to existing site soil, it shall be excavated and replaced with a sufficient depth, backfill with screened weed free topsoil, and provide soil conditioning and mulch;

w. Where existing site soil is not suitable for use (i.e. horticulturally suitable for sustaining plant growth), it shall be excavated and replaced with a sufficient depth (minimum 500 millimetres) of screened weed-free topsoil;

x. Limit the use of turf to areas adjacent to the station forecourt areas;

y. Ensure all areas of irrigation are efficiently watered utilising water wise irrigation methods – Water dependent landscaping is only to be included upon F&I manager approval;

z. Ensure maintenance access is provided to all areas of the station precinct and rail reserve; and

aa. Minimise ongoing maintenance costs for PTA.

bb. Avoid planting beneath staircases to pedestrian bridges or platforms, where necessary only plant low growing species and ensure a boundary is created at the footing of the structure using a curb or other grade separation;

4.2.1 General Landscaping Design Requirements

The following requirements apply to stations and station precinct landscaping works. The contractor/designer shall:

a. Ensure the hard landscape has a lower level of aesthetics than the forecourt paved areas to provide a transition to car parking areas;

b. Ensure all hard landscapes are accessible and inclusive, providing varied opportunities within the landscape for people with disabilities;

c. Where necessary provide handrails to guide partially sighted around obstacles or lead towards paths;

d. Ensure the hard landscape is integrated with civil designs for road pavements, including bollard placement to limit vehicle access;

e. Utilise irrigated tree, shrub and groundcover planting and limit the use of irrigated grass – all irrigation must be approved by F&I manager;

f. Utilise tree planting with a mixture of 100 and 200-litre bag size trees, as appropriate, for scale and screening. Emphasis should be placed on Western Australian native slow-growing trees. Plant trees along pathways and roadways should provide visual softening and reduce the urban heat island effect;

g. Utilise species consistent with the retained bushland or probable remnant species in areas adjacent to retained bushland or vegetation;

h. Utilise non-slip tree grates where trees are planted in areas of hard materials;

i. Ensure species are selected that are not known to cause root problems to limit root damage to adjacent hard materials. Root control strategies shall be will be required for trees planted within, or adjacent, to hard materials. The strategies may include root cells, compacted aggregates, substrate sealers or root control barriers, to the approval of PTA;

j. Utilise low-growing native shrubs and groundcovers, with a maximum height of 1000 millimetres within garden bed areas, that have had proven success within PTA landscapes. Larger shrubs can be used for screening where required only;

k. Utilise a minimum 140 millimetre pot size plants, at a rate of three per square metre to a maximum spacing of one per square metre, depending on species mature size;

l. Provide 100 millimetre depth of soil conditioner in garden beds, cultivated into subsoil prior to planting and mulching;

m. Utilise screened pine bark mulch with particle size between 35 and 75mm, with a low combustibility, in all garden bed or mulch only areas to a minimum depth of 100 millimetres; and

n. Utilise 10 to 15 millimetre screened stone mulch in all swale or water infiltration areas, with a minimum depth of 100 millimetres.

o. Utilise Geotextile membrane slope retention methods to support any slope larger than 1:3;

p. Where possible, tie areas of landscaping together with crossings to provide a safe passage for small ecologically significant wildlife to help avoid confrontation with customers;

4.2.2 Forecourt Landscaping Design Requirements

The forecourt landscaping design shall:

a. Ensure hard landscape has a high level of aesthetics with pattern, texture and colour variation within paved areas;

b. Maximise in-situ seating/retaining elements and integrate seating retaining elements with the architectural and urban design of the forecourt;

c. Ensure all seating/furniture is accessible and inclusive, providing varied opportunities within the landscape for people with disabilities;

d. Ensure seating is durable and low maintenance, design walls and paved areas to discourage skateboarding, where required incorporate skate deterrents;

e. Ensure hard landscape is integrated with civil designs for road pavements, and includes bollard placement to limit vehicle access;

f. Utilise areas of irrigated grass as approved by PTA, within the station forecourt areas. Irrigated grass areas shall be separated from garden bed areas using a flush turf edge, minimum size of 150mm x150mm;

g. Utilise mature and semi-mature tree planting within the forecourt areas, with a minimum of eight 1500-litre trees being included within the forecourt planting scheme. All tree plantings shall have suitable soil zones for healthy tree growth, and deciduous trees should be considered to provide summer shade and winter light where appropriate;

h. Utilise a mix of 100 and 200-litre bag size trees in other areas, as appropriate, for scale and screening;

i. Utilise non-slip tree grates where trees are planted in areas of hard materials;

j. Ensure species selected are not known to cause root problems, to limit root damage to adjacent hard materials. Root control strategies will be required for trees planted within, or adjacent to hard materials. The strategies may include root cells, compacted aggregates, substrate sealers or root control barriers, to the approval of PTA;

k. Utilise low-growing native shrubs and groundcovers, with a maximum height of 1000 millimetres within garden bed areas, that have had proven success within PTA landscapes. Larger shrubs can be used for screening where required only;

l. Utilise plant species that are varied colour, texture and form and flowering times;

m. Utilise a minimum 140 millimetre pot size plants, at rate of four per square metre to a maximum spacing of one per square metre, depending on species mature size and provide 20gms of slow release fertiliser;

n. Incorporate free draining turf sand in turf areas for a minimum of 150 millimetres below finished turf level;

o. Provide a 100 millimetre depth of soil conditioner, cultivated into existing subsoil or imported topsoil prior to planting and mulching, in all garden bed areas;

p. Utilise screened pine bark mulch with particle size between 35 and 75 millimetres, with a low combustibility, in all garden bed or mulch only areas, to a minimum depth of 100 millimetres;

q. 500 litre trees to be stabilised utilising underground rootball guying systems.

r. 100 and 200 litre tree planting to be provided with two (2) of 1800 high 50x50 hardwood stakes, securely placed and tied with flexible rubber or cloth tree ties. Hardwood stakes shall be painted black.

s. Provide soil conditioner to the tree at the rate of a minimum of 30% of the trees container size, mixed well into the existing soil.

t. Ensure tree planting is provided with an integrated architectural, civil, and landscape architectural approach to ensure carpark trees have sufficient root space, for healthy long term establishment of the tree. Where possible provide flush kerbs to allow water infiltration.

u. Utilise 10 to 15 millimetres screened stone mulch in all swale or water infiltration areas, with a minimum depth of 100 millimetres; and

v. Consider and integrate elements of the State Government's 'Wildflower Way' Initiative.

4.2.3 Carpark Landscaping Design Requirements

The carpark landscaping design shall:

a. Ensure all hard landscapes are accessible and inclusive, providing varied opportunities within the landscape for people with disabilities;

b. Ensure the hard landscape is integrated with civil designs for road pavements, and includes bollard placement to limit vehicle access;

c. Utilise irrigated tree, shrub and groundcover planting;

d. Utilise tree planting with a mixture of 100 and 200-litre bag size trees, as appropriate, within car park islands, diamonds and half diamonds. The maximum amount of soil area should be used below trees, where possible;

e. Utilise tree planting with a mixture of 45 and 100-litre bag size trees, as appropriate, within areas of planting adjacent to car parks, and provide visual amenity and screening, where possible, to adjacent residential areas;

f. Place an emphasis on Western Australian native slow-growing trees;

g. Include trees along pathways and roadways to provide visual softening and reduce the urban heat island effect;

h. Provide tree planting within the car park at a minimum rate of two trees per 30 car bays where bays are in double rows (i.e. where rows of parking bays face each other) and two trees per 15 bays where bays are in single rows;

i. Ensure tree planting is arranged clear of all lights and signs, so it will not become a future maintenance problem, reduce lighting levels or obscure CCTV sight lines;

j. Ensure plantings do not obscure sightlines for vehicles and pedestrians within the car park;

k. Ensure tree planting is provided with an integrated civil, architectural and landscape architectural approach to ensure carpark trees have sufficient root space, for healthy long term establishment of the tree. Where possible provide flush kerbs to allow water infiltration

l. Utilise non-slip tree grates where trees are planted in areas of hard materials or adjacent to access paths where there is potential for an increased trip hazard to be created;

m. 45, 100 and 200 litre tree planting to be provided with two (2) of 240000 high 50x50 hardwood stakes, securely placed and tied with flexible rubber or cloth tree ties. Hardwood stakes shall be painted black.

n. Provide soil conditioner to the tree at the rate of a minimum of 30% of the container size, mixed well into the existing soil.

o. Utilise species consistent with the retained bushland or probable remnant species in areas adjacent to retained bushland or vegetation;

p. Ensure species are selected that are not known to cause root problems to limit root damage to adjacent hard materials. Root control strategies will be required for trees planted within, or adjacent to, hard materials. These strategies may include root cells, compacted aggregates, substrate sealers or root control barriers, to the approval of PTA;

q. Utilise low-growing native shrubs and groundcovers, with a maximum height of 1000 millimetres, within garden bed areas, which have had proven success within PTA landscapes. Larger shrubs can be used for screening, where required only;

r. Utilise a minimum 140 millimetre pot size plants, at a rate of between three per square metre and maximum spacing of one per square metre, depending on species mature size and provide 20gms of slow release fertiliser.

s. Utilise suitable riparian species for swale and basin planting at a rate of four per square metre;

t. Provide 100 millimetre depth of soil conditioner in garden bed areas, cultivated into subsoil prior to planting and mulching;

u. Utilise screened pine bark mulch, with particle size between 35 and 75 millimetres, with a low combustibility in all garden bed or mulch only areas to a minimum depth of 100 millimetres; and

v. Utilise 10 to 15 millimetre diameter screened stone mulch in all swale or water infiltration areas to a minimum depth of 100 millimetres.

4.2.4 Rail Reserve and Landscaping Adjacent to PSPs Design Requirements

The landscaping design for the rail reserve and areas adjacent to PSPs shall:

a. Ensure the landscape is integrated with civil designs for the rail reserve and the PSPs and is site specific with themes to reflect the surrounding area;

b. Access ways, lines of sight for signalling and crossings are maintained clear of obstruction;

c. Provide a minimum of 10 meters clearance around inspection pits, signal location boxes and all structures

d. Provide for safe maintenance access to all railway infrastructure;

e. Utilise irrigated tree, shrub and groundcover planting immediately adjacent to the station (approximately 10 metres past platform length);

f. Utilise non-irrigated tree, shrub and groundcover planting for the remainder of the reserve;

g. Utilise irrigated tree planting with of 45-litre bag size trees, as appropriate within areas of planting adjacent to the platforms, and ensure trees are not planted any closer that 5 meters or the mature height of the vegetation plus one meter (which ever is greater) from the overhead infrastructure and running rail;

h. Plants planted between 5m and 7m from any overhead lines shall consist of ground covers and small shrubs less than 1m in height.

i. Utilise Western Australian native slow growing trees, wherever possible;

j. Ensure tree planting is arranged clear of all lights, signals, signs or other reserve infrastructure so it will not become a future maintenance problem;

k. Utilise species consistent with the retained bushland or probable remnant species in areas adjacent to retained bushland or vegetation;

l. Utilise irrigated low-growing native shrubs and groundcovers, with a maximum height of 1000 millimetres, within garden bed areas adjacent to the platforms that have had proven success within PTA landscapes;

m. Ensure all trees are a minimum of 3m from the edge of the PSP;

n. Ensure that planting within 3m from the edge of the PSP shall consist of ground covers and small shrubs (less than 1m in height); utilise plant species with varied colour, texture and form and flowering times;

o. Utilise a minimum 140 millimetre pot size plants, at a rate of two per square metre to a maximum spacing of one per square metre, depending on species mature size;

p. Utilise tubestock and seeding for non-irrigated plantings at rate of between of one and two per square metre, depending on species mature size, and 4.5 kilograms per hectare native seed;

q. Utilise Western Australian natives, with a provenance to the Swan Coastal Plain, for non-irrigated plantings;

r. Utilise suitable riparian tubestock species at a rate of four per square metre in non-irrigated swale and basin areas;

s. Provide a 100 millimetre depth of soil conditioner in irrigated areas, which has been cultivated into subsoil prior to planting and mulching;

t. Utilise screened pine bark mulch with particle size between 35 and 75 millimetres, with a low combustibility, in all irrigated areas and garden beds, with mulch-only areas at a minimum depth of 100 millimetres;

u. Have 50 millimetre depth of weed-free topsoil, mixed with 50 millimetre depth of native chipped vegetation for non-irrigated plantings, which is spread in a 100 millimetre depth layer by a tracked machine running perpendicular to the contours to provide depressions for seed germination, and

v. Consider and integrate elements of the State Government's 'Wildflower Capital' Initiative.

Table 3 - PTA Approved Species List 2019

Genus	Species
Acacia	Cyclops
Acacia	Saligna
Allocasuarina	Humilis
Banksia	Ashbyi
Banksia	Attenuata
Banksia	Manglesii
Banksia	Prionotes
Eucalyptus	Todtiana
Melaleuca	Heugelii
Acacia	Pulchella
Anigozanthos	Humilisa
Anigozanthos	Aculeata
Beaufortia	Elegans
Calothamnus	Quadrifidus
Callistemon	Kings Park special
Callistemon	viminalis
Calytrix	Fraseri
Chamelaucium	Uncinatum
Conostylis	Pulchella
Dampiera	Linearis
Dianella	Divaricata
Dodonaea	Hackettiana
Eremophila	Glabra
Gompholobium	Tomentosum
Grevillea	Crithmifolia
Grevillea	Gin Gin Gem
Grevillea	Thelemanniana
Grevillea	Olivacea
Hermiandra	Pungens
Kennedia	Prostrata
Olearia	Axillaris
Pimelea	Rosea

4.3 Irrigation Design Requirements

Irrigation is planned to be phased out on future projects as part of a broader sustainability strategy but standards will remain in this specification for instances where F&I make an exception, such as to keep very large or established plants alive on a site to satisfy environmental survey requirements. When authorisation for the use of irrigation has been provided by the manager of F&I, the following requirements shall be applied:

Irrigation systems shall be designed by an irrigation designer as part of the landscape architectural scope of works to ensure integration with the architectural, electrical and hydraulic consultants. The irrigation systems shall be designed to be waterwise, and provide efficient irrigation for soft landscape works.

The contractor shall apply for and facilitate on the PTA's behalf all approvals, permits, licenses, and connections associated with scheme or ground water supply.

Permanent irrigation shall be provided to the following areas, within a station precinct:

- All tree planting of 45L or greater bag size.
- All planting utilising 140mm or greater pot size.
- All planting within 75m of station entries.
- All planting with 3m of a kerb line.
- All planting within carpark islands and roundabouts.
- Areas of screen planting for visual amenity.

