ATTACHMENTS

BRIEFINGS SESSION

17 APRIL 2018

Attachment No. 1:

Proposed Additions and Alterations to Single House at Lot 37 (No. 6) Daylesford Road, Bassendean

- Plans for the proposed development
- Correspondence dated 15 July 2014 from McLeod's Barristers and Solicitors

Attachment No. 2:

Joint Development Assessment Panel Application for Mixed Development Comprising Additions and Alterations to Nursing Home, Shops and 18 Multiple Dwellings at Lot 54 (Nos. 25-27) Hamilton Street; and Lot 84 (No. 68) Old Perth Road; and Lot 85 (No. 70) Old Perth Road, Bassendean

1. Applicant's Planning Report titled:

Application for Planning Approval - Proposed Aged Care Facility, Multiple Dwellings & Shops - Prepared by Peter Webb and Associates

Annexures to Planning Report comprising:

- (a) Annexure 1 WAPC Amalgamation Approval.
- (b) Annexure 2 Certificates of Title x 3.
- (c) Annexure 3 Annotated Site Photographs.
- (d) Annexure 4 Design Drawings comprising:
 - EX1 Existing Site Plan;
 - Schedule of Finishes 8 Dec 2017
 - SK1 Proposed Site Plan;
 - SK2 Lower Ground Floor Plan;
 - SK3 Upper Ground Floor Plan;
 - SK4 First Floor Plan;
 - SK5 Second Floor Plan;
 - SK6 Third Floor Plan:
 - SK7 Elevations:
 - SK8 Elevations;
 - SK9 Sections:
 - SK10 Shadow Plan;
 - Perspective 1 Old Perth Rd; and
 - Perspsective 2 From Hamilton St / Old Perth Rd corner.
- (e) Annexure 5 Landscape Plan.
- (f) Annexure 6 Correspondence comprising:
 - (i) 22 Oct 2014 from Peter Webb & Associates to Town of Bassendean; and
 - (ii) 13 Nov 2014 reply from Town of Bassendean to Peter Webb & Associates.
- (g) Annexure 7 Local Planning Policy No. 1 Compliance Report.
- (h) Annexure 8 Waste Management Plan.
- (i) Annexure 9 Traffic Impact Statement.
- (j) Annexure 10 Contaminated Site Audit.
- (k) Annexure 11 Stormwater Drainage Management Plan.
- 2. Aerial Photo / Location Plan

Attachment No. 3:

Correspondence received from Lavan Legal on behalf of Birmingham properties Pty Ltd.

Attachment No. 4:

- Proposed Town of Bassendean Dust and Building Waste Local Law 2018
- Comments received from the Department of Local Government.

Attachment No. 5:

Proposed Town of Bassendean Repeal Local Law 2018

Attachment No. 6

- Photos of the verge and crossover at 18 Anzac Terrace, after the incident occurred;
- Photo of the verge and crossover at 18 Anzac Terrace from Google Street View, before the incident occurred.

Attachment No. 7

- Solarban Tinting quote
- Superior Slat System quote
- Installation Plan

Attachment No. 8

- Draft 1 Surrey Street Interpretation, Infant Heath, Community Use and Playgroup Project Brief for 2c Design
- Department of Health, Child & Adolescent Community Health Services Consultancy / Clinic Room Layout (RL.CO4.04) & Typical child Health Clinic Layout (CC.001) Plans

Attachment No. 9

Final draft Reconciliation Action Plan 2018 - 2021

Attachment No. 10

Draft Policy 6.7 - Electronic Recording and Livestreaming of Council Meetings

Attachment No. 11

Draft Town of Bassendean Advisory Group Policy

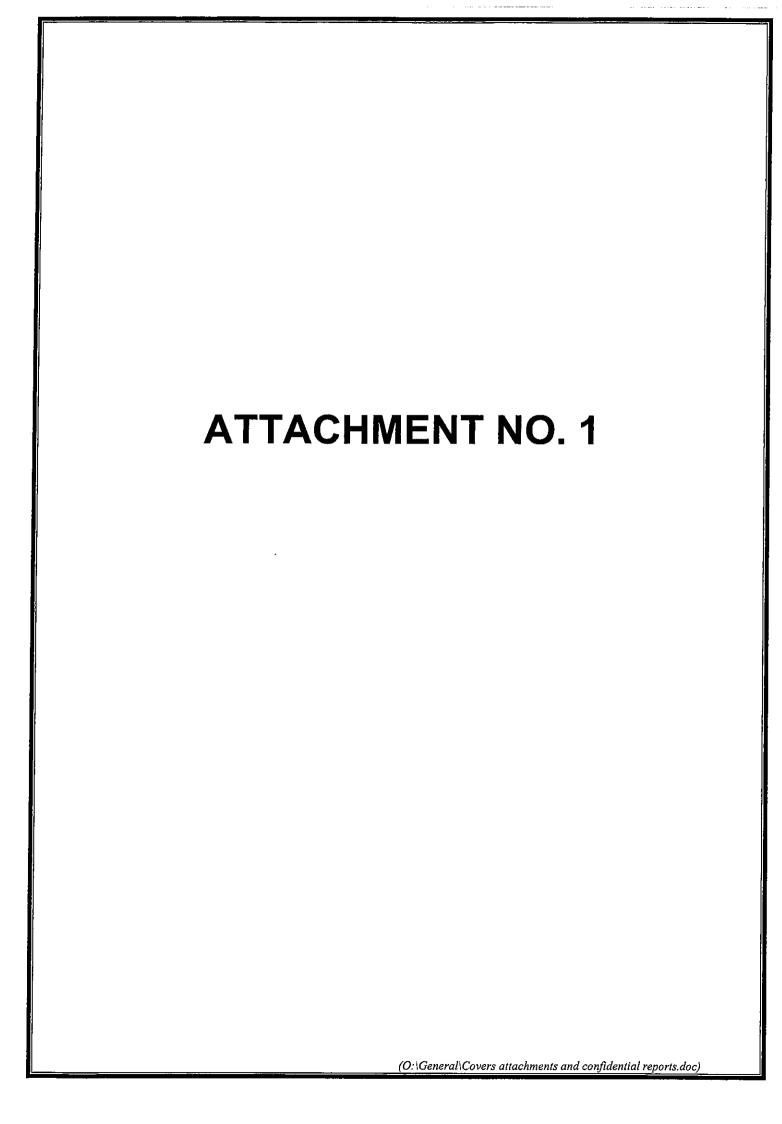
Attachment No. 12:

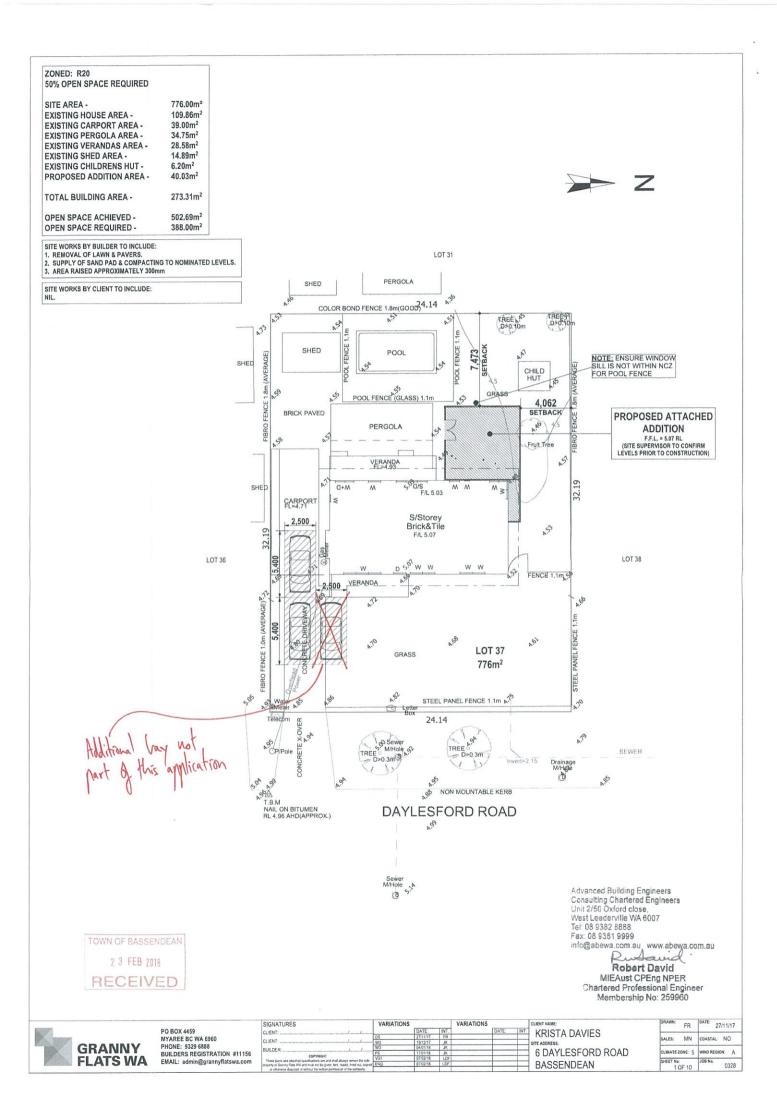
Quarterly Report P/E 31 March 2018

Attachment No. 13:

- List of Committee Objectives, Strategies and Projects (extract from Strategic Priority 3: Built Environment of the Town's 2017-2027 Strategic Community Plan).
- Design Bassendean Committee Minutes of 5 April 2018.

Confidential Attachments





NOTES: - CLIENT SUPPLIED MATERIALS & LABOUR - REFER TO CONTRACT & ADDENDA. - BUILDER TO VERIFY ALL DIMENSIONS, LEVELS & CONTOURS ON SITE BEFORE CONSTRUCTION. - DUMENSIONS ARE TO FRAME STUDS ONLY & DO NOT INCLUDE LININGS OR CLADDINGS - HEIGHTS ARE FROM TOP OF SLAB. NO ALLOWANCE MADE FOR FLOOR COVERINGS.
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MIEAust CPEng NPER
Chartered Professional Engineer

AREA CALCULATIONS Area m² **NEW ADDITION** 40,030 NEW ROOF 43.116

TOWN OF BASSENDEAN 2 3 FEB 2018

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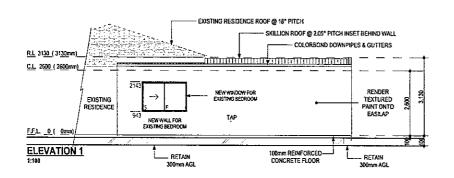
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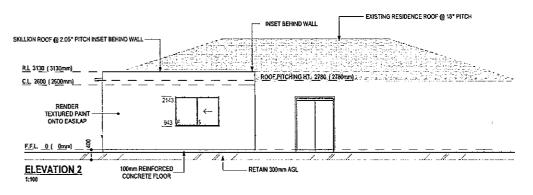


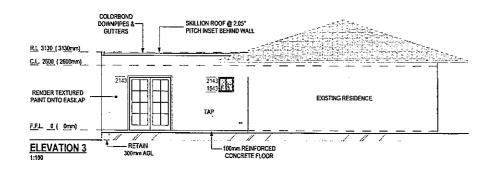
PO BOX 4459 MYAREE BC WA 6960 PHONE: 9329 6888 **BUILDERS REGISTRATION #11156** EMAIL: admin@grannyflatswa.com

SIGNATURES	VARIATIONS	-		VARIATIONS			CLIENT NAME:
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CLIENT:	WD	27/11/17	×		-		SITE ADDRESS:
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or otherwise disposed of without the written permission of the company.		<u>1</u>			L		

	MATERIAL	COLOUR		
EXTERNAL WALLS	HARDIES EASYLAP	CLASSIC CREAM		
GABLE END INFILL	HARDIES EASYLAP	CLASSIC CREAM		
ROOF	COLORBOND	MONUMENT		
GUTTERS	COLORBOND	MONUMENT		
DOWNPIPES	COLORBOND	MONUMENT		
WINDOW FRAMES	ALUMINIUM	ANOTEC DARK GREY		







Advanced Building Engineers
Consulting Chartered Engineers
Unit 2/50 Oxford close,
West Leederville WA 6007
Tel: 08 9302 8088
Fax: 08 9381 9999
info@abewa.com.au www.sbewa.com.au
Robert David
MIEAust CPEng NPER
Chartered Professional Engineer
Membership No: 259960

TOWN OF BASSENDEAN
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PHONE: 9329 6888
BUILDERS REGISTRATION #11156
EMAIL: admin@grannyfiatswa.com

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Our Ref

CS:KH:BASS-35999

15 July 2014

Mr C Buttle Senior Planning Officer Town of Bassendean PO Box 87 BASSENDEAN WA 6934

Dear Christian

Development in the flood fringe - deed of indemnification

I refer to the meeting you and I attended at this office on 14 July 2014 along with Brian Reed and write in order to confirm the oral advice given at that time.

Condition requiring deed of indemnification

The Town's Local Planning Policy No. 4 – Flood Plain Management and Development Policy (LPP4) provides, among other things, that in permitting any development on flood prone land the Council should require the applicant to indemnify the Council against any liabilities for damage or loss caused by flood and may require the applicant to enter into an agreement to secure the indemnity. The Town's practice is to secure the indemnity through a condition of planning approval which requires the land owners to enter into an agreement with the Town which acknowledges the property is located within the flood fringe of the Swan River, and to indemnify the Town for any claims or liabilities for damage or loss caused by flooding associated with the proposed development. The deed creates a caveatable interest in the land so that the indemnity can be secured against future purchasers. Presently there are two proceedings in the SAT which seek to challenge the condition which requires the deed of indemnification.

In my view those challenges will succeed in the event the point is argued at a final hearing. I will try and explain the reason for that view.

In order for a condition of planning approval to be valid it must satisfy the so-called *Newbury* test. One aspect of the *Newbury* test is that the condition must be for a proper planning purpose.

There are a number of relatively recent court decisions which make it clear that a condition which requires the provision of an indemnity to the planning authority is not a condition imposed for a proper planning purpose. Among those decisions is a 2011Tasmanian case which involved the requirement for a legal agreement indemnifying the council for flooding or inundation of a property.



Stirling Law Chambers 220-222 Stirling Highway Claremont WA 6010 Tel (08) 9383 3133 Fax (08) 9383 4935 Email: mcleods@mcleods.com.au

Partners

Craig Slarke (Managing Partner)
Denis McLeod
Neil Douglas
David Nadebaum
Andrew Roberts
Peter Wittkuhn
Fiona Grgich
Peter Gillett
David Nicholson

Development in the flood fringe - deed of indemnification

The decisions I have in mind are from the Eastern States, but the principle has now been consistently applied in a number of jurisdictions. I have no doubt that the State Administrative Tribunal will also apply the same principle in this State.

The fact that the condition applied by the Town springs from LPP4 will not alter the outcome. If the requirement for a land owner to enter into a deed of indemnity with the Town sprang from a provision of the Local Planning Scheme, the answer may be different, but I doubt that the WAPC (or the Minister) would support a scheme amendment to that effect.

Section 70A notification

Section 70A of the *Transfer of Land Act 1893* provides for a local government to register a notification against the certificate of title to land where it is considered desirable that proprietors or prospective purchasers of the land 'be made aware of a factor affecting the use or enjoyment of the land or part of the land'.

It is legitimate for the local government to impose as a condition of a planning approval a requirement for the land owners to sign the notification under Section 70A advising of a factor affecting use or enjoyment of the land in certain cases, to allow the local government to register the notification. A Section 70A notification may be appropriate in relatively unusual cases where the potential impacts of non-residential factors may adversely affect residential amenity. For example, Section 70A notifications are commonly used where residential development is affected by aircraft noise.

In my opinion it would be appropriate and reasonable for the Town to require a Section 70A notification to be registered against the certificate of title for land on which a dwelling has been approved within the flood fringe, to advise of the fact the dwelling may be subject to flooding and of the requirement that the lower level is not to be used for habitable purposes.

A Section 70A notification would be a suitable substitute for a condition requiring a deed of indemnity in that:

- (a) it is registered against the certificate of title;
- (b) it advises owners and prospective purchasers of the issues associated with the development of land within the flood fringe; and
- (c) by notifying the owners and potential purchasers of the risk associated with the flooding, it discharges the Council's duty of care to the owners and prospective purchasers in that regard.

I would recommend amending LPP4 to substitute the requirement to register a Section 70A notification for the existing requirement to enter into a deed of indemnity.

Negligence claims for damages

The current condition is for the purpose of protecting the Town against the possibility of a claim for damages arising from the flooding of the approved dwelling.

It is true that the Council has a duty of care to the owners and potentially to future purchasers of the land when granting planning approval. The potential therefore arises for a negligence claim in the context of development within the flood fringe arising from:

- (a) negligently granting approval to development in circumstances where it ought not be granted; and
- (b) failing to warn the owners or prospective purchasers of the risks associated with developing within the flood fringe.

I have already mentioned above that the Section 70A notification would be adequate to discharge the Town's duty of care to inform the owners and potential purchasers of the risks associated with developing on flood prone land.

The notification will not necessarily protect the Town from a claim in negligence associated with granting an approval where it not ought to have been granted in the first place. However, the Town's LPP4 makes it clear that the Council is to determine planning proposals for flood prone land according to applicable guidelines and on the advice of relevant agencies. Generally speaking, development within the floodway is not supported, whereas development in the flood fringe can be supported in appropriate cases and subject to a suitable design (including finished floor levels).

Provided that the Council's decisions are properly made in accordance with the applicable policies and advice from regulatory agencies, the decision to grant planning approval should not be considered negligent even if the development is subsequently subject to damage by flooding. The Council should however monitor any changes to the flood plain mapping and the Department of Water's policy on development on flood prone land to ensure LPP4 correctly reflects the Department's position.

Additionally it is worth noting that in a worst case scenario the Town's insurance policy would respond to a claim of negligence associated with the grant of approval of development within a flood prone area. Elected members are not personally liable for a negligent decision of the Council provided that the decision was made in good faith.

