ATTACHMENTS

ORDINARY COUNCIL AGENDA

25 JUNE 2019

Attachment No. 1

Ordinary Council Minutes of 28 May 2019

Attachment No. 2

Special Council Minutes of 10 June 2019

Attachment No. 3

Special Council Minutes of 18 June 2019

Attachment No. 4

Draft Local Integrated Transport Plan (LITP)

Attachment No. 5

- 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. 6

- Old Perth Road Bollard -Guildford Rd to Wilson St- Location Plan
- Old Perth Road Bollard-Guildford Rd to James St- Location Plan
- Traffic Management Plan Old Perth Road Markets; and
- Traffic Management Plan Wonder Realm .

Attachment No. 7

- Site plan James Street;
- Site plan Penzance Street;
- Site Plan Devon Road,
- Draft letter to residents;
- Minister for Transport, Planning, and Lands letter;
- JSG Mini shelter,
- PTA Provision of Bus Shelter letter; and.
- PTA Bus Stop and Shelter Works Program.

Attachment No. 8

- 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. 9

Sustainability Frameworks: A Review and Comparative Analysis Comparative Matrix (WALGA/City of Perth)

Attachment No. 10

Building over feature survey; and Bowden Tree Consultancy - Arboricultural Report and Landscape Plan.

Attachment No. 11

Minutes of the River Parks Committee meeting of 4 June 2019

Attachment No. 12

Minutes of the Bassendean Local Emergency Management Committee meeting held on 5 June 2019.

Attachment No. 13

Minutes of Design Bassendean meeting on 5 June 2019.

Attachment No. 14

Minutes of the Audit and Governance meeting held on 5 June 2019

Attachment No. 15

Sustainability Committee Minutes of 12 June 019

Attachment No. 16

List of payments made under delegated authority for the period May 2019

Attachment No. 17 Financial Reports for May 2019

Attachment No. 18 AshfieldCAN *'Urban-Landscapeplaces-Botanic'* conceptual plans for the park

Confidential Attachments 1 to 3

ATTACHMENT NO. 1

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TOWN OF BASSENDEAN ORDINARY COUNCIL MEETING MINUTES 28 MAY 2019

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TOWN OF BASSENDEAN

MINUTES

ORDINARY COUNCIL MEETING

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

ON TUESDAY 28 MAY 2019 AT 7.00PM

1.0 DECLARATION OF OPENING/ANNOUNCEMENT OF VISITORS

The Presiding Member declared the meeting open, welcomed all those in attendance and acknowledged the past and present traditional owners and custodians of the land on which the meeting was held.

The Mayor presented a Sports Achievement Award to Jack Wright of 58 Margaret St, Ashfield.

The CEO addressed the public on Item 10.4 - Provision to Design and Construct a Men's Shed and Associated Works, as this item has been withdrawn.

The Mayor addressed the public on Item 10.3 - Smart Resource Waste Tracking System Project, given the publicity in today's media.

2.0 PUBLIC QUESTION TIME & ADDRESS BY MEMBERS OF THE PUBLIC

2.1 Public Question Time

Ms Nonie Jekabsons, 6 Barton Parade, Bassendean

Is the signage at Pickering Park referring to the algae bloom and safety of the water going to be replaced.

The Director Operational Services responded that there was signage installed at various spots, it has obviously gone missing and will be followed up. Termites have been eating the jetty at Point Reserve, can the damaged timber be replaced.

The Director Operational Services advised that an inspection of the jetty will be undertaken.

There are feral beehives at Point Reserve in tree hollows that need to be dealt with.

The Mayor thanked Ms Jekabsons for bringing these matters to the Town's attention.

Mr Bruce Keay, Earlsferry Court, Bassendean

In relation to Item 10.3, has consideration been given to the possible outcomes, given the enormous financial cost to the Town.

The Manager Parks and Environment advised that this is a federally funded project (if the grant is approved). The project is being run by a private business and that the Town has been invited to participate via the 1,500 residences. Through technology we can identify the types of products going into people's bins. That information can be fed back to businesses to encourage them to decrease their packaging and materials to reduce waste going to landfill. The technology is already built into the waste trucks.

Mr Don Yates, 10 Thompson Road, Success Hill, Bassendean

Which is more important, the Local Planning Scheme text or maps. What happens when there is a discrepancy between the text and maps.

The Acting Manager Development Services responded that the Scheme text and maps are designed to be read in conjunction with each other and Officers would need to know the specific discrepancy to give comment on that.

Why are the EPA sites not included in either the map or the text.

The Acting Manager Development Services responded that the properties would be listed with the Environmental Protection Authority and are separately identified under the relevant Environmental Protection Legislation and are listed under the website of the Department of Environment and Regulation. It is disappointing that that kind of information and also the heritage listings are not detailed in the Scheme.

The Mayor asked Mr Yates to give his feedback online so it can be included for consideration when the Town is updating the Scheme.

Mr Gregory Peterson, 8 Carnegie Road, Bassendean

In relation to Item 10.5, for each option how much less phosphorus and nitrogen will enter the river.

The Mayor advised that the question would need to be taken on notice.

Mr Moss Johnson, 6 Barton Parade, Bassendean

In relation to Item 10.5, could Friends groups, local residents sporting groups etc be involved in the writing of briefs and scope of works before going out to tender and spending money so the needs of the community are being met.

The CEO responded that the Town is certainly open to looking at that through its engagement processes. One of the things the Town will be looking at is a new community engagement framework which will allow for earlier engagement with the community.

2.2 Address by Members of the Public

It should be noted that public statements are not recorded in the minutes.

3.0 ATTENDANCES, APOLOGIES AND APPLICATIONS FOR LEAVE OF ABSENCE

Present

Councillors

Cr Renee McLennan, Mayor Cr Bob Brown, Deputy Mayor Cr John Gangell Cr Kathryn Hamilton Cr Melissa Mykytiuk Cr Sarah Quinton Cr Jai Wilson

Officers

Ms Peta Mabbs, Chief Executive Officer Mr Graeme Haggart, Director Community Development Mr Simon Stewert-Dawkins, Director Operational Services Mr Ken Cardy, Manager Parks & Environment (until 8.35pm) Mr Phil Adams, A/Manager Asset Services Mr Christian Buttle, A/Manager Development Services Mr Ken Lapham, A/Director Corporate Services Mrs Amy Holmes, Minute Secretary

<u>Public</u>

Approximately 40 members of the public were in attendance.

Press

Nil

<u>Apologies</u>

Mr Anthony Dowling, Director Strategic Planning

Leave of Absence

The following Leaves of Absence were requested:

- Cr Quinton 10 to15 June;
- Cr Brown 2 to 12 June; and
- Cr Mykytiuk 31 May to 3 June.

COUNCIL RESOLUTION - ITEM 3.0

OCM – 1/05/19 MOVED Cr Hamilton, Seconded Cr Mykytiuk, that the following Leave of Absence be granted:

- Cr Quinton 10 to 15 June;
- Cr Brown 2 to 12 June; and
- Cr Mykytiuk 31 May to 3 June.

CARRIED UNANIMOUSLY 7/0

4.0 DEPUTATIONS

Item 10.5 - Bindaring Park Wetland Concept

Cottera Environmental Director, Ms Rebecca Epworth, (*Qualifications MSc Environmental Engineering, MSc(Eng) Environmental Wastewater Engineering, BSc (Hons) Animal Science*) was in attendance to provide a presentation on the above.

The presentation can be viewed at: https://www.bassendean.wa.gov.au/council-meetings/ordinarycouncil-meeting/345

5.0 CONFIRMATION OF MINUTES

5.1 Ordinary Council Meeting held on 23 April 2019

<u>COUNCIL RESOLUTION/OFFICER RECOMMENDATION –</u> ITEM 5.1(a)

OCM – 2/05/19 MOVED Cr Mykytiuk, Seconded Cr Quinton, that the minutes of the Ordinary Council Meeting held on 23 April 2019, be received.

CARRIED UNANIMOUSLY 7/0

<u>COUNCIL RESOLUTION/OFFICER RECOMMENDATION –</u> ITEM 5.1(b)

OCM – 3/05/19 MOVED Cr Quinton, Seconded Cr Mykytiuk, that the minutes of the Ordinary Council Meeting held on 23 April 2019, be confirmed as a true record.

CARRIED UNANIMOUSLY 7/0

6.0 ANNOUNCEMENT BY THE PRESIDING PERSON WITHOUT DISCUSSION

The Ideas Hub now has the two models for the community to visit and consider. Also the mobile ideas hub will be in various areas of the community during June. The details are on the Town's website.

7.0 PETITIONS

8.0 DECLARATIONS OF INTEREST

Cr Brown declared a Proximity Interest for Item 10.8 - Ashfield Parade - Notice of Motion Response.

9.0 BUSINESS DEFERRED FROM PREVIOUS MEETING

Nil

10.0 REPORTS

10.1 Adoption of Recommendations En Bloc

It was agreed that items 10.2, 10.5, 10.6, 10.7, 10.8, 10.13, 10.14 and 10.18 be removed from the en-bloc table and considered separately.