The installation and utilisation of irrigation should be kept to a minimum in areas of the station precinct, such as, large planting areas and drainage basins.

Permanent irrigation systems shall utilise ground water bores, unless ground water is not available.

Temporary irrigation systems may utilise scheme water supply.

In addition, specific design requirements include, but are not limited to:

a. All bores with submersible pumping systems and associated electrical connections, controls, cabinets, etc. shall meet industry best practice and Australian Standards.

b. Scheme water connections shall be provided with backflow prevention to Australian Standards.

c. The contractor shall allow for all tanks, filtration and water treatment equipment to ensure water supply is sufficient from low yield bores, and that water quality is maintained and treated to reduce chemical compounds in the irrigation water that create ongoing maintenance issues associated with blockage, high iron content and prevent staining.

d. Bore water shall be suitable for irrigation with suitable low salt content and neutral pH value.

e. Irrigation control systems shall be commercial and integrated with the station design; housed in free standing cubicles or built into the architectural form. Maintenance access to the control system shall be available at all hours.

f. Irrigation components shall be, or located so they are, lockable and tamper proof.

g. Irrigation system shall consist of uPVC mainlines and sub-mains. Sprinklers and sprays shall be connected by uPVC lateral pipework. All pipework extending under roads and other hard surfaces shall be sleeved in appropriately sized sleeves at a depth of 750 millimetres.

h. All turf areas shall be irrigated utilising appropriate sprinklers and sprays to ensure efficient watering of turf.

i. Garden bed areas shall be drip irrigated. The drip irrigation shall be connected to submains with poly pipe, which shall be buried a minimum 100 millimetres below the top of finished soil levels (not mulch levels) and be pressure compensating drippers with a minimum watering rate of four litres per hour.

5. Implementation - Specifications

5.1 General

Permanent landscaping and re-vegetation works shall not be undertaken until elements of the project works are sufficiently advanced to enable the landscaping works to be implemented without undue damage from subsequent activities.

The implementation of non-irrigated landscaping and revegetation works shall be undertaken so all direct seeding and non-irrigated planting is timed to occur with adequate seasonal rainfall to maximise germination, establishment and growth.

Temporary landscape works and stabilisation shall be undertaken immediately, as required, during the project works.

As a minimum, the landscaping works shall be undertaken, and materials shall be supplied and installed, in accordance with the standards listed in Table 1.

5.2 Before Site Clearance

Before site clearing and earthworks, the contractor shall ensure:

a. All site vegetation to be retained has been surveyed, identified and tagged, and protective measures have been implemented in accordance with AS 4790;

b. Trees located on clearing lines have been identified, and design and clearing lines have been adjusted to facilitate retention where possible;

c. All materials identified for reuse (e.g. weed free topsoil, boulders, rock, timber) have been pegged/tagged ready for salvage operations;

d. All site vegetation suitable for salvage has been salvaged;

e. All areas of weed infestation have been identified and pegged out and effective measures implemented to control the weeds and avoid spreading weed vegetative materials and weed infested topsoil during the clearing and earthworks;

f. Stockpile locations for the storage of cleared vegetation, topsoil and other site materials for reuse have been identified, pegged out and the soil surfaces suitably prepared ready for stockpiling operations;

g. All existing rubbish and dumped material and objects have been removed from the construction site; and

h. All approvals and licenses for clearing and ground water have been received.

5.3 Construction

During the construction phase of the project works, the landscaping contractor shall ensure all precautions are taken, as necessary, to prevent damage to retained vegetation within, or adjoining, the limits of clearing. Retained vegetation shall not be covered or buried with topsoil.

In addition, the contractor will be required to:

a. Prune trees with roots greater than 150 millimetres diameter from retained vegetation, promptly, and by a qualified tree surgeon (engaged by the contractor);

b. Prune vegetation for hazard reduction and/or selective thinning of branches in accordance with AS 4373 Pruning of Amenity Trees;

c. Remove any weed-infested topsoil from site to ensure it does not contaminate site soils and materials being reused within the works;

d. Clear, chip and stockpile native site vegetation for use in non-irrigated revegetation areas, where appropriate;

e. Minimise the mixing of subsoil and topsoil during stripping, stockpiling and re-spreading operations, and use appropriate plant and equipment by competent operators;

f. Finish the soil surface of all revegetated batters and embankment slopes so it is not bladed or scraped smooth but left in a roughened state to facilitate revegetation works;

g. Finish the soil surface of all landscape areas to be free of spoil and grade it to allow for all soil conditioning and finish treatments;

h. Round the top and toe of all batters to match the shape of the surrounding ground surfaces, and to ensure finished surfaces do not create physical barriers to uniformly disperse surface water flows;

i. Reshape the land form and finished soil levels and treatment of soil surfaces to maximise the absorption of rainfall and surface water flows within the site;

j. Ensure all imported topsoils and reconditioned existing soils are in accordance with AS 4419 Soils for Landscaping and Garden Use, AS 4454 Composts, Soil Conditioners and Mulches, and AS 3743 Potting Mixes;

k. Undertaken soil preparation, where necessary, to ensure de-compaction, fine grading and soil improvements for subsequent planting, seeding or grassing operations;

l. Spread topsoil, soil conditioners and mulch to a uniform depth;

m. Implement measures for soil surface stabilisation and protection of batter slopes and vegetated swales;

n. Install bores, water supply connections, irrigation sleeves and fixtures, as necessary and when approved by the manager of F&I, to allow for subsequent irrigation works (temporary or permanent) in accordance with Australian Standards;

o. Obtain all plants from nurseries accredited under the Nursery Industry Accreditation Scheme Australia;

p. Ensure all plant stock is hardened, vigorous and free of disease and insect pests at the time of planting and has adequate and healthy root mass readily evident when removed from the container, sufficient to hold the potting medium together, but not to the extent that plants are root bound; and

q. Ensure all:

    1. Trees are supplied in accordance with NATSPEC – Guide for Trees and AS 2303;

    2. Vegetation chipped to mulch is only used in non-irrigated revegetated areas of the rail and road reserve, and other natural revegetation areas;

3. Mulch materials used within the works (other than in non-irrigated revegetation areas) are screened pine bark mulch graded to exclude fibrous or fine particles with 95% of the particles within a size range of 35 to 70 millimetres in even proportions;
4. Measures are implemented so all finished soil surfaces are protected from weed infestation;
5. Weed species are controlled and managed for all areas of the site; and
6. Personnel engaged in spraying herbicides on construction site have a current pesticide operator's licence in accordance with the Health (Pesticides) Regulations 2011 and a non-toxic, water-soluble, biodegradable coloured dye is added to the herbicides before spraying that will be clearly visible for at least 48 hours after the herbicide application.

5.4 Hard Landscape Works

The contractor shall provide hard landscaping in areas where access for future maintenance of turf using equipment such as mowers will be difficult, including around furniture and below hard finishes such as walls and buildings.

Hard landscaping shall be installed with:

a. Falls to eliminate any ponding;
b. Fall away from all buildings and cabinets;
c. Appropriate accessibility, in accordance with AS 1428, including all warning and directional tactile pavers;
d. Any segmental unit paving adjoining planting or grass areas including concrete edge restraints; and
e. Appropriate grinding, or other augmentation, of finished surfaces to achieve required levels, or level relationships shall not occur. Required levels or level relationships shall be achieved through proper setting out and installation of each element.

5.5 Materials

5.5.1 Water

Water supplied for construction and vegetation establishment shall be from a potable water source or from a bore / ground water source that contains acceptable chemical analysis so as not to inhibit seed germination and plant health. Where potable water is not being used, a water analysis shall be provided to the superintendent for approval prior to commencement of water use.

The Contractor shall take a sample of the water proposed for use. The sample shall be submitted to an accredited laboratory for a standard chemical analysis including pH, electrical conductivity (EC), total dissolved salts, bicarbonates, hardness, alkalinity, iron, sodium, calcium and dissolved carbon dioxide.

5.5.2 Fertilisers

Approved fertilisers shall be supplied to site in the manufacturer's unopened bags, and shall be stored until use in accordance with the manufacturer's directions.

Planted areas shall be fertilised with slow release (9 month duration) fertiliser, suitable for native plants.

5.5.3 Pesticides and Herbicides

All chemicals are to be registered with the Australian Pesticides and Veterinary Medicines Authority (APVMA) for that specific purpose.

Application shall be undertaken by a licensed sprayer from a Registered Pest Management Business (Department of Health), in accordance with Health (Pesticides) Regulations 2011.

All chemical applications shall be in accordance with the spray manufacturer's directions and material data and safety sheets. All chemicals shall be approved pesticides, licensed for use within Western Australia.

Pesticide details should be submitted to PTA, including all Material Data Sheets for approval prior to any spraying activity. Only spray with approved pesticides.

5.5.4 Topsoils

Site topsoil that is deemed to be weed and dieback free, from within the rail reserve earthworks boundary, prior to clearing, shall be identified and salvaged for reuse in the revegetation of the rail reserve after the completion of the earthworks. Site topsoil shall be salvaged and stockpiled for reuse in accordance with the relevant project specification.

Site topsoil must only be used within the rail reserve.

Imported topsoil shall be weed free and comply with AS 4419 Soils for Landscape and Garden Use. The contractor shall a test analysis of all imported topsoil to show it complies with AS 4419, to be undertaken by a certified laboratory.

5.5.4.1 Soil Conditioners

Generally the soil conditioner shall be of a concentrated manner suitable for cultivation into topsoils so as to form a homogenous soil type comprising of balanced composted natural materials and manures without chemical additives that poses no public health risks.

Soil conditioner shall comply with AS 4454 Composts, Soil Conditioners and Mulches. The contractor shall a test analysis of all imported mulches to show they comply with AS 4454, to be undertaken by a certified laboratory. Soil conditioners shall also have a neutral pH value with low salt content and shall be moisture retentive soil containing humus and have no detrimental effects on the planted plant stock.

All soil conditioners shall be well composted to ensure the soil conditioner is free of weeds, viable seed stock, pathogens, root particles or other propagules.

5.5.5 Mulches

The following shall apply to the use of mulches:

a. Mulches shall be organic material, free of weeds, propagules, rubbish, and other materials that will inhibit plant growth.

b. Site mulch shall be chipped native vegetation, from within the rail reserve earthworks boundary. Site mulch shall be salvaged and stockpiled for reuse in accordance with the relevant project specification.

c. Site mulch shall only be used within the rail reserve.

d. Imported mulches shall comply with AS 4454 Composts, Soil Conditioners and Mulches. The contractor shall a test analysis of all imported mulches to show they comply with AS 4454, to be undertaken by a certified laboratory.

e. Imported mulch for use within the station precincts shall only be screened pine bark mulch with particle size between 35 and 75 millimetres, with a low combustibility.

5.5.6 Plant Material

The following is applicable to plant material:

a. Plant material shall be supplied by nurseries that are accredited under the Nursery Industry Accreditation Scheme of Australia, and in accordance with NATSPEC Guide for Supply of Trees.

b. Plants shall be free of pest and disease, be supplied in specified nursery containers, shall not be root bound and shall retain rootball shape when the plant is removed from the container. Plant shall be true to form and display normal leaf size and shape appropriate to the species.

c. Plants propagated for use within the rail reserve shall be propagated from seed or cutting from plant material with a provenance of the Swan Coastal Plain.

d. Trees (45,100&200lt) shall be staked utilising 2 of 2400 x 50 x 50mm square hardwood stakes, painted with 2 coats of Dulux exterior paint- matt black. Once installed the stakes should be able to withstand all predicted site wind loads.

e. Trees (500lt) size shall be guyed utilising Arborguys, with stainless steel wires and fixings installed over the root ball fixed with a minimum of 3 below ground anchors.

5.5.7 Seeds

The following shall apply to the use of seeds:

a. Seeds shall be collected or supplied by contractors or suppliers that comply with the Revegetation Industry Association of Western Australia's (RIAWA) Seed Collection Guidelines, including but not limited to; 01-RIWA Seed Standards and 02_RIWA Accreditation guidelines.

b. Seed shall also be collected and stored in accordance with Florabank "Guidelines and Code of Practice", see *www.florabank.org.wa,* and Florabank Guidelines 1-10.

c. Seed supplied or collected for the project shall have a Swan Coastal Plain provenance.

5.5.8 Irrigation

Irrigation materials shall be supplied in accordance with the appropriate Australian Standards, including but not limited to; ASNZS 4131 Polyethylene (PE) Compounds for Pressure Pipes and Fittings; AS/NZS 4130 Polyethylene (PE) Pipes for Pressure Applications; AS/NZS 4129 Fittings for Polyethylene (PE) Pipes for Pressure Applications; and AS 3000 Wiring Rules.

6. Maintenance and Establishment

Before and during the maintenance, and establishment period (24 months from Practical Completion), the contractor shall ensure the following:

a. All precautions are taken, as necessary, to prevent damage to any landscaping works;

b. Any new vegetation cover is protected and allowed to establish and grow;

c. All necessary site management is implemented to control vehicle and pedestrian access to landscaped areas; and

d. Horticultural maintenance activities are in place and commenced to establish the landscaping works prior to the maintenance and establishment period. Noting that, irrespective of the maintenance and establishment period, the contractor shall maintain the works from installation until Final Completion has been achieved.

During the maintenance and establishment period (24 months from Practical Completion) the contractor shall provide all landscape and horticultural maintenance, including preventative maintenance activities, to industry best practices. This will include, but is not limited to:

- Maintenance of plants and turf.
- Soil testing, if required to aid plant maintenance.
- Replacement of defective turf or plants.
- Watering.
- Fertilising.
- Weeding.
- Mowing and edge trimming to all lawn areas including collection and removal of clippings, mowing to ensure the turf is kept between 30 and 50 millimetres in height.;
- De-thatching
- Coring.
- Topdressing and or turf replacement for failed areas.
- Topping up and making good of mulch to garden bed areas.
- Pruning (including formative), as required and to ensure sightlines are not obscured.
- Maintenance of stakes and tree ties and other temporary landscape fixtures, such as plant guards and grates.
- Pest and disease control of lawn, shrubs and trees.
- Replacement of dead or failed plants.
- Maintenance scheduling and testing of irrigation systems.
- Erosion control and repairs.
- Removal of rubbish and debris in garden areas.
- Cleaning, maintenance, repair or touch up to surfaces finishes and hard materials.
- Maintenance of furniture.
- Rectification of all vegetation and landscaping that has been damaged by vandalism.

- Maintenance of paving and other hard landscaping.
- Maintenance of all firebreaks.
- Retention of a log book of maintenance activities.
- Preparation of maintenance reports.