Future practice

I have already recommended above that the Town should amend LPP4 so as to remove the requirement for a deed of indemnification and replace it with a requirement for a Section 70A notification. Another benefit of doing so is that a notification is more convenient and less expensive than a deed and caveat arrangement. A Section 70A notification need only be registered once whereas the deed and caveat arrangement requires a new deed and caveat to

be prepared and relodged each time the property changes hands. There is an associated expense to the purchasers which can be avoided through the use of a Section 70A notification.

In cases where a land owner has already entered into a deed of indemnity with the Town and the land is subsequently sold, the deed provides for the purchaser to enter into a similar arrangement. It is open to the Town to agree with the new purchaser that a section 70A notification will be registered instead of requiring a new deed and lodging a fresh caveat. Doing so does not alter the previous condition of planning approval but, instead, would be done in the exercise of the Town's discretion with respect to enforcement of that condition.

However, I would suggest liaising with the Town's insurers in the first instance to make sure that they do not have any objection to changing the arrangement with land owners in the manner suggested.

Please let me know if you have any queries concerning the above.

Yours sincerely

Craig Slarke Managing Partner

Contact: Direct line: Craig Slarke 9424 6223

Email:

cslarke@mcleods.com.au

ATTACHMENT NO. 2

Application for Planning Approval

Proposed Aged Care Facility, Multiple Dwellings & Shops

Lot 54 (#27) Hamilton Street & Lots 84-85 (#68-70) Old Perth Road, Bassendean

Town of Bassendean / Metro Central JDAP

Application for Planning Approval

Proposed Aged Care Facility, Multiple Dwellings & Shops

Lot 54 (#27) Hamilton Street & Lots 84-85 (#68-70) Old Perth Road, Bassendean

Town of Bassendean / Metro Central JDAP

Prepared by:

PETER WEBB & ASSOCIATES (PWA)

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E: planning@webbplan.com.au

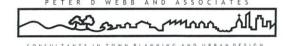
Principal: Mr Nik Hidding
Job Number: C2062

ersion / Date: Final / 30 Jan 2018

Prepared for:

T&T MANAGEMENT SERVICES PTY LTD

PO Box 78 BURSWOOD WA 6100



1.0 INTRODUCTION

Peter Webb and Associates (PWA) acts for T & T Management Services Pty Ltd (T&T), which owns Lot 54 (#27) Hamilton Street and Lots 84-85 (#68-70) Old Perth Road, Bassendean in this matter and lodge this Application on T&T's behalf.

T&T is a company within the Aegis Aged Care Group which is the largest aged care provider in Western Australia.

T&T own and operate the existing Bassendean Aged Care Facility at Lot 54 Hamilton Street. In order to meet the high demand for quality aged care accommodation in the Bassendean area, T&T plan to extend this facility into the recently acquired Lots 84 and 85 Old Perth Road, which share a common northern boundary with Lot 54, being situated directly to the south of the Bassendean Aged Care Facility. As part of preliminary discussions over the proposed expansion of this Facility over Lots 84 and 85 with the Town of Bassendean, it was acknowledged that the subject lots would be required to be amalgamated with Lot 54. On behalf of T&T, we have obtained a WAPC conditional approval for amalgamation of the three subject lots. The conditions of this approval are currently in the process of being satisfied. A copy of the WAPC Amalgamation Approval is attached at **Annexure 1**.

This Application seeks approval for the proposed development of a five (5) storey building, with a basement car park, three (3) shop tenancies at street level with primary frontages to Old Perth Road, two (2) levels of aged care accommodation providing a total of 64 beds and two (2) upper floor levels of residential Over-55's apartments (18 multiple dwellings). The new development incorporates a "seamless" connection to the existing Aged Care Facility at the upper ground level.

The existing Aged Care Facility at Lot 54 Hamilton Street includes 44 aged care beds (some bed rooms have two (2) beds in the room), which will be reduced to 39 aged care beds when the construction of the new aged care extension begins.

In total, 39 aged care beds will be accommodated in the existing facility, with 64 new aged care beds (some bed rooms have two (2) beds in the room) being accommodated in the extension (total 103 aged care beds).

1.1 Joint Development Assessment Panel (JDAP) Determination

Due to the anticipated construction cost being **\$13 million**, the Development Application will be required to be determined by the Metro-Central Joint Development Assessment Panel (JDAP) as a mandatory Application.

The JDAP process has been developed in order to streamline approval processes for large-scale development proposals and act in the place of the local government in making decisions on whether or not to grant approval.

Accordingly, please find *attached* our completed Application for Planning Approval Form and DAP Form 1, both signed by the Directors of T&T.

Please also find *attached* the prescribed Application fees based on the anticipated construction cost of \$13 million.

Following is a supporting report outlining the details of the proposal as well as the location, the site and relevant planning background and supporting rationale.

2.0 OVERVIEW & SITE DETAILS

2.1 Overview

Applicant:

Peter Webb & Associates (PWA)

Architect:

Montague Grant Architects Pty Ltd (MGA)

Landowners:

T & T Management Services Pty Ltd (T&T)

Scheme:

Local Planning Scheme No. 10 (LPS 10)

Zoning:

"Town Centre"

MRS:

LPS 10:

"Urban"

Current Use:

Aged Care Facility and Vacant

Combined Lot Size:

4.947m²

Proposed Use Classes:

"Use Not Listed" (Aged Care Facility)

"Multiple Dwellings" (Over 55's Apartments)

"Shop" (3x Retail Tenancies)

Construction Cost:

\$13,000,000.00

2.2 Site Details

The lots the subject of this Application include Lot 54 (#27) Hamilton Street, Bassendean; and Lots 84 (#68) and 85 (#70) Old Perth Road, Bassendean. The WAPC had granted conditional Approval to amalgamate the three landholdings into a single green title lot, which was obtained as part of the planned extension of the existing Bassendean Aged Care Facility, the subject of this Application. T&T is currently in the process of satisfying each of the conditions of the Amalgamation Approval. A copy of the WAPC Approval 151362 is attached at Annexure 1.

The lots the subject of this Application are currently described on separate Certificates of Title Volumes 2514, 1631 and 1496 and Folios 597, 156 and 999 and have individual land areas of 3,101m², 922m² and 924m², respectively. The combined land area of the three (3) lots is 4,947m². (Refer to **Annexure 2**: Certificates of Title.)

Existing improvements on Lot 54 include a single storey brick and tile Aged Care Facility with associated car parking in the south western corner of that site. Lots 84 and 85 have until recently, operated as a used motor vehicle sales facility, with associated sales and administration structures existing on the land, which are not in a particularly good state of repair. This site is largely paved for the display of used motor vehicles. (Please refer **Figure 1** for Aerial Photograph). Three (3) car parking bays exist in the Old Perth Road reserve adjacent to the southern boundary of the subject site.

Vehicle access to the car parking facility for the existing Aged Care Facility is provided from Hamilton Street. Vehicle access to Lot 84 is currently provided at the corner of Hamilton Street and Old Perth Road with access to Lot 85 being via Old Perth Road.

All of the usual engineering infrastructure services (including sewerage, reticulated scheme water supply, electricity and telephone services) are all available to the Bassendean Aged Care Facility and have been provided to it. Similarly, Lots 84 and 85 also enjoy access to all of the usual urban engineering infrastructure services.

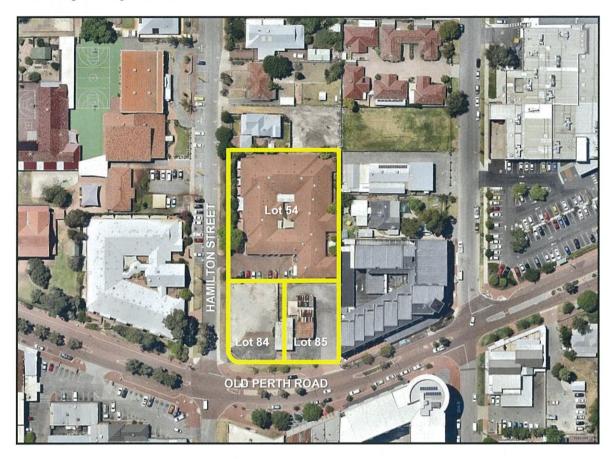


Figure 1: Aerial Photograph

Please refer to the attached annotated photographs at **Annexure 3** which depict the existing Bassendean Aged Care Facility, together with photographs of the subject land in the context of this part of the Bassendean Town Centre.

3.0 THE PROPOSAL

The proposed extension of the Bassendean Aged Care Facility is described on design drawings prepared by Montague Grant Architects Pty Ltd (MGA) included at **Annexure 4**. Two (2) 3D Perspective views of the proposed development are also included to support this Application, and area also included at Annexure 4.

The proposed extension of the existing Aged Care Facility involves the construction of a five (5) storey building on the corner of Old Perth Road and Hamilton Street, which is designed to sensitively step down towards and seamlessly connect to the established Facility on Hamilton Street.

The proposed development will accommodate a total of 52 parking bays in the lower ground level parking area.

A Landscaping Plan has been prepared by Urban Retreat Garden Design and is included at **Annexure 5**.

3.1 Proposed Development

This proposal comprises three (3) components being:

- Aged Care Facility Extensions;
- Over-55's (Aged Persons') Apartments; and
- Three (3) Shop tenancies fronting Old Perth Road at the lower ground level.

3.1.1 Aged Care Facility

The upper ground and first floor of the proposed new building are to provide additional much needed high care accommodation for the aged. Sixty four (64) new aged care beds will be provided in the new extension together with 39 aged care beds that will be in the existing facility. (Currently there are forty four (44) aged care beds in the existing facility, however 5 beds will need to be removed to facilitate the aged care extension.)

Therefore, in total, there will be **103 beds** available for aged care accommodation.

The upper ground floor level is designed to provide the connection to the existing Aged Care Facility to the north, which is proposed to be extended south to meet the new building. The extension of the existing single storey building on Hamilton Street to the south will involve the removal of 11 car bays which currently exist along the southern side boundary of that lot. These car bays are proposed to be accommodated within the new basement car park of the amalgamated lot.

The upper ground floor and first floor levels accommodating the aged care facilities will include bedrooms which have balconies facing east, set back 3.07m from the boundary. These balconies are not anticipated to be a problem, since the adjacent development to the east

includes a three-level building on the boundary with a solid blank parapet wall facing the subject site. Therefore, the aged care balconies of the upper ground and first floor levels will not cause any visual privacy issues (because there is solid blank wall).

The two levels of aged care accommodation will also be supplemented with lounge spaces, kitchen, courtyard (upper ground), therapy rooms, a theatre, staff room, administration and reception in various locations.

Importantly, at the corner of Old Perth Road and Hamilton Street, each of the aged care accommodation levels includes a lounge with access to balconies to accentuate the corner (and to make the aged care residents feel part of the town life). The corner shop below with curved street awning also matches in with this design feature.

Car parking facilities (52 car parking bays) to accommodate staff and visitors to the aged care facility and residents of the multiple dwellings and shops are located on the lower ground level, accessed from Hamilton Street.

3.1.2 Over 55's Apartments

The Over 55's component of the development will comprise a total of 18 multiple dwellings, located over the top two (2) levels of the proposed development.

Of the multiple dwellings, 15 are two-bedroom dwellings; 2 are three-bedroom dwellings and 1 is a one-bedroom dwelling.

All multiple dwellings are at or below 110m² in plot ratio area and each have access to a suitably-sized balcony. All multiple dwellings are accessed via a communal lift which has restricted security access.

Fourteen (14) stores (each of at least 4m² in area) are included in the lower ground parking level to supplement 14 multiple dwellings and 2 stores each are located on the second and third floors, respectively.

3.1.3 Shops

The development incorporates three (3) individual "Shop" tenancies on the lower ground level, with primary frontages to Old Perth Road. These shop tenancies are designed to ensure the building provides for maximum interaction with its frontage to Old Perth Road, at street level, with the inclusion of extensive glazing. The "Shops" will have awnings extending out over the adjacent pavement areas.

The "Shops" are generally located on the street boundary to Old Perth Road.

The basement car parking associated with the facility is proposed to the rear of the shops. Vehicle access to and from the on-site parking facility is proposed from Hamilton Street.

The three shop tenancies will include a total floor space of 219m².

The shops will also have access to separate male, female and disabled toilet facilities, located between shop tenancy 1 and 2, accessed from the basement parking level.

(Subsequent uses in these three (3) tenancies will be subject to separate Change of Use Applications).

4.0 PLANNING ASSESSMENT

4.1 Metropolitan Region Scheme

The Metropolitan Region Scheme (MRS) is the statutory planning Scheme for the Perth Metropolitan Region.

The subject land is zoned "Urban" under the MRS.

4.2 Local Planning Scheme No. 10

4.2.1 Zoning

The lots the subject of this Application are zoned "Town Centre", pursuant to the Town of Bassendean Local Planning Scheme No. 10 (LPS 10) and are also subject to the provisions of the Bassendean Town Centre Strategy and Guidelines (the Strategy). Refer **Figure 2** for LPS 10 Zoning Map Extract.

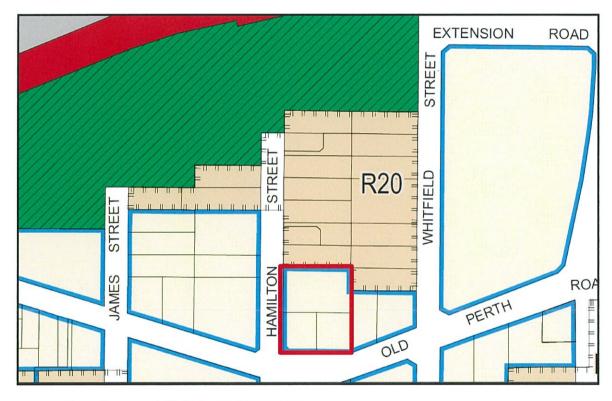


Figure 2: LPS 10 Zoning Map Extract

The objectives of the "Town Centre" zone are:

- "(a) to promote, facilitate and strengthen the town centre zone as the principal focus of the district in terms of shopping, professional, administrative, cultural, entertainment and other business activities;
- (b) To recognise the unique and specific function of each precinct within the town centre in terms of:

- (i) Traditional main street pedestrian based commercial retail, west of Wilson Street;
- (ii) Civic, drive-by commercial and town centre living uses between Wilson and Whitfield Street; and
- (iii) Car based retail in the Bassendean Village Shopping Centre.
- (c) to accommodate a diversity of commercial, cultural and residential facilities;
- (d) to encourage the integration of existing and proposed facilities within the zone so as to promote ease of pedestrian movement and the sharing of infrastructure, as well as to retain the opportunity for any future expansion of the area;
- (e) to achieve safety and efficiency in traffic circulation;
- (f) to ensure that buildings, ancillary structures and advertising are of high quality and achieve an architectural theme contributing to the uniqueness of the townscape;
- (g) to provide sheltered places for pedestrians and shade to car parking areas;
- (h) to preclude the storage of bulky and unsightly goods from public view;
- (i) to provide landscaping appropriate to the scale of development; and
- (j) to ensure that development conforms with the Local Planning Strategy and the principles of any Local Planning Policy adopted by the Council."

In response to these objectives we consider that:

- the proposed development will accommodate a diverse range of commercial and residential facilities in the "Town Centre" zone;
- the proposed development encourages integration of existing and proposed facilities by combining the existing Aged Care Facility with the proposed Aged Care extensions;
- the proposed development is of high quality design which contributes significantly to the developing townscape by redeveloping the site and removing run-down facilities adjacent to Old Perth Road;
- the proposed development provides sheltered places for pedestrians with the use of awnings over the Shops frontages along Old Perth Road;
- the proposed development ensures that no storage of bulky goods or unsightly materials is evident from the public realm.

In these circumstances, the proposed development complies with the general objectives of the "Town Centre" zone.

4.2.2 Use Classes

The Use Class of "Nursing Home" is not a use which is specifically identified in LPS 10. Following a preliminary meeting with the Planning Department of the Town regarding T&T's

proposal to expand the proposed Aged Care Facility over Lots 84 and 85 Old Perth Road, the Town confirmed in writing that this Development Application for the planned extension proposal will be assessed as a 'Use Not Listed' in accordance with Clause 4.4.2 of LPS 10. (Refer to Annexure 6: Town's Correspondence (November 13, 2014) and associated PWA correspondence (October 22, 2014)).

As indicated in our correspondence to the Town of October 22, 2014, a Scheme Amendment to progress this proposal is completely inappropriate given that the Town does have the ability to consider a Use Not Listed, particular where a same use already exists on part of the subject site and which use is not at all inconsistent with the context of uses within the Town Centre.

In this respect, the Town will need to consider whether the use is consistent with the objectives of the zone as outlined in Clause 4.4.2 (a) of LPS 10. As previously outlined, the proposed development is consistent with the objectives of the "Town Centre" zone, and provides a high quality development within the existing townscape.

The Use Classes of "Shop" and "Multiple Dwellings" are uses which are capable of approval in the "Town Centre" zone. A "Multiple Dwelling" is a "D" (Discretionary) use and a "Shop" is a "P" (Permitted) use in the "Town Centre" zone.

4.2.3 Car Parking

Table 2 of LPS 10 sets out the parking requirements for the Aged Care Facility and the Shop components of the development, and the R-Codes set out the parking requirements for the Over-55's Apartments component of the development.

The parking requirements of the development are outlined in **Table 1** below, with additional detail outlined after it.

This development proposes to provide 52 basement car parking bays in the lower ground floor level parking area. Three (3) car parking bays already exist in the Old Perth Road reserve adjacent to the southern boundary of the subject site, which can be used by visitors.

Use Class	Ratio	Calculation	Proposed
Nursing Home	1 bay per 5 beds	103 beds = 21 bays	
Shop	8 bays per 100m ² GFA	219m² GFA = 17.5 bays	
Multiple Dwellings	1 bay per dwelling plus 0.25 visitor bays per dwelling	18 dwellings = 18.5 bays	
		18 dwellings = 4.5 visitor	
Total Required		61.5	
TOTAL PROVIDED			52

Table 1: Car Parking Requirements

In relation to the Aged Care Facility component of the Application, the "Nursing Home" car parking requirement can be used, as it is the "best fit" of the available uses in Table 2 of LPS 10.