<u>COUNCIL RESOLUTION/OFFICER RECOMMENDATION –</u> ITEM 10.1

OCM – 4/05/19 MOVED Cr Quinton, Seconded Cr Mykytiuk, that Council adopts en bloc the following Officer recommendations contained in the Ordinary Council Meeting Agenda of 28 May 2019:

Item	Report
10.3	Smart Resource Waste Tracking System Project
10.4	Item Withdrawn
-	RFT 089 2018-19 – Provision to Design and Construct a Men's Shed and
	Associated Works (Including Site Construction Works) for the Town of
	Bassendean
10.9	Chief Executive Officer's 6 Month Highlights Report
10.10	Determinations Made by the Principal Building Surveyor
10.11	Determinations Made by Development Services
10.15	Financial Statements – April 2019
10.16	Use of the Common Seal
10.17	Calendar for June 2019

CARRIED UNANIMOUSLY 7/0

Council	was	then	requested	to	consider	the	balance	of 1	the
Officer r	ecom	menc	lations inde	pei	ndently.				

Item	Report
10.2	The Establishment of a Memorandum of Understanding (MOU) between the
	Department of Communities (specifically, the Housing Authority) and the Town
	of Bassendean
10.5	Bindaring Park Wetland Concept
10.6	Draft Verge Treatment Policy and Draft Verge Maintenance Policy
10.7	Review of Local Law – Activities on Thoroughfares and Trading in
	Thoroughfares and Public Places Local Law 2010
10.8	Ashfield Parade Notice of Motion Response
10.12	People Services Committee Meeting held on 15 May 2019
10.13	Town Assets Committee Meeting held on 8 May 2019
10.14	Accounts for Payment – April 2019
10.18	Implementation of Council Resolutions
11.1	Notice of Motion – Cr Brown: Lot 821 on Plan 40943, 52 Villiers Street,
	Bassendean
11.2	Notice of Motion – Cr Hamilton: Differential Rating
13.1	Council Street Trees – 118 Whitfield Street, Bassendean
13.2	Sports Achievement Awards

10.2 <u>The Establishment of a Memorandum of Understanding</u> (MOU) between the Department of Communities (specifically, the Housing Authority) and the Town of <u>Bassendean (Ref: LEGL/AGMT/209 – Peta Mabbs, Chief</u> <u>Executive Officer</u>

APPLICATION

Council was requested to support the establishment of a MOU between the Department of Communities (specifically, the Housing Authority) and the Town of Bassendean to explore opportunities for the increased supply of affordable housing near the Town centre and the Town's three train stations, consistent with Perth and Peel @ 3.5 Million (PP3.5M) planning framework.

OCM – 5/05/19 MOVED Cr Wilson, Seconded Cr Hamilton, that Council supports the CEO entering into the Memorandum of Understanding between the Department of Communities (Housing Authority) and the Town of Bassendean, as attached to the Ordinary Council Meeting Agenda of 28 May 2019. CARRIED UNANIMOUSLY 7/0

10.3 <u>Smart Resource Waste Tracking System Project (Ref:</u> <u>WSTMNGT/TENDNG/10 - Ken Cardy, Manager Asset</u> <u>Services)</u>

APPLICATION

The purpose of this report was to provide Council with information regarding the joint funding submission to the Federal Government's Cooperative Research Centres Projects (CRC-P) Grants Program "Round 2 Smart Cities" for waste management themed projects.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 10.3

OCM – 6/05/19 MOVED Cr Quinton, Seconded Cr Mykytiuk, that Council notes that the Town of Bassendean, in partnership with Suez, WALGA, Climate-KIC, Tradr (SME), Matter (SME) and Curtin University, has submitted a research grant application titled *"Developing a Smart Resource Tracking System to clean up the Australian Waste Industry"* to the CRC-P (Round 7) on 28 March 2019.

<u>CARRIED UNANIMOUSLY BY EN BLOC RESOLUTION –</u> <u>OCM-4/05/19 7/0</u>

10.4 <u>RFT 089 2018-19 - Provision to Design and Construct a</u> <u>Men's Shed and Associated Works (Including Site</u> <u>Construction Works) for the Town of Bassendean (Ref:</u> <u>COMDEV/TENDNG/12 - Graeme Haggart Director</u> <u>Community Development.</u>

Please note, this report has been withdrawn by the CEO

The Men's Shed is a priority for the Town of Bassendean which is why it is important this matter is given due consideration. Therefore, this item will be considered at a future Council meeting.

The Manager Parks & Environment left the meeting at 8.35pm and did not return.

10.5 Bindaring Park Wetland Concept Plan (Ref: GOVNCCL/MEET/33 Jeremv Walker. -Senior Environmental Officer and Stewert-Dawkins, Simon **Director Operational Services**)

APPLICATION

The purpose of this report was for Council to consider the Bindaring Park Wetland Concept Plan, correspondences received and consider the Coterra Environment information presented at the 9 April 2019 Council Concept Workshop, in order to endorse a draft concept plan to commence the community consultation process.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 10.5

- OCM 7/05/19 MOVED Cr Mykytiuk, Seconded Cr Gangell, that Council:
 - Receives the letter attached to the 28 May 2019 Ordinary Council Meeting Agenda from the Department of Biodiversity Conservation & Attractions supporting the Option 1 Bindaring Park Wetland Concept design and feedback regarding the alternative RPMC-2/02/18 concept design;
 - 2. Notes the OCM-17/3/18 resolution and requests Coterra Environment amend Option 1 Bindaring Park Wetland Concept design to achieve the following:
 - 2a That specifications ensure that space, access and fall to construct bio filters satisfy the Guidelines for Stormwater Bio Filtration Systems and delete the floating wetland;
 - 2c Coterra Environment to update pathways, as per feedback, and replace with a boardwalk as far as the first Water Corporation's sewer inspection, including pathways proposed off Watson Street;
 - 3. Supports the amended Option 1 Bindaring Park Wetland Concept Plan to be advertised for public comment; and
 - 4. Notes that a further report will be provided on the outcomes of the community consultation feedback received.

CARRIED_UNANIMOUSLY 7/0

10.6 Draft Verge Treatment Policy and Draft Verge Maintenance Policy (Ref: PARE/MAINT/1 – Phillip Adams (Acting Manager Asset Services) and Andreea Balica (Engineering Technical Assistant / Compliance Officer)

APPLICATION

The purpose of this report was for Council to endorse for public consultation:

- the draft Verge Treatment Policy (to allow residents to install permissible verge treatments without the requirement of a formal application); and
- a draft Verge Maintenance Policy (that guides the level of service provided to verges).

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 10.6

- **OCM 8/05/19** MOVED Cr Quinton, Seconded Cr Mykytiuk, that Council:
 - 1. Requests the draft Verge Treatment Policy and Verge Maintenance Policy attached to the Ordinary Council Meeting Agenda of 28 May 2019, be advertised for public comment;
 - 2. Lists \$10,000 for consideration in the draft 2019/2020 budget to assist with Waterwise Verge Treatment in accordance with the Water Corporation funding criteria;
 - 3. Notes that Officers will develop Street Verge Greening Guidelines to assist residents; and
 - 4. Notes that a further report will be provided on the outcomes of the community consultation feedback received prior to the draft Verge Treatment Policy and Verge Maintenance Policy being adopted.

CARRIED UNANIMOUSLY 7/0

10.7 <u>Review of Local Law – Activities on Thoroughfares and</u> <u>Trading in Thoroughfares and Public Places Local Law</u> 2010 (Ref: LAWE/LOCLWS/2 – Phillip Adams (Acting <u>Manager Asset Services)</u>, Andreea Balica (Engineering <u>Technical Assistant / Compliance Officer</u>)

APPLICATION

The purpose of this report was for Council to consider the preparation of a new Thoroughfares and Public Places Local Law 2019.

Section 3.12 (2) of the Act requires the person presiding at the Council meeting to give notice to the meeting of the purpose and effect of the proposed local law in the prescribed manner.

PURPOSE AND EFFECT

THOROUGHFARES LOCAL LAW

The **purpose** of the proposed Thoroughfares and Public Places Local Law is to provide Council with the mechanism to control activities in thoroughfares, to protect the natural environment and to have the ability to ensure that crossovers and verge treatments are properly maintained.

The **effect** of the proposed Thoroughfares and Public Places Local Law will enable the Town of Bassendean to issue permits or notices for the Local Law to be effective.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 10.7

- **OCM 9/05/19** MOVED Cr Gangell, Seconded Cr Brown, that Council:
 - Commences the advertising and consultation processes outlined in clauses (3) and (3a) of section 3.12 of the Local Government Act 1995 for the proposed Thoroughfares & Public Places Local Law 2019; and
 - 2. Notes the LGIS Risk Assessment undertaken. <u>CARRIED UNANIMOUSLY</u> 7/0

10.8 <u>Ashfield Parade Notice of Motion Response (ref:</u> <u>PARE/DESCONT/5 – Jeremy Walker, Senior Environmental</u> <u>Officer</u>

Cr Brown declared a Proximity Interest and left the meeting at 8.45pm.

APPLICATION

The purpose of this report, as per Notice of Motion (OCM 23/2/17), was to provide Council feedback on the Ashfield Parade Foreshore Restoration Project.

OFFICER RECOMMENDATION – ITEM 10.8

That Council:

- 1. Receives the Syrinx Environmental written response on the Ashfield Parade Reserve foreshore works;
- 2. Notes that Officers will liaise with the Department of Biodiversity Conservation & Attractions in regards to a permit to request the selective removal of the Acacia Saligna trees within the higher embankment; and
- 3. Seeks a further risk assessment be undertaken on the requirement for the fence, including the opportunity for alternative measures.

Cr McLennan moved an alternative motion.

COUNCIL RESOLUTION – ITEM 10.8

- **OCM 10/05/19** MOVED Cr McLennan, Seconded Cr Mykytiuk, that Council:
 - 1. Recognises that the outcomes for the Ashfield Parade Foreshore Restoration Project that were presented to residents of Ashfield Parade in 2005, and the ultimate outcome delivered were not in complete alignment;
 - 2. Requests the CEO write to all residents of Ashfield Parade to acknowledge this discrepancy;
 - 3. Seeks a further risk assessment be undertaken on the requirement for the fence, including the opportunity for alternative measures.