Landscape maintenance shall be conducted under the supervision of a qualified horticulturist.

6.1 Monitoring

During the maintenance and establishment period (24 months from Practical Completion), the contractor shall monitor the entirety of the landscaping works. Monitoring shall be undertaken by the landscape architect responsible for the design works and include:

a. A visual inspection of the entire landscaping works every month to identify areas where additional weed control, infill planting or other maintenance is required;

b. At least 40 permanent photographic monitoring points, which are used to show the same site as it develops over time; and

c. A three monthly monitoring report (to be submitted to PTA's representative) to record and evaluate the success of the landscaping and revegetation works, compared to the completion criteria. This shall identify any follow-up remedial or maintenance works to be undertaken to meet the completion criteria, and set out a program for the remedial or maintenance works.

7. Handover and Acceptance

At the end of the maintenance and establishment period (24 months from Practical Completion), the contractor shall provide a handover report for acceptance by PTA's representative.

The handover report shall include:

a. All monitoring reports;

b. Surveyed as-constructed drawings, signed by the contractor, detailing all seeding, planting, grassing, seating furniture and hard landscaping works verified as correct and signed by the landscape architect;

c. Surveyed as-constructed drawings, signed by the contractor, detailing all irrigation works including valve location, mainline pipe runs (to be surveyed during construction), control location, electrical and hydraulic supplies, verified as correct and signed by the landscape architect;

d. Any outstanding defects for correction and the proposed timing for correction; and

e. The recommended ongoing maintenance works program.

7.1 Acceptance Criteria

At the end of the maintenance and establishment period (24months from Practical Completion), the contractor shall ensure the following completion criteria have been met by the landscape works.

Vegetation cover for all non-paved areas shall meet the following requirements:

a. All non-irrigated revegetation areas of planting or direct seeding shall have a minimum of 75% projected foliage cover (excluding weeds) over any treated area of 100 square metres, with no bare soil areas more than two square metres. Noting, projected foliage cover is the proportion of the ground covered by the vertical projection of the vegetation and foliage;

b. All irrigated planting areas shall have a minimum of 90% projected foliage cover (excluding weeds) over any treated area of 100 square metres, with no bare soil areas more than 0.5 square metres; and

c. All irrigated areas of grass shall have a minimum of 95% grass foliage cover (excluding any weeds) over any treated area of 100m2 square metres, with no bare soil areas more than 0.5 square metres.

Species diversity shall meet the following requirements:

a. All non-irrigated revegetation areas of planting or direct seeding shall have at least 30% of the species used in the planting or seeding mix for any specific location and no less than five species of shrubs or groundcovers or both occurring within any 100 square metre area. Where tree species are used, representatives of all species shall also be present; and

b. All irrigated planting areas shall have species types in accordance with the approved design drawings.

Plant numbers for all non-paved areas shall meet the following requirements:

a. All non-irrigated revegetation areas of planting or direct seeding shall be at least 75% of original plant numbers over any treated area of 100 square metres;

b. All irrigated planting areas shall have at least 90% of original plant numbers over any treated area of 100 square metres;

c. Tree planting shall be100%;

d. Transplanted vegetation shall be100%.

Plant material and turf condition shall meet the following requirements:

a. Plant material and turf is well formed and exhibits signs of vigorous healthy growth;

b. Plant material has grown and established, is not stunted, leaf size and colour is true to form;

c. Turf has established to an even green colour free from dry and dead patches;

d. Plant material and turf is free of disease symptoms (e.g. yellowing, wilting, etc.); and

e. Plant material and turf is free from signs of insect pests.

Weed pest and disease control shall meet the following requirements:

a. Declared plants and other high control priority species;

b. A 500 millimetre diameter weed-free zone shall be achieved around the base of each plant;

c. A minimum of 70% of all non-irrigated planting areas and 90% of all irrigated planting areas shall be free of weeds;

d. The presence of other nuisance species, and their impact on new plant growth, shall be demonstrably manageable with minimum future maintenance requirements; and

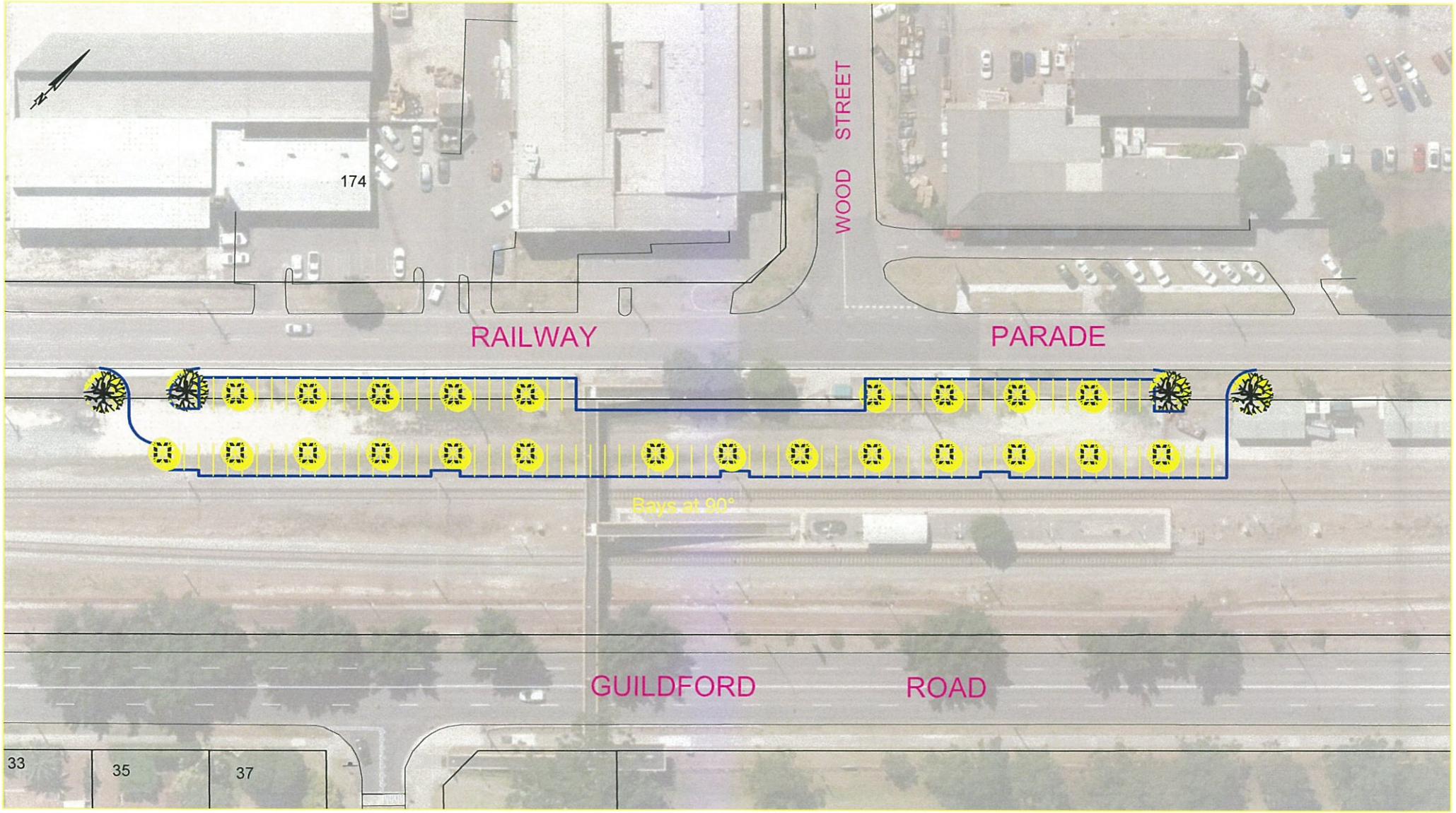
e. Plant material and turf shall be free from signs of insect pests, disease and fungus.

8. Definitions and Abbreviations

The following definitions and abbreviations are used in this document:

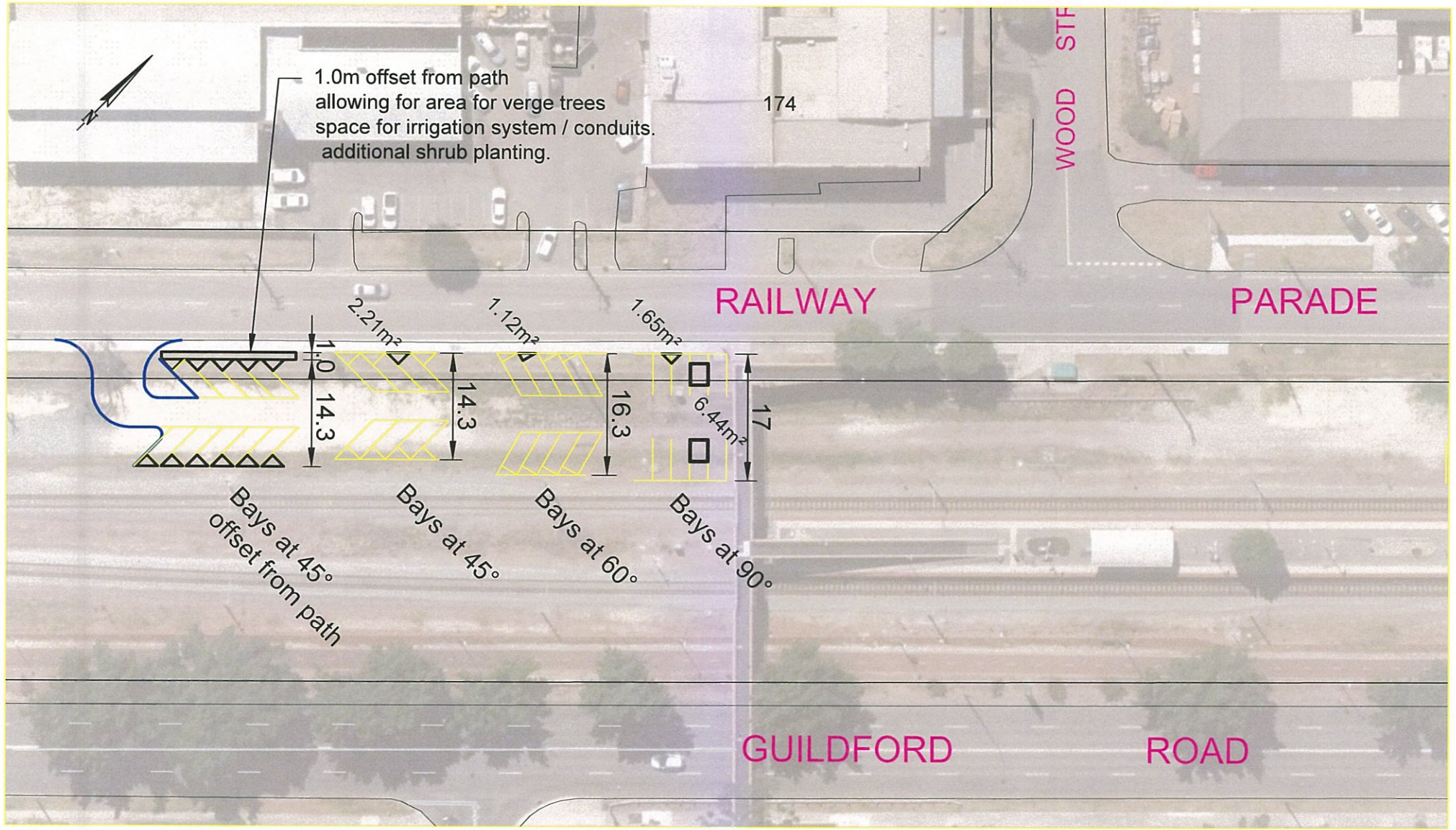
Table 4: Definitions and Abbreviations

Term	Definition
APVMA	Australian Pesticides and Veterinary Medicines Authority
CCTV	Closed Circuit Television
CPTED	Crime Prevention Through Environmental Design
EC	Electrical Conductivity
PSP	Principal Shared Path. These are defined under the Road Safety Rules as 'shared paths', where pedestrians have right of way but are for use by both cyclists and pedestrians.
PTA	Public Transport Authority
RIAWA	Revegetation Industry Association of Western Australia's
Shall	This indicates a mandatory requirement.



TOWN OF BASSENDEAN
REVISED DRAWING WITH INCREASED LANDSCAPING

TOWN OF BASSENDEAN ASSET SERVICES 48 OLD PERTH RD BASSENDEAN WA 6054 Telephone: (08) 9377 9000 Facsimile: (08) 9279 5616 Email: mail@bassendean.wa.gov.au www.bassendean.wa.gov.au	AMENDMENTS G. F. E. D. C. B. A.	NORTH POINT	0 5 10 15 20 25 30 35 40 45 50 ORIGINAL DRAWING SIZE IS A1	SURVEY / FIELD BOOK DESIGN / CAD DRAWING DRAWN / DATE CHECKED / DATE APPROVED / DATE HORIZONTAL SCALE / VERTICAL SCALE	DRAWING NAME TOWN OF BASSENDEAN ASHFIELD STATION CARPARK RAILWAY PARADE DRAWING NUMBER / SHT / REV. TOB 30–2019	A1



TOWN OF BASSENDEAN
ALTERNATIVE DESIGN

TOWN OF BASSENDEAN
ASSET SERVICES
48 OLD PERTH RD
BASSENDEAN WA 6054
ABN 38 247 485 168
Telephone: (08) 9377 9000
Facsimile: (08) 9279 5416
Email: mail@bassendean.wa.gov.au
www.bassendean.wa.gov.au

AMENDMENTS	
G.	
F.	
E.	
D.	
C.	
B.	
A.	

NORTH POINT

0 5 10 15 20 25 30 35 40 45 50
ORIGINAL DRAWING SIZE IS A1

SURVEY	FIELD BOOK
DESIGN	CAD DRAWING
DRAWN	DATE
CHECKED	DATE
APPROVED	DATE
HORIZONTAL SCALE	VERTICAL SCALE

DRAWING NAME: TOWN OF BASSENDEAN
ASHFIELD STATION CARPARK
RAILWAY PARADE
DRAWING NUMBER: TOB 30-2019
SHT:
REV:
A1

ATTACHMENT NO. 6

WALGA | City of Perth

Sustainability Frameworks

A Review and Comparative Analysis

1.0 Acknowledgements

This report is a summary of research conducted at the City of Perth in May 2018 and has been put together by WALGA, with permission from the City.

WALGA would like to thank the City of Perth for sharing this research for the benefit of other Local Governments.