For the Shop component, the "Shop" car parking requirement of Table 2 of LPS 10 can be used.

For the Over 55's component of the development the R-Codes will be used to determine the car parking requirement.

Aged Care Facility:

Table 2 of LPS 10 indicates that a ratio of 1 parking bay per 5 beds is required for any development for a Nursing Home.

Since there are 103 beds in the complete aged care facility, there is a requirement for **21** parking bays.

Shops:

Table 2 of LPS 10 indicates a ratio of **8 parking bays per 100m²** gross floor area for "Shop" uses. Since there is 219m² of gross floor area attributed to the proposed three (3) Shop tenancies, there is a requirement for **17.5** parking bays.

Over 55s Apartments:

For the Over-55's Apartments, the R-Codes require 1 car parking bay per multiple dwelling (less than 110m² in size), in Location A. (The site is within 800m of the Bassendean Train Station, so the site is a "Location A" site).

Since there are 16 apartments that fit this criteria, there is a requirement for 16 parking bays.

Two (2) of the proposed multiple dwellings are 3 bedroom dwellings, and therefore, these two (2) dwellings require 1.25 bays per dwelling (2.5).

The R-Codes also require 0.25 visitor parking bays per dwelling, which therefore requires 4.5.

Total Parking Requirement:

So for the subject site, there is a total parking requirement of (21 + 17.5 + 16 + 2.5 + 4.5) **61.5 (61)** parking bays.

With the proposed 52 parking bays in the basement level of the development, there is a slight parking shortfall.

The parking basement level will be secured after hours with staff and apartment occupants having access to the car park with the use of personal cards.

4.2.4 Variations to Site Development Standards & Requirements

LPS 10 contains a variation clause, which (except for development in respect of which the R-Codes applies) allows standards and requirements of LPS 10 to be varied, subject to compliance with the procedure set out at Clause 5.5.2 and Clause 5.5.3 of LPS 10.

The parking shortfall requires the exercise of discretion.

4.2.5 General Development Requirements – Town Centre Zone

LPS 10 indicates that the local government, at its discretion, can permit residential development within the "Town Centre" zone to a maximum density of R Inner City (R-IC), where the development is complementary to the scale and character of buildings within the "Town Centre" zone (refer Clause 5.10.3 of LPS 10).

4.3 Residential Design Codes of WA

The provisions of the R-Codes (Part 6) are required to be considered in respect of the 'Over 55's' (Aged Persons') Apartment component of the proposed development.

For the purposes of the R Inner City (R-IC) Coding set out in Clause 5.10.3 of LPS 10, the R-Codes indicates that for assessment purpose, the **R-AC3 Coding** should be used.

An assessment of the applicable parts of Part 6 is outlined below.

4.3.1 Building Size (Part 6.1.1)

The Apartment component has been designed in accordance with the provisions of the R-Codes in terms of 'building size'. The coding of the residential development on this site, according to the LPS 10, is **R-IC** (but the provisions of R-AC3 are to be used for assessment purposes).

The plot ratio requirements of the R-AC3 coding, is 2.0.

Given that the apartment component of the development is above other (non-residential) components, the defined Plot Ratio is only for the residential component within this mixed use proposal.

The plot ratio area attributed to the residential multiple dwellings (only) is 1,876m² which, as a ratio of the site's combined land area, is 0.38 (which is therefore compliant).

4.3.2 Building Height (Part 6.1.2)

The development has been designed in accordance with the provisions of Part 6.1.2 of the R-Codes which requires a height of walls to be no higher than 18.00m. The wall height as viewed from Old Perth Road is (generally) 16.00m – 17.00m and is therefore, compliant with the provisions of the R-Codes.

4.3.3 Street Setback (Part 6.1.3)

The entire building has been located to a generally nil setback to Old Perth Road to assist with providing solar access to the windows facing the internal courtyard. This is a variation from the

R-Codes' requirement to have a 2.00m minimum primary street setback, however, the Town has previously advised that it will be supportive of this variation for the benefits it provides for other parts of the site.

Balconies for upper levels of the apartment complex are completely within the property boundaries.

Balconies facing Old Perth Road are at a nil setback for the second level, but are setback further for the upper-most level.

Balconies for the apartments facing Hamilton Street are set back at least 2.20m from the boundary.

4.3.4 Lot Boundary Setbacks (Part 6.1.4)

The Apartment component on the top two levels has been generally designed in accordance with the provisions of Part 6.1.4 of the R-Codes which requires setbacks to be in accordance with Table 5 of the R-Codes, subject to minor variations set out below.

The setback is required to be 4.00m from adjacent lot boundaries.

Setbacks to the eastern boundary of the site are the main part of the development requiring assessment for lot boundary setbacks.

The eastern most units (5-7 and 14-16) are set back 3.57m from the eastern boundary, in lieu of 4.00m. Since these walls have no major openings facing east (where walls are set back 3.57m), the slight variation is considered acceptable, given also that the adjacent (recently completed) development to the east has a large blank parapet wall on part the boundary (up to the third level) with the remainder simply being a covered car parking area to the rear of it. Therefore, the adjacent development would not have a significant interface with the subject site.

Major openings for the eastern most units (5-7 and 14-16) are set back approximately 5.50m - 6.50m in accordance with the Visual Privacy requirements of the R-Codes.

4.3.5 Street Surveillance (Part 6.2.1)

The entire development has been designed in accordance with the provisions of Part 6.2.1 of the R-Codes which requires street elevations of buildings to address the street, with facades generally parallel to the street and with clearly definable entry points visible.

As indicated on the Development Plans, the façades are clearly parallel to the street and includes a number of apartments over two (2) levels that have active and passive surveillance over Old Perth Road and Hamilton Street (from habitable rooms and balconies that have glass balustrading).

A clear definable pedestrian entry point to the entire development is evident from Hamilton Street.

Proposed Aged Care Facility Extension & Proposed Shops & Multiple Dwellings Hamilton Street and Old Perth Road, Bassendean

File: C2062appln3DA Page 13 Basement parking structures are located to the rear of the development and do not impact on the visual surveillance views from the apartments or aged care facility to the public realm.

4.3.6 Outdoor Living Areas (Part 6.3.1)

The multiple dwellings have been generally designed in accordance with the provisions of Part 6.3.1 of the R-Codes which requires all apartments to be provided with at least one (1) balcony or equivalent accessed from a habitable room with a minimum area of $10m^2$ and a minimum dimension of 2.4m.

Units 10, 11, 14 & 15 have smaller balconies, and these have been made smaller to provide for solar access to dwellings below. However, these balconies are still of sufficient size to be used for over-55's occupants and therefore, still satisfy the Design Principles of Part 6.3.1 which requires balconies to be used in conjunction with a habitable room and (if possible) open to winter sun.

4.3.7 Parking (Part 6.3.3)

The Multiple Dwellings have been designed in accordance with the provisions of Part 6.3.3 of the R-Codes which outlines the minimum number of on-site car parking spaces per dwelling.

A previous section in this Report outlined the parking requirements for the site.

4.3.8 Vehicular Access (Part 6.3.5)

The development has been designed in accordance with the provisions of Part 6.3.5 of the R-Codes which requires consideration in respect of vehicular access.

Importantly, the facility provides for the following (in accordance with Part 6.3.5):

- Vehicle access is limited to one crossover to Hamilton Road to the new development.
- Delivery access is from Hamilton Street, at an existing crossover location.
- Driveway to the car park is designed for two-way access to allow for vehicles to enter the street in a forward gear; and
- Access-ways will be sealed and drained appropriately.

4.3.9 Visual Privacy (Part 6.4.1)

The Visual Privacy requirements of Part 6.4.1 of the R-Codes for balconies of the apartments are required to be considered in respect of the Design Principles, as they are not set back in accordance with the Deemed-to-Comply requirements, which require a 6.00m setback.

The balconies are set back 3.57m from the boundary to the east.

The neighbouring, recently completed development to the east includes a large three storey high blank parapet on part of the boundary with the remainder being a roofed car park, and therefore the proposed apartment balconies will only overlook the roof component of the adjacent development, which in the circumstances, will not cause any impact on visual privacy to that adjacent development.

The adjacent development is unlikely to change, even in the medium term, since it has only recently been completed.

The other balconies facing north overlook only the roof of the existing Aged Care Facility which will be included on the same Title once the Amalgamation Approval is fully implemented. As such, visual privacy issues will not occur in this direction.

All other major openings for the multiple dwellings are set back in accordance with the Visual Privacy requirements of the R-Codes.

4.4 Local Planning Policies

4.4.1 Local Planning Policy 1: Bassendean Town Centre Strategy & Guidelines

This proposal seeks to redevelop this prominent corner site within the Bassendean Town Centre to form part of the established Aged Care Facility currently on Lot 54, in a manner which accords with the specific Planning and Design Guidelines of the Strategy for the Central Area (between Wilson and Whitfield Streets) of the Town Centre.

It is indicated in the Strategy that the land the subject of this Application is appropriate for "residential apartments with ground level mixed commercial uses", with a five (5) storey development being appropriate along the Old Perth Road frontage of the proposed amalgamated site

The first two levels are recommended as having a nil setback to Old Perth Road with the three levels above that being set back to allow for landscape and solar access to Old Perth Road. The development is designed to generally respond to these provisions.

The Strategy requires a **public realm contribution of 2%** of the building construction cost for development with the "Town Centre" zone, which includes a **provision for public art**. It is anticipated that a Condition of Planning Approval may include the application of this requirement, either through physical provision of public realm artwork or possibly, a cash in lieu payment in accordance with the Town of Bassendean's Local Planning Policy 15 "Percent for Art Policy". For the reasons outlined in 4.4.2, this Application seeks to limit this requirement.

A compliance report against the main provisions of LPP 1 is included at Annexure 7.

4.4.2 Local Planning Policy 15: Percent for Art Policy

Local Planning Policy 15 seeks to improve the public realm by requiring developments which have an anticipated construction cost over \$1,000,000 to provide, or contribute to, public art.

LPP 1 already indicates that developments within the Town Centre attract a requirement to provide at least 2% of the anticipated construction cost in the form of public art (or a cash in lieu

payment if a physical contribution cannot be made). The requirement of LPP 1 is an increase in the standard requirement of LPP 15, which requires a 1% contribution.

In response to both LPP 1 and LPP 15, T&T seeks the Town to consider **applying a reduced requirement for the provision of public art** since the Applicant, a Community focussed organisation, is dependent on Commonwealth subsidy funding for this project. It is essential that the Applicant efficiently applies the scarce financial resources it is provided.

In those circumstances, requiring a 2% contribution to public art (which would be valued at \$260,000 given the \$13,000,000 anticipated construction cost) is considered unreasonable, and the scarce financial resources would be better spent in providing the expensive, crucial aged care services to the Community.

Should a full exemption not be achievable, we request that any Condition for public art be worded to provide for Art-related features to be designed into the exterior or interior of the new development by MGA in consultation with a recognised Artist to a percentage value which recognizes the special circumstance of this Proposal. (We suggest a 1% requirement linked to the value of **only** the residential apartments and shop components of this development).

In any event, this Application proposes public art by a local artist on the eastern end of the Old Perth Road frontage (stylised swan).

4.5 Waste Management

A Waste Management Plan has been prepared by Aurora Environmental and is attached at **Annexure 8**, however some general details are included below.

4.5.1 Aged Care Facility

Waste collection for the Aged Care Facility will be by a private contractor which will use a rear lift collection system considered ideal for small to mid-sized commercial operations. The facility will utilise various bin sizes for both general waste and recycling material.

Collection will occur at the existing crossover location to Hamilton Street in the designated "delivery bay". A bin store is adjacent to that delivery bay.

4.5.2 Over 55's Apartments

Waste collection for the Over 55's Apartment component will be from Old Perth Road, undertaken by the Town's Waste Collection team. A caretaker of the facility will ensure that general waste and recycling bins are placed onto the street verge on collection day.

The internal bin store is located in the basement parking level which includes a rotary bin system and chute for non-recyclable waste. The caretaker will attend to the rotary bin system on a daily basis to ensure empty bins are available to it.

In addition, interim recycle bin stores are located on each apartment floor level for easy accessibility by occupants, and bins from these interim recycle bin stores will be moved to the main basement bin store by the caretaker at regular intervals.

4.5.3 Shops

Waste collection for the Shop tenancies will be by the Town's Waste Collection team, through the use of conventional rubbish and recycling bins. Tenants will have access to the bin store. The caretaker will be responsible for placing the shop bins onto the Old Perth Road street verge on collection days.

4.6 Overshadowing

The extent of overshadowing at midday on 21 June does not impact the footpath opposite the site along Old Perth Road. The extent of overshadowing is illustrated on the Shadow Plan at Annexure 4.

4.7 Traffic Impact Statement

Transcore (Traffic Engineers) were engaged to conduct a Traffic Impact Statement (TIS) in support of this application. The TIS is included at **Annexure 9**.

The traffic analysis undertaken demonstrates that the traffic generation of the proposed development is minimal (less than 100vph) and as such, would have insignificant impact on the surrounding road network.

4.8 Contaminated Site Audit

Strategen (Environmental Consultants) were engaged to conduct an environmental assessment of Lots 84 & 85 Old Perth Road, Bassendean, given the site was historically used as a service station, car workshop and more recently, a car sales yard. The environmental assessment was commenced following receipt of the WAPC's Approval for the amalgamation of the subject site, which included a condition requiring site investigation.

Senversa was subsequently engaged to undertake a Contaminated Site Audit and produce a Mandatory Auditors Report (MAR) for the site.

The Auditor's advice is included at Annexure 10.

5.0 SERVICING CONSIDERATIONS

All of the usual engineering infrastructure services (including sewerage, reticulated scheme water supply, electricity and telephone services) are all available to the site and have been provided to it.

The proposed development is intended to be supplemented with solar power generating equipment to increase energy efficiency.

Air conditioning wells have been included in the roof structure to effectively screen the air conditioning infrastructure.

A Stormwater Drainage Management Plan (SDMP) has been prepared by BPA Engineering and is included at **Annexure 11**. This SDMP has already been informally submitted to the Town's Engineering Department for comments, which have been incorporated in the final SDMP.

6.0 RESPONSE TO PRE-APPLICATION ISSUES

During a previous attempt to submit this Development Application, the Town had provided a number of comments in relation to different aspects of the proposal for the subject site.

A comprehensive dialogue on those issues was progressed between the Town and Aegis' consultant team, including MGA and PWA.

We include herewith, the Town's earlier comments and responses by PWA.

Town's comments

1. Open up the ground level courtyard to more sun (increase size), noting (a) the limited solar access that is afforded to this space; and (b) the scale of built form surrounding this space (i.e. four storeys of built form around a small courtyard) (consider opportunities to bring at least the nursing home levels of the building out to the Old Perth Road and Hamilton Street property boundaries to assist in this respect) (opportunity exists for these levels of the building being brought out to street boundaries).

Our response

It can be seen from the drawings that the courtyard on the ground level has been opened up to facilitate greater solar access to the lower levels of the aged care facility. This has largely been achieved by extending the development closer to the Old Perth Road and Hamilton Street road reserves.

Town's comments

2. Landscaping detail shown on drawings for central courtyards are highly misrepresentative of landscape treatment that could actually be achieved within this space (drawings show 7m high trees on top of concrete slab to car park below with planters incorporating 400mm soil depth).

Our response

The submitted drawings show mature vegetation specific to the extent of soil depth.

Town's comments

3. Activate the area in front of the blank wall on the Hamilton Street side of the building which sits between shop 3 and the car park entry (i.e. consider incorporating a break out space for nursing home patients and their families into the design on the outside of the building into the design of the project).

Our response

We refer the Town to our comments in relation to this issue where we had indicated that it was not practical to create a 'breakout space' for aged care residents in this locality for the reasons outlined in that email. We seek to have the Town reconsider this request.

Town's comments

4. Blank wall to transformer and fire pump room on Old Perth Road frontage of the development only acceptable if a suitable public art concept can be formulated for consideration in conjunction with the application for development approval.

Our response

We note the request to include suitable public art on the blank wall to the transformer and fire pump room on the Old Perth Road frontage of the development. It had always been MGA's intention to include a stylised sculpture of a swan on this wall and it is unfortunate that this was not included in MGA's earlier drawings however this has now been incorporated in the submitted drawings

Town's comments

5. Increase size of entry foyer to development and consider relocation to corner of building or Old Perth Road frontage.

Our response

In response to the Town's request to increase the size of the entry foyer for the development, MGA has redesigned the entry to increase the width of the foyer from 3.60m to 4.20m and this change is reflected on the submitted drawings.

Town's comments

6. Provide weather protection to entry foyer (none shown on perspectives).

Our response

An entrance canopy was shown on MGA's earlier drawings but was missed on the perspectives submitted. The entry roof awning has been retained and it is at about 1.00m below the first floor level.

Town's comments

7. Consider direct link between entry foyer and adjoining commercial tenancy, especially if it is contemplated that it may be a café.

Our response

The Town originally sought to have Aegis consider a direct (pedestrian) link between the entry foyer of the facility and the adjoining commercial tenancy. Aegis noted in its email

that this no longer appeared to be an issue for the Town as it was impractical for Aegis to provide this link.

Town's comments

8. Consider balconies surrounding lounges on OPR / Hamilton St corner.

Our response

The submitted design drawings now show balconies adjacent to lounges on the Old Perth Road / Hamilton Street corner.

Town's comments

9. Reconsider the impact of the modifications to the existing entry to the existing section of nursing home facing Hamilton Street. The revised entry arrangement is considered to be inferior to that which currently exists. An entry of an equivalent standard to that which currently exists should be maintained as the existing section of nursing home will operate independently from the new section of development

Our response

The existing entry to the existing Aged Care Facility is not a formal entry into the new Facility, and is being significantly reduced in size for that reason. The existing Aged Care Facility will NOT operate independently from the new Facility. The whole facility (old and new) will operate as a single unit. All visitors to the new Facility will be required to arrive at the main Reception area in the new part. Once residents and visitors are familiar with the expanded Facility, they will be provided with coded entry to the new entry point.