CARRIED UNANIMOUSLY 6/0

Cr Brown returned to the meeting at 8.47pm.

10.9 <u>Chief Executive Officer's 6 Month Highlights Report (Peta</u> <u>Mabbs, Chief Executive Officer)</u>

APPLICATION

This is an update of progress following the appointment of a new Chief Executive Officer on 22 October 2019.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 10.9

- OCM 11/05/19 MOVED Cr Quinton, Seconded Cr Mykytiuk, that Council notes the CEO's six month progress report. <u>CARRIED UNANIMOUSLY BY EN BLOC RESOLUTION –</u> <u>OCM-4/05/19 7/0</u>
 - 10.10 <u>Determinations Made by the Principal Building Surveyor</u> <u>Ref: LUAP/PROCED/1 – Kallan Short, Principal Building</u> <u>Surveyor</u>)

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 10.10

- OCM 12/05/19 MOVED Cr Quinton, Seconded Cr Mykytiuk, that Council notes the decisions made under delegated authority by the Principal Building Surveyor. <u>CARRIED_UNANIMOUSLY_BY_EN_BLOC_RESOLUTION –</u> <u>OCM-4/05/19_7/0</u>
 - 10.11 <u>Determinations Made by Development Services (Ref:</u> <u>LUAP/PROCED/1 – Brian Reed, Manager Development</u> <u>Services)</u>

OCM – 13/05/19 MOVED Cr Quinton, Seconded Cr Mykytiuk, that Council notes the decisions made under delegated authority by the Manager Development Services. <u>CARRIED UNANIMOUSLY BY EN BLOC RESOLUTION –</u> <u>OCM-4/05/19 7/0</u>

10.12 <u>People Services Committee Meeting held on 15 May 2019</u> (Ref: GOVN/CCL/MEET/36 – Graeme Haggart, Director Community Development)

APPLICATION

The purpose of this report was for Council to receive the report on a meeting of the People Services Committee held on Wednesday 15 May 2019, and to adopt the following recommendations from the Committee:

PSC – 1/05/19	Resignation from Committee - Marie Molloy
PSC – 2/05/19	Community Groups Funding Applications
PSC 4/05/19	Ongoing Progress Reports

<u>COUNCIL RESOLUTION/COMMITTEE RECOMMENDATION</u> -- ITEM 10.12

- OCM 14/05/19 MOVED Cr Quinton, Seconded Cr Brown, that Council
 - 1. Does not fill the community representative vacancy on the People Services Committee;
 - 2 Approves sponsorship of \$1,500 to the Bassendean Men's Shed Association Inc as contribution to the cost of a short promotional film, and that a funding agreement be developed and signed between the applicant and the Town;
 - 3. Approves sponsorship of \$1,660 to the Rail Heritage WA for signage, and that a funding agreement be developed and signed between the applicant and the Town;
 - 4. Considers funding in 2019/20 Budget for the minor capital works at Wind in the Willows Ashfield (\$35,000) and Wind in the Willows Bassendean (\$60,000); and
 - 5. Receives the report of the meeting of the People Services Committee meeting held on Wednesday 15 May 2019. CARRIED BY AN ABSOLUTE MAJORITY 7/0

10.13 <u>Town Assets Committee Meeting held on 8 May 2019 (Ref:</u> <u>GOVNCCL/MEET/37 – Simon Stewert-Dawkins, Director</u> <u>Operation Services)</u>

APPLICATION

The purpose of this report was for Council to receive the report on a meeting of the Town's Asset Committee held on 8 May 2019, and adopt the following recommendations from the Committee:

TAC - 1/05/19	Tree Planting Program – Arboricultural
	Assessment from Bowden Tree Consultancy
TAC - 2/05/19	Street Lighting Audit – Within 200m Radius of
	Success Hill Train Station

<u>COUNCIL RESOLUTION/COMMITTEE RECOMMENDATION</u> - ITEM 10.13

- **OCM 15/05/19** MOVED Cr McLennan, Seconded Cr Brown, that Council:
 - 1. Receives the report on a meeting of the Town Assets Committee held on 8 March 2019;
 - 2. Receives the Arboricultural Assessment on the 2019 Street Tree Selection Report by Bowden Tree Consultancy;
 - 3. Requests Officers to request Bowden Tree Consultancy to provide a report on the available number of trees that can be purchased from nurseries for the 2019 winter planting season, in accordance with Australian Standard AS2303:2015;
 - 4. Notes that the number of trees that can be planted during the winter planting season will depend on the availability of trees in stock from nurseries which are currently available, that will match the Arboricultural Assessment – 2019 Street Tree Selection; and
 - Notes that further engagement with the community will be undertaken to reconsider more appropriate solutions than LED lighting, to address the issues with lighting within a 200m radius of Success Hill Train Station.

CARRIED UNANIMOUSLY 7/0

10.14 <u>Accounts for Payment – April 2019 (Ref: FINM/CREDTS/4 –</u> Jill Brazil, Acting Manager Corporate Services)

APPLICATION

The purpose of this report was for Council to receive the Accounts for Payment in accordance with Regulation 13 (3) of the Local Government (Financial Management) Regulations 1996.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 10.14

OCM – 16/05/19 MOVED Cr Brown, Seconded Cr Quinton, that in accordance with Regulation 13(3) Local Government (Financial Management Regulations 1996) the List of Accounts paid April 2019 be received.

CARRIED UNANIMOUSLY 7/0

10.15 <u>Financial Statements – April 2019 (Ref: FINM/AUD/1 – Jill</u> Brazil, Acting Manager Corporate Services)

APPLICATION

The Local Government Financial Management Regulations, Clause 34(1) requires that a monthly financial report be presented to Council. A Local Government is to prepare each month a statement of financial activity that clearly shows a comparison of the budget estimates with the actual revenue and expenditure figures for the year to date.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION -ITEM 10.15

OCM – 17/05/19 MOVED Cr Quinton, Seconded Cr Mykytiuk, that the Financial Reports for the period ending April 2019, be received. <u>CARRIED UNANIMOUSLY BY EN BLOC RESOLUTION –</u> <u>OCM-4/05/19 7/0</u>

10.16 <u>Use of the Common Seal (Ref: INFM/INTPROP/1 – Sue</u> Perkins, Executive Assistant)

OCM – 18/05/19 MOVED Cr Quinton, Seconded Cr Mykytiuk, that Council notes the affixing of the Common Seal to the documents, as shown in the Ordinary Council Agenda of 28 May 2019, during the reporting period. <u>CARRIED UNANIMOUSLY BY EN BLOC RESOLUTION –</u> OCM-4/05/19 7/0

10.17 <u>Calendar for June 2019 (Ref: Sue Perkins, Executive</u> <u>Assistant)</u>

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 10.17

OCM – 19/05/19 MOVED Cr Quinton, Seconded Cr Mykytiuk, that the Calendar for June 2019 be adopted. <u>CARRIED UNANIMOUSLY BY EN BLOC RESOLUTION –</u> <u>OCM-4/05/19 7/0</u>

10.18 <u>Implementation of Council Resolutions (Ref:</u> <u>GOVN/CCLMEET/1 – Sue Perkins, Executive Assistant to</u> <u>the CEO)</u>

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 10.18

OCM – 20/05/19 MOVED Cr Hamilton, Seconded Cr Brown, that the outstanding Council resolutions detailed in the table listed in the Ordinary Council Meeting Agenda of 28 May 2019 be deleted from the Implementation of Council Resolutions list, excluding items ROC18/64882, ROC17/54543, ROC17/53219 and ROC18/59093.

CARRIED UNANIMOUSLY 7/0

11.0 MOTIONS OF WHICH PREVIOUS NOTICE HAS BEEN GIVEN

11.1 <u>Notice of Motion – Cr Brown: Lot 821 on Plan 40943, 52</u> Villiers Street, Bassendean

COUNCIL RESOLUTION - ITEM 11.1

OCM – 21/05/19 MOVED Cr Brown, Seconded Cr Hamilton, that this Item be deferred to the June OCM.

CARRIED UNANIMOUSLY 7/0

Cr McLennan left the meeting at 9.20pm, Cr Brown took the Chair. Cr McLennan returned to the meeting at 9.21pm and Cr Brown vacated the Chair.

11.2 <u>Notice of Motion – Cr Hamilton: Differential Rating</u>

COUNCIL RESOLUTION – ITEM 11.2

OCM – 22/05/19 MOVED Cr Hamilton, Seconded Cr Wilson, that Council requests Officers incorporate a report and analysis of a simple Differential Rating System in the upcoming Budget Workshop scheduled for the first week in June 2019, to assist in Council's deliberations with particular emphasis on any vacant land (inclusive of lots zoned for residential, commercial or industrial) that may be subject to a different rating to all other classes of improved land under a Differential Rating System.

CARRIED 6/1

Crs Hamilton, Wilson, McLennan, Brown, Mykytiuk & Quinton voted in favour of the motion. Cr Gangell voted against the motion.

12.0 ANNOUNCEMENTS OF NOTICES OF MOTION FOR THE NEXT MEETING

12.1 Cr Wilson: FOGO Waste System

Should the Town adopt a FOGO system with fortnightly general waste bin collection, taking into account the findings of the SMRC FoGo trial and the research conducted by Catalyse into that trial, Council resolves to:

 Provide residents of the Town with the option to opt-in to having a second general waste bin prior to the roll-out of the third FoGo bin in order to ensure that families with children living at home and larger households have adequate general waste capacity to meet their needs.