**The City of Perth and WALGA do not endorse any particular sustainability framework. This report has been compiled to share information in the hope that it will assist Local Governments in directing their own approaches dependent on their context-specific needs.*

Contact:

Jade Mains

WALGA | City of Perth

Sustainability Frameworks

A Review and Comparative Analysis

1.0 Acknowledgements

This report is a summary of research conducted at the City of Perth in May 2018 and has been put together by WALGA, with permission from the City.

WALGA would like to thank the City of Perth for sharing this research for the benefit of other Local Governments.

**The City of Perth and WALGA do not endorse any particular sustainability framework. This report has been compiled to share information in the hope that it will assist Local Governments in directing their own approaches dependent on their context-specific needs.*

Contact:

Jade Mains

WALGA | City of Perth

Contents

2.0 Introduction

Sustainability has become increasingly more widely acknowledged since its formal introduction in the Brundtland Report in 1987. It brought together economic, environmental and social elements for the first time, calling for an acknowledgement that the earth could not sustain life with the current belief that our resources were infinite.

For Local Government, sustainability is an important function of their organisation and responsibility to their wider community. Both rural and urban areas pose significant challenges in terms of management and planning for a changing climate, increased populations and depleting resources. However, the opportunities are vast, with innovative and aspirational examples from some of the world's leading Cities shaping urban sustainability.

In approaching sustainability, Local Governments need to align their work against clear and robust frameworks. There are several sustainability frameworks that allow for this, with added benefits of benchmarking and mainstreaming sustainability across organisations. Within this summary document, five frameworks, One Planet Living, Sustainable Development Goals, The Natural Step, Green Star Communities and Transition Dynamics have been briefly reviewed and a comparative analysis undertaken against a set of key criteria to access their suitability for adoption by Local Government.

3.0 Framework Review

3.1 One Planet Living

The One Planet Living framework is a leadership program developed by Bioregional, an international organisation who champion the framework, stemming from their experience of working with eco-villages in the UK. The framework takes a holistic approach to planning and strategic implementation through ten guiding principles of sustainability, assisting Local Governments in examining challenges, developing appropriate targets and provides a user friendly communication tool.

There are currently numerous Local Government organisations using the framework. Most notably, The City of Fremantle who has achieved One Planet Council recognition on both a national and international scale. Greater Geelong also uses the platform in a formal nature and has also been recognised as a One Planet Council. In the past City of Subiaco and City of Yarra have also used the framework in an informal nature. Most other local government examples are UK based.

The Framework can be engaged with in both an informal nature, or formally, which attracts an annual membership (varying cost depending on the size of Local Government) plus additional accreditation fees if that is something a Local Government finds of value. Accreditation fees start in Year 1 at $9500, reducing to roughly $8500 from Year 2. Accreditation allows a Local Government to be formally recognised on the bioregional platform and market this through their own brand.

stakeholders. These branding tools allow for the platform to become genuinely embedded within a Local Governments brand, solidifying sustainability as an integral part of its identity.

The framework can also be used by a variety of stakeholders, exemplified through the LandCorp White Gum Valley (WGV) development in partnership with the City of Fremantle. In the WGV development the One Planet framework was used to drive the project in creating a community with a range of sustainable housing types, living options and green space in an existing suburban area.

Highlights of the One Planet action plan for the project were:

- Free sustainable upgrade packages for single lots to ensure zero carbon buildings, provision of a rainwater tank and a mature deciduous tree for shading.
- Private public partnership funding for battery storage of solar-generated electricity being progressed for 50% of all dwellings
- Multi-residential car parking to average less than one space per unit (very low in car-dependant Perth)
- Tree canopy returned to 30% of site and 30% of trees in the public domain to have edible fruits
- Resident engagement programme driven by the Low Carbon Living CRC programme and City of Fremantle

Other benefits of using the One Planet framework include:

- Ability to deeply embed the framework within existing organisational strategies due to both quantitative and qualitative data utilised in KPI's within the action plan. This assists with obtaining buy-in at executive level and allowing for a more seamless integration of the framework into existing workflows.
- Support, advice and accreditation opportunities if used in a formal nature from Bioregional

Successful implementation and embedding of the One Planet Living framework is resource intensive, which can be challenging in a resource constrained environment. It also requires strong and sustained leadership from senior management to ensure the framework is successfully driven and managed within the organisation. In addition to this, the advice that Bioregional offers is largely based on international examples, and not necessarily relevant to the Western Australian context.

3.2 The Natural Step

The Natural Step (TNS) is a science-based framework, based around a robust definition of sustainability through four principles which then feeds into a well-developed planning methodology that encourages consensus-building and systems thinking.

The underlying premise of the framework is a scientific, systemic and strategic approach to sustainability that simplifies a complex concept allowing for concise and focused action.

The TNS framework can be used informally, using open-source online resources to implement. The Natural Step international organisation also offers collaboration, education and facilitation services to assist with comprehensive adoption of the framework. There are 11 satellite offices worldwide, the closest to Australia being in New Zealand. Accessing this level of support in the use of the framework requires formal subscription to the TNS organisation attracting fees.

Currently the framework is used mainly in the business sector, most notably by corporations such as Nike, Starbucks and Ikea, however there are also a number of Local Governments engaging with the framework. The City of Portland is a global example of a leader in sustainability which has engaged with the framework to assist with formulating a road map for action. On a local scale, the City of Vincent is currently in the process of embedding the core principles across the City in an informal nature.

The process for adoption of the TNS framework consists of four stages, termed the A-B-C-D approach, using a feedback mechanism tool to set up and monitor the pathway towards sustainability. Beginning with developing the vision through adopting the core principles, progressing through to baseline mapping, developing an action plan with creative solutions to challenges and gaps, and then adopting a step by step implementation plan that identifies the low hanging fruit for quick wins, whilst longer term actions are mapped out.

One of the most significant benefits of this framework is its comprehensive and aspirational approach through a system-thinking model. Seeing an organisation as a system, intrinsically linked together and therefore not in isolated parts, which represents the true nature of sustainability.

The TNS framework is also flexible, which allows diverse Local Governments to tailor to their specific regions. In addition to this, being based around a common definition, instead of benchmarked across a set of principles, allows for deep integration of the framework across the organisation.

However, whilst the framework's flexibility and aspirational approach are a benefit, they can also present significant challenges for implementation. Full buy-in across the organisation would be required to embed the frameworks concept across an organisation, as well as significant resources in developing and implementing the framework. Support is also limited with all offices being internationally located.

To further information on The Natural Step, visit the organisations website. The City of Vincent is also currently adopting the framework informally to drive its Environmental Sustainability Strategy, however it is yet to be published.

3.3 United Nations Sustainable Development Goals

The Sustainable Development Goals (SDG's) are a globally recognised goals-based framework developed by the United Nations. In 2015 193 countries, including the Federal Australian Government pledged to take action and report against the goals.

The SDGs provide clear guidelines and targets that seek to shift away from status-quo approaches, transitioning towards a truly sustainable future. Despite their global nature, the goals can be tailored to national and local regions.

The SDGs have been significantly adopted by a number of Local Government leaders of sustainability, including the City of New York, City of Melbourne, Sydney and Brisbane. Locally, the EMRC have used the goals to drive their Regional Environment Strategy.

Implementing the platform consists of four stages of localisation, involving internal and external stakeholder engagement, setting the local SDG agenda, action plan development and ongoing monitoring and evaluation.

Significantly, the SDGs have been politically committed to on the global stage by the Australian Government, therefore alignment and adoption of the platform by Local Governments is of great benefit as all levels of government have a shared responsibility in working towards the goals and allows for an integrated line of sight. The WA state government are yet to formally commit to the goals.

Other benefits of the SDGs include:

In addition to this, no formal support through the United Nations on adopting the framework is available, however the organisation, as well as external partners, are continuously adding to the online resources available to Local Governments.

For more information on the Sustainable Development Goals, click here.

For more information on how Local Governments can implement the UNSDG framework, click here.

The City of Melbourne has developed a 'scorecard' mapping the goals against existing strategies and plans, which can be viewed here.

Read the EMRC's full Regional Environment Strategy, which incorporated the SDG's into their strategic planning.

3.4 Green Star Communities

The Green Star Communities is a national framework and rating tool developed by the Federal Government, centred around five core principles in which to achieve sustainability. The overarching objective of the framework is to achieve national consistency towards a best-practice sustainable communities based on a common definition. The framework was developed to foster the ability for multiple stakeholders to use, as well as having a Local Government focus.

The platform can be engaged with through membership and accreditation. Membership gives the ability to access the technical support from Green Star and discounts in accreditation fees. Currently membership costs $2640 annually with accreditation fees varying, priced per project generally and beginning at $35,000. Accreditation can be attained without membership to the Green Star platform.

There is currently very little uptake within the Local Government context of the Green Star Communities Framework. Parramatta City Council and Mount Barker Council currently use the framework. The City of Stirling has also recently engaged with the framework to guide its Scarborough Beach development on a purely project basis.

There are six stages of implementation to adopt the framework:

- Application of Principles, involving embedding each principle within each policy, plan or project. This application builds a broad sustainability lens into every facet of the organisation, ensuring triple bottom line driven outcomes can be achieved.
- Defining Community Boundaries, involves identifying boundaries and adopting a place-based approach in applying the principles. This means that for the principles to be effective, clear boundaries of influence need to be established and parameters set

- Application in a Transparent and Accountable way, is the best practice application of the five core principles that open and accountable communication. The review of this application should be done in consultation with relevant stakeholders and access to this information made public.

One of the major benefits of the Green Star Communities framework is its development by the federal government and its affiliation with the renowned and widely adopted Green Star family, who also provide the Green Star Buildings platform. This provides a certain degree of alignment with federal government sustainability initiatives.

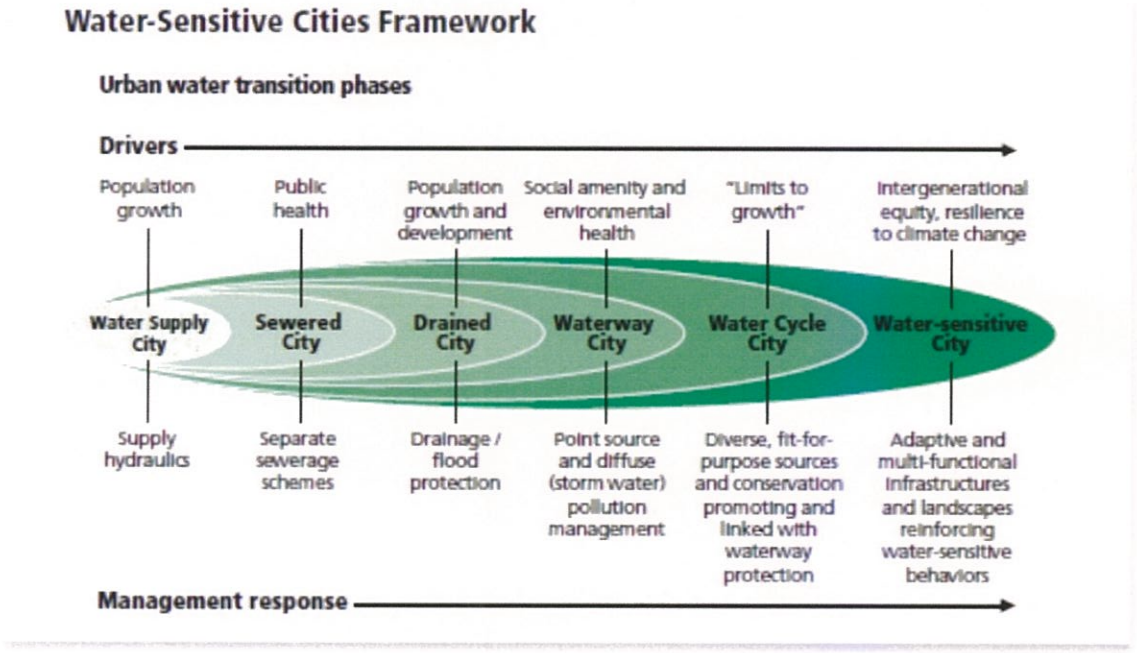
However, due to the backbone of the framework being a rating tool, it can be largely centred on a points-based system, rather than taking a holistic and staged approach to achieving sustainability. The framework also attracts significant and ongoing costs, requiring ongoing buy-in, and due to this there has been very limited uptake at a local government level.

The Green Star Communities Guide for Local Government can be viewed here.

3.5 Transition Dynamics

Whilst not a sustainability framework, the Transition Dynamics model represents a truly transitional tool that could be harnessed either in isolation or as a part of a custom framework approach to drive sustainability within Local Government. The framework was developed in 2016 by Rebekah Brown (Professor and Director of Monash Sustainable Development Institute), following a 2014 study on Urban Water and Sustainability Transitions.

The framework focuses on facilitating and tracking the changes in a system by acknowledging different 'stages' of the transition. The framework is currently applied specifically to Urban Water management and in this context, the transition tool states key drivers that must be addressed through each 'transition phase' (or stage), that is then matched with response practices that ensure the implementation and achievement of each transition. It is this emphasis on the progression that Brown claims may ultimately determine the success of a transition journey.



4.0 Comparative Analysis

Each of the five frameworks above were tested using comparative analysis tool, synthesizing how each framework performed against a set of key criteria applicable in the Local Government decision-making context.

Key Criteria
Alignment and Potential Integration with Key Strategies/Plans?
Financial Costs
Resource Requirements (FTE)
Benchmarking Opportunities (If so, What Level?)
Effective Communication Tool? Internal (Corporate) or External (Community)
Alignment and Integration potential with other frameworks
Ability to Demonstrate Leadership (Local, National, Global)
Ability to use as a Transition Tool (Staging Approach)

KEY CRITERIA	ONE PLANET	THE NATURAL STEP	UN SDG'S	GREEN STAR COMMUNITIES	TRANSITION DYNAMICS
Alignment and Potential Integration with Key Strategies/Plans?	Yes. KPI's both quantitative and qualitative, aligning strongly to LG strategic plans. Broad principles enable for complete Integration across organisation. If Certification engaged with, separate reporting/data collection for bioregional process required.	Yes. Systems-thinking approach allows for complete integration. Aspirational approach strives for excellent and leadership aligning across all strategies.	Yes. Localisation allows for deep integration across LG strategies/plans. Planning timeframes align annual LG reporting.	Yes, principles align with LG strategies/plans. Integration could be challenging due to rating tool style.	Potential to integrate with existing KPI's to determine progression through transition phases. However, due to limited water context, integration potential uncertain and not currently demonstrated in LG.
Financial Costs	Annual Formal membership $5600, Accreditation fees - YR 1 $9500, YR 2 & 3 $8500.	Not Attained. Is an open sourced framework so can be accessed without consultation with TNS.	No direct financial costs as an open source framework. However, development may require external consultation.	Annual membership $2640. Certification fees vary, and are generally priced per project starting at $35,000.	No direct financial costs, however customisation may require extensive external consultation
Resource Requirements (FTE)	1 FTE - Annual management plus additional resources during development process.	1 FTE - Annual management, plus additional resources for development process.	1 FTE - Annual management, plus addition resources for development process.	1 FTE - Annual management, plus addition resources for development process.	Unable to determine - absence of adoption at Local Government level.
Benchmarking Opportunities ***(if so, at what scale – Local/ National/Global)***	Yes, potential for all scales. Built in certification opportunities available across National & International against other Bioregional Councils.	Yes, Local and Global. No direct certification.	Yes, all scales. No direct certification, however substantial opportunities through aligning with globally recognised platform that is highly adopted by leading Local Governments.	Yes, Nationally. Built in rating tool and accreditation, however benchmarking against this very limited and perhaps not relevant to leadership aspirations.	Yes, but not as a stand-alone framework. Would need to be 'packaged'. This is more a staging tool to account for transitions towards a sustainable pathway.