In Aegis's view a "convenient path of movement" for family members and visitors is provided. Family members and visitors can access the reception and then make their way down a lift or stairs to the "breezeway" to the relevant part of the Facility.

Town's comments

10. Open up corridors throughout the proposed development to the outside through the introduction of windows and 'view corridors' within the building. Proposed development is very internalised and internal amenity for nursing home in particular but also apartment occupiers could be improved greatly by internal design adjustments to provide a relationship between the inside spaces and the outside. At the moment, the view down corridors is commonly to exit doors or blank walls. See markings on attached plans for a diagrammatic explanation in this respect

Our response

In response to the Town's request to 'open up corridors throughout the proposed development...' Aegis has considered that request and in all of the circumstances of the

proposed development, believes it unreasonable and inappropriate to further modify the corridor design to reflect this request. The aged care component includes corridors that open up into lounge areas with windows and balconies.

Aegis believes that the development has an entirely appropriate internal configuration with the design as it has been submitted.

Town's comments

11. Integration of two buildings and carrying over architectural language from existing structure into new building. Perspectives show a very different built form between what is proposed and what is existing. Consider introducing some sections of pitched roof over some of the lower sections of the proposed building to tie in with the pitched roof form of the existing building (and the pitched roof which is proposed over the uppermost level of the proposed building).

Our response

MGA has modified the roof design of the proposed extensions to achieve a greater level of integration. MGA is of the view that this modified design will achieve the Town's objective of greater visual integration between the two buildings. Additionally, air conditioning 'wells' in the roof system are also proposed to effectively screen the air conditioning infrastructure.

Town's comments

12. Crime Prevention Through Environmental Design (CPTED) – be mindful of the emergency exit next to the fire pump room – don't create a space which is enclosed on both sides (as shown on the perspectives). Make sure that the right hand side of this area is not enclosed and is stepped back to tie in with the same design approach that has been utilised with the adjoining 'Whitfield' development (see attached photo).

Our response

In response to the Town's suggestion for Crime Prevention through Environmental Design (CPTED) Aegis believes that the exit area as designed by MGA, is precisely as has been suggested by the Town. We invite the Town's further review of the design drawings to ensure that the Town is agreeable to what is being proposed in this instance.

Town's comments

13. No concerns held with building bulk, provided that shadowing does not extend beyond kerb line on opposite side of Old Perth Road. Indeed, it was suggested that it may be possible to bring some sections of the building closer to street boundaries.

Our response

It is noted that the Town has no concerns with building bulk so there is little more to add to this issue. The overshadowing at June 21 does not extend beyond the kerb on the opposite side of Old Perth Road.

Town's comments

- 14. If there is a desire to push forward with the design concept as presented (what I will call the donut design for ease of reference) in lieu of a design incorporating a single building layer along street boundaries along with fully enclosed circulation spaces for the apartments, which are both notionally at odds with the design approach advocated within the Town Centre Policy and Strategy should only be supported where there is refinement to the design concept to provide:
 - a) Increased size central courtyard;
 - b) Improved cross-ventilation within individual units;; and
 - c) Refinement to design to allow optimised solar access to living areas.

In relation to the three points identified above, the following comments are made:

Central courtyard

Opportunities exist for the size of the central courtyard to be increased, as discussed earlier within this correspondence.

Our response

In response to the Town's issues concerning cross ventilation/solar access, MGA has undertaken extensive modification to its design to include additional windows and openings in the proposed apartment's component of the development, in addition to increasing the area of the central courtyard to achieve this objective.

Town's comments

 Corner units – locating living areas at corner of dwellings with openings on opposing walls.

Our response

The design of the living areas in particular has been modified to achieve the required objective for improved cross ventilation. Additional openings have been created on opposing walls to achieve the outcome of greater cross ventilation.

Town's comments

16. Non-corner units (such as apartment 17) – incorporate a design where living room sits proud of adjoining rooms rather than being recessed into building as currently proposed, allowing for openings for cross ventilation to be incorporated into side walls of living area in addition to street facing wall of living area.

Our response

In response to the Town's request that non-corner units (such as apartment 17) incorporates a design where the living room component sits proud of adjoining rooms to facilitate greater cross ventilation. This has now been provided in MGA's revised design.

Town's comments

17. Top level units - vented skylights.

Our response

In response to the Town's request for vented skylights on the top level apartments, MGA has agreed with this and these are shown as dashed, crossed rectangles on the submitted third floor plan.

Town's comments

Individual apartments on second top level – ventilation through units on uppermost level.

Our response

While Aegis notes the Town's request for individual apartments on the second top level to be provided with ventilation through the units on the upper most level, MGA confirm that this would be impractical as the effective air flow through such minor openings of contorted route would be minimal and non-effective. Larger openings to provide effective ventilation would result in a significant floor area reduction to the top floor units, and this is not acceptable to Aegis.

Town's comments

Solar Access

Opportunities exist for solar access to individual dwellings to be improved, including:

19. All dwellings on northern side of building (units 2, 3, 5, 11, 12, and 14) being designed with glazed north facing living areas and roof overhangs beyond designed specifically to exclude direct solar access during summer while allowing direct solar access to living areas during winter.

Our response

In response to the Town's request for solar access to individual dwellings to be improved, MGA has included smaller balconies on the top floor to facilitate greater solar access to the units below. (We note that this may be a variation to the Residential Design Codes of

WA (R-Codes) however if the Town is prepared to support this variation to the R-Codes' requirements then Aegis will incorporate these smaller balconies.)

Town's comments

20. Projection of Living areas for units on eastern and western sides of building (units 1, 6, 10 and 15) in such a manner that an element of north-eastern or north-western solar access is afforded to the living areas of these dwellings.

Our response

In response to the Town's request that the living areas be projected for the units on the eastern and western sides of the building, MGA has redesigned these units so the they enjoy an element of NE/NW solar access.

Town's comments

Without additional measures being implemented, it is not considered that the variations which are being proposed from Council's policy for development within the Town centre should be supported. The principles referred to above can be incorporated into a refined design concept for the site (but it is important to note that it would be necessary for the design to be refined beyond that which has been provided to the Town to date). There was also a thought that additional measures such as provision of PV panels or the like, could also be incorporated into the design to demonstrate a commitment to energy efficient design principles that are advocated within the Town Centre Strategy and Guidelines, so it would be beneficial for you to give consideration to other design measures that you could incorporate into the design in this respect.

Our response

From the submitted design drawings, it can be seen clearly that Aegis has seriously considered the design principles of this development as required by the Town.

It has always been Aegis' intention to incorporate solar (photovoltaic) panels to assist in energy conservation and these panels are now shown on the submitted drawings. The solar panels are placed on the north-east and north-west roof planes.

Town's comments

Additional Comments:

I have also taken the opportunity to undertake a design review of the car park and provide the following comments

Car Park on site

21. The allocation / distribution of bays within the car park must be allocated between the differing land uses that are proposed and must match the allocation on any future strata

plan (i.e. bays for individual apartment owners, bays for residential visitors, bays for individual shop tenancies). If there is any intent that there will be a shared parking allocation for some of the bays, then this must be clearly shown on the plans and it must be clearly explained how this will translate into any future strata titling arrangement. There is no scope for individual apartment bays to be part of a sharing arrangement nor apartment visitor bays.

Our response

In response to the comprehensive comments in relation to car parking bays in the lower ground floor area, the submitted plan shows that this car parking facility has been comprehensively redesigned.

Town's comments

22. The alignment of the entry to the car park must be adjusted in order that it aligns with the access aisle beyond.

Our response

The aligning of the entry to the car park with the alignment of the access aisle beyond has now been achieved in the submitted drawings.

Town's comments

23. The accessible car bay is unacceptable in that to exit this bay it is necessary to reverse along the entire aisle within which this bay is located and then reverse back into the main aisle of the car park prior to engaging forward gear to then leave the car park (an accessible car parking bay along with an associated shared space alongside must be provided for the development).

Our response

The accessible car bay has now been redesigned to facilitate simplified reversing.

Town's comments

24. Bays in car park scale under length generally (5.3m v 5.4m min required)

Our response

MGA confirms that the dimensions of the car parking bays are consistent with the minimum car parking dimensions required.

Town's comments

25. Access aisles within the car park scale under length generally (6.1m v 6.2m min required).

Our response

In response to the Town's concern about vehicle access aisles within the car park, we confirm that these aisles are correctly sized at 6.2m.

Town's comments

26. Certain bays within the car park have a lesser width than prescribed (bay 44 is 2.1m wide v 2.4m min prescribed; bay 48 is 2.4m width but must be 2.7m min based on design presented; column between bays 51 and 52 has not been designed in accordance with the preferred parking envelope identified within Fig 5.2 of AS2890.1)

Our response

We confirm that the car parking bays as shown on the drawings are now consistent with Australian Standard AS2890.1

Town's comments

27. A wheel stop is required in bay 18 noting that it is arranged at right angles to bay 44.

Our response

The car park design shown on the submitted drawings includes wheel stops to all parking bays.

Town's comments

28. In car parks available to the public blind aisles are only permitted to be as long as the width of six, 90 degree spaces. The car park design incorporates two blind aisles which exceed this length

Our response

The car park design shown on the submitted drawings still incorporates two blind aisles which exceeds 6 car parking bays. However, with the Town's previous agreement to assist in this matter, these two blind aisles are now designated <u>not</u> for visitor use.

Town's comments

29. Much more detailed information is required in relation to pre-existing spot heights and contours needs to be provided in order that the driveway gradients specified in AS2890.1 can be considered and assessed in detail (across footpath, across building line, grade transitions etc).

Our response

The car park entry gradient slopes down from 13.10 12.20 which is 900mm in height over a distance of 7.90m, giving a gradient of 1:8.80 which, with transitions, complies with AS2890.1.

Town's comments

30. The width of the entry to the car park must be 6.1m min in order to demonstrate compliance with cl 2.5.2 of AS2890.1

Our response

The entry to the car park has been redesigned to be 6.10m wide in accordance with AS2890.1.

Town's comments

31. The entry to the car park should be designed to accommodate queuing space for two cars on site in order to demonstrate compliance with the provisions of cl 3.4 of AS2890.1. The current design provides for no on site queuing and the first vehicle parked awaiting entry to the car park would be blocking the footpath having regard to the changes to footpath location that are shown on the drawings. This is an unacceptable arrangement.

Our response

In response to the Town's request that the entry to the car park should be designed to accommodate queuing space for two cars in order to demonstrate compliance with the appropriate Australian Standard, we note that the car park entry will remain open during the opening hours of the facility (generally 6:00am to 6:00pm) so vehicles will be able to enter the site unrestricted and not be required to queue in front of the closed entry gate. The entry gate will be closed after 6:00pm and as there will be very few vehicle movements after this hour, vehicle queuing will not be an issue.

Town's comments

32. You would need to demonstrate how it was appropriate for residential visitor parking spaces (and visitor parking spaces to the development generally) to be located behind security enclosure, when the expected arrangement for visitor parking is that it will be located forward of security barriers

Our response

After-hours access through security gate will be via intercom, and accepted visitors will be allowed access into the car park by remote electrics by aged care staff or apartment residents.

Town's comments

33. Pedestrian path within car park to rear of shops 1 and 2 must be 1.2m width minimum in order to meet disability access requirements. This path needs to connect through to entry lobby (i.e. through area where accessible car bay is currently shown)

Our response

The footpath within the parking structure to the rear of Shops 1 and 2 has been redesigned to connect through to the entry lobby and is 1.20m wide.

Town's comments

34. An area for required bicycle parking must be incorporated into the design of the car park.

Our response

In response to the Town's request for bicycle parking to be incorporated into the design of the car park, this has now been provided and located behind Shop 3 in the lower ground floor car parking area.

Town's comments

35. The arrangement that has been put forward in relation to car parking including the proposal for a variation to on site car parking provision will only be supported if there is some provision incorporated into the car park design for motor cycle and scooter parking (3 bays minimum) (specified dimensions 1.2m x 2.5m), along with the capacity to appropriately provide additional car parking around the perimeter of the site (see further comments below in this respect).

Our response

The revised car park design now incorporates four additional bays for motorcycles in addition to those provided specifically for bicycles.

Town's comments

36. The waste management plan for the development will need to clearly show how the delivery bay and associated turning bay is of a sufficient size to allow rubbish trucks to enter and leave the site in a forward gear. Without looking at this matter in detail I would anticipate that the driveway and associated turning bay is not of a sufficient size to accommodate the turning movements of the rubbish truck that will be servicing the development. The waste management plan will also need to clearly show how rubbish is to be transferred from the car park for collection by the rubbish truck also.

Our response

The waste collection trucks will continue to access the existing loading area, as they have done at the existing Bassendean Aged Care Facility for years. The transfer of rubbish from the bin store in the basement car park area for collection will be appropriately managed by the caretaker.

A Waste Management Plan has been prepared by Aurora Environmental.

Town's comments

37. I know that we touched on this matter briefly during our earlier discussions, but I think that it would be prudent to suggest that a waste management consultant be engaged and involved in the design process to avoid the need for design modifications to be undertaken at a later date for design requirements that were not properly considered at this early stage.

Our response

Aurora Environmental has been engaged to prepare a Waste Management Plan.

Town's comments

Car Parking Bays on Street

38. The proposal to add parallel parking bays to the eastern side of Hamilton Street while maintaining right angle parking bays on the western side of Hamilton Street has been considered from an engineering perspective (including discussion with a representative of Main Roads) and it has been determined that this design approach is not acceptable from a traffic safety perspective as there is an unacceptable crash risk for this design configuration (the standard and safest design approach for street parking is parallel on either side of the street). Accordingly it will be necessary for the proposed development to be modified and for all of the bays that were shown parallel on Hamilton Street (where situated opposing right angle bays on the opposite side of the street) to be removed.

Our response

Whilst a previous proposal included on-street car parking in Hamilton Street, this Application does not propose this.

Town's comments

39. There will be limited opportunity to provide some parallel parking on the Hamilton Street side of the development site (likely limited to two bays within the vicinity of the proposed entrance to the development)(it is not possible for street bays to project any closer to the Hamilton Street/ OPR intersection than you have shown on your drawings) along with an extension to the parking embayment on the Old Perth Road side of the development site to accommodate an additional two bays beyond the three bays that currently exist on this side of the site (the drawings incorrectly show this space accommodating 4 bays in lieu of the 3 bays that it actually does accommodate). This obviously has implications for the car parking argument put forward in your initial submission.

Our response

There will be no on-street car parking proposed.

Town's comments

40. Street trees on the Old Perth Road side of the property will need to be retained, however noting the intention to develop commercial tenancies, it will be possible to add in an additional 1.8 metre pedestrian path immediately forward of the site which will then rejoin the existing pedestrian path on the kerb side forward of the development site in exactly the same way as has occurred on the opposite side of the street (refer to street view image attached).

Our response

In relation to the Town's comments concerning street trees on Old Perth Road and the Town's request to add an additional 1.8m wide pedestrian path immediately forward of the site, Aegis agrees with this and has included this footpath in its modified design.

Town's comments

41. The Town would be prepared to support a design concept of the kind that has been put forward ('donut' concept), but this would be contingent upon the design being refined further to provide enhanced solar access and cross ventilation beyond that which has been incorporated into the design to date.

Our response

Given MGA has substantially redesigned the proposal, we trust that the Town will support this Application.

7.0 CONCLUSION

This Report has been prepared by Peter Webb & Associates (PWA) in association with the project team, on behalf of T&T Management Services Pty Ltd to support a Development Application for the proposed Aged Care Facility extension, development of 18 Multiple Dwellings and three (3) Shop tenancies at Lot 54 (#27) Hamilton Street, Bassendean, and Lots 84-85 (#68-70) Old Perth Road, Bassendean.

The Town is undoubtedly aware of the desperate need for a far greater supply of high level care and Over-55's developments for our ageing community throughout the State, than is currently provided.

This Application endeavours to meet this need by providing a high quality Aged Care Facility accommodating 64 new aged care beds of various levels of care, in addition to 39 beds in the existing Aged Care Facility, together with 18 residential Over-55's apartments constructed over two levels.

This proposal will also enable the redevelopment of Lots 84 and 85 which continue to remain underutilised and unattractive.

The Application is demonstrated to be entirely consistent with the objectives and requirements for this proposal, as specified in the Town's relevant Planning Framework.

The Applicant has undergone extensive planning, design and consultation in the preparation of this entire proposal and we now seek the Town's favourable consideration of this Application.

The Town is reminded that approximately 12 years ago, the Applicant bought the Town of Bassendean's 25 aged care licences when it closed its low care hostel. At that time, the Applicant made an obligation to the Town to return those aged care beds back to the community in the future. The approval of this development will enable T&T to meet the previous undertaking provided by it, to the benefit of the community and to the benefit of the Town of Bassendean.

Accordingly, and on the basis of our submissions in this report and the attached Development Plans, we respectfully seek Planning Approval for the proposed Aged Care Facility at Lot 54 (#27) Hamilton Street, Bassendean, and Lots 84-85 (#68-70) Old Perth Road, Bassendean.

We look forward to the Town progressing this Application in a timely manner and to provide a favourable recommendation and Responsible Authority Report to JDAP within the allotted timeframe.