- 2. To include this opt-in option in a mail-out to all households prior to the roll-out of the third FoGo bin, along with other printed materials which provide general information about the new 3-bin FoGo system, to enable this opt-in capacity to be available prior to day 1 of the new scheme.
- 3. To charge those households who do opt-in to having an additional general waste bin to meet their needs (as is currently the case for households who have an additional bin), an additional amount in their annual waste-levy fee no greater than cost-recovery, which could be removed in following years should the household subsequently inform the Town that they no longer need the additional capacity.

13.0 CONFIDENTIAL BUSINESS

COUNCIL RESOLUTION - ITEM 13.0(a)

OCM – 23/05/19 MOVED Cr Brown, Seconded Cr Hamilton, that the meeting go behind closed doors in accordance with Section 5.23 of the Local Government Act 1995, the time being 9.47pm. CARRIED UNANIMOUSLY 7/0

Cr Hamilton left the meeting at 9.47pm.

13.1 <u>Council Street Trees – 118 Whitfield Street, Bassendean</u> (Ref: COUP/MAINT/1 – Ken Cardy, A/g Manager Parks & Gardens, Environmental Services & Waste)

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.

Cr Mykytiuk moved the officer recommendation with the removal of Point 2.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 13.1

- **OCM 24/05/19** MOVED Cr Mykytiuk, Seconded Cr Brown, that:
 - 1. Council approves the removal of both street trees (Eucalyptus rudis) located at 118 Whitfield Street, Bassendean; and

......

2. Council notes that officers will communicate with the property owners of 118 Whitfield Street, Bassendean, regarding the planting of replacement street trees during the 2019 planting season.

CARRIED UNANIMOUSLY 6/0

13.2 <u>Sports Achievement Awards (Ref: COMR/AWADP/4 – Tim</u> <u>Dayman, Recreation Development Officer</u>

This matter was considered with members of the public excluded from the Chambers under Clause 5.23 (2) (b) of the Local Government Act 1995, as the report discusses a contract which may be entered into, by the local government and which relates to a matter to be discussed at the meeting.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 13.2

- **OCM 25/05/19** MOVED Cr Mykytiuk, Seconded Cr Brown, that:
 - Council awards the Town of Bassendean Sports Achievement Award to the junior nominees shown in the Confidential Minutes attached to the Ordinary Council Meeting Agenda of 28 May 2019;
 - 2. Council presents the Sports Achievement Awards at the 25 June 2019 Ordinary Council Meeting; and
 - 3. The report and names of the recipients of the Award remain confidential until after the Awards are presented. CARRIED UNANIMOUSLY 6/0

COUNCIL RESOLUTION - ITEM 13.0(b)

OCM – 26/04/19 MOVED Cr Brown, Seconded Cr Mykytiuk, that the meeting come from behind closed doors, the time being 9.49pm. <u>CARRIED UNANIMOUSLY</u> 6/0

Cr Hamilton returned to the meeting at 9.50pm.

As no members of the public returned to the Chamber, the reading aloud of the motions passed behind closed doors was dispensed with.

14.0 CLOSURE

The next Briefing Session will be held on Tuesday 18 June commencing at 7.00pm. The next Ordinary Council Meeting will be held on Tuesday 25 June commencing at 7.00pm.

There being no further business, the Presiding Member declared the meeting closed, the time being 9.50pm.

ATTACHMENT NO. 2

)

TOWN OF BASSENDEAN

MINUTES

SPECIAL COUNCIL MEETING

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

ON MONDAY 10 JUNE 2019 AT 5.30PM

1.0 DECLARATION OF OPENING/ANNOUNCEMENT OF VISITORS

The Presiding Member declared the meeting open, 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 PUBLIC QUESTION TIME AND ADDRESS BY MEMBERS OF THE PUBLIC

Nil.

3.0 ATTENDANCES, APOLOGIES & APPLICATIONS FOR LEAVE OF ABSENCE

<u>Present</u>

Councillors

Cr Renee McLennan, Mayor Cr John Gangell Cr Kathryn Hamilton Cr Melissa Mykytiuk Cr Jai Wilson

<u>Apologies</u>

Cr Bob Brown – Leave of Absence Cr Sarah Quinton – Leave of Absence

Officers

Ms Peta Mabbs, Chief Executive Officer Mrs Renae Maher, Manager Organisational Development Public

NIL

Press

Nil

3.1 Leave of Absence

Cr McLennan announced she will be taking leave of absence from 6 July to 21 July 2019.

4.0 REPORTS

COUNCIL RESOLUTION - ITEM 4.0(a)

SCM1-1/06/19 MOVED Cr Wilson, Seconded Cr Mykytiuk, that the meeting go behind closed doors in accordance with Section 5.23 of the Local Government Act 1995, the time being 5.40pm.

CARRIED UNANIMOUSLY 5/0

4.1 Organisational Re-Design (Ref: GOVN/CCLMEET/40 -Peta Mabbs, Chief Executive Officer)

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.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION -**ITEM 4.1**

MOVED Cr Hamilton, Seconded Cr Mykytiuk, that Council SCM1-2/06/19 authorises the Chief Executive Officer to deliver and implement the proposed organisational structure as per the noted rationale provided in the 'A New Way of Working through Organisational Re-Design' report and proposed organisational structure chart, attached to the Special Council Agenda of 10 June 2019.

CARRED BY AN ABSOLUTE MAJORITY 4/1

All Councillors in attendance were in favour of the motion, except Cr Wilson who voted against the motion.

5.0 CLOSURE

There being no further business, the Presiding Member declared the meeting closed, the time being 6.50pm.

ATTACHMENT NO. 3

TOWN OF BASSENDEAN

MINUTES

SPECIAL COUNCIL MEETING

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

ON TUESDAY 18 JUNE 2019 AT 6.30PM

1.0 DECLARATION OF OPENING/ANNOUNCEMENT OF VISITORS

The Presiding Member declared the meeting open, 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 PUBLIC QUESTION TIME AND ADDRESS BY MEMBERS OF THE PUBLIC

Nil.

3.0 ATTENDANCES, APOLOGIES & APPLICATIONS FOR LEAVE OF ABSENCE

Present

<u>Councillors</u>

Cr Renee McLennan, Mayor Cr Bob Brown Cr John Gangell Cr Kathryn Hamilton Cr Sarah Quinton Cr Jai Wilson

<u>Officers</u>

Ms Peta Mabbs, Chief Executive Officer Mr Paul White, Director Corporate Services Apologies

Cr Melissa Mykytiuk

<u>Public</u>

Nil

<u>Press</u>

Nil

4.0 REPORTS

4.1 <u>Implementation of Differential Rates - (Ref: RAT & VAC/FEECHAG/3 – Ken Lapham, Acting Director Corporate Services)</u>

APPLICATION

The purpose of this report was to obtain Council approval to advertise the differential rates and minimum rates proposed for inclusion in the 2019/20 Budget.

OFFICER RECOMMENDATION - ITEM 4.1

That:

1. Council approves the proposed 2019/20 rate in the dollar and the minimum rates to be advertised by public notice as per the following:

RATE CATEGORY	RATE IN THE \$	MINIMUM RATE
GRV – PROPERTY- VACANT	14.500 cents	\$2,100
GRV – ALL OTHER PROPERTY	7.3020 cents	\$1,106

- 2. Council endorses the Town of Bassendean objects and reasons for the proposed rate categories for the 2019/20 financial year; and
- 3. In line with Council's objective in community consultation, a circular be sent to all owners of vacant land, advising of the Council's proposal to introduce a differential rate in the 2019/20 financial year and the likely financial impacts of the proposed new rate levy.

Council made an amendment to the Officer Recommendation to include an additional point 4 and some minor amendments, as shown in bold below.

COUNCIL RESOLUTION - ITEM 4.1

- SCM2-1/6/19 MOVED Cr Hamilton, Seconded Cr Wilson, that:
 - 1. Council approves the proposed 2019/20 rate in the dollar and the minimum rates for the **purposes of advertising**, as follows:

RATE CATEGORY	RATE IN THE \$	MINIMUM RATE
GRV – PROPERTY- VACANT	14.500 cents	\$2,100
GRV – ALL OTHER PROPERTY	7.3020 cents	\$1,106

- 2. Council endorses the Town of Bassendean objects and reasons for the proposed rate categories for the 2019/20 financial year;
- 3. In line with Council's objective in community consultation, a circular be sent to all owners of vacant land, advising of the Council's proposal to introduce a differential rate in the 2019/20 financial year and the likely financial impacts of the proposed new rate levy; and
- 4. Following advertising for a period of 21 days, Council considers feedback at the Ordinary Council meeting to be held in July/August 2019. CARRIED BY AN ABSOLUTE MAJORITY 6/0

4.2 Imposition of Children's Services - Fees & Charges 2019-20 (Ref: FINM/AUD/1 – Ken Lapham, Acting Director Corporate Services)

APPLICATION

The purpose of this report was for Council to adopt the Fees for the Wind in the Willows in accordance with Regulation 6.16 of the Local Government Act 1995.

COUNCIL RESOLUTION/OFFICER RECOMMENDATION - ITEM 4.2

SCM2-2/6/19 MOVED Cr Wilson, Seconded Cr Hamilton, that, in accordance with Section 6.16 (3) of the Local Government Act, Council adopts revised Children's Services fees of:

- Daily fee of \$115; and
- Weekly Fee (Full-time Care) \$540 to apply from 1 July 2019.