Effective Communication Tool - Internal or External	Yes, Bright, user-friendly and easily understood brand. Clear enabler of community-level engagement. Benefits extend to corporate-level, however buy in may be limited due to limited uptake within Local Government.	No, limited. Highly complex and technical. Would require substantial customisation to be engaging and allow for buy-in at community and corporate level.	Yes, bright, globally recognised brand, easily understood and relatable. Extensive opportunity for corporate-level engagement and buy in due to UN reputation and awareness. These benefits would also extend out to community-level.	No, complex and project driven but principles are clear. Recognised within LG context as a building rating system, which would have some benefits for buy in at corporate-level. Community-level would require substantial customisation.	No, would require a complete customisation to make LG specific. Both corporate and community-level engagement and buy-in would be challenging as not LG specific or reputable.
Ability to Demonstrate Leadership (Scale - *Local/ National/Global*)	Yes, at a local level City of Fremantle have achieved leadership through the platform. Built in recognition available at both national and global scale, however very little uptake at all levels, therefore benefits are limited.	Yes, City of Portland are recognised as global leaders, however extent to which the TNS drives their strategies is unknown. No direct accreditation opportunities.	Yes. Multiple LG leaders using, many are capital cities. Aspirational & global focused allowing for leadership potential across all scales. No built-in accreditation but due to global following, alignment will foster recognition through other avenues.	Yes, nationally. Built in accreditation, however with limited benchmarking - how effective? Projects are focused so questionable at how aspirational.	Yes, but not as a stand-alone framework. Would need to be 'packaged' with others to achieve. This is more a staging tool to account for transitions towards sustainable pathway
Alignment/Integration potential with other frameworks?	Yes, could easily align with SDG's	Yes, with SDG's - City of Portland currently takes this approach	Yes, compatible with most frameworks. Very flexible and adaptable	Potentially	Yes, could be once customised.
Ability to use as a Transition Tool (*Staging Approach*)	Yes, built into the framework but less so than others.	Yes, built into the framework.	Yes, built in to the framework through staging, back casting, milestones and short-long term planning.	No, rating tool which only accesses progress towards this benchmark.	Yes, lies at the heart of this framework.

4.2 Key Criteria Discussion

4.2.1 Alignment and Potential Integration with Key Strategies/Plans

All of the five frameworks align to varying degrees, depending on internal organisational structures. The TNS systems-thinking approach requires complete integration to be effectively utilized, therefore would potentially be problematic if full-buy in across all levels was not obtained.

By far the two strongest frameworks against this indicator are One Planet Living and the SDG's. Both approaches track and value community and corporate commitments, aligning with existing KPI reporting systems within Local Government. Further to this, the broad goals of the SDG's foster easy integration, providing the opportunity to pull existing plans and projects through the framework for quick wins. The SDG's reporting structure of annual reporting against short-term projects, whilst working towards an overall 15 year plan for long-term sustainability would be highly beneficial in working in with existing Local Government strategy timelines.

4.2.2 Costs – Financial and Resource Requirements (FTE)

Financial Costs vary substantially across the frameworks however, resource requirements are largely the same sitting at 1 Full Time Employee (FTE) required for the ongoing implementation and monitoring once a framework has been embedded.

The One Planet Living and GBCA both have annual membership and certification costs associated with their use, however GBCA is by far the cost intensive. It attracts an annual membership as well as a substantial per-project fee for certification. There is an option to apply for a multiple-project discounted rate, however the project-basis of this accreditation perhaps makes it a less attractive option to adopt as a holistic and comprehensive sustainability approach.

While the TNS framework is being applied by Local Governments globally, which may offer benchmarking opportunities, at the local Level, the City of Vincent is only adopting the approach through their Environmental Strategy and therefore limited for a holistic organisational-wide approach.

The SDG's, although offering no formal certification, represent the most relevant opportunity for benchmarking due to its extensive uptake globally and recently by many national Local Governments. The increasing number of organisations that are now looking towards this platform indicates that there is genuine interest and value in adopting the goals to align ongoing projects against. There is also added benefit of the goals being committed to on a federal level, and therefore a responsibility of all Local Governments to report against them.

4.2.4 Use as an Internal (Corporate) or External (Community) Communication Tool

The two dominant frameworks in this indicator are the SDG's and the One Planet Living approach. Both frameworks are bright, clear and understandable frameworks that would enable either framework to be an effective communication tool.

The One Planet Living brand has been successfully adopted and embedded by the City of Fremantle across both its internal and external operations. The ability for a framework to be easily understood outside of the technical knowledge of sustainability officers is of significant benefit to Local Governments, and the One Planet brand certainly meets this requirement.

The SDG's also meet this requirement, however has the added benefit of being able to be adapted to fit within the City's existing brand. Localising the aspirational global goals is an important element in making the goals relevant to both internal and external stakeholders, also creating opportunities for higher levels of awareness and ownership. The City of Baltimore successfully took this approach allowing for complete integration and harmony of the SDG's with the City's own brand.

The Transition Dynamics framework could also easily be aligned with the SDG's as the goals foster the recognition of a long-term pathway in achieving sustainability through staging and milestone recognition. This sort of approach could assist with lessening the burden of attempting to implement and report against 17 goals all at once, instead working into the action plan different stages of transition to account for quick wins.

4.2.6 Ability to Demonstrate Leadership (Local, National, Global)

Again, all five of the frameworks could lead to demonstrate leadership due to the holistic approach to sustainability. The GBCA would be the most limited, whereby its approach is more project based and therefore restricted in achieving leadership across a more organisation-wide approach.

The One Planet Living framework has demonstrated its ability to represent leadership at the local level through the City of Fremantle. The added benefit of the built-in accreditation of One Planet Council Status allows the City of Fremantle to actively promote this recognition and leadership across both internal and external levels. Bioregional also actively promotes this recognition through their own channels at the International level, however the reputation of Bioregional as an organisation is less widely known than the United Nations.

The SDG's again represents the strongest opportunity to demonstrate leadership, despite the lack of formal accreditation. The goals are an internationally recognised framework, unanimously adopted by 193 UN member states, with the Australian Government being among this group. The large commitment to the SDGs at the global level would allow significant leadership aspirations across all scales (local, national and global governments) from the outset. This is evident from the significant number of leading councils who have or are currently in the process of alignment with the SDG's, such as the City of New York, City of Portland, City of Melbourne, City of Sydney and City of Brisbane.

4.2.7 Ability to use as a Transition Tool (Staging

The Transition Dynamics framework obviously is fundamentally centred on acknowledging transitions within a system, however getting it to the point of being a fully comprehensive and useable framework for City use detracts from this benefit.

The Natural Step framework and the SDG's acknowledge transitions within their ongoing implementation processes. Both are systems-thinking focused and therefore the system is constantly reassessed and benchmarked against the framework, allowing for easy integration of transition stages to help the track progress towards their overall objectives.

5.0 Summary

Of the five sustainability frameworks reviewed, none were completely fit for purpose in being able to be readily adopted and implemented by Western Australian Local Governments. In considering the most suitable framework, it is vital that Local Governments assess their own unique and context specific requirements, so that it can be embedded into the organisation's operations and become a part of its identity. Each framework has particular characteristics which may be beneficial to certain Local Governments, or organisations may find a more customised approach whereby elements of each framework is taken to tailor a framework completely to their needs. Regardless of the approach, it is clear there are substantial benefits and opportunities for Local Governments to drive successful sustainability programmes and demonstrate leadership and advocacy by centralising their work under a robust framework.

Further to this, what become very clear during the consultation process was that Local Governments want to work together in sustainability initiatives, particularly around knowledge-sharing and synergy opportunities possible through adoption of similar framework models. Just as the United Nations Sustainable Development Goals clearly set out; sustainability cannot be achieved in isolation at any scale. Local Governments, States and Nations must work together in tackling the bigger global issues, whilst addressing their more region-specific challenges through holistic approaches.

ATTACHMENT NO. 7

TOWN OF BASSENDEAN

MINUTES

AUDIT AND GOVERNANCE COMMITTEE

HELD IN THE COUNCIL CHAMBER, 48 OLD PERTH ROAD, BASSENDEAN

ON WEDNESDAY 5 JUNE 2019, AT 9.30AM

1.0 DECLARATION OF OPENING/ANNOUNCEMENT OF VISITORS

The Presiding Member opened the meeting, welcomed all those in attendance and conducted an Acknowledgement of Country.

2.0 ATTENDANCES, APOLOGIES AND APPLICATIONS FOR LEAVE OF ABSENCE

Present

Cr Kathryn Hamilton, Presiding Member
Cr Jai Wilson
Cr Melissa Mykytiuk
Ian Walters
Cr Renee McLennan, Mayor (Observer)

Officers

Peta Mabbs, CEO
Ken Lapham, A/Director Corporate Services
Amy Holmes, Minute Secretary

Consultants

Mr Suren Herathmudalige, Macri Partners
Mr Tony Macri, Macri Partners
Ms Anne Cheng, Moore Stephens,
Ron Back, Financial Advisor

Apologies

Mr Tom Klaassen

3.0 DEPUTATIONS

3.1 Ms Anne Cheng from Moore Stephens, was in attendance to discuss the Internal Audit.

3.2 Mr Suren Herathmudalige and Mr Tony Macri from Macri Partners, were in attendance to discuss the Interim Audit Report.

4.0 CONFIRMATION OF MINUTES

4.1 Audit and Governance Committee meeting held on 18 March 2019

COMMITTEE/OFFICER RECOMMENDATION – ITEM 4.1

MOVED Cr Wilson, Seconded Ian Walters, that the minutes of the Audit and Governance Committee meeting held on 18 March 2019, be confirmed as a true record.

CARRIED UNANIMOUSLY 4/0

5.0 ANNOUNCEMENTS BY THE PRESIDING PERSON WITHOUT DISCUSSION

Nil

6.0 DECLARATIONS OF INTEREST

Nil

7.0 BUSINESS DEFERRED FROM PREVIOUS MEETING

Nil

8.0 REPORTS

8.1 Update on Audit Activity from Anne Cheng, Moore Stephens (WA) Pty Ltd

This will now be a standing item on the Audit and Governance Committee Agenda, to enable updates from Council's External Auditor.

Audit Regulation 17 Review

A review of Audit Regulation 17 commenced on13 May 2019. The purpose of the review is to provide an independent assessment to the CEO in respect of the Town's governance and processes regarding Risk Management, Internal Controls and Legislative Compliance.

A draft report for consideration and review is targeted for 7 June 2019.

Audit Plan for 2019-2020

The Audit Plan for the next financial year will be presented to the next Audit and Governance Committee following engagement with the CEO. The rationale for the Plan will take into consideration the results of the Audit Regulation 17 review to target areas based on exposure to financial and/or operational risk.

Risk Workshops

Risk Workshops were conducted for staff and for the Executive Team on 8 and 17 May 2019.

The objectives of the Risk Workshops were to provide training using ISO 31000:2018 as the Risk Management Standard to:

- increase awareness of the principles of risk management;
- outline staff accountability and responsibilities for managing risk in their respective work areas;
- engage in risk conversations to start the process of formalising procedures for risk identification, assessment and risk mitigation; and
- provide informal and formal risk reporting guidelines for staff adherence.

The Risk Workshop for the Executive Team focused on discussion of strategic risks, including outcomes of risk discussions from the staff workshops.

COMMITTEE/OFFICER RECOMMENDATION – ITEM 8.1

AGC-1/06/19 MOVED Cr Mykytiuk, Seconded Cr Wilson, that the update on Audit Activity from Moore Stephens (WA) Pty Ltd, be received.

CARRIED UNANIMOUSLY 4/0

8.2 2018/19 Interim Audit – Macri Partners (Ref: FINM/AUD1 - Ken Lapham, Manager Corporate Services

APPLICATION

The purpose of this report was to provide Council, through the Audit and Governance Committee, with details of the 2018/19 Interim External Audit Report and provide management comments and information on the remedial action taken.

ATTACHMENTS

Confidential Attachment No. 1:
2018/19 Interim Audit Report

BACKGROUND

In March 2019, Macri Partners, the Town's Auditors, has reviewed the following functions:

- Bank Reconciliations;
- Investment of Surplus Funds;
- Purchases, Payments and Creditors;
- Rate Receipts and Rate Debtors;
- Receipts and Sundry Debtors;
- Payroll;
- General Accounting (Journals, etc);
- IT Controls;
- Registers (Tenders Register, etc);
- Compliance;
- Review of Council Minutes.

STRATEGIC IMPLICATIONS

Objectives *What we need to achieve*	**Strategies** *How we're going to do it*	**Measures of Success** *How we will be judged*
5.1 Enhance organisational accountability	5.1.1 Enhance the capability of our people	Community / Stakeholder Satisfaction Survey (Governance)
	5.1.2 Ensure financial sustainability	
	5.1.3 Strengthen governance, risk management and compliance	Compliance Audit
	5.1.4 Improve efficiency and effectiveness of planning and services	Risk Management Profile
	5.1.5 Ensure optimal management of assets	Financial Ratio Benchmarked. Asset Ratio Benchmarked

FINANCIAL CONSIDERATIONS

Funding to meet costs associated with the 2019 External Audit exists in the 2018/19 Budget.

COMMENT

The Interim Audit of systems and processes provides a level of assurance to auditors, the CEO, the Committee and Council in relation to the level of controls that are in place and staff adherence to those controls.

A summary of the issues identified by the Auditor is included as an attachment to the agenda. Management comments in response to the issues raised by Macri Partners, have been submitted to Macri Partners and the Office of Auditor General.