Peter Webb & Associates

ANNEXURE 1 WAPC Amalgamation Approval

ANNEXURE 2Certificates of Title

ANNEXURE 3 Annotated Site Photographs

Design Drawings (Montague Grant Architects) and 3D Perspective Views

Landscaping Plan (Urban Retreat Garden Design)

File: C2062appln3DA

Town of Bassendean Correspondence & PWA Correspondence

LPP 1 Compliance Report (PWA)

Waste Management Plan (Aurora Environmental)

Traffic Impact Statement (Transcore)

Contaminated Site Audit (Senversa)

Stormwater Drainage Management Plan (BPA Engineering)



Your Ref

Enquiries

: Nik Lamat (Ph 65519286)

Peter D Webb & Associates P O Box 920 SUBIACO WA 6904

Approval Subject To Condition(s) Freehold (Green Title) Subdivision

Application No: 151362

Applicant

Planning and Development Act 2005

: Peter D Webb & Associates P O Box 920 SUBIACO WA 6904

Owner : T & T Management Services Pty Ltd 90 Goodwood Parade BURSWOOD WA 6100

Application Receipt: 30 January 2015

Lot Number : 54, 84 & 85

Diagram / Plan : Deposited Plan 29092 Plan 1786

Location : Pt Swan Q1

C/T Volume/Folio : 2514/597, 1631/156, 1496/999

Street Address : Hamilton Street & Old Perth Road, Bassendean

Local Government : Town of Bassendean

The Western Australian Planning Commission has considered the application referred to and is prepared to endorse a deposited plan in accordance with the plan date-stamped 30 January 2015 once the condition(s) set out have been fulfilled.

This decision is valid for three years from the date of this advice, which includes the lodgement of the deposited plan within this period.

The deposited plan for this approval and all required written advice confirming that the requirement(s) outlined in the condition(s) have been fulfilled must be submitted by 18 May 2018 or this approval no longer will remain valid.



Reconsideration - 28 days

Under section 151(1) of the *Planning and Development Act 2005*, the applicant/owner may, within 28 days from the date of this decision, make a written request to the WAPC to reconsider any condition(s) imposed in its decision. One of the matters to which the WAPC will have regard in reconsideration of its decision is whether there is compelling evidence by way of additional information or justification from the applicant/owner to warrant a reconsideration of the decision. A request for reconsideration is to be submitted to the WAPC on a Form 3A with appropriate fees. An application for reconsideration may be submitted to the WAPC prior to submission of an application for review. Form 3A and a schedule of fees are available on the WAPC website: http://www.planning.wa.gov.au

Right to apply for a review - 28 days

Should the applicant/owner be aggrieved by this decision, there is a right to apply for a review under Part 14 of the *Planning and Development Act 2005*. The application for review must be submitted in accordance with part 2 of the *State Administrative Tribunal Rules 2004* and should be lodged within 28 days of the date of this decision to: the State Administrative Tribunal, 12 St Georges Terrace, Perth, WA 6000. It is recommended that you contact the tribunal for further details: telephone 9219 3111 or go to its website: http://www.sat.justice.wa.gov.au

Deposited plan

The deposited plan is to be submitted to the Western Australian Land Information Authority (Landgate) for certification. Once certified, Landgate will forward it to the WAPC. In addition, the applicant/owner is responsible for submission of a Form 1C with appropriate fees to the WAPC requesting endorsement of the deposited plan. A copy of the deposited plan with confirmation of submission to Landgate is to be submitted with all required written advice confirming compliance with any condition(s) from the nominated agency/authority or local government. Form 1C and a schedule of fees are available on the WAPC website: http://www.planning.wa.gov.au

Condition(s)

The WAPC is prepared to endorse a deposited plan in accordance with the plan submitted once the condition(s) set out have been fulfilled.

The condition(s) of this approval are to be fulfilled to the satisfaction of the WAPC.

The condition(s) must be fulfilled before submission of a copy of the deposited plan for endorsement.

The agency/authority or local government noted in brackets at the end of the condition(s) identify the body responsible for providing written advice confirming that the WAPC's requirement(s) outlined in the condition(s) have been fulfilled. The written advice of the agency/authority or local government is to be obtained by the applicant/owner. When the written advice of each identified agency/authority or local government has been obtained, it should be submitted to the WAPC with a Form 1C and appropriate fees and a copy of the deposited plan.



If there is no agency/authority or local government noted in brackets at the end of the condition(s), a written request for confirmation that the requirement(s) outlined in the condition(s) have been fulfilled should be submitted to the WAPC, prior to lodgement of the deposited plan for endorsement.

Prior to the commencement of any subdivision works or the implementation of any condition(s) in any other way, the applicant/owner is to liaise with the nominated agency/authority or local government on the requirement(s) it considers necessary to fulfil the condition(s).

The applicant/owner is to make reasonable enquiry to the nominated agency/authority or local government to obtain confirmation that the requirement(s) of the condition(s) have been fulfilled. This may include the provision of supplementary information. In the event that the nominated agency/authority or local government will not provide its written confirmation following reasonable enquiry, the applicant/owner then may approach the WAPC for confirmation that the condition(s) have been fulfilled.

In approaching the WAPC, the applicant/owner is to provide all necessary information, including proof of reasonable enquiry to the nominated agency/authority or local government.

The condition(s) of this approval, with accompanying advice, are:

CONDITION(S):

- 1. Redundant vehicle crossover(s) to be removed and the kerbing, verge, and footpath (where relevant) reinstated with grass or landscaping to the satisfaction of the Western Australian Planning Commission and to the specifications of the local government. (Local Government)
- 2. (a) Prior to commencement of subdivision works, investigation for soil and groundwater contamination is to be carried out to determine if remediation is required.
 - b) If required, remediation, including validation of remediation, of any contamination identified shall be completed prior to the issuing of titles to the satisfaction of the Western Australian Planning Commission on advice from the Department of Environment Regulation, to ensure that the lots created are suitable for the proposed use.

Investigations and remediation are to be carried out in compliance with the *Contaminated Sites Act 2003* and current Department of Environment Regulation Contaminated Sites Guidelines.

(Department of Environment Regulation)

 Arrangements being made with the Water Corporation so that provision of a sewerage service will be available to the lots shown on the approved plan of subdivision. (Water Corporation)



- 4. The provision of easements for existing or planned future water, sewerage and/or drainage infrastructure as may be required by the Water Corporation being granted free of cost to that body. (Water Corporation)
- 5. Arrangements being made to the satisfaction of the Western Australian Planning Commission and to the specification of Western Power for the provision of an underground electricity supply to the lot(s) shown on the approved plan of subdivision. (Western Power)
- 6. The transfer of land as a Crown reserve free of cost to Western Power for the provision of electricity supply infrastructure. (Western Power)

ADVICE:

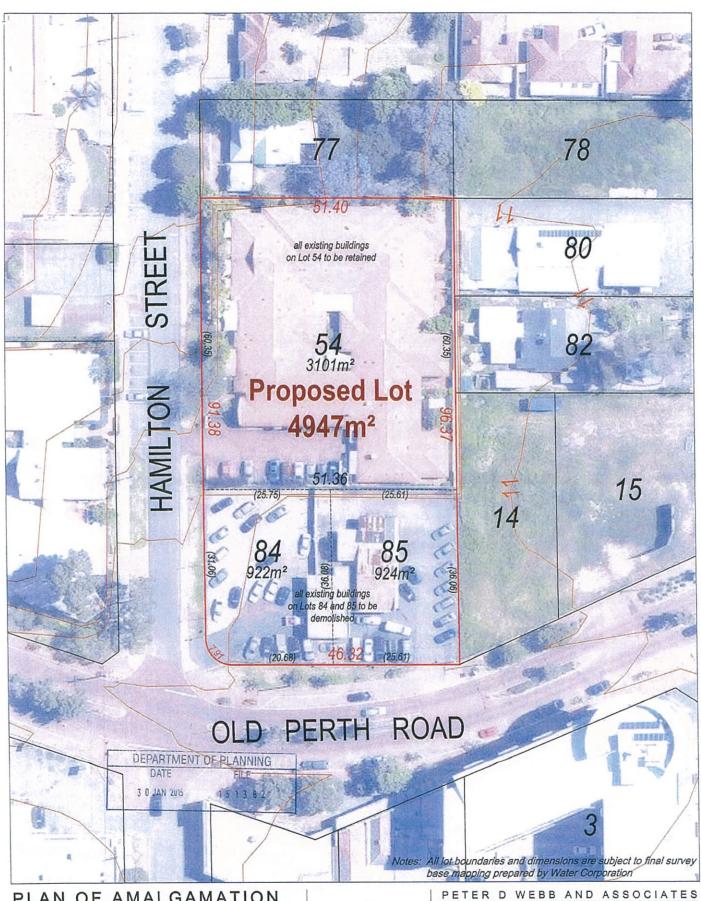
- 1. The Town of Bassendean advises that an investigation for soil and groundwater contamination should be carried out for the existing Lots 84 and 85 prior to any future development in consultation with the Department of Environment Regulation.
- 2. With regard to Conditions 3 and 4, the landowner/applicant shall make arrangements with the Water Corporation for the provision of the necessary services. On receipt of a request from the landowner/applicant, a Land Development Agreement under Section 83 of the *Water Services Act 2012* will be prepared by the Water Corporation to document the specific requirements for the proposed subdivision.
- 3. With regard to Condition 5, Western Power provides only one underground point of electricity supply per freehold lot.

Tim Hillyard

Secretary

Western Australian Planning Commission

18 May 2015



PLAN OF AMALGAMATION

LOT 54 Hamilton Street, LOTS 84 AND 85 Old Perth Road BASSENDEAN





WESTERN



AUSTRALIA

REGISTER NUMBER

85/P1786

ATE DATE DUPLICATE ISSUED

DUPLICATE EDITION 2

7/1/2015

VOLUME 1496 FOLIO 999

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 85 ON PLAN 1786

REGISTERED PROPRIETOR:

(FIRST SCHEDULE)

T & T MANAGEMENT SERVICES PTY LTD OF 90 GOODWOOD PARADE, BURSWOOD

(T M874673) REGISTERED 2/1/2015

LIMITATIONS, INTERESTS, ENCUMBRANCES AND NOTIFICATIONS:

(SECOND SCHEDULE)

 THE LAND THE SUBJECT OF THIS CERTIFICATE OF TITLE EXCLUDES ALL PORTIONS OF THE LOT DESCRIBED ABOVE EXCEPT THAT PORTION SHOWN IN THE SKETCH OF THE SUPERSEDED PAPER VERSION OF THIS TITLE.

Warning:

A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.

* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.

Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

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

SKETCH OF LAND:

1496-999 (85/P1786)

PREVIOUS TITLE:

411-52

PROPERTY STREET ADDRESS:

70 OLD PERTH RD, BASSENDEAN.

LOCAL GOVERNMENT AUTHORITY:

TOWN OF BASSENDEAN

NOTE 1:

N115607

DEPOSITED PLAN 406625 LODGED

WESTERN



AUSTRALIA

REGISTER NUMBER 84/P1786

DUPLICATE EDITION

7/1/2015

FOLIO

156

VOLUME 1631

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 84 ON PLAN 1786

REGISTERED PROPRIETOR: (FIRST SCHEDULE)

T & T MANAGEMENT SERVICES PTY LTD OF 90 GOODWOOD PARADE, BURSWOOD

(T M874673) REGISTERED 2/1/2015

${\bf LIMITATIONS, INTERESTS, ENCUMBRANCES\ AND\ NOTIFICATIONS:}$

(SECOND SCHEDULE)

 THE LAND THE SUBJECT OF THIS CERTIFICATE OF TITLE EXCLUDES ALL PORTIONS OF THE LOT DESCRIBED ABOVE EXCEPT THAT PORTION SHOWN IN THE SKETCH OF THE SUPERSEDED PAPER VERSION OF THIS TITLE. VOL 1631 FOL 156.

Warning:

A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.

* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.

Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

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

SKETCH OF LAND:

1631-156 (84/P1786)

PREVIOUS TITLE:

1006-672

PROPERTY STREET ADDRESS:

68 OLD PERTH RD, BASSENDEAN.

LOCAL GOVERNMENT AUTHORITY:

TOWN OF BASSENDEAN

NOTE 1:

N115607

DEPOSITED PLAN 406625 LODGED



WESTERN



AUSTRALIA

> VOLUME 2514

FOLIO **597**

RECORD OF CERTIFICATE OF TITLE

UNDER THE TRANSFER OF LAND ACT 1893

The person described in the first schedule is the registered proprietor of an estate in fee simple in the land described below subject to the reservations, conditions and depth limit contained in the original grant (if a grant issued) and to the limitations, interests, encumbrances and notifications shown in the second schedule.

REGISTRAR OF TITLES

LAND DESCRIPTION:

LOT 54 ON DEPOSITED PLAN 29092

REGISTERED PROPRIETOR:

(FIRST SCHEDULE)

T & T MANAGEMENT SERVICES PTY LTD OF 90 GOODWOOD PARADE, BURSWOOD

(T M397473) REGISTERED 9/9/2013

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

Warning:

A current search of the sketch of the land should be obtained where detail of position, dimensions or area of the lot is required.

* Any entries preceded by an asterisk may not appear on the current edition of the duplicate certificate of title.

Lot as described in the land description may be a lot or location.

-----END OF CERTIFICATE OF TITLE-----

STATEMENTS:

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

SKETCH OF LAND:

DP29092

PREVIOUS TITLE:

1786-751, 1992-275

PROPERTY STREET ADDRESS:

27 HAMILTON ST, BASSENDEAN.

LOCAL GOVERNMENT AUTHORITY:

TOWN OF BASSENDEAN

NOTE 1:

DUPLICATE CERTIFICATE OF TITLE NOT ISSUED AS REQUESTED BY DEALING

L699107

NOTE 2:

N115607

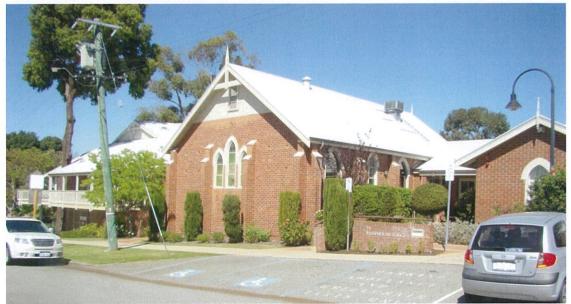
DEPOSITED PLAN 406625 LODGED



Photograph 1: Looking north-east from Hamilton St into the existing Aged Care Facility.



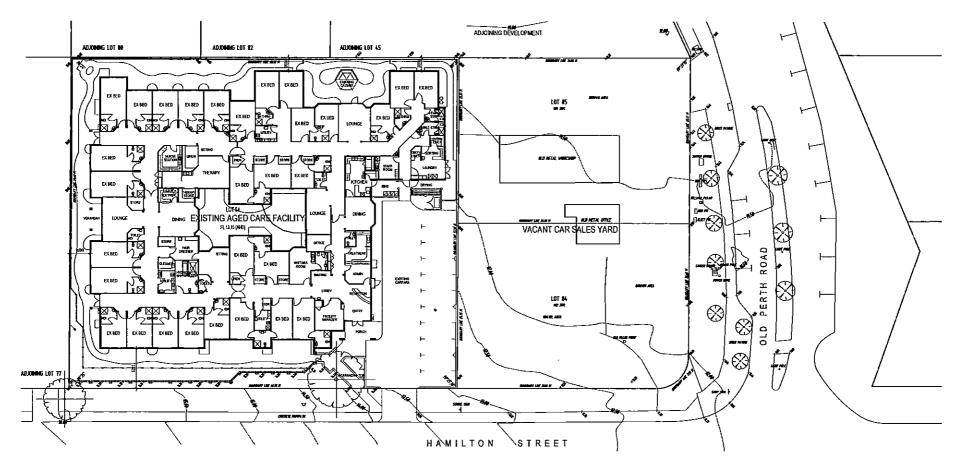
Photograph 2: Looking south east along Hamilton Street noting the landscape associated with the existing Aged Care Facility on Lot 54.



Photograph 3: Looking south west into the Aegis Hostel situated on the (western) side of Hamilton Street, opposite the land the subject of this Application.



Photograph 4: Aerial view depicting the existing site in the context of surrounding development (in particular the development to the east).



SITE PLAN

1:200



MONTAGUE GRANT ARCHITECTS PTY LTD A.C.N. 009 072 593

онс но EX1

OLUMNO SITE ANALYSIS PLAN
GUENT AGED CARE GROUP PTY LTD
JOB BASSENDEAR ALED CARE, ALTERATIONS AND ADDITIONS LOTS 54, MA & MS OLD PERTH ROAD BASSENDEAN

DATE 31/10/17 SEALES 1:200 ESSUE DA

TOWN OF BASSDOEAN DRAWINGS MUST NOT BE SCALED
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MONTAGUE GRANT ARCHITECTS PTY LTD 26 BRISBANE STREET PERTH 6000 TEL 9328 2233 FAX 9227 6346 ACN 009 072 593

SCHEDULE OF FINISHES

PROJECT:

BASSENDEAN AGED CARE, ALTERATIONS & ADDITIONS

SITE:

HAMILTON STREET & OLD PERTH ROAD, BASSENDEAN

PROPRIETOR:

AEGIS AGED CARE GROUP PTY LTD

JOB NO:

14.11

DATE:

8 DECEMBER 2017

EXTERNAL

ITEM

MATERIAL

COLOUR

Brick Walls generally

Painted sand finished render

on clay brickwork

Dulux 'Grand Piano' S15C1Dulux 'Stoney Creek S15A4'

Dulux ' Powered Rock' SI5A2

Dulux 'Boycott' S15A7

Dulux 'Very Terracotta' S08F8

Tile Faced Brick Walls Glazed ceramic wall tiles

on clay brickwork

Special 'Ochre' colour selected

for this specific project.