CARRIED BY AN ABSOLUTE MAJORITY 6/0

5.0 CLOSURE

There being no further business, the Presiding Member declared the meeting closed, the time being 6.55pm.

ATTACHMENT NO. 4

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

This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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
Job title		Bassendean Transport Study		Job number 260965-00		
		Phase 2 Loc the future	Phase 2 Local Integrated Transport Plan: A plan for the future		File reference	
Document re	f	Phase 2				
Revision	Date	Filename	180911_Bassendean Transport Plan Repo		Phase 2 Local Integrated OGRESS.docx	
Work in progress	11 Sept 2018	Description	Work in progress – g stakeholder/ commu implementation plan	nity consultation for	eedback and	
			Prepared by	Checked by	Approved by	
		Name	Ryan Falconer	Danya Mullins	Danya Mullins	
		Signature	RWTakoner-	10 Mulle	10 Mulle	
Work in progress	8 Oct 2018	Filename	181008_Bassendean	181008_Bassendean Transport Study_Phase 2 Local Integrat		
progress	2018	Description	Transport Plan Report_Work in Progress v2_issued.docx Addresses feedback received from the Town (11 September 2018).			
			Prepared by	Checked by	Approved by	
		Name	Ryan Falconer	Danya Mullins	Danya Mullins	
		Signature	RWTakono-	10 Mulle	@ Mulle	
Work in progress	19 Oct 2018	Filename			Phase 2 Local Integrated ss external issue.docx	
		Description	an another dependence of the second s		– METRONET, Public City of Bayswater, City	
			Prepared by	Checked by	Approved by	
		Name	Ryan Falconer	Danya Mullins	Danya Mullins	
		Signature	Rev Takonar-	10 Mulle	10 Mulle	
Work in progress	3 Dec 2018	Filename	181203_Bassendean Transport Plan Repo		Phase 2 Local Integrated ss v3.docx	
		Description			edback and discussions	
			Prepared by	Checked by	Approved by	
	+)	Name	Ryan Falconer	Danya Mullins	Danya Mullins	

Document Verification

Job title		Bassendear	1 Transport Study		Job number	
					260965-00	
		Phase 2 Loo the future	cal Integrated Trans	File reference		
Document r	ef	Phase 2			l	
Revision Date Filename				an Transport Study_P port_Final draft.docx	hase 2 Local Integrated	
Issue 10 May version 4 2019		Description	government agenc	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	D Mulli-	D Mulle-	10 Mulle-	
		Filename Description	190612 Bassendean Transport Study Phase 2 Local Integrated Incorporates feedback from elected members (29 May 2019).			
			Prepared by	Checked by	Approved by	
		Name	Danya Mullins	Danya Mullins	Danya Mullins	
		Signature	De Mulle-	D Mulle-	10 Mulli	
		Filename Description			·	
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J-2200000280985-00 BASSENDEAN TRANSPORT STUDY-WORKINTERNALIDELIVERABLES/REPORTS/190612_BASSENDEAN TRANSPORT STUDY_PHASE 2 LOCAL INTEGRATED TRANSPORT PLAN REPORT_FINAL_DOCX

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.

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



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

Phase 2 | Issue version 4 | 12 June 2019 | Arup 19912_BASSENDEAN TRANSPORT STUDY_PHASE 2 LOCAL INTEGRATED TRANSPORT FLAN REPORT_FINAL_DOCK

Town of Bassendean

Page 4

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 shortlisted 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 Phase 2 - Local Stakeholder engagement **Integrated Transport** Community engagement Plan Presentation to elected members SWOT/ contextual analyses Transport Assessment Report Definition of provisional strategies and actions resentation 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 Current step **Community consultation**

Town of Base

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Finalisation of LITP

Bassendean Transport Study see 2 Local Integrated Transport Plan: A plan for the future

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**.

Phase 2 | Issue version 4 | 12 June 2019 | Arup

Strengt	hs
Public	Three train stations in the town
transport	 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	• Strong east-west link (Midland line Principal Shared Path [PSP]), which
transport	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	 Grid network across much of the town, which provides a relatively high
network	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)
Weakn	esses
Public	Road geometry at the staggered junction of Altone Road, Morley Drive and
transport	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
	Kolativery poor connections to Sandy Deach Reserve

Table 1 – Summary SWOT variables

Road	 Severance effects of Midland rail line
network	 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
Opport	unities
Public	• Delivery of TOD along key bus corridors and in station catchments to
transport	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	• Delivery of strategic links north of Bassendean train station and along
transport	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
	 Opportunity to improve wayfinding simultaneously with route upgrades Improvements to traffic flows and intersection operations at West
	 Opportunity to improve wayfinding simultaneously with route upgrades Improvements to traffic flows and intersection operations at West Road/Guildford Road associated with West Road bridge widening
	 Opportunity to improve wayfinding simultaneously with route upgrades 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
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	 Opportunity to improve wayfinding simultaneously with route upgrades 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
Road network	 Opportunity to improve wayfinding simultaneously with route upgrades 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
	 Opportunity to improve wayfinding simultaneously with route upgrades 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

• 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
• 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 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
• 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 Descendent e.g. Lord Street extension to Lordridge
 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
• 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

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	Town of Bassendean	Supported
		possible for flexibility in design and operations		
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 tra	nsport			
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
РТ3	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 versus 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 extending 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 trai	nsport			
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	Explanation 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	Responsible authority Town of Bassendean	Council response Supported
Road netwo	prk			

Proposal		Explanation	Responsible authority	Council response
RNİ	 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 	Main Roads WA has prepared draft concept for Guildford which is now being reviewed by the Western Australian Planning Commission. 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.	Main Roads WA/Town of Bassendean	 Council does not support the Main Roads WA concept. Council's preference is for a cross- section incorporating median and suitable channelisation that mitigates impacts on verge trees and potential for induced traffic, helps the Town deliver on infill targets and retains key local street access. Council's preference is for signalisation of Guildford Road/Colstoun Road including connection of the PSP to the south side of Guildford Road and the Ashfield bridge
RN2	 Guildford Road corridor design and operations (West Road to Swan River): Consult with Main Roads WA regarding reasonable signal phasing at intersection of Guildford Road/West Road associated with West Road bridge widening and anticipated intersection upgrade Consult with Main Roads WA regarding road cross-section, bridge structure over Swan River and intersection treatment at Guildford Road/North Road/Earlsferry Court 	See RN1	Main Roads WA/Town of Bassendean	Council does not support the Main Roads WA concept. Council's preference is for the Town to input to design for other road upgrades including bridge works and 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 devel	lopment			
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	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	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.	Public Transport Authority/Town of Bassendean	Supported
Governme	nt 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 Guide¹. 	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 project² 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 review³.

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 townwide 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 parkand-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.

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



THE OPTIONS PRO AND HAVE BEEN T PURPOSES ONLY

NOTE

- VERTICAL CLEARANCE REQUIRED 5.2m
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 INDURAN RAND, LINETH, The
- BAMP/OVERPASS WOTH 154 MARKIN IN EXISTING OVERHEAD POWER LINES WITHIN THE
- WHICH IMPACT PROPOSED OVERPASS AUXIMENT
- LONCEPTURE, DETONE DO NOT TARE WITE ACCOUNT THE LOCATION OF UNDEREADED SERVICES AND RELOCATION OF SERVICES WHEN MAY BE REQUIRED TO SUPPORT STRUCTURE, ELFRENTS AND ACCOUNTS OF MERITING THE AND

OPTION 2

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

Town of Bassendean

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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.



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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 throughrunning 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. Town of Bassendean

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

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

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

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



Englavie Park Doore

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.

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Figure 9 - Wilson Street subway preliminary concept

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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 recommend 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.

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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:

- 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.

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NOTES

- ALL LEVELS ARE APPROXIMATE ONLY
- ALLOWANCE FOR PROPOSED UNDERPASS TO PROVIDE A CLEAR HEIGHT OF LIGH EXISTING ROADS JOINTIFED TO BE REGRADED ARE BASED ON A SIS GRADE FROM EXISTING SUMFACE LEVELS TO BE REPORTED UNDERPASS LEVEL OF
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Figure 12 - Rail, only underpass preliminary concept

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Figure 13 - Rail and Guildford Road underpass preliminary concept

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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 practice⁴.

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; <u>http://vtpi.org/tdm/tdm105.htm</u>; <u>https://www.perthnow.com.au/news/traffic/30kmh-limit-will-save-lives-ng-b88906633z</u>

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-andride 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 principles⁵), 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

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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: <u>https://www.vicroads.vic.gov.au/traffic-and-road-use/trafficmanagement/smartroads</u>.

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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. Town of Bassendean

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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 lanedual 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.