The 2018/19 audit process involved the Office of Auditor General, who will oversee Local Government financial audits. The Auditor General commenced local government financial audits in 2017/18. Macri Partners will complete the 2018/19 Annual Financial audit for the Town of Bassendean, with the Office of Auditor General having the final audit sign off.

Appropriate action to have the various recommendations in the Interim Audit Report implemented, will be or has been undertaken.

The Audit and Governance Committee can recommend that Council receive the Interim Audit Report and note management's comments.

The Acting Director Corporate Services recommends that the Interim Audit Report prepared by Macri Partners be received and that the management's comments be noted.

The Committee discussed the Payment of Bonds and Trust Funds. The CEO will liaise with WALGA to seek its opinion on this matter and lobby for change with the Auditor General.

The following amendments will be made to the Interim Audit Report:

5. Access unrestricted to payroll module

Management Comment

Agreed. Corrective action has now been implemented. ***The Payroll Officers' access will be limited to payroll processing functions segregated from read only functions for oversight purposes.***

9. *Recognition of trust fund monies and payment of interest*

Management Comment

Disagree. Action will be taken to challenge the Office of the Auditor General's finding. Further advice is to be sought from the West Australian Local Government Association (WALGA) and the Department of Local Government, Sport and Cultural Industries before the next Audit & Governance Committee meeting.

COMMITTEE/OFFICER RECOMMENDATION – ITEM 8.2

AGC-2/06/19 MOVED Cr Mykytiuk, Seconded Cr Hamilton, that the Audit and Governance Committee recommends that Council receives the Interim Audit Report for the 2018/19 financial period, **as amended**, from Macri Partners.

CARRIED UNANIMOUSLY 4/0

8.3 Policy 6.14 - Review of Purchasing (Ref: GOVR/POLCY/1- Acting Director Corporate Services, Ken Lapham)

APPLICATION

In response to the 2018/19 Interim Audit review, the Audit and Governance Committee was requested to recommend Council adopt a revised Purchasing Policy.

The Town of Bassendean Purchasing Policy does not include information about what forms of quotations are acceptable, the minimum number of verbal and written quotes and record retention.

In order to comply with the requirements of the Local Government (Functions & General) Regulations 1996 a revised Purchasing policy to ensure compliance is presented.

Separate to the above, consideration was also given to a Council resolution (28 August 2018) that *"the Audit and Governance Committee consider the scope of works and deliverables for new projects and consultancies that would be appropriate for presentation to Council/Committees for consideration and approval prior to release, and provide recommendations to Council."*

A progress report on the progress in reviewing the Town's procurement processes & controls, was also provided.

ATTACHMENT

Attachment No. 2

- Current Purchasing Policy 6.14; and
- Draft Purchasing Policy 6.14 *(with Track Changes).*

BACKGROUND

The review of 6.14 - Purchasing Policy was presented to the Audit and Governance Committee at the meeting held on 8 August 2018. The application was to consider:

1. A notice of motion from Cr Brown: Incentive for Local Business; and
2. Review the purchasing policy in order to comply with the requirements of the Local Government (Functions & General regulations.

At its meeting held on 28 August 2018, Council resolved to:

"1. Defer a decision on Policy 6.14 – Purchasing Policy and refers it back to the Audit & Governance Committee to consider in the light of:

a) recommendations and feedback from WALGA regarding sustainable procurement;
b) the findings of the Auditor General's Report on Procurement that is due to be released in the near future;

2. Request the Audit & Governance Committee consider the scope of works and deliverables for new projects and consultancies that would be appropriate for presentation to Council/Committees for consideration and approval prior to release, and provide recommendations to Council."

In response to Council's resolution on 28 August 2018 (in particular item 1 above), a further review of the Purchasing Policy - 6.14 was presented to the Audit and Governance Committee meeting held on the 7 November 2018.

The application was to consider adjustment to the policy in view of the WALGA sustainability report and receipts of the Auditor General's Office report on Local Government Procurement. The policy also sought to address the Council resolution pertaining to incentives for local businesses for the procurement of goods & services.

As a result of this report, Council at its meeting held on 22 November 2018, deferred the review of Policy 6.14 pending a Councillors' workshop.

COMMENT

1) Amendment of 6.14 Purchasing Policy: Local Government (Functions and General) Regulations

An amendment was made to the Local Government (Functions and General) Regulations that requires Council to include purchasing thresholds and explanations to the thresholds that should be included into the Purchasing Policy. In addition to this, it is a requirement to include how the recording and retention of written information, or documents, in respect of all quotations are received.

In order to comply with the 2018/19 Interim Audit outcomes, a revised purchasing policy that reflects the inclusion of purchasing thresholds and includes matters relating to the recording and retention of written information, is attached to the agenda.

It should be noted that further enhancements to the policy will be presented to the Audit and Governance Committee at a later stage, to address issues in regards to sustainability, incentives for local businesses (Local Economic benefit).

2) Scope of works for Projects and consultancies:

The Local Government (Functions & General) Regulations 1996 provides specific guidance that Local Governments are required to follow in the preparation of a purchasing policy in relation to contracts for other persons to supply goods and services where the consideration under the contract is expected to be $150,000 or less or worth $150,000 or less.

In accordance with the Local Government (Functions & General) Regulations section 11A (3), the proposed purchasing policy (attached) provides specific guidance on forms of quotations for various levels of expenditure, in summary the quotation levels are:

CONTRACT VALUE	QUOTATION REQUIREMENT
<$1,999	Irregular or Non Recurrent -One (1) Verbal or Written prior to purchasing
$2,000 to $4,999	Irregular or Non Recurrent - One (1) Written / Electronic Quote
$5,000-$19,999	Irregular or Non Recurrent - Two(2) Written / Electronic Quotes
$20,000 to $59,999	Three (3) Written/Electronic Quotations with formal evaluation & Directors approval required Includes WALGA preferred suppliers
$60,000 to $149,999	A Formal Request for Quotation (RFQ) is required where a Specification and Qualitative Criteria are to be issued.
$150,000>	Tenders to be Called via Public Advertising or if WALGA preferred suppliers panel exists go via WALGA Panel

It is acknowledged that there is no legislative requirement to refer any contract below $150,000 to Council for endorsement or consideration. In order to meet Council's request to be informed of the scope of works and deliverables for new projects or consultancies over the value of $20,000 and to allow the Council to provide comment, it is suggested through the CEO weekly bulletin, advice be provided on the list of such projects and consultancies over $20,000 for Councillors' comment. (If a Councillor expresses an interest in a scope of works, that additional information will be furnished).

3. A status update report on the progress in reviewing the Town's procurement processes & controls

   A workshop was undertaken in April 2019 which enabled opportunities to identify improvements in the Town's current procurement systems. A number of staff, including the CEO, Directors, Managers and authorising officers attended the procurement workshop in conjunction with an officer from the Corruption and Crime Commission who shared a number of case studies of what can go wrong in procurement based, upon actual examples across local government. This emphasised the need for robust processes and systems but also clear policies and procedures, and most importantly a culture of integrity.

   The workshop also covered issues of procurement levels and clearer guidelines, limitations of the current IT system, creating a procurement workflow system, and the proposal of moving from the current decentralised system to a center-led approach to better manage risks.

Going forward in the next stage of transforming the framework, the move to a more centre-led procurement model under Corporate Services will be undertaken.

STATUTORY REQUIREMENTS

Local Government Act 1995

The Local Government (Functions and General) Regulations requires that the Purchasing Policy (Clause 11(3)) states:

A purchasing policy must make provision in respect of —

(a) the form of quotations acceptable; and
(ba) the minimum number of oral quotations and written quotations that must be obtained; and
(b) the recording and retention of written information, or documents, in respect of —
(i) all quotations received; and
(ii) all purchases made.

FINANCIAL CONSIDERATIONS

Nil

The Acting Director Corporate Services will make the following amendments to the policy as requested by the Committee:

Under the heading Strategy, delete the words 'Buying Local' and 'However it is recognised…'. This point will now read:

"Where possible, suppliers operating within the Town of Bassendean are to be given the opportunity to quote for goods and services required by the Town."

Change review date to ***December 2019****.*

COMMITTEE/OFFICER RECOMMENDATION - ITEM 8.3

AGC-3/06/19 MOVED Cr Wilson, Seconded Cr Mykytiuk, that the Audit and Governance Committee recommends to Council that it adopts Policy 6.14 – Purchasing, as included in the Audit and Governance Committee Agenda of 5 June 2019, **as amended**.

CARRIED BY AN ABSOLUTE MAJORITY 4/0

8.4 Role of Internal Audit and Audit Focus for 2018/19 (Ref GOVR/LREGLIA/3 – Ken Lapham Acting Director Corporate Services

APPLICATION

The purpose of this report was to provide Council, through the Audit and Governance Committee with details on the progress of the Internal Auditors organisational risk assessment, assessment of internal controls, and assessment of legislative compliance to meet the requirements of regulation 17 of the Local Government (Audit) regulations 1996, and regulation 5 (2) of the Local Government (Financial Management) Regulations 1996.

BACKGROUND

At the Audit and Governance Committee meeting held on Wednesday 6 February 2019, the CEO presented an item on the role of the Internal Audit and better aligning the Town's Internal Audit program to its risk profile.

The Committee supported a proposal to undertake an organisational risk assessment, in addition to examining the Town's controls to manage and mitigate these risks.

The purpose of this is to assess the health of the organisation and also to comply with requirements of the Local Government Act and Regulations.

STRATEGIC IMPLICATIONS

Objectives *What we need to achieve*	**Strategies** *How we're going to do it*	**Measures of Success** *How we will be judged*
5.1 Enhance organisational accountability	5.1.1 Enhance the capability of our people	Community / Stakeholder Satisfaction Survey (Governance)
	5.1.2 Ensure financial sustainability	
	5.1.3 Strengthen governance, risk management and compliance	Compliance Audit
	5.1.4 Improve efficiency and effectiveness of planning and services	Risk Management Profile
	5.1.5 Ensure optimal management of assets	Financial Ratio Benchmarked. Asset Ratio Benchmarked

FINANCIAL CONSIDERATIONS

Funding to meet the costs associated with the 2019 Internal Audit is provided for in the 2018/19 Budget.

COMMENT

The Audit & Governance recommendation point 5 stated:

> *"A report to the Audit & Governance Committee on the Outcomes of the Internal Auditors organisational risk, and other activities (as listed under application), is to be provided by 30 June 2019".*

As part of the Town's compliance obligations and to build a culture of risk management, workshops were recently held with staff at the Depot and Town Centre.

The workshops and development work in building the risk matrix, is being developed by the Town's internal auditors, Moore Stephens (WA) Pty Ltd. Workshop objectives were:

- Identification/articulation of key strategic risks;
- Capture of operational risks by Business Units; and
- Embed risk mindset into decision-making throughout the Town.

Key outcomes from the workshop were:

- Risk Management theory simplified;

- Risk Assessment – the big picture; and
- Sample Risk Register.

Further work is to be undertaken over the next month to build a risk assessment matrix and assess the state of Town's controls. It is envisaged that the final report will be presented to the Audit and Government Committee meeting in August 2019.

COMMITTEE/OFFICER RECOMMENDATION – ITEM 8.4

AGC-4/06/19 MOVED Ian Walters, Seconded Cr Mykytiuk, that Council notes the progress on the internal risk assessment, assessment of internal controls and assessment of legislative compliance, with the final report to be presented to the **Audit and Governance Committee in August 2019**.

CARRIED UNANIMOUSLY 4/0

9.0 MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil

10.0 ANNOUNCEMENTS OF NOTICES OF MOTION FOR THE NEXT MEETING

Nil

11.0 CONFIDENTIAL BUSINESS

COUNCIL RESOLUTION – ITEM 11.0(a)

AGC-5/06/19 MOVED Cr Mykytiuk, Seconded Cr Wilson, that the meeting go behind closed doors in accordance with Section 5.23 of the Local Government Act 1995, the time being 11.13am.

CARRIED UNANIMOUSLY 4/0

Mr Ron Back left the meeting at 11.13am and did not return.

11.1 Auditor's Report

Confidential Attachment No. 2:

This matter was considered with members of the public excluded from the Chamber under Clause 5.23 (2) (b) of the Local Government Act 1995, as the officer report discusses information of a personal nature.

A final report for the Audit & Governance Committee and review is targeted for the August 2019 Committee meeting.

12.0 CLOSURE

The next meeting will be held on Wednesday 7 August 2019, commencing at 5.30pm.

There being no further business, the Presiding Member closed the meeting at 11.30am.

6.14 Purchasing Policy

Objective

This policy:

1. Ensures compliance with ~~Meets the~~ ~~requirements of~~ the *Local Government Act 1995* and the Local Government (Functions and General) Regulations 1996 to establish a framework of operational standards for contracts to purchase goods and services;
2. Provides guidance ~~Sets out the~~ ~~requirements~~ to all Council employees on all levels of procurement ~~for acceptable~~ ~~forms of quotation, and the~~ ~~recording of documents and information, for contracts to purchase~~ ~~goods and services;~~ to ensure ethical behavior, and to ensure probity, and transparency;
3. ~~Is designed to e~~Ensures that the Town receives value for money as a result of its purchasing activities;
4. Aims to deliver a high level of accountability whilst providing a flexible, efficient and effective and transparent procurement framework;
5. Ensures that the Town considers the environmental and sustainability implications of the procurement process across the life cycle of goods and services; and
6. Ensures that all purchasing transactions are recorded in compliance with the State Records Act 2000 and associated records management practices and procedures of the Town.

Strategy

The Town is committed to sustainable procurement practices. The Town will advertise and assess qquotes and tenders to secure supply arrangements that contribute to achieving the Town's strategic goals and objectives in line with the following principles:

- Enhance our natural and built environment~~,~~ by purchasing products and services that demonstrate environmental best practice~~,~~ and will reduce negative impacts;
- Enhance our ~~E~~economic environment by ensuring value for money in all contracting and purchasing;

- Ensure Good Governance by maintaining transparency in contracting and purchasing, minimising the risk to the Town of Bassendean through the application of a robust risk management mechanism's ensuring that the products and services it purchases are in line with the Town's objectives; and
- Where appropriate, the Town shall endeavour to provide an advantage to suppliers demonstrating that they minimise environmental and negative social impacts and embrace sustainable business practices.

Siaff-have-developod a procurement manual that provides an effective 'how to' framework for Town of Bassondoan- contracting for goods and services. Understanding and adhering to the-proGedur-es-wtihin-tho-manual-, will help ensure good purchasing outcomos.