Metal Roof Fascia

and Eaves Gutter

Colorbond Steel

Colorbond 'Woodland Grey'

Tile Roofs

Terracotta Marseille pattern

roof tiles

Terracotta Orange

'Natural Blend'

Window Frames

Powdercoat finished aluminium

'Charcoal Metalic'

Window Glazing generally

Low energy performance glass

'Solar Grey'

Shopfront Glazing

Low energy performance glass

'Clear'

Balcony Balustrading

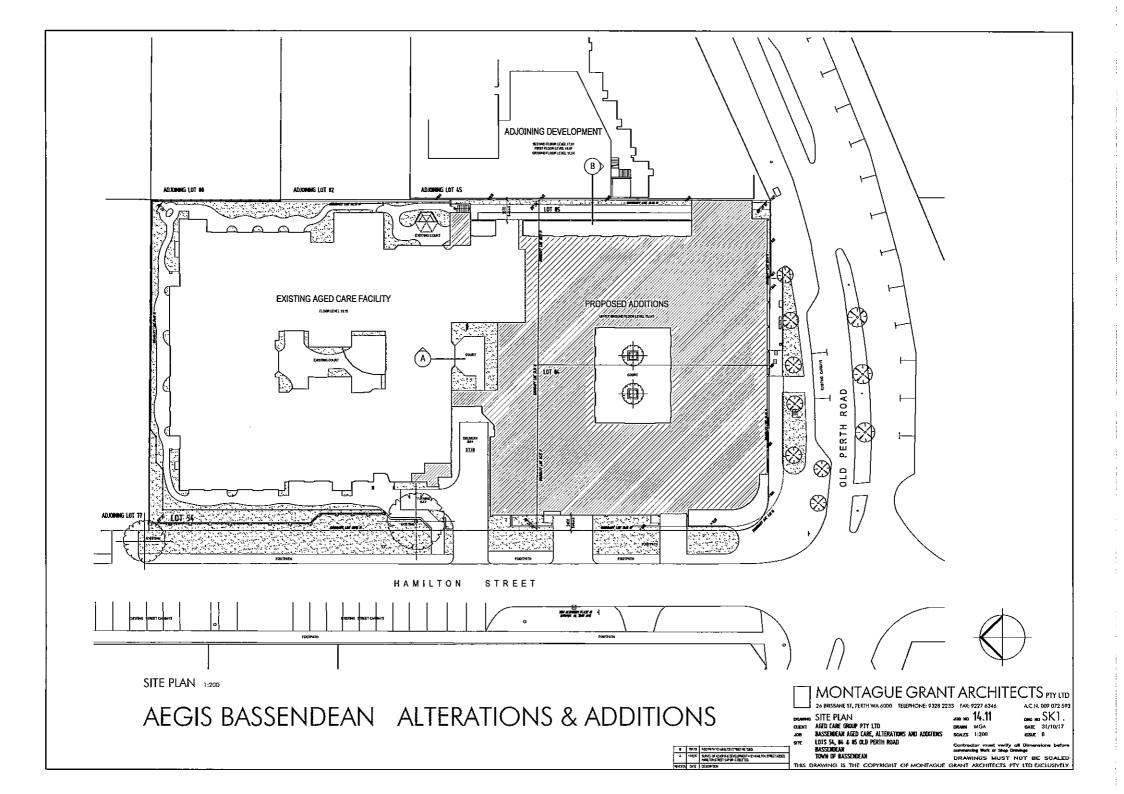
Frameless toughened glass with

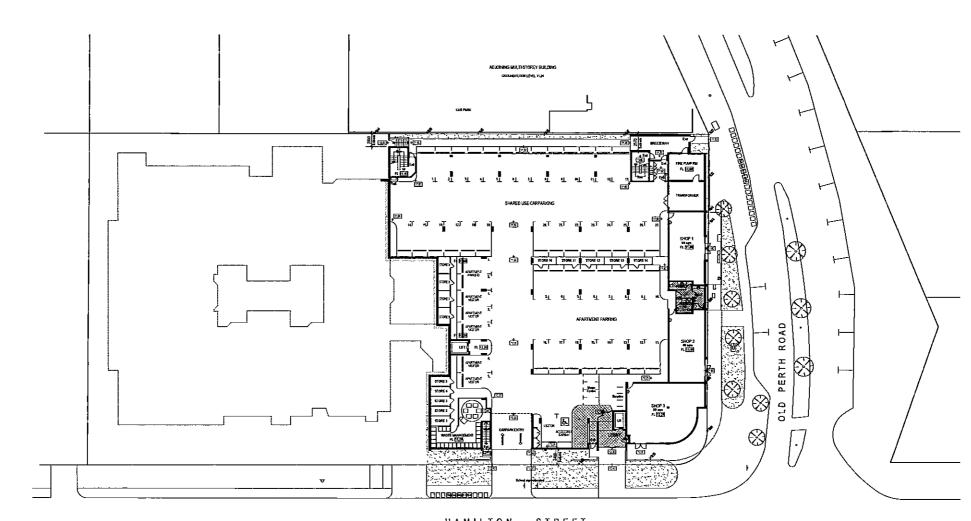
stainless steel handrail.

Clear glass & polished

stainless steel.

MONTAGUE GRANT ARCHITECTS PTY LTD



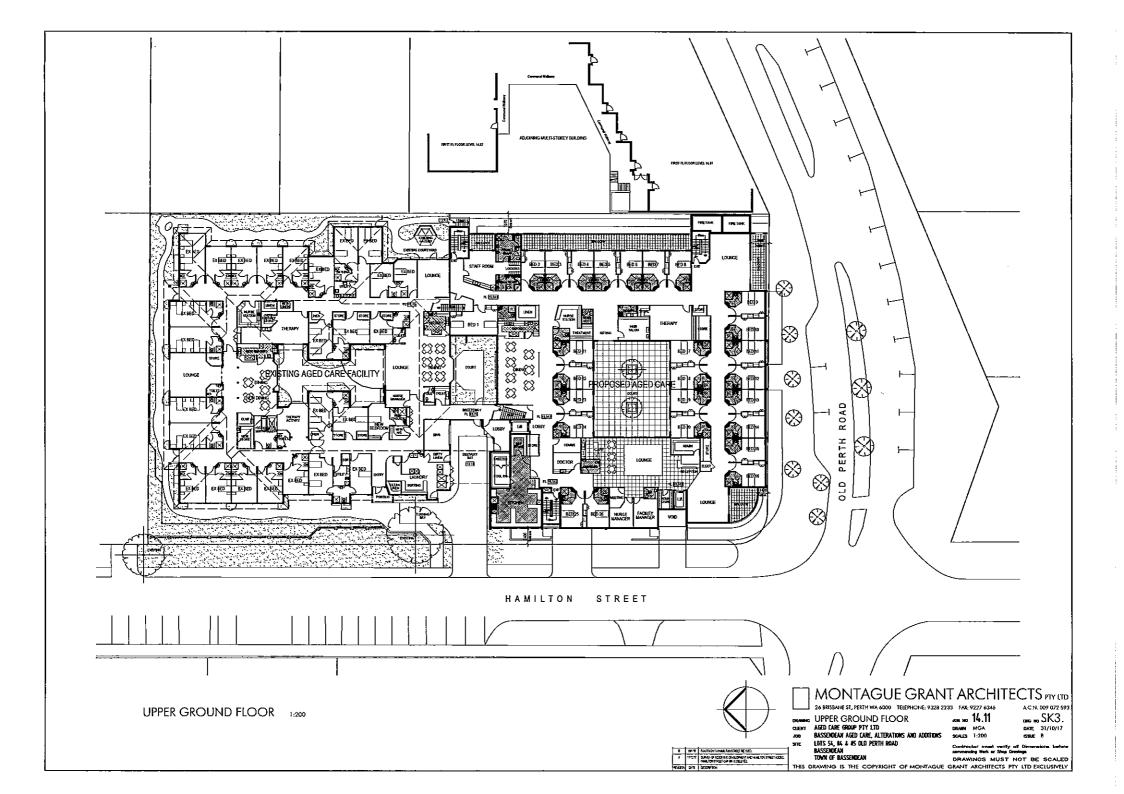


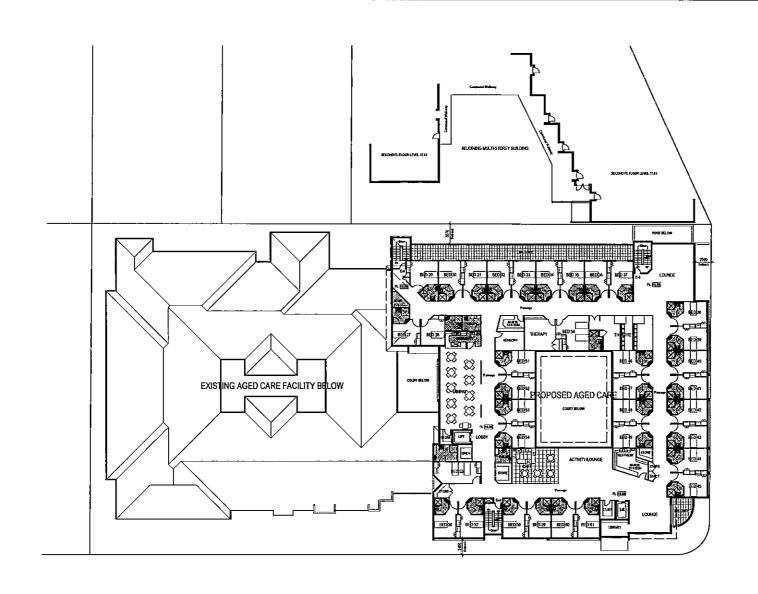
HAMILTON STREET

LOWER GROUND FLOOR 1:200



MONTAGUE GRANT ARCHITECTS PTY LTD COUNTY AGED CARE GROUND FLOOR
COUNTY AGED CARE GROUP PTY LTD
LDB BASSENDEAN AGED CARE, ALTERATIONS AND ADDITIONS ORG NO SK2. DATE 31/10/17 MAN SHARE SHARE SHARE SHARE SHARE SHARE SHARE SHARE
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FIRST FLOOR PLAN

1:200

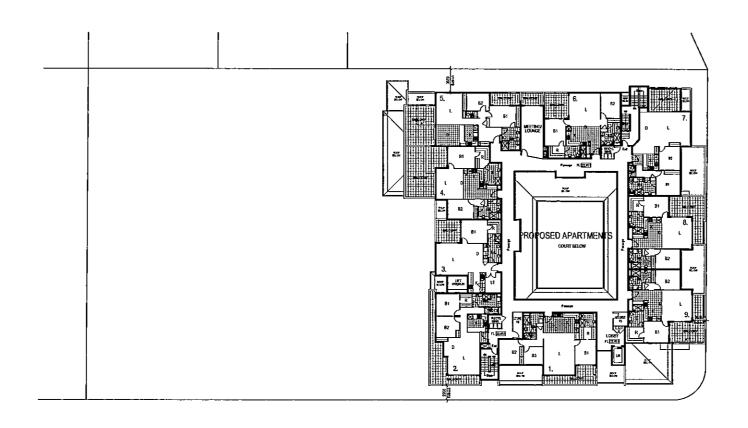
MONTAGUE GRANT ARCHITECTS PTY LTD

DATE 31/10/17

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TOWN OF BASSENDEAN

SEALES 1:200

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SECOND FLOOR PLAN 1:200



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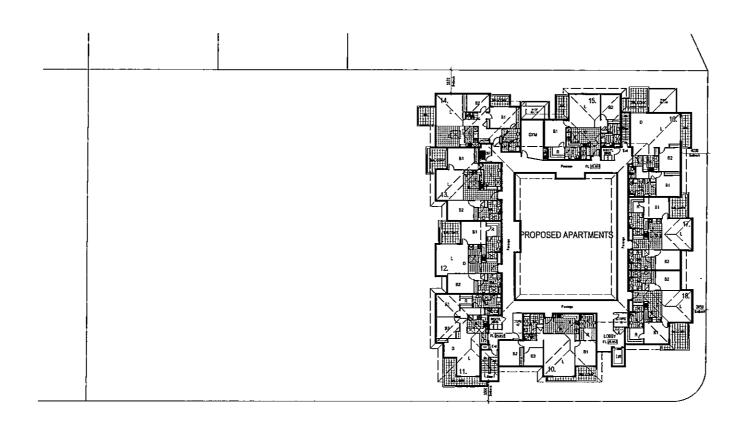
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THIRD FLOOR PLAN 1:200



MONTAGUE GRANT ARCHITECTS PTY LTD 26 BRISBANE ST, PERTH WA 6000 TELEPHONE: 9328 2233 FAX: 9227 6346

DRG NO SK6.
DATE 31/10/17
ESSUE A

DOUBLE THIRD FLOOR PLAN
CLIPIT ACEI CARE GROUP PTY LTD
JOB BASSENDEAN ACEI CARE, ALTERATIONS AND ADDITIONS
SITE LOTS 13, 18 & 18 DLD PRITH RIAD
BASSENDEAN
TOWN OF BASSENDEAN

DRAWNINGS

DRAWNINGS

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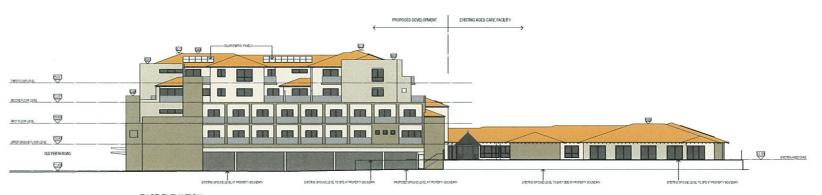
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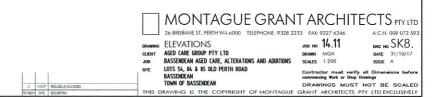
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NORTH ELEVATION



EAST ELEVATION







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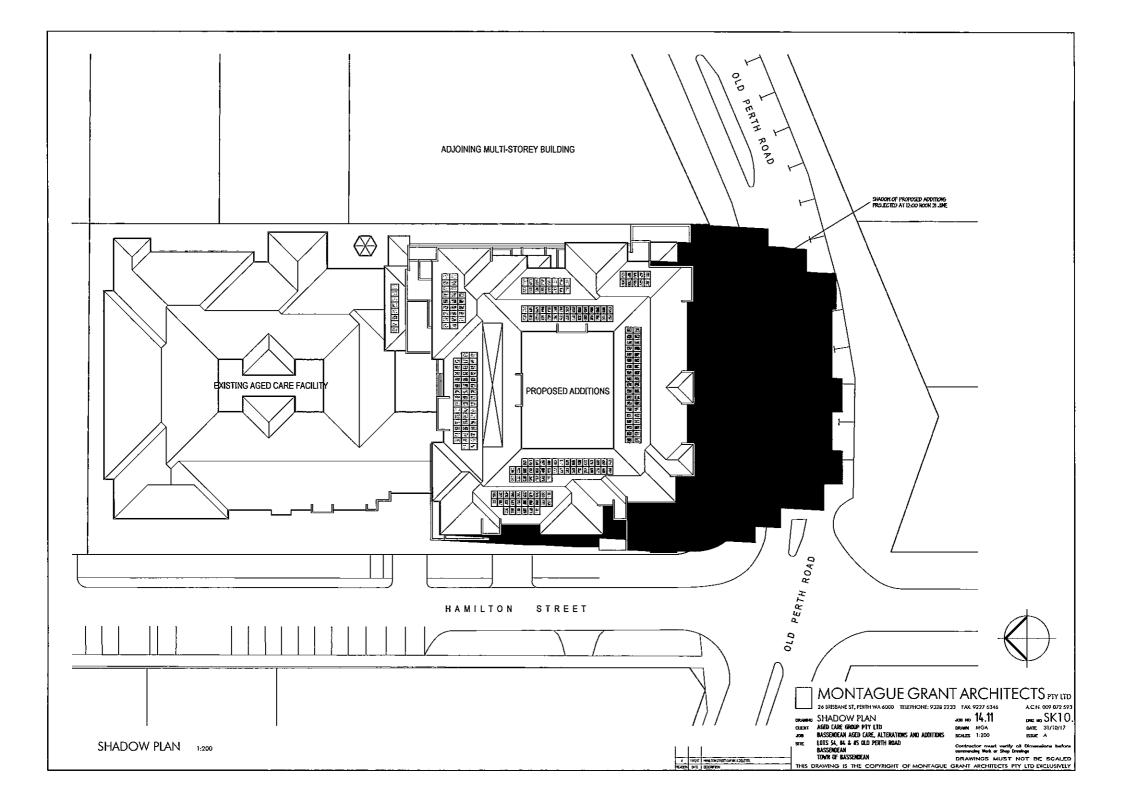


SECTION A

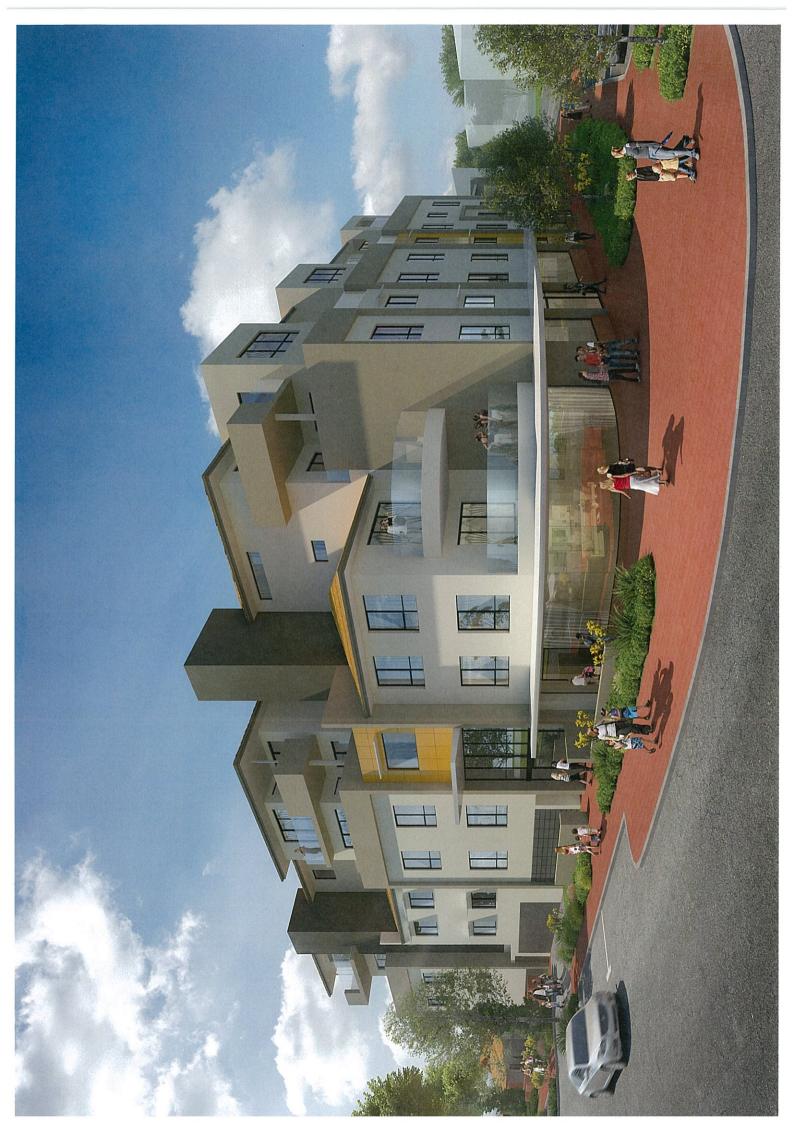


SECTION B









PLANT SCHEDULE

All plants depicted are at estimated mature size as an indication of the future landscape.