	Propos	sal	Responsibility	Priority
60	P1	Preparation of town-wide parking strategy to replace 2011 plan	Town of Bassendean	Short
Parking	P2	Supply pilot electric vehicle recharging infrastructure	Town of Bassendean/Public Transport Authority	Short
	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
	РТ6	Channelise Ivanhoe Street on approach to Morley Drive to mitigate delays for buses	Town of Bassendean	Medium
Public Transport	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)
	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
sport	AT4	Assess current design of Wilson Street subway and consider for replacement/ closure	Public Transport Authority/ Department of Transport/ Town of Bassendean	Short
Active Transport	AT8	Create Town of Bassendean micro- funding account for small active transport improvements	Town of Bassendean	Short

	Proposal		Responsibility	Priority
	RN1	Guildford Road corridor design	WAPC/ Main Roads	Short (ongoing
		and operations (western Town	WA/Town of	advocacy)
		boundary to West Road):	Bassendean	
		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		
	RN2	Guildford Road corridor design	Main Roads WA/Town	Short
	KIN2	and operations (West Road to	of Bassendean	Short
		Swan River):	or bassendean	
		Consult with Main Roads WA		
		regarding road cross-section,		
		bridge structure over Swan River and intersection		
		treatment at Guildford		
		Road/North Road/Earlsferry		
	RN3	Court Convert Walter Road East from	Town of	Medium
	IL IS	four travel lanes to two with	Bassendean/Department	Medium
		median division	of Planning, Lands and	
		median division	Heritage	
	RN5	Advocate for traffic signal and	Main Roads WA/Public	Short- interim
	I I I I	boom gate synchronisation at	Transport Authority	measure ahead
		Collier Road/Guildford Road	Transport Truthonty	of more suitable
		Comer Road, Sundiora Road		grade-
				separation
				treatment as
				part of
				METRONET
				programme
	RN6	Assess potential to signalise	Town of	Short –
		intersection of Railway	Bassendean/Main	engineering
		Parade/Lord Street	Roads WA	feasibility and
				modelling
				required to
				ascertain
¥				impacts with a
'0r				view to
Road network				deciding
n				whether this
ad				proposal should
R				be adopted
				be adopted

	Propos	al	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
	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
Land Development	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

Project title	Bassendean Transport Study	Job numb 260965	
Meeting name and number	Stakeholder meeting - Transperth / 6	File refere	ence
Location	Transperth, Public Transport Centre, East Perth	Time and 1330	date 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		

culation	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	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.
Transport Authority regarding possible reduction in park-and-ride demand associated with Morley-Ellenbrook	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

181025_MEETING NOTES_BASSENDEAN TRANSPORT STUDY STAKEHOLDER MEETING TRANSPERTH (2)_FINAL.DOCX

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.

Project title	Bassendean Transport Study	Job num 26096:	
Meeting name and number	Stakeholder meeting – City of Bayswater ^{File} reference / 2		
Location	City of Bayswater, 61 Broun Avenue,	Time and	l date
	Morley	1000	26 October 2018
Purpose of meeting	Review and discussion regarding draft B	assendear	n LITP initiatives
Present	Matt Turner (MT), City of Bayswater		· · · · · · · · · · · · · · · · · · ·
	Bryce Coelho (BC), City of Bayswater		
	Ryan Falconer (RF), Arup		
Apologies	Ryan Falconer (RF), Arup N/A		

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

J-280000/28046-00 BASSENDEAN TRANSPORT STUDYWANAGEMENTADMINIMEETINGSPHASE 2/BAYSWATERINB1020_MEETING NOTES_BASSENDEAN TRANSPORT STUDY STAKEHOLDER MEETING BAYSWATER (2)_FINALDOCX

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 Bassend Danya Mullins (DM), Arup	lean		

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

Project title

Bassendean Transport Study

Job number

Date of Meeting

260965-00

26 October 2018

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.
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Project title	Bassendean Transport Study	Job number 260965-00 File reference			
Meeting name and number	Stakeholder meeting – City of Swan / 5				
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

181030_MEETING NOTES_BASSENDEAN TRANSPORT STUDY STAKEHOLDER MEETING SWAN (2)_FINAL.DOCX

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 Ba Lord Street and Walter Road East	assendean LITP initiatives –		
Present	Damien Martin (DM), DPLH Shanthi Golestani (SG), DPLH Parwez Jahmeerbacus (PJ), DPLH Anthony Dowling (AD), Town of Bassen Ryan Falconer (RF), Arup	idean		
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 longlist 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

181118_MEETING NOTES_BASSENDEAN TRANSPORT STUDY STAKEHOLDER MEETING DPLH_DRAFT.DOCX

Project title	Job number	Date of Meeting
Bassendean Transport Study	260965-00	16 November 2018

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.

181118_MEETING NOTES_BASSENDEAN TRANSPORT STUDY STAKEHOLDER MEETING DPLH_DRAFT.DOCX

Appendix B

Final Plans presented for community consultation

B1

Plans to be included following endorsement by Council.

Phase 2 | Issue version 4 | 10 May 2019 | Arup J-2200001260965-00 Bassendean transport study/work/internal/deliverables/reports/190510_Bassendean transport study_phase 2 local Integrated transport plan report_final_draft.docx

Appendix C

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Functional Road Hierarchy Review Analysis

	Read	Morley Dr	Lord St	Walter Rd East	Cul	lier Ru	Ivanhoe St	Julanthe Street	
	Lanes	4	2	Watter No can	Section outside Tell boundary	Within Toð boundary		(managed states	
	Civided/ undivided	Divided	2 Undivided	4 Undivided (short sections of median)	Divided	4 Undivided (short sections of median)	2 Undivided	2 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]	tes at major intersections 33	At Watter Road L and Guildford Road, only 17.7	20		n intersections	Only at Walter Road E 20.1	Only at Collier Road 20.1	
Operating	Cyding/ peth fadiities	Footpath both sides	Footpath both sides south of Walter Road E. Footpath west side, only north of Walter Road	Footpaths both sides	Footpath on both sides	Shared path on north side. Isolated sections of footpath on south side	Footpath on western side	20-1 Footpath on western side	
	On-street parking	No	No	No	No	No	No	No	
	Speed limit (km/h)	70 72 (Altone Rd to Ivanhoe St), 19 (Gallagher St	60 49 (Morley Dr to Walter Rd E).	60 25 (ToB boundery to Percence 51).		70	50 116 (Morley Dr to Walter Rd E).	50	
	Bus operations (buses per day)	to Lord St)	16 (Walter Rd E to Railway Pde)	33 (Ivanhoe St to Lord St)	84 (immediately east of ToB boundary)	54 (ToB boundary to Islanthe St)	149 (Walter Rd E to Railway Pde)	N/A	
1000	Adjoining land use types	Residential	Residential	Residential	Industrial/ light industrial, medium density residential	Industrial/ light industrial	Residential, public purpose	Residential, parks and recreation	
	Observed (avg) Forecast ROM (avg)	11,950	12,100	12,567	13,100 21,100	9,600 15,100	2,467 N/A	8,690 36,100	
eekday VPD	Difference	9,800	2,500	5,133	8.000	3,500	N/A	7,410	
	% difference (forecast vs. observed)	82%	21%	42%	62%	57%,	N/A	85%	
of the second second	Catagory			District Distributor A (DA)			Local Dist	Local Distributor (LD)	
inin Reads	Predominant purpose		High capacity traffic mo	wements between industrial, commercial and	esidential areas		Movements of traffic within local areas and c	entect access roads to higher order distribut	
unctional Road	Indicative traffic volume (AADT)			> 8.000				.000	
Kerarchy (FRH)	Recommended operating speed								
	(km/h)			60-80				ed for built-up area)	
	Category (corresponding to FRH)			Integrator A (IA)			Neighbourhoo	i Connector (NC)	
lveskle	Indicative function			in the primary distributors, with frequent conn Low percentage of trucks. Usually bus routes. anes and separate dual-use paths are usually n				reets with mostly residential frontage that typically provide the lower-order sub-arterial network. These streets service and link neighbourhoods and attivity centres	
Neighbourhoods:	Indicative volume range (vpd)			15,000 - 35,000 (outside centres)			< 7,000 (NC-A), < 3,000 (NC-B)		
Novement	Max speed (km/h)			70 (outside centres)				0 (NC-B) 50	
Network	Indicative street reserve width			53.6			27.6	[NC-A], [NC-B]	
	Recommended functional characteristics	2 x 8.3 (ncl. bits land) 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 footpat on the other side (NICA) 11.6 including parking, plus shared path on one verge (NC-8)		
Anabyss	Compliance with FRI priories for correct estepartes	Durtype clash are performed not to have performed and the second se	Sub-type enderstand out to have maintential access of the have the model of the have represent front agree scenario provide the have the topological distance and the have the have the topological access the model of the have the have and enders access the have the have and the have the have access the have the have and the have the have access the have the have and the have the have and the have the have the have and the have the model of the have the have and the have the distance access the have the have and the distance access the have the have the have the model of the have the have the have the have the distance topological the have the have the have the have the have the have the have the have the have the have the distance topological the have the have the have the have the have the have the have the have the have the have the have the distance topological the have the have the have the have the have the have the have t	residential eccess - Worker AG Exobibits regulational foreignes can always a length to the Thom of accession. When the Constraints of the Constraints of the Constraints of the Constraints of the Constraints of the Constraints (Constraints), and for Inneed advance Theory, accessible transmitter is a set of the Constraints. Therefore the Constraints of the Constraints (Constraints) and the Constraints of the Constraints of the constraints (Constraints), more can be constraints). These Experiments (Constraints), more can be constraints), and the constraints (Constraints), more can be constraints).	Rows. While observed volumes are man- arterial connections across the rail to Gu The FRH criteria specify that measures fo should be implemented on DA-type read Currently, no flootpath exists along the lo	idford Rd and to Tonkin Hwy. In the control and safety of pedestrians (s: e.g. pedestrian signals were warranted, ingth of the south side of Collier Rd within site road crossing facilities between Jackson	Drives streets operets generally as freeder mote a traves hold access there and the access and moteod travel. The access and moteod travel that access and moteod travel that access and moteod travel. The access and moteod travel and freederships and the access and the access and the access and the access and the access and the access and the access and the access and the access and in the larger store. Easting descritterion should be preserved.	Durgs there is specify a panelly a taken in the specific	
	Discussion regarding preferred	The form of Multip Direffects generally is clearfunction and intended functions under the FRIS. The intergrade Algorithm of the public of the PRIS. The intergrade Algorithm of the public function of the public of the public of the public reage for intergrade and public of the public reage for intergrade and public of the public public of the public o	Lond S in our forecast to artist at significantly more table in the mouse in liquid ratio. Wolmes are estimated to be which the complex cases/or all income disclored ratio without, several of foretages access and must function may mentiopated in SUL. This inclusion is an entiopated in SUL. This inclusion is an entiple of the considered disclosed in the considered disclosed of the considered disclosed disclosed disclosed of the considered disclosed disclosed di	Module traffic volumes are around 20%, higher than theorem in traffic at 12, with the speech of the traffic at 12, with the speech of a two have read. ROM forecast for 2202 and 2023 have limited granth along the mode. The low characteristic along significant theory are creases and model that support additional directly along the transmite, which is considered. This which is the support additional directly along the transmite, which is 3500 million of the transmite which is in the support of the transmite which is in the support of the transmitter and interval of the transmiter which is a support matcher and the transmitter and matcher and the transmitter	and therefore its classification under the In order to better align with the correspo meet the criteria for DA roads in the FMH recommended, including protected pede	anding principles for an IA road in LN and to Limproved pedestrian provisions are astrian crossings and a footpath along the s recommended (subject to impacts on the drive).	The low observed traffic volumes and local recess risk of vanishes 51 demonstrates that is any any service of vanishes 51 demonstrates that is any service of vanishes 51 demonstrates that is the service, which is a law, feature of the Tank of the service is one of the B.3.5.4. The oracle and the service the service of the resource resource of the the B.3.5.4. The oracle and the service of the service of the resource resource of the service of the service resource resource the service of the service resource resource resource of the service of resource resource resource of the service resourc	Information of Americans, including fractable access, despite camping materially ling variants travered. Gelfer Ma, Linders and Ling access, the second second second generative variants and the Gard Research generative variants and the second second generative variants and second second generative variants and second second generative variants and second second second second second second second second second second second second second second second second second material on the second second second second materials on the second seco	