Tho Manual and associated Council policios provide a purchasing and contracting ffamewofk that roflocts tho principles and arrangements fundamental to efficient

These procedures apply to all methods of procurement, including o commorco methods.

In undertaking any procurement activity, authorized Council purchasing officers, and any privato sector organisations purchasing on the Town's behalf, must

In the event of any inconsistency between these Procedures and Council policies, compliance with tho policios takos procodonco. Key outcomes that Council wishes to achieve are:

- ensuring value for money in Town of Bassendean contracting and purchasing;
- ensuring there is transparency in Town of Bassendean contracting and purchasing;
- minimising the risk to the Town of Bassondoan from purchasing and contracting through the application of a robust risk management mechanism ensuring that the ofoduots and services it purchases are in line with the Town's objectives for

  products and services, support products with minimum packaging and contribute to improved environmental quality and progress towards sustainability
- Ensure that the purchasing framework promotes the sustainable use of rosourcos and roduoo nogativo impacts.
- Buying Local - Where possible suppliers operating within the Town of Bassendean are to be given the opportunity to quote for goods & services required by the Ttown. However it is recognised that not every category of goods and services reguired by the Town will lend itself to supply by local businesses.

* To efficiently manage the replacement of the Town of Bassendearts vohiolo

Records Management

All records associated with the tender process or a direct purchase process must be recorded and retained.

For a tender process, this includes:

- Tender documentation;
- Internal documentation;
- Evaluation documentation;
- Enquiry and response documentation; and
- Notification and award documentation.

For a direct purchasing process this includes:

- Quotation documentation;
- Internal documentation; and
- Order forms and requisitions.

~~Record~~

Retention of records shall be in accordance with the minimum requirements of the State Records Act, and the Town of Bassendean's internal records management procedures.

~~**Sustainable Procurement**~~

~~The Town is committed to implementing sustainable procurement by providing a preference to suppliers that demonstrate sustainable business practices (social advancement, environmental protection and local economic benefits).~~

~~The Town will embrace Sustainable Procurement by applying the value for money assessment to ensure that wherever possible our suppliers demonstrate outcomes which contribute to improved environmental, social and local economic outcomes. Sustainable Procurement can be demonstrated as being internally focussed (i.e. operational environmental efficiencies or employment opportunities and benefits relating to special needs), or externally focussed (i.e. initiatives such as corporate philanthropy).~~

~~Requests for Quotation and Tenders will include a request for information from Suppliers regarding their sustainable practices and/or demonstrate that their product or service offers enhanced sustainable benefits.~~

~~**Local Economic Benefit**~~

~~The Town encourages the development of competitive local businesses within its boundary first, and second within its broader region. As much as practicable, the Town will:~~

- ~~Where appropriate, consider buying practices, procedures and specifications that do not unfairly disadvantage local businesses;~~
- ~~Consider indirect benefits that have flow on benefits for local suppliers (i.e. servicing and support);~~
- ~~Ensure that procurement plans address local business capability and local content;~~

- ~~Explore the capability of local businesses to meet requirements and ensure that Requests for Quotation and Tenders are designed to accommodate the capabilities of local businesses;~~
- ~~Avoid bias in the design and specifications for Requests for Quotation and Tenders - all Requests must be structured to encourage local businesses to bid; and~~
- ~~Provide adequate and consistent information to local suppliers.~~

Purchasing Threshold

The Town will maintain a principle period of 3 years for all procurement of goods or services for the Town, for purchases valued over $20,000.

~~,~~ W~~w~~here the value of procurement and contract (excluding GST) ~~,~~ is, or is expected to be:

Monetary Threshold (excluding GST)	**Purchasing Method Required**
Up to $1,999 Annually - ~~For Irregular and Non-Recurrent Purchases 3 year period for Recurring Purchases~~	Irregular and Non-Recurrent Purchases ~~- For irregular and nonrecurrent~~ goods and services valued up to $1,999 per year, no competitive process is required, although **one** verbal quote must be obtained prior to purchasing. An exception is where goods are purchased by Corporate Credit Card. ~~Recurring Purchases - Recurring goods and services valued up to $1,999 per year, require a projected spend over 3 year period. Use Contract Procurement Checklist Appendix 4.~~
$2,000 to $ 4,999 Annually ~~- For Irregular and Non-Recurrent Purchases~~	Irregular and Non-Recurrent Purchases - ~~For Irregular and Non-~~
	~~Recurrent~~ Purchases goods and services valued between $2,000 and $4,999 per year, no competitive process is required, although **one written** quote must be obtained prior to purchasing.
$5,000-$19,999 Annually ~~- For Irregular and Non-Recurrent Purchases 3 year period for. Recurring Purchases~~	Irregular and Non-Recurrent Purchases - For goods and services valued between $5,000 and $19,999 a purchase, **2 x Written quotations** are required. Where rates are reasonable and consistent with similar products, officers must occasionally undertake market testing to ensure best value for money is obtained. Record of Written Quotes $2,000 to $59,999 is attached in Appendix 3. ~~Recurring Purchases - Recurring goods and services valued between $5,000 and $19,999 per year require projected spend over 3 year period. Use Contract Procurement Checklist Appendix 4.~~
$20,000 - $59,999 **(over 3 years)**	**Minimum 3 written quotations are ~~requested~~ required and Manager or Director approval required,** informal evaluations could include OHMS requirements, financial viability, experience and referees. ~~Record of Written Quotes $2,000 to $59,999 is attached in Appendix 3 together with evaluation form.~~
$60,000-149,999 Formal RFQ required	Formal Request For Quotation (RFQ) is required to be issued by the Contract Support Officer. ~~Contract Owner/Manager is to complete the Contract Procurement Checklist (Appendix 4), have Manager of Service and Director approve then forward to Contract Support Officer.~~ A sufficient number of written quotations are to be sought (minimum of three 3 written quotations.) A quote must be sought from either: • The open market; or • A supplier included in the relevant WALGA Preferred Supplier Arrangement. ~~(link on Intranet). All suppliers of those particular services registered on the WALGA Portal must be given the opportunity to provide a response to our quote, unless Director has approved otherwise; or~~

	• ~~•~~ Other suppliers that are accessible under another tender exempt arrangement (WA Disability Enterprise or an Aboriginal o~~O~~wned ~~B~~business). ~~Responses are to be evaluated on both price considerations and appropriate weighted qualitative criteria, by the Contract Supervisor/Manager and Evaluation Panel to evaluate the submission/s and recommend a supplier. The Successful Supplier must be approved by the Manager of Service and Director.~~
$150,000 and above RFT Required	Request for Tender (RFT) ~~to be called by Contract Support Officer~~. Request for Tender is to be issued in accordance with the Local Government Act 1995 (Section 3.57) unless expressly exempted under clause 11 (2) of the Regulation. ~~Contract Owner/Manager is to complete the Contract Procurement Checklist (Appendix 4), have Manager of Service and Director approve then forward to Contract Support Officer, who will then complete (Director and CEO Procurement Authority Appendix 6) to proceed with Tender process.~~ Request for Tender must be sought from either: • The open market (must be publicly advertised State-wide); or • A supplier included in the relevant WALGA Preferred Supplier Arrangement (link on Intranet). All suppliers of those particular services registered on the WALGA Portal must be given the opportunity to provide a response to our request, unless Director has approved otherwise; or • Other suppliers that are accessible under another tender exempt arrangement (WA Disability Enterprise or an Aboriginal o~~O~~wned ~~B~~business) and State or Commonwealth Government ~~C~~contracts. ~~Responses are to be assessed by the Evaluation Panel on appropriate weighted qualitative criteria, who will recommend a successful supplier. The Procurement Decision (successful supplier) is to be reported to the next Ordinary Council Meeting, to be approved by Council.~~

Application

Responsibility for the implementation of this policy rests with the Mayor, Councillors and Chief Executive Officer. The Policy is to be reviewed every three years.

Policy Type: Strategic Policy **Link to Strategic Community Plan:** Leadership and Governance	**Responsible Officer:** Chief Executive Officer **Last Review Date:** September 2017 August 2018 and June 2019 **Version** 4~~3~~ **Next Review due by:** May 2020

ATTACHMENT NO. 8

TOWN OF BASSENDEAN

MINUTES

BASSENDEAN LOCAL EMERGENCY MANAGEMENT COMMITTEE

HELD IN THE COUNCIL CHAMBER, 48 OLD PERTH ROAD, BASSENDEAN

ON WEDNESDAY 5 JUNE 2019, AT 3.30PM

1.0 DECLARATION OF OPENING/ANNOUNCEMENT OF VISITORS

The Acting Presiding Member declared the meeting open, welcomed all those in attendance and conducted an Acknowledgement of Country.

2.0 ATTENDANCES, APOLOGIES AND APPLICATIONS FOR LEAVE OF ABSENCE

Members

Snr Sgt Matt McCaughey, Kiara Police, Acting Presiding Member
Cr Melissa Mykytiuk
Cr Kathryn Hamilton
Sharna Merritt, Senior Ranger
Ryan Hamblion, Department for Communities
Graeme Haggart, Director Community Development
Ken Cardy, Manager Parks & Environment (from 3.50pm)

Staff

John Lane, Emergency Management Officer/XO
Amy Holmes, Minute Secretary

Apologies

Cr Bob Brown, Presiding Member
Jeff Somes, Environmental Health Officer
Gordon Munday, Manager Bassendean SES Unit

3.0 DEPUTATIONS

Nil

4.0 CONFIRMATION OF MINUTES

4.1 Minutes of the Bassendean Local Emergency Management Committee meeting held on 6 March 2019

COMMITTEE/OFFICER RECOMMENDATION – ITEM 4.1

MOVED Sharna Merritt, Seconded Cr Mykytiuk, that the minutes of the BLEMC meeting held on 6 March 2019, be confirmed as a true record.

CARRIED UNANIMOUSLY 6/0

5.0 ANNOUNCEMENTS BY THE PRESIDING PERSON WITHOUT DISCUSSION

Nil

6.0 DECLARATIONS OF INTEREST

Nil

7.0 BUSINESS DEFERRED FROM PREVIOUS MEETING

Nil

8.0 OFFICER REPORTS

8.1 Flood Mitigation Project - Update

The Town of Bassendean has completed the mapping and is in possession of flood markers for installation. A decision will need to be made by the Town of Bassendean as to the engagement of suitable contractors for the completion of the installation of flood markers.

The Bassendean SES have advised that they are unable to complete this project and therefore an additional point was added to the recommendation.

COMMITTEE/OFFICER RECOMMENDATION – ITEM 8.1

BLEMC – 1/06/19 MOVED Cr Hamilton, Seconded Cr Mykytiuk, that:

1. The information on the Flood Mitigation Project be received; and

2. **The Committee notes the recommendation that the markers will now be installed by contractors, yet to be appointed, rather than the SES, to be completed by 30 June 2019.**

CARRIED UNANIMOUSLY 6/0

Item 8.2 was deferred for discussion later in the meeting.

8.3 Town of Bassendean LEMC Business Plan

Ken Cardy, Manager Parks & Environment, joined the meeting at 3.50pm.

In line with State Emergency Preparedness Procedure 7, the Executive Officer should:

- Coordinate the development and submission of committee documents in accordance with legislative and policy requirements including an Annual Report, Annual Business Plan and maintenance of LEMAs.

The Executive Officer has prepared the Town of Bassendean's LEMC Business Plan for discussion and adoption.

COMMITTEE/OFFICER RECOMMENDATION – ITEM 8.3

BLEMC – 2/06/19 MOVED Ken Cardy, Seconded Cr Mykytiuk, that the Town of Bassendean LEMC adopt the Business Plan 2019/20 subject to future amendments as required.

CARRIED UNANIMOUSLY 7/0

8.4 Emergency Management Agency Reports

SEMC Business Unit

The SEMC Business Unit Report will be circulated when received.

District Emergency Management Committee (DEMC)

The Central DEMC Minutes will be circulated when received.

WALGA EMAG

The WALGA EMAG minutes will be distributed when received.

Local Welfare Committee

No meeting has been conducted in the past quarter.

COMMITTEE/OFFICER RECOMMENDATION – ITEM 8.4

BLEMC – 3/06/19 MOVED Matt McCaughey, Seconded Sharna Merritt, that the Emergency Management Agency Reports be received.
CARRIED UNANIMOUSLY 7/0

8.5 Post-Incident Reports and Post Exercise Reports

The Committee has requested all HMA's routinely forward post incident reports to the Town for presenting to LEMC.

Any relevant post incident and post exercise reports are to be tabled at the meeting.

COMMITTEE/OFFICER RECOMMENDATION– ITEM 8.5

BLEMC – 4/06/19 MOVED Cr Mykytiuk, Seconded Graeme Haggart, that **the Committee notes that no** post incident or post exercise reports **have been** received at this time.
CARRIED UNANIMOUSLY 7/0

8.6 Contact Details and Key Holders

The current Contact Details and Key Holders' was circulated at the meeting for any update requirements.

COMMITTEE/OFFICER RECOMMENDATION – ITEM 8.6

BLEMC – 5/06/19 MOVED Sharna Merritt, Seconded Ken Cardy, that the Committee members' contact details be confirmed, as amended.
CARRIED UNANIMOUSLY 7/0

8.7 Preparedness, Prevention, Response and Recovery Issues

Ryan Hamblion

Emergency Welfare Training will be held on 25 June. The aim is to inform and prepare Departmental staff and key stakeholders from our partnering agencies on the operation of providing welfare services to the community during and after an emergency.

COMMITTEE/OFFICER RECOMMENDATION – ITEM 8.7

BLEMC – 6/06/19 MOVED Cr Mykytiuk, Seconded Ryan Hamblion, that Preparedness, Prevention, Response and Recovery Issues raised, be received.

CARRIED UNANIMOUSLY 7/0

8.2 Local Government Emergency Risk Management Project Report

The Town of Bassendean is currently a participant in the State Risk Assessment Project Local. The first hazard workshop dealing with Heatwave took place on 7 November 2018 at the City of Bayswater, hosted by officers from DFES Special Risks Section.

The Town of Bassendean is awaiting confirmation of the location and timing of the next workshop in the series.

In the interim, the LEMC should discuss the Heat Wave Risk Register to determine whether risk statements with a treatment priority of 1 or 2 meet the requirements for treatment at the local level.

The Committee discussed the heatwave treatment options. John Lane, Emergency Management Officer, recorded comments in the risk register, for future reference.

- *The Town can be more proactive in advertising facilities with air conditioning that people can go to, such as the library.*
- *Adopt a programme for the dissemination of information to the community.*

COMMITTEE/OFFICER RECOMMENDATION – ITEM 8.2

BLEMC – 7/06/19 MOVED Sharna Merritt, Seconded Cr Mykytiuk, that the **Committee notes** the treatment options **discussed** relative to the Heat Wave hazard and that details of **the** discussion **will** be added to the risk register for future reference during the treatment phase.