Shrubs and ground cover to be planted shrubs at min 13cm pot size. Trees to be planted at min 30ltr pot size.

Trees	Height x width
3 x Corymbia ficifolia 'Summer Beauty'	5m x 4m
2 x Lagerstroemia indica 'Zuni'	3m x 3m
1 x Fraxinus griffithii	6m x 4m

Shrubs

36 x Banksia spinulosa 'Birthday Candles'	50cm x 60cm
14 x Banksia sentinel	2m x 90cm
32 x Callistemon viminalis 'Better John'	90cm x 80cm
8 x Callistemon viminalis 'Slim'	2m x 1.3m
20 x Chamelaucium uncinatum 'Beach Ball'	80cm x 80cm
9 x Correa pulchella 'Little Cate'	50cm x 1.5m
30 x Correa reflexa 'Flared Bell'	80cm x 70cm
11 x Dracaena marginata 'Tricolour'	2.5m x 1m
4 x Leptospermum obovatum 'Starry Night'	2m x 1.5m
10 x Leptospermum sericeum 'Esperance Tea Tree'	1.5m x 1.3m
6 x Melaleuca incana 'Nana'	1m x 1m
$9 \times \text{Melaleuca}$ pentagona var. latifolia 'Little Penta'	40cm x 2m
22 x Pittosporum tenuifolium 'Golf Ball'	40cm x 40cm

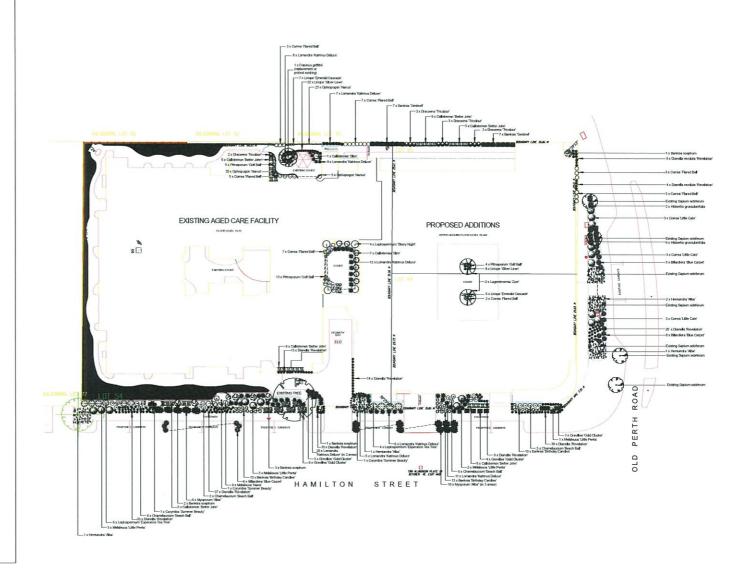
Grasses

169 x Dianella revoluta 'Revelation' 50cm x 55cm 13 x Liriope muscari 'Emerald Cascade' 30cm x 30cm 30 x Liriope muscari 'Silver Lawn' 35cm x 40cm 78 x Lomandra longifolia 'Katrinus Deluxe' 70cm x 70cm 63 x Ophiopogon japonicus 'Nanus' 10cm x 20cm

Ground cover

19 x Billardiera fusiformis 'Blue Carpet'

16 x Grevillea juniperina 'Gold Cluster' 30cm x 80cm 5 x Hemiandra pungens 'Alba' 20cm x 3m 8 x Hibbertia grossulariifolia 10cm x 1.2m 16 x Myoporum parvifolium 'Alba' 10cm x 1.5m



Bassendean

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30cm x 1m

All planting areas to be mulched to a depth of 80mm. Mulch is pine bark wood chips.

Trees to be stabilised with stakes and webbing or polyethylene strips.

See the Certified Irrigation Plan for watering detail.

Watering schedule to be as per Water Corporation's 'Water Efficiency Measures' guidelines.



SCALE 1500





CONSULTANTS IN TOWN PLANNING AND URBAN DESIGN

Our Ref: C2062-01.docx

22 October 2014

Chief Executive Officer Town of Bassendean PO Box 87 Bassendean WA 6934

Attn: Mr B Reed - Manager, Development Services

Dear Sir

Re: Proposed Extension of Existing Approved Nursing Home Lots 16 and 79 Hamilton Street, Lots 84 and 85 Old Perth Road, Bassendean

This is to advise that we act for the Aegis Aged Care Group (Aegis) which company owns property situated at Lots 16, 79 and 53 Hamilton Street (cnr Old Perth Road), Bassendean.

In 2001, the Council of the Town supported Amendment No. 64 to the then Town Planning Scheme No. 3 (TPS 3) which resulted in a Scheme Amendment which included Lot 79 Hamilton Street within 'Appendix VII - Additional Uses' as an Additional Use - Nursing Home.

We believe that the Town would be aware that Aegis has undertaken extensive modifications to this facility and which has resulted in a much improved facility for the care of the aged and aging in the Town of Bassendean (and beyond).

We are pleased to advise that Aegis is currently in the process of finalising a contract to purchase adjoining lots to the south, being Lots 84 (SN 68) and 85 (SN 70) Old Perth Road, Bassendean. (Lot 84 is situated directly adjacent to the corner of Old Perth Road and Hamilton Street.)

Lots 84 and 85 directly abut Lots 16 and 79 to the south (and which lots currently accommodate the Aegis Nursing Home facility). Lots 84 and 85 presently accommodate a Used Car Sale facility which (at least in our opinion) in every respect, is quite inappropriate in this location.

In particular, it appears inconsistent with the objectives of the Town's Centre Area Strategy which *inter alia*, for this site, envisages a building of between three and five storeys in height. For example, the Strategy Plan seeks to, '…ensure the plan includes sustainable mixed uses along Old Perth Road as a vibrant main street.' The current use is hardly consistent with that objective.

The Bassendean Town Centre Strategy Plan (August 2007) indicates that the land the subject of this submission is appropriate for, 'Residential Apartments with Ground Level Mixed Commercial Uses.'

Proposed Extension of Existing Approved Nursing Home Lots 16 and 79 Hamilton Street, Lots 84 and 85 Old Perth Road, Bassendean Our Ref: C2062-01 Page 2

The Strategy also identifies this part of Old Perth Road as being an appropriate place for a small retail mode at its intersection with Hamilton Street. The sketch actually included in this section indicates up to five levels of building being appropriate. The first two levels are recommended as having a nil set back to Old Perth Road with two levels above that being set back to allow for landscape and solar access to Old Perth Road.

This part of the Town is zoned Town Centre in the Town's Local Planning Scheme No. 10 (LPS 10) and which zone is able to accommodate a range of uses either as Permitted (P) or uses approvable at Council's discretion ('A' or 'D'). Those uses include (but are not limited to): Ancillary Accommodation, Car Park, Community Purposes, Consulting Rooms, Convenience Store and Corner Shop, Fast Food Outlet, Hospital, Lunch Bar, Medical Centre, Multiple Dwelling, Office, Restricted Premises and Shop.

We note that the Use Class 'Nursing Home' is not a use which is identified in the Scheme and hence it appears that is why the Council of the Town supported the Use Class 'Nursing Home' as an Additional Use in the earlier Scheme (TPS 3). (It is not clear why that earlier approved Additional Use does not appear in Schedule 2 - Additional Uses of the current Scheme?)

It is evident (pursuant to Clause 4.4.2 (b)) that the Council of the Town does have the ability to consider a proposal where a specific use is not mentioned in the Zoning Table, '...and cannot reasonably be determined as falling within the type, class or genus of activity of any other Use Category, the local government may.....(b) determine that the use may be consistent with the objectives of the particular zone and thereafter, follow the advertising procedures of Clause 9.4 in considering an Application for Planning Approval...'

It would be the Proponent's preference that Aegis not be required to proceed through a Scheme Amendment process, but that the Council feels it appropriate in all of the circumstances of this proposal, to consider this matter as an Application for a Use Not Listed, pursuant to Clause 4.4.

We attach herewith, annotated photographs which describe the existing Aegis Aged Care Nursing Home facility, together with photographs of the subject land in the context of this part of the Bassendean Town Centre.

We are aware that representatives of Aegis including specifically, the Director and CEO (Mr Michael Cross) had extensive discussions in the past with the Town's Executive staff including Mr Graeme Haggart (Director, Community Development) and Mr Brian Reed (Manager, Development Services).

As part of those discussions, it is evident that Aegis had indicated that it would seek to develop a four storey facility on this site. The proposed uses of each level of the building are summarised below.

- The basement level including shops/offices to the footpath; car parking bays; kitchen and laundry facilities.
- The ground floor level comprising of the main lobby together with aged care bed facilities.
- The first floor level containing aged care bed facilities.
- The second floor level accommodating Over 55 Years apartments.

It is Aegis' objective to develop a facility with up to approximately a total of 125 beds. The current Aegis facility maintains 44 beds in the Nursing Home and an additional 36 beds in the Hostel on the western side of Hamilton Street (being a total of 80 beds in the these two facilities). The extension of the existing facility on to Lots 84 and 85 is planned to include

Proposed Extension of Existing Approved Nursing Home Lots 16 and 79 Hamilton Street, Lots 84 and 85 Old Perth Road, Bassendean Our Ref: C2062-01 Page 3

an additional 45 beds over those which currently exist, resulting in the total of about 125 beds.

We are aware that in the past, Aegis had purchased 25 bed licences from the Town and in return, gave an undertaking that the company would return at least those 25 beds, in due course. That commitment is a fundamental part of the Aegis proposal to the Town as part of this Application.

Almost as an aside, Aegis is aware that two portions of land abutting the southern side of Lots 84 (293m²) and 85 (152m²) and which appear to have been given up/sold by previous owners. Aegis queries whether the Town still requires all or part of the land area of this truncation as the company would be most interested in discussing opportunities which might be available to purchase back all or part of that truncated area, if the Town is of the view that (all or part of) this truncated part of Old Perth Road is no longer required?

We are aware of the dialogue between Mr Cross and Mr Reed of the Town and the various commitments which had been given by Mr Cross of behalf of Aegis which include:

- 1. the future amalgamation of Lots 84 and 85 with the company's existing property.
- 2. car park to around 60% over the ground floor of the site.
- 3. office and retail outlets fronting Old Perth Road to the footpath.
- 4. frontage use to tie-in the proposed development of the adjoining site.
- 5. first floor aged care accommodation at the same finished floor level as the existing aged care facility on the adjoining land.
- 6. second and third floors of accommodation of aging and aged care.
- 7. an overall appearance of the facility will be of an apartment building, including small balconies.

We are also aware that at that time (November 2013) the Town responded to Aegis' proposals, suggesting that the most appropriate resolution of this issue would be to have Aegis make an Application for an Amendment to the Scheme which might propose an Additional Use of Residential Building on the site, although Aegis maintains its objective to seek to have the Town consider the application of Clause 4.4 rather than proceed through an Amendment to the Scheme.

Regardless of the planning mechanism used to achieve Aegis' objectives, it appears that the Town has provided some preliminary indication (at least at office level) of a willingness to support the principle of what is being proposed by Aegis, for which support in principle we are grateful.

We now look forward to discussing Aegis' proposals with you in some further detail at your convenience.

Kind regards

Principal

Cc: Mr M Cross - Aegis Aged Care Group Pty Ltd



Photograph 1: Looking north east from Hamilton Street into the existing Aegis facility on Lots 16 and 79.



Photograph 2: Looking south east along Hamilton Street and with the landscape associated with the Aegis facility.



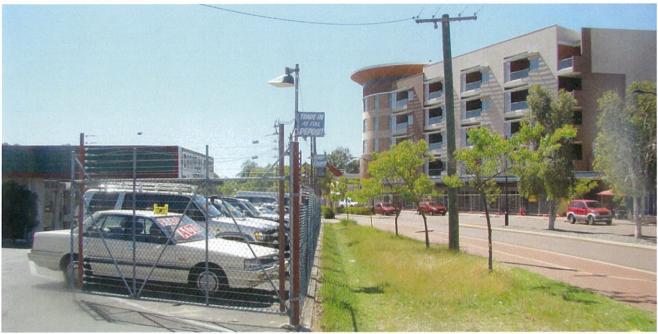
Photograph 3: Looking south west into the Aegis Hostel.



Photograph 4: Looking south east through the electrified fence of the motor vehicle sales premises, the subject of the new application to the multi storey apartment complex on southern side of Old Perth Road.



Photograph 5: The southern part of the Aegis Hostel facility from Hamilton Street noting the architectural merit of the structure.



Photograph 6: Looking east along the southern frontage of the site (adjacent to Old Perth Road), noting the width of the verge on this (northern) side of the road.



Photograph 7: Looking north west across the adjacent vacant (but to be developed) lot on the eastern side of the Aegis Aged Care facility and the north eastern corner off the car yard.



48 Old Perth Road, Bassendean WA 6054 PO Box 87, Bassendean WA 6934 Tel: (08) 9377 8000 Fax: (08) 9279 4257 Email: mail@bassendean.wa.gov.au Website: www.bassendean.wa.gov.au ABN 20 347 405 108

Our ref: OLET-4590014

A2264, A4036: BR

Your ref: DC2062-01.docx

Peter D Webb And Associates Po Box 920 SUBIACO WA 6904

Dear Peter and Claire

ADVISING OF PROPOSED EXTENSION OF EXISTING APPROVED NURSING HOME LOTS 16 AND 79 HAMILTON , LOTS 84 AND 85 OLD PERTH ROAD, BASSENDEAN

I refer to your letter of 22 October 2014 and firstly apologise for my delay in responding to you.

I advise that officers of the Town would support treating a future application as a use not listed, in accordance with Clause 4.4.2 of the Local Planning Scheme No 10.

Should you wish to discuss any aspect of this matter further, I may be contacted on 93778005.

Yours faithfully

BRIAN REED

MANAGER DEVELOPMENT SERVICES

13 November 2014.

LOCAL PLANNING POLICY 1 (LPP1)

BASSENDEAN TOWN CENTRE STRATEGY & GUIDELINES

DESIGN REPORT IN RELATION TO PROPOSED AGED CARE FACILITY EXTENSION, MULTIPLE DWELLINGS AND 3 SHOPS AT LOT 54 (#27) HAMILTON STREET & LOTS 84-85 (#68-70) OLD PERTH ROAD, BASSENDEAN

PREPARED BY PETER WEBB & ASSOCIATES (PWA)

Local Planning Policy No. 1 (LPP1) - Bassendean Town Centre Strategy & Guidelines outlines a vision and objectives for development within the Bassendean Town Centre.

Planning and design guidelines in LPP1 are grouped into three (3) sections:

- Site planning and urban design;
- · Building form and detail;
- · Environment and services.

This Design Report provides responses to the relevant sections of LPP1 in support of the proposed development. The Architect has given due consideration to the guidelines of LPP1 in the design of the proposed development, which has resulted in a high quality built form outcome for this Town Centre site.

PART 7 - SITE PLANNING & URBAN DESIGN

Clause 7.1 Urban Setting & Context

Guidelines

 Buildings should contribute positively to the desired character of the precinct and to the streets and public spaces around them.

Proposal:

The proposed development contributes positively to the desired character of the Central (Old Perth Road) Precinct by appropriately positioning the ground level and first level at a nil setback and having upper floors set back from Old Perth Road to provide a town centre environment and account for reduced overshadowing.

An overshadowing plan is provided demonstrating that the proposed development does not overshadow any private property at midday June 21.

The proposal is compliant with Clause 7.1 of LPP1.

Clause 7.4 Development Type & Intensity in Bassendean

Guidelines

- Higher intensity and mixed uses that contribute to vitality of town centre are encouraged while low intensity uses are discouraged.
- Provision of affordable single or 2 bed apartments is encouraged.

Proposal:

The proposed development provides a high density mixed use development that will contribute to the vitality of the town centre and provides aged care services, multiple dwelling apartments and shop uses on ground floor fronting Old Perth Road.

By providing over-55s apartments in addition to aged care beds, this ensures that Bassendean continues to have a diverse and cohesive community where people can continue to live through different phases of life.

The proposal is compliant with Clause 7.4 of LPP1.

Clause 7.5 Building Envelope

- An agreed envelope of footprint and height will define new development on each lot. There
 is no plot ratio limit in the town centre.
- A minimum height of 3 storeys or 10 metres is set for buildings generally in the town centre.
- A maximum height of 5 storeys is set for buildings generally on lots fronting Old Perth Road subject to streetscape, shadowing and overlooking issues.
- Buildings on the north boundary of Old Perth Road (west end) shall not be higher than the existing parapet at street front.
- Buildings on the south boundary of Old Perth Road (west end) shall not be higher than the existing Padbury building parapet at street front.
- Development should generally have nil set back to front and side boundaries.
- Residential development at ground level can be setback 2.0 to 4.0 metres to provide a transition between public and private space. Residential entry foyers at ground level can have a nil setback.
- Rear setbacks should be provided suitable to accommodate parking and avoid overshadowing of neighbouring buildings.
- Rear setbacks from residential adjoining should provide for privacy and comply with R code requirements.
- Entrances can be set back up to 4.0 metres to create a sense of address; these setbacks should be co-ordinated with neighbouring buildings and detailed as small urban public spaces.