ATTACHMENT NO. 5

Dogs Local Law

Date of Submission Feb 13 19 11:54:15 pm	Screen Name Gogo22	Submission	Comment
100 10 10 11.04.10 pm	006022	Agreed	
Feb 15 19 09:42:32 am	Smc	 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. 	Nil 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.
		Make people attend dog training. Puppy school and dog school. Have more dog training.	
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: dog exercise areas? reserves where dogs are prohibited absolutely? 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 aftermoon 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
 - o 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
 - o 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'.

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• 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

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SCHEDULE 1

OFFENCES IN RESPECT OF WHICH MODIFIED PENALTY APPLIES

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).

.....

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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. 7







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 <u>SURVEY FORM REPLACEMENT OF BUS SHELTER IN :</u> <u>PENZANCE STREET</u> <u>JAMES STREET</u> 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: <u>dave kelly@mp.wa.gov.au</u>

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 gueries 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 Facsinile: +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

Dave Kelly

MINISTER FOR WATER; FISHERIES; FORESTRY; INNOVATION AND ICT; SCIENCE STATE LABOR MP FOR BASSENDEAN

Ashtleid | Bassendean | Bayswater | Beechboro | Eden Hill | Kiara | Lockridge | Morley | Success Hill

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

6 Old Perih Road BASSENDEAN WA 6054 9279 9871 🔛 dave.keliy@mp.wa.gov.au Dave Kelly - Bassendean Labor MP

@ @Davokellymp

Dear Minister,

5

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 sheller 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.

vinderely

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







JSG MINI Bus shelter by Jason Signmakers. PTA Subsidy Approved



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 (<u>rick.jones@pta.wa.gov.au</u>). Rick will coordinate the manufacture and installation of the bus shelter.

Yours sincerely

Brad Holden SIGNAGE AND INFORMATION DEVELOPMENT CO-ORDINATOR

Shelter ID	PTA Number	Road Name	Owner	Maintainer	Tumo	Ave. Weekday	Managerial	Cardinian	Comments		
Sheller ID	11344	Guildford Road	Adshel	Maintainer Adshel	Type Adshel Shelter	Passengers (on only) 0	Material Metal	Condition		Treatment	PTA Funded
(11344	Gundiora Road	Austici	Austrei	Adsher Sheiter	U	Metal	1		Nil	
									Shelter depressively clean to read	Remove existing shelter, construct new hardstand in closed road	
889	11370	Walter Road East	Town of Bassendean	Town of Bassendean	Double Sided	9	Reinforced Concrete	2	Shelter dangerously close to road.	reserve behind path, install new shelter, upgrade kerb, install TGSIs.	Yes - Part
					Double sided		nemoreed concrete	2		Modify shelter seating, upgrade hardstand, upgrade kerb, install	
890	11371	Walter Road East	Town of Bassendean	Town of Bassendean	Double Sided	6	Reinforced Concrete	2		TGSIs.	Yes - Part
									Shelter too close to road and in poor		
891	11372	Walter Road East	Town of Bassendean	Town of Bassendean	Double Sided	5	Reinforced Concrete	4	condition	Remove shelter, upgrade hardstand, upgrade kerb, install TGSIs.	Yes - Full
										Modify shelter seating to create 0.8m wide bay for a wheelchair,	
									Shelter seat too close to path	relocate bin, upgrade kerb, divert path away from front of shelter,	Yes - Part
887	11373	Walter Road East	Town of Bassendean	Town of Bassendean	Double Sided	5	Reinforced Concrete	2		install TGSIs.	
	15546	Old Perth Road	Adshel	Adshel	Adshel Shelter	21	Metal	2		Upgrade kerb, install TGSIs	Yes - Full
	15547	Old Perth Road	Adshel	Adshel	Adshel Shelter	1	Metal	1		Upgrade hardstand to provide access, install TGSIs, relocate bin	Yes - Full
	15547	old Fertil Road	Austier	Austrei	Austrel Shelter	1	Metal	1	Shelter shows signs of impact damage,	and sign, upgrade kerb.	
										Widen existing path into road to create larger waiting area or	Vec. eest
885	15549	Wilson Street	Town of Bassendean	Town of Bassendean	Enclosed	23	Metal	2	Telstra building.	resite stop. Investigate options, design and budget.	Yes - part
										issite stopi intestigate options, design and budget.	
884	15550	James Street	Town of Bassendean	Town of Bassendean	Double Sided	0	Reinforced Concrete	2		Remove shelter, upgrade hardstand, upgrade kerb, install TGSIs	Yes - Full
										Modify shelter seating, upgrade hardstand, upgrade kerb, install	
881	15551	Devon Road	Town of Bassendean	Town of Bassendean	Double Sided	6	Reinforced Concrete	2		TGSIs, reposition bin.	Yes - Part
880	15552	Devon Road	Town of Bassendean	Town of Bassendean	Seat Only	2	Metal	2	Seat non-compliant.	Remove seat, upgrade kerb, install TGSIs.	Yes - Full
877	15555	North Doord	T	T (D)						Modify shelter seating, upgrade hardstand, upgrade kerb, install	Yes - Part
677	15555	North Road	Town of Bassendean	Town of Bassendean	Double Sided	3	Reinforced Concrete	2		TGSIs.	ies rure
878	15557	North Road	Town of Bassendean	Town of Bassendean	Seat Only	0	Metal	3	Seat too close to kerb and non-	Remove seat, upgrade hardstand, install 2 x kerb ramps, upgrade	Yes - Full
876	15565	West Road	Town of Bassendean	Town of Bassendean	Double Sided	1	Reinforced Concrete	2	compliant. Too close to kerb to modify.	kerb, install TGSIs. Remove shelter, upgrade kerb, install TGSIs.	Mar Full
				To the Dussellucult	Double blued		Reinforced concrete	2	Too close to kerb to modify.	Remove existing shelter. Upgrade hardstand, install new shelter	Yes - Full
									Too close to kerb to modify.	further back from kerb, upgrade kerb, upgrade 2 x kerb ramps by	Yes - Part
345	15594	Hardy Road	Town of Bassendean	Town of Bassendean	Double Sided	11	Reinforced Concrete	3	,	roundabout, new TGSIs	ies rait
										Remove shelter, upgrade hardstand, upgrade kerb, create kerb	the second
343	15595	Hardy Road	Town of Bassendean	Town of Bassendean	Double Sided	2	Reinforced Concrete	3	Too close to kerb to modify, low usage.	ramp on both sides of road, install TGSIs.	Yes - Full
			in a second second		2. 2.27 Sec. 9.					Modify shelter seating, upgrade hardstand, install 2 x kerb ramps,	Vac Bast
868	15597	French Street	Town of Bassendean	Town of Bassendean	Double Sided	3	Reinforced Concrete	2		upgrade kerb, install TGSIs.	Yes - Part
379	15598	Constant Charles								Modify shelter seating, upgrade hardstand, upgrade kerb, install	Yes - Part
379	12238	French Street	Town of Bassendean	Town of Bassendean	Double Sided	1	Reinforced Concrete	2		TGSIs.	ies ruie
										Upgrade hardstand around sign, install 2 x kerb ramps and extend	
869	15603	Margaret Street	Town of Bassendean	Town of Bassendean	Cantilever	3	Metal	3		path on northern side to meet existing path, install TGSIs, upgrade kerbing.	Yes - Full
		Baratottoet	To the of Dassendedin	Town of Bussendeun	Currencie	5	Weta	5		Modify shelter seating, upgrade hardstand, upgrade kerb, install 2	
370	15605	Fisher Street	Town of Bassendean	Town of Bassendean	Double Sided	6	Reinforced Concrete	2		x kerb ramps, new TGSIs	Yes - Part
379	15607	Kenny Street	Town of Bassendean	Town of Bassendean	Double Sided	4	Reinforced Concrete	2		Modify shelter seating, upgrade hardstand, install TGSIs.	Yes - Part
										Modify shelter seating, upgrade hardstand, install TGSIs including	1 10 10 10 10
371	15608	Kenny Street	Town of Bassendean	Town of Bassendean	Double Sided	5	Reinforced Concrete	2		to existing kerb ramps.	Yes - Part
										Upgrade hardstand, upgrade kerb, install 2 x kerb ramps, install	
373	15612	Reid Street	Town of Bassendean	Terrin of Desservices	Castilaura	-				TGSIs, modify existing seat to create 0.8m wide space for	Yes - Part
5/5	15012	Reid Street	Town of Bassendean	Town of Bassendean	Cantilever	7	Metal	3		wheelchair.	
372	15613	Reid Street	Town of Bassendean	Town of Bassendean	Double Sided	1	Reinforced Concrete	3		Modify shelter seating, upgrade hardstand, install 2 x kerb ramps,	Yes - Part
				. Swit of Sussellueall	Souple Sided	L	nemoreu concrete	3		upgrade kerb, install TGSIs, reposition bin.	
	15683	Lord Street	Adshel	Adshel	Adshel Shelter	6	Metal	2		Upgrade bardstand install 2 v kost i I TCCI-	Yes - Full
				Provinci	in a statier stretter	0	inicial	2		Upgrade hardstand, install 2 x kerb ramps, install TGSIs.	
	15684	Lord Street	Adshel	Adshel	Adshel Shelter	7	Metal	2		Upgrade hardstand, install 2 x kerb ramps, install TGSIs,	Yes - Full
		Lord Street	Adshel	Adshel	Adshel Shelter	4	Metal	2		Upgrade hardstand, install 2 x kerb ramps, install IGSIs. Upgrade hardstand, install 2 x kerb ramps, install TGSIs.	Yes - Full
								-		Modify shelter seating to create 0.8m wide bay for a wheelchair,	Tes - Full
									Seating too close to path	relocate bin, upgrade kerb, divert path to kerb line in front of	Yes - Part
386	15741	Walter Road East	Town of Bassendean	Town of Bassendean	Double Sided	5	Reinforced Concrete	2		shelter, install TGSIs.	
1000		10 W 202	0 0 0						Hardstand already upgraded		
392	15745	Ivanhoe Street	Town of Bassendean	Town of Bassendean	Double Sided	25	Reinforced Concrete	3	Hardstand already upgraded.	Modify shelter seating to create 0.8m wide bay for a wheelchair.	No
0.7	15747								Hardstand already upgraded.	Modify shelter seating to create 0.8m wide bay for a wheelchair,	No
393	15747	Ivanhoe Street	Town of Bassendean	Town of Bassendean	Double Sided	14	Reinforced Concrete	2	an and an endy approach.	relocate bin onto verge away from TGSIs.	NU
94	15748	Ivanhoe Street	Town of Bassendean	Town of Bassendean	Double Sided	9	Reinforced Concrete	3	Hardstand already upgraded.	Modify shelter seating to create 0.8m wide bay for a wheelchair,	No
	10/10	in annoe street	Lown or bassendean	i own or bassenuean	Double sided	3	nemorceu concrete	5		extend path into park to create additional space around shelter.	