CARRIED UNANIMOUSLY 7/0

9.0 MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

Nil

10.0 ANNOUNCEMENTS OF NOTICES OF MOTION FOR THE NEXT MEETING

Nil

11.0 CONFIDENTIAL BUSINESS

Nil

12.0 CLOSURE

The next meeting of the BLEMC is to be held on Wednesday 4 September 2019, commencing at 3.30pm.

There being no further business, the Presiding Member declared the meeting closed, the time being 4.30pm.

ATTACHMENT NO. 9

TOWN OF BASSENDEAN

MEETING OF THE DESIGN BASSENDEAN REFERENCE GROUP

HELD IN THE IDEAS HUB, 31 OLD PERTH ROAD, BASSENDEAN

ON WEDNESDAY 5 JUNE 2019 AT 5:30PM

MEETING NOTES

Being approximately 10 months since the group last met, the Town recognises the value of the shared expertise contained within the reference group and has a desire for the group to share ideas to provide valuable input into the Town's planning framework. The meeting was a re-orientation meeting that was relatively informal, with the group presented with the state and local planning context for the Town, and expected and foreshadowed changes to the Town planning framework.

1.0 DECLARATION OF OPENING

The CEO, Peta Mabbs opened the meeting, welcomed all those in attendance, and acknowledged the past and present traditional owners and custodians of the land on which the meeting was held.

2.0 ATTENDANCES & APOLOGIES

Attendances

Reference Group Members
Phil Burton
Jennie Collins
Moss Johnson
Ross Jutras Minett

Councillors
Cr Renée McLennan, Mayor
Cr Kathryn Hamilton

Officers
Ms Peta Mabbs, CEO
Mr Anthony Dowling, Director Strategic Planning
Mr Brian Reed, Manager Development Services
Mr Christian Buttle, A/Manager Development Services (Planning)
Mr Cameron Hartley, Planning Officer
Mr Alex Snadden, Planning Officer/Reference Group Executive Officer

Special Guests

Kathy Bonus, Chief Planning Advisor – Department of Planning, Lands and Heritage

Dale Sanderson, Director Metro Central – Department of Planning Lands and Heritage

Rohan Miller Director of Schemes and Strategies – Department of Planning, Lands and Heritage

Apologies

David Doy, Community Member

3.0 STATE PLANNING CONTEXT – KATHY BONUS

Kathy Bonus provided a comprehensive outlined the Perth and Peel @ 3.5 million (2018), the current overarching state strategic planning document (which replaced Directions 2031), which seeks to plan for a more compact City (i.e. Perth Metro and Peel region) to accommodate approximately 800,000 additional homes required by the time that the population hits 3.5 million, with half of those homes provided through infill development. Kathy bonus also provided an overview of State Planning Policy framework changes, namely to address the built form outcomes to better coordinate planning and design. These include:

- The introduction of State Planning Policy 7.0 Design of the Built Environment, which discusses 10 Design Principles which underpin good design;
- Design WA Residential Design Codes for Apartments which is the introduction of a performance based assessment for Apartment development to replace the deemed-to-comply pathway, which previously existed under Part 5 of the Residential Design Codes; and
- A Design Review Guide, which is a guide to setting up design review panels.

Kathy outlined future stages the Department is currently working on which involve:

- Precinct Design to address precinct planning, which will help facilitate local governments retain a particular character or guide the transition of the character from one particular look and feel to another; and
- Medium Density Design Guidelines, which will look to facilitate better design for Medium Density Development – grouped housing.

Members of the Reference Group took the opportunity to reiterate the need for improved design standards within the framework at both the State and Local level.

4.0 LOCAL PLANNING CONTEXT – TOWN'S STAFF

Tony Dowling, the Town's Director Strategic Planning, provided an update on the development of a draft Local Planning Strategy, what key informing studies have been completed to date, and the 'BassenDream Our Future' community engagement project.

Christian Buttle, A/Manager Development Services (Planning), provided an update on anticipated and approved larger developments within the Town.

Brian Reed, Manager of Development Services, advised the group that the Town is currently undertaking a comprehensive review of its Local Planning Policies and identified the priority Local Planning Policies (Tree Preservation on Development Sites & Built Form Guidelines).

5.0 HOUSEKEEPING

The CEO reiterated the purpose of the group to provide input into the Town's Planning Framework, inclusive of the draft Local Planning Strategy, the review and development of the Town's Local Planning Policies and a potential consolidation of the Local Planning Scheme, all of which are considered priority projects of the Town.

The CEO expressed the desire for the Group to meet on a monthly basis in a relatively informal manner (i.e. no standing orders), with those who chair the meeting rotating between community members.

Members of the Reference Group sought advice on the method for their feedback to be provided back to Council.

The Reference Group was informed that members of staff would be in attendance at all meetings held, with minutes taken by staff and a report provided to Council at the next available council meeting after any meeting of the group.

It was agreed that a monthly meeting would be acceptable, with the next meeting occurring in July (at a date to be determined), with the intent of having Creating Communities, the consultaning group working with the Town, facilitating 'BassenDream – Our Future', to provide a presentation on their interim report.

The Reference Group requested a summary of the Group's previous ambitions and discussions as well as access to previous documents and studies that the Town has commissioned prior to the next meeting. It was agreed that these would be provided.

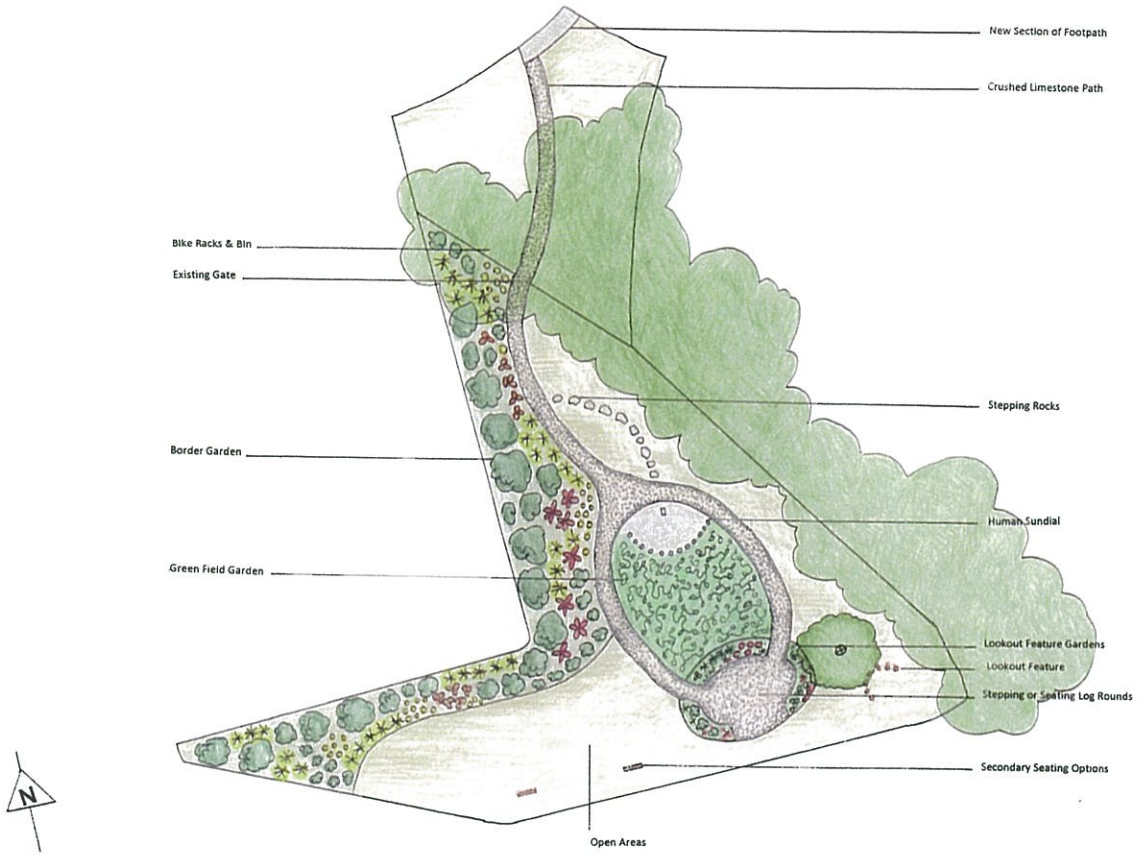
6.0 CLOSURE

The meeting closed at 7.30pm.

ATTACHMENT NO. 10

ATTACHMENT NO. 10

The Lookout: A Reflective Community Space overlooking Ashfield Flats



Original Plan size A2 **Scale 1:400** 0 5 10

Crushed Limestone Path
Crushed Limestone Path that provides pram and wheelchair accessibility.

Limestone Stepping Rocks
A playful element and alternative pathway – low key nature play element and interest for all ages

Human Sundial
Playful and usual element, a point of difference for the space. This could be constructed in many different ways – poured concrete for the whole space then markers painted/embossed or individual stone/mosaic markers set into mulch.

Green Field Garden
This garden creates a calm and spacious feel in the centre of the site. One species of super low native groundcover only is utilised to create this feel. It should be densely planted from the beginning so that people do not create alternative pathways through this area.

Seating or Stepping Log Rounds.
These provide a seating option in the shade, taking advantage of the existing trees on site and in the gully to the east. As a seating area they again focus on the view and also provide another playful element as stepping logs.

Lookout Feature Gardens
Decorative gardens of low, native plants that surround the lookout feature.

Lookout Feature
Low, multi-level seating element constructed of stone, wood or 'lamiere' concrete it contains options for groups or individuals to sit comfortably. Signage and artwork can included in this feature. For more information see detailed Lookout feature drawings.

Border Garden
These gardens effectively divide the community space from the private space of the adjoining houses. A diverse selection of low native shrubs, ground covers and grasses will be used. The garden will add seasonal interest and beauty to the space while also increasing the habitat value for local fauna. Spaces will be left through the gardens for resident access to their gates.

Open Areas
These spaces could be treated in a number of ways depending on final decisions made about the maintenance regime and site-preparation. Options include: leaving it as it is continuing to mow these areas which are a combination of couch and weeds. More regular mowing will encourage the couch to become more lawn like (in summer this area would brown off). Chunky free draining mulch as is or sparsely planted with low growing native ground covers. The final option would be to install a new lawn complete with reticulation in these areas.

Secondary Seating
Bench Seats for reflection, remembrance and quiet contemplation looking out over the beautiful Ashfield Flats.

Service Area: Bike Rack and Bin
No parking is provided on-site so bike parking helps to that the site is pedestrian and bike friendly. This is also an ideal location for a bin with dog waste disposal bags.

Plant Palette Suggestions
A range of water-wise, low growing native shrubs, ground covers and grasses will be used. There are three distinct garden spaces. The Border Garden, the Lookout Feature Gardens and the Green Field Garden.

The Border Garden
Grevillea thelemanniana
Pimelea ferruginea
Thryptomene baeckeacea prostrata
Grevillea obtusifolia "Gin Gin Gem'
Ficinia nodosa
Dianella revoluta
Constylis candicans
Kennedia prostrata

Green Field Garden
Acacia saligna prostrata
OR
Hardenbergia "Sea of Purple"
OR
Carpobrotus virescens

Lookout Feature Gardens
Thryptomene baeckeacea prostrata
Conostylis candicans
Pattersonia occidentalis
Dampiera linearis
Dianella revoluta
Kennedia prostrata

Other Possible Species
Hibbertia grossulariifolia
Grevillea crithmifolia "Green Carpet"
Leschenaultia floribunda
Hardenbergia comptoniana
Low growing Scaevola cultivars

The View
All of the new elements included in this plan including all planting is deliberately low so as to not impact on the sense of scale and sense of space and sky that the Lookout provides.
The view out over the Ashfield Flats is the key view but the "long view" to the horizon and the hills is equally important and a rare commodity in the city.

Playfulness
Although there is no playground on site play is welcome. All features are low key and are suitable for all ages including adults. Encouraging playfulness and physical activity for everyone is an important function of local public space. All the features that could be considered play elements are on the east side to reduce any noise issues for residents to the west.

URBAN
gardenslandscapesplaces
BOTANIC
emmaslavin@bigpond.com
0438 561 483

Client: AshfieldCAN
Address: Hardy Rd, Bassendean
Scale: 1:400
Date: October 2018
Garden Concept Design: Original size: A2

This is a concept plan only. All dimensions must be checked on site by construction contractors

Government of Western Australia
Department of Water and Environmental Regulation

Your ref
Our ref DMO274
Enquiries Naomi Telford
Phone 08 6364 7154
Fax 08 9333 7575
Email naomi.telford@dwer.wa.gov.au

Mr Ross Parker
Senior Projects and Policy Officer
Western Australian Planning Commission
140 William Street
PERTH WA 6000

Dear Mr Parker

RE PART FORMER LOT 663 HARDY ROAD ASHFIELD, NOW KNOWN AS LOT 821 ON PLAN 40943, 52 VILLIERS STREET BASSENDEAN

I refer to your letter to the Department of Water Environmental Regulation (DWER) dated 9 February 2018 regarding the proposed management of the abovementioned site.

Following inspection of the site by DWER on 12 February 2018, review of historical information on file and consultation with the Department of Health, DWER has concluded that the site is suitable for its current use as regional open space (from a contamination perspective) provided a site management plan (SMP) is prepared for its ongoing management.

The SMP should detail how the site is to be regularly inspected and maintained to ensure the grass cover remains intact and no visible asbestos-containing material (ACM) is present on the surface of the site, collection and disposal of any visible ACM and maintenance of the stability of the embankment to ensure the fill and any ACM remains contained. The SMP should also set out how inspections and maintenance actions are to be documented.

As the site is deemed suitable for its current use, DWER has classified the site as *remediated for restricted use* under section 13 of the *Contaminated Sites Act 2003* (the Act). Formal notice of the classification will be provided to the Western Australian Planning Commission (WAPC) in due course.

The site classification sets out restrictions on use of the site, which include no change to a more sensitive land use and no disturbance of the fill. Should any disturbance of the fill be proposed in the future, a site-specific health and safety management plan would need to be developed to manage handling of any excavated material, air monitoring and post-disturbance validation.

Regarding the proposed construction of public seating at the site, the WAPC propose to install a concrete slab on which the structure can be fixed to avoid soil disturbance for footings. DWER agrees this approach is suitable and has no objection to the WAPC approving the development on this basis.