Proposal:

The proposed development provides a 5 storey development complying with the Town Centre requirement for its location along Old Perth Road. The development has a generally nil setback along Old Perth Road and along the side boundary. Awnings are proposed along Old Perth Road and at the corner of Hamilton Street to provide an urban form.

The proposal is generally complaint with the requirements of Clause 7.5 of LPP1.

Clause 7.6 Building Orientation and Address

Guidelines

- Buildings should have the long axis east- west (or within 15 degrees of east- west) to maximise northern solar access.
- Buildings should have the primary entrance, address and frontage on or clearly identifiable from the primary street.
- Courtyards can be used to provide solar access in deeper buildings

Proposal:

The proposal maximises northern solar access given the site's orientation and location. The proposed development has the main entrance at a clearly identifiable location on Hamilton Street, close to the intersection of Old Perth Road. The proposal also provides internal courtyard to provide solar access. The proposal is compliant with Clause 7.6 of LPP1.

Clause 7.8 Pedestrian & Cycle Amenity

Guidelines

- Provide clear, well designed paths around buildings leading to entrances that link into the public footpath network.
- Provide pedestrian shelter at entrances and along active street frontages.
- Provide good end of trip facilities, including lockers and showers for walkers and cyclists in workplaces in the town centre.
- Provide bicycle racks outside all commercial, retail and civic buildings.
- Buildings should have the long axis east- west (or within 15 degrees of east- west) to maximise northern solar access.
- Buildings should have the primary entrance, address and frontage on or clearly identifiable from the primary street.
- Courtyards can be used to provide solar access in deeper buildings

Proposal:

The proposal provides clear well designed paths that link proposed entrances (to aged care lobby and also the Shops) with existing paths in Old Perth Road.

The proposed development provides awnings along Old Perth Road to provide shelter along the active street front.

Bike racks are provided in the undercroft parking area for use by shop tenants or customers.

Other guidelines in this section have been addressed in other parts of the policy and in this Report.

As the proposed development is not primarily for retail use, end of trip facilities are not provided.

The proposed development generally complies with Clause 7.8 of LPP1.

Clause 7.9 Vehicle Movement & Parking

Guidelines

- Car parking is to be provided consistent with LPS 10.
- Parking should be located to rear of or below buildings. Cars and parking areas should not visually dominate development.
- Where car parking requirements limit optimum site development council may consider cash- in- lieu payment.
- Parking for motor cycles and scooters should be provided to encourage use.
- At- grade parking areas including the Bassendean Village car park should be well landscaped with shade trees (1 for every 4 car bays) and have clearly defined, direct and well lit pedestrian links.
- For residential dwellings of 1 to 2 bedrooms the parking ratio shall be reduced to 1 bay per dwelling.
- Shared surfaces are encouraged using trafficable unit paving and materials consistent with neighbouring developments and public areas.
- Parking should be accessed from secondary streets and not from Old Perth Road.
- Crossovers should be limited to one crossover (3 6m wide) per development site.
 Crossovers should match footpath colour.
- Service and delivery should be provided discretely and in minimal space.
- Consideration should be given to location, access to and storage of recycling and other rubbish bins including communal bin facilities.
- Emergency vehicle access, particularly for fire fighting vehicles, must be provided to satisfaction of Council and FESA.

Proposal:

The proposal has provided car parking generally consistent with the provisions of LPS 10 and is included in an undercroft parking area below the main building. This ensures that the car parking area does not visually dominate the development.

In addition to standard vehicles, the proposed development also provides four (4) motorcycle/scooter bays.

The undercroft parking area is accessed from Hamilton Street (and not Old Perth Road).

One main crossover is proposed to the new development, from Hamilton Street.

Consideration has been given to the location, access and storage of rubbish and recycling bins within the proposed development.

The proposal complies with Clause 7.9 of LPP1.

Clause 7.10 Landscape & Hardscape

Guidelines

- Landscape provision will be assessed on quality rather than quantity. No specific percentage provision is required in the town centre but all outdoor areas are expected to be landscaped and maintained to a high quality appropriate to an urban setting.
- Existing healthy, mature trees of appropriate species should be retained and incorporated into new development. Where trees are removed they shall be indicated as removed on plans and their removal justified
- · Generally use water- wise and indigenous plant species
- Improve microclimate of courtyards and other urban spaces with use of some deciduous shade trees and water elements. The use of deciduous trees will be limited to courtyards and other urban spaces where seasonal climate response is considered important.

Proposal:

A landscaping plan has been prepared in support of the proposed development to provide comprehensive quality landscaped areas around the development, including endemic plant species. Shade trees will be included in courtyard areas. Existing mature trees will be retained where possible, and new trees will be planted. All landscaping areas will be reticulated.

The proposed development complies with Clause 7.10 of LPP1.

PART 8 - BUILDING FORM & DETAIL

Clause 8.1 Adaptable Buildings

Proposal:

The proposed development is for aged care and residential uses, which are unlikely to change for many years, and as such, have not been designed to be adapted for a different use.

Clause 8.2 Building Character

- Buildings should reflect contemporary lifestyle, function and materials and not mimic historic styles and building methods.
- Buildings should respond to the character of significant buildings in the town.

 Buildings should have a proportion and scale appropriate to their location within a high quality urban town setting and respecting neighbouring buildings.

Proposal:

The proposed development has been designed as a modern, contemporary development, and responds appropriately to its setting within an urban town centre environment. The proposed development is also complementary to surrounding development which is of a similar urban scale.

The proposed development generally complies with Clause 8.2 of LPP1.

Clause 8.3 Facades

Guidelines

- Building facades should respond to neighbouring facades through use of consistent horizontal lines, good proportion and other design aspects.
- A consistent, well detailed design approach to all facades of a building is expected. Care should be taken in design of all facades that can be viewed from anywhere in the public realm, this includes window placement, proportion and relief in the wall plane.
- No façade shall appear as a "back" and blank walls should be avoided. Exposed plumbing or other services are not acceptable on any facades.
- Ground floor façades should be distinctive from upper levels, changes in wall plane, texture, material and colour can be used.
- Circulation spaces such as stairs and foyers should be positioned and glazed to add activity that is visible from the street.
- Glazing of facades is encouraged to provide visibility between inside and outside the building. Windows at ground level on active frontages shall be minimum 2.4m high. External sun shading is encouraged appropriate to orientation.
- The top of buildings should finish with a roof or expressed detail.

Proposal:

The proposed development has been designed as a modern contemporary development, and provides high quality facades on all sides, including windows, material/colour changes, and contrasting feature walls.

Glazing of the shopfront facades has been included to provide visibility to the pedestrian footpaths.

External sun shading through the use of awnings has been included in the development.

A similar coloured pitched roof has been proposed to match in with the pitched roof of the existing aged care facility.

The proposed development complies with Clause 8.3 of LPP1.

Clause 8.4 Roofs

Guidelines

- Simple roof forms complementing the linearity of buildings are desirable.
- Verge and eaves overhangs sufficient to create strong shadow lines are encouraged on expressed roofs.
- Low pitch roofs (<10 degrees) should be concealed by parapet walls.
- Pitched roofs should respect and be consistent in pitch with roofs in close proximity.
- The top of buildings should finish with a roof or expressed detail.

Proposal:

The proposed development provides pitched roof to match in with the existing aged care facility, but also provides wall panels that project above the eave line in some areas, which provides visual interest.

Overall, the proposed development is considered to comply with Clause 8.4 of LPP1.

Clause 8.5 Old Perth Road Frontage

Guidelines

- Active frontage can include small landscaped spaces that are publicly accessible and contribute to the streetscape and building address.
- Non- residential and mixed-use buildings shall have nil setbacks to Old Perth Road frontage.
- Mixed-use buildings should have predominantly non-residential ground floor frontages to
 Old Perth Road, with the exception of common foyers or home based studios/ offices.
- Residential active frontages should offer a transition such as a terrace or veranda between the public and private space where the resident can spend time and express identity through landscape and detail.
- Verandas or terraces can be raised above adjacent footpath level to a maximum of 1.2 metres.
- Glazed shopfronts are required in retail and commercial buildings.
- Old Perth Road facades should have a minimum of 80% clear glazed area at ground level.

Proposal:

The proposed development provides active frontages along Old Perth Road, with three (3) shops proposed. The development is at a nil setback to Old Perth Road, together with non-residential uses at ground level. Glazed shopfronts have been proposed for the shop uses, which provides for passive surveillance.

Overall, the proposed development complies with the requirements of Clause 8.5 of LPP1.

Clause 8.6 Building Entry

Guidelines

- The primary building entrance should be clearly identifiable and visible from the primary street.
- Other entrances should be scaled and designed according to their function and frequency
 of use.
- Entrances can be set back from the street with external treatments being consistent with the adjacent streetscape.
- Pedestrian shelter, signage and lighting should be provided at primary entrances.

Proposal:

The proposed development provides the main building entrance to the aged care facility and upper residential apartments at a clearly identifiable location from Hamilton Street, close to the corner of Old Perth Road. The main entrance is set back from Hamilton Street, with footpath connection and landscaped environs. The main entrance area will be made legible and lit at night for pedestrian amenity and safety.

The proposed development complies with Clause 8.6 of LPP1.

Clause 8.7 Awnings, Canopies & Balconies

- All active commercial and retail frontages in the west and east ends along Old Perth Road should have continuous pedestrian shelter over the footpath.
- Residential and mixed use buildings shall have pedestrian shelter such as awnings or canopies over entrances.
- Balconies and terraces are encouraged on street facades in residential and mixed use buildings.
- Balconies should have predominantly open balustrades, while considering the need for screening of washing and air conditioner units and solar screens.
- · Awnings, canopies and balconies should:
 - o Have minimum clearance to footpath of 2.7 metres;
 - Have minimum extension out from building of 2.5 metres;
 - Relate in height/ design to adjoining canopies/ awnings;
 - Consider signage locations and dimensions
- Provision and maintenance of canopies and awnings over the footpath is the responsibility
 of the building owner.

Proposal:

The proposed development provides awnings over the pedestrian footpath along Old Perth Road. Balconies are proposed on upper levels fronting out on to both Old Perth Road and Hamilton Street. For the two levels in the aged care facility, there is a balcony at the corner, accessed from a communal lounge.

The awnings achieve the minimum clearance to the footpath and extend out at least 2.50m.

The proposed development complies with Clause 8.7 of LPP1.

Clause 8.8 Materials and Colour

Guidelines

- Respond to neighbouring buildings with complimentary colours and materials.
- A limited palette of external colours and building materials should be used to ensure building harmony. Generally, use neutral, subtle colours for long lasting surface finishes and use bright colours only as accent and for surfaces that will be repainted or finished regularly.
- High quality durable materials that have acceptable levels of weathering and wear are preferred to materials that require constant maintenance..
- Use of tilt- up concrete is discouraged unless carefully detailed, finished and given relief in the wall plane.
- Use of highly reflective glazing is not permitted. Samples of reflective/tinted coatings shall accompany any development application and will be to satisfaction of the Town of Bassendean.
- Strong and bright colours may be approved subject to durability, where council considers that proposed use of colour will contribute to the character of the town centre in a positive way.

Proposal:

The proposed development provides a balanced range of colours and materials to ensure building harmony. The design of the building is high quality and complies with the requirements of Clause 8.8 of LPP1.

Clause 8.9 Signage & Public Art

Proposal:

No signage is proposed at this stage, given there is limited commercial space in the proposed development. Further no tenants have been sought for the three (3) shops at this stage, so signage will be dealt with under a separation Application.

Public art will be undertaken within the development, as referenced in the main Planning Report.

Clause 8.10 Plant & Equipment

Guidelines

- All plant and equipment must be concealed from public view using screening or other means that is an integral part of the building design. Surface mounted services piping and conduits will not be permitted.
- Roof mounted equipment, aerials, antennas, masts etc must be screened from all views including from above where applicable. Detail of screening shall be included in DA plans, elevations and 3D images.
- Ground level or balcony mounted equipment/air conditioning plant must be well screened using materials to suit the building.
- All plant and equipment must have noise attenuation to council satisfaction.
- Telecommunications dishes are not permitted on roofs.
- Lift over runs shall be contained within the roof space or appropriately designed as an element of the building active frontages.

Proposal:

The proposed development has been comprehensively designed and all plant and equipment (including bin stores) have been located away from public view.

PART 9 - ENVIRONMENT AND SERVICES

Clause 9.1 Climate and Energy Response

- A solar access and shadow analysis is required as part of the DA.
- Buildings should be designed to minimise energy consumed for heating, cooling and artificial light including:
 - Window design for good thermal and daylight performance.
 - Building materials and insulation to contribute to comfortable thermal conditions.
 - Air movement within buildings to provide comfortable thermal conditions and appropriate air quality.
 - Building materials, appliances and fuel sources selected to minimise energy requirements and greenhouse gas emissions.
- Building services should be designed and maintained to minimise energy and resource use including:
 - o Optimum natural light.
 - o Optimum natural ventilation.
 - Energy efficient motors and equipment, lighting control systems, fittings and appliances.

- o Energy efficient air conditioning and mechanical ventilation systems and controls.
- Minimum water use and waste.
- o Energy efficient hot water systems.
- Water efficient taps and fittings.
- Minimal energy use over the whole life of the building.
- Maximum use of renewable energy and use of fuels with low greenhouse gas emissions.
- Current '5 star' requirements of the green star rating system can be used to demonstrate
 a response to this commitment. A report accompanying the DA should describe the climate
 response and energy requirements of the building.

Proposal:

The proposed development has been well designed to respond to the site's orientation and includes windows and openings to allow for natural breeze ventilation and solar access. A shadow plan has been provided to demonstrate no detrimental overshadowing of adjacent land. Efficient water systems, taps and fittings will be incorporated into the development. Solar panels will be included on the roof for electricity generation.

The proposed development generally complies with Clause 9.1 of LPP1.

Clause 9.2 Services and Infrastructure

Guidelines

- The Town of Bassendean requires infrastructure contributions to be made based on the value of development.
- All stormwater shall be contained on site or connected to drainage points where supplied.

Proposal:

A Stormwater Drainage Management Plan has been prepared in support of the proposed development and is included in the Application package. Therefore, the proposal is compliant with Clause 9.2 of LPP1.

Clause 9.3 Servicing and Maintenance

- Service yards must not be located along active frontages and shall be designed as integral
 parts of the building.
- All waste storage and delivered goods should be contained within buildings. Rubbish storage and collection facilities shall comply with the current general requirements of the Town of Bassendean and will be efficient, convenient and allow for collection of recyclable material.

 Doors providing access to internal waste/storage or loading dock areas should be the minimum width and height possible to serve the required loading/unloading function and be constructed of aesthetically pleasing materials.

Proposal:

Bin storage areas have been included in the proposed development, away from public view, but still easily accessible. A Waste Management Plan has been prepared in support of the proposed development.

Clause 9.4 Noise Attenuation

Guidelines

- Incorporate suitable noise attenuation measures in buildings affected by train or traffic noise in windows, ceilings and insulation airport noise controls.
- All accommodation buildings are to be detailed and/or designed so that internal noise levels in bedroom areas will be in the range of 30 to 35dB.
- All plant and equipment is to have noise attenuation.

Proposal:

The proposed development is not affected by train or traffic noise, so does not required increased noise attenuation measures for windows and ceilings. Plant and equipment rooms will be suitably treated to reduce noise.

Clause 9.5 Safety and Security

- A diverse and complementary mix of uses will encourage public presence and activity at different times of the day and night.
- Buildings should overlook public spaces and building entries should be clearly visible from public spaces.
- Buildings should not have recesses or other unsecured areas not in full public view.
- Solid fencing/screening above 0.8m high is discouraged on street frontages.
- A clear view from 0.8m- 2.0m above ground should be maintained in landscape, walling and screening unless screening is fully secure. Landscaping, walls and fencing shall be designed to maintain clear visibility to and from doors, windows, and pedestrian paths.
- Appropriate lighting shall be provided for safety and security (Refer 12.6)
- Robust materials which are aesthetically pleasing should be used in public places.
 Materials vulnerable to graffiti and vandalism shall be avoided. Use of security film to windows and anti graffiti treatment to other surfaces accessible at ground level is encouraged.

Proposal:

The proposed development provides for three different land uses which provides for a range of activity at different times of the day. The proposed development addresses public spaces and the main entry is clearly identifiable from the street. The development does not propose any street boundary fencing of walls which could attract antisocial behaviour. All exterior spaces will be well-lit for the safety of the public, as well as the residents of the aged care facility and the over-55s apartments. The proposed development complies with Clause 9.5 of LPP1.

Clause 9.6 External Lighting

Guidelines

- Appropriate lighting for pedestrian safety shall be provided to all pedestrian paths and parking areas.
- Building entrances should be lit for safety and identity.
- All external lighting shall be robust, vandal resistant and themed to complement development character.
- Display lighting to commercial and retail premises along Old Perth Road shall be timeswitched to remain on every evening until at least 15 minutes after the last train has left Bassendean Station.
- Consideration should be given to pedestrians, cyclists and drivers with regard to glare from lighting sources.

Proposal:

The proposed development will provide a range of lighting to public spaces, awnings, undercroft parking area, and along pedestrian footpaths for the safety of its residents and the public. The main entrance will be well-lit (including inside the lobby). The proposed development complies with Clause 9.6 of LPP1.

CONCLUSION

It is evident that the proposed development located at the corner of Old Perth Road and Hamilton Street, will reinforce a strong sense of place within the Bassendean Town Centre and includes a range of land uses to provide a vibrant main street environment.

The proposed development includes high quality built form, responds to the climate and is appropriate in the context of the Bassendean Town Centre. Landscaping and urban design reflects and incorporates a sustainable approach and contributes to the overall amenity of the area.

In conclusion, the proposed development generally achieves the objectives of the LPP1 - Bassendean Town Centre Strategy & Guidelines, and warrants approval accordingly.



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Waste Management Plan
Proposed Aged Care Facility, Multiple Dwellings & Shops
Lot 