882	15804	Penzance Street	Town of Bassendean	Town of Bassandaan	Daubla Sidad		Deinforced Connector		Seat is within path and too close to		Yes - Full
	1.0.0.0.0			Town of Bassendean	Double Sided	9	Reinforced Concrete	3	road.	Remove shelter, upgrade kerb, install TGSIs.	States - States
883	15805	Penzance Street	Town of Bassendean	Town of Bassendean	Double Sided	7	Reinforced Concrete	3	Seat is too close to path.	Remove shelter, upgrade kerb, install TGSIs.	Yes - Full
897	15813	Broadway	Town of Bassendean	Town of Bassendean	Seat Only	10	Metal	3	Seat non-compliant.	Remove seat, upgrade hardstand, upgrade kerb, install TGSIs.	Yes - Full
									Current hardstand is made from slabs		
895	15818	Broadway	Town of Bassendean	Town of Bassendean	Double Sided	7	Reinforced Concrete	2	and is uneven, requiring shelter to be moved.	Remove shelter, replace hardstand, upgrade kerb, install 2x kerb ramps, install TGSIs, upgrade bin to fixed.	Yes - Full
896	15819	Broadway	Town of Bassendean	Town of Bassendean	Double Sided	9	Reinforced Concrete	2		Modify shelter seating, upgrade hardstand, upgrade kerb, install 2 x kerb ramps, new TGSIs	Yes - Part
888	15820	Broadway	Town of Bassendean	Town of Bassendean	Double Sided	6	Reinforced Concrete	2	Shelter too close to road.	Remove shelter, upgrade kerb.	Yes - Part
	15824	Collier Road	Adshel	Adshel	Adshel Shelter	3	Metal	1		Install TGSIs, upgrade kerb	Yes - Full
	15839	Collier Road	Adshel	Adshel	Adshel Shelter	1	Metal	1		Install TGSIs, upgrade kerb	Yes - Full
875	22725	West Road	Town of Bassendean	Town of Bassendean	Double Sided	4	Reinforced Concrete	3		Upgrade hardstand, upgrade kerb, install 2 x kerb ramps, install TGSIs, modify existing seat to create 0.8m wide space for wheelchair.	Yes - Part
874	22726	West Road	Town of Bassendean	Town of Bassendean	Double Sided	4	Reinforced Concrete	2		Upgrade hardstand, upgrade kerb, install 2 x kerb ramps, install TGSIs, modify existing seat to create 0.8m wide space for wheelchair.	Yes - Part
		Devon Road	Town of Bassendean	Town of Bassendean	Double Sided	0	Reinforced Concrete	2	No longer PTA stop.	Remove shelter and hardstand, reinstate verge.	No
	15746	Ivanhoe Street	Town of Bassendean	Town of Bassendean	Post only	24		0	High use, but lack of available land for shelter.	Investigate, but unlikely to be possible.	
	15811	Rugby Street	Town of Bassendean	Town of Bassendean	Post only	18			High use and potentially good location for a shelter.	Investigate and design. Would require hardstand, shelter, kerbing, 2 x kerb ramps and TGSI's	Yes - part

ATTACHMENT NO. 8



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

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Attachment 1Certificate of TitleAttachment 2Site Plan
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 Addr ess	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.



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

	19 - 14c		26	30/P2052	r
WESTERN	121	AUSTRALIA	DUPLICATE EDITION N/A	DATE DUPLIC.	
RECORD OF	QUALIFIED) CERTIFICA	TE	VOLUME LR3024	folio 45
	OF				
CRC	WN LAND	TITLE			
UNDER TH	E TRANSFER OF	LAND ACT 1893			
AND THE LA	AND ADMINISTR	ATION ACT 1997			
NO	DUPLICATE CR	EATED			

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.

REGISTER NUMBER

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

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:P2052PREVIOUS TITLE:LR3024-45PROPERTY STREET ADDRESS:NO STREET ADDRESS INFORMATION AVAILABLE.LOCAL GOVERNMENT AUTHORITY:TOWN OF BASSENDEAN, CITY OF BAYSWATERRESPONSIBLE 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 (INE. 5 ND. 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 ND. U/A BAYS)	64 (INC. 1 NO. U/A BAYS)	88 (INE, 2 ND, 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)



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



Public Transport Authority

SPECIFICATION

Stations and Buildings Landscape Architecture

UNCONTROLLED IF PRINTED

8803-000-009 Rev 1.00

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Date 23/04/2019 Approved

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Document History and Governance

Document Governance

		Role			
Docun	nent Owner	Manager Facilities	s & Infrastructure - N&I		
ocu	ment 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.

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Rev 1.00

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Specification

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8803-000-009 - Specification - Stations and Buildings - Landscape Architecture

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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

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 ar 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			

Table 2: Codes and Standards

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Sn	PCI	fica	tion	
SP	001	1100	1011	

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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;
- 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;

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- 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;
- 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);
- 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.

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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;
- 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;

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- 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;
- I. 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;
- 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;
- 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;
- 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;

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

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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;
- 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;
- I. 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;
- 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.

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- 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
- I. 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;

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- 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;
- I. 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;
- 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 nonirrigated 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.

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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	odonaea Hackettiana		
Eremophila	Glabra		
Gompholobium	Tomentosum		
Grevillea	Crithmifolia		
Grevillea	Gin Gin Gem		
Grevillea	Thelemanniana		
Grevillea	Olivacea		
Hermiandra	Pungens		
Kennedia	Prostrata		
Olearia	Axillaris		
Pimelea	Rosea		

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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.

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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.

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- 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.

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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.

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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;
- Minimise the mixing of subsoil and topsoil during stripping, stockpiling and respreading 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;
- 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;
- I. 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;
- 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:
 - 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;

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- 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.

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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.

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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.

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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.

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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.

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- 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.

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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;
- 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.

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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.

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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.			

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TOWN OF BASSENDEAN REVISED DRAWING WITH INCREASED LANDSCAPING

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TOWN OF BASSENDEAN ALTERNATIVE DESIGN



TOWN OF	BASSENDEAN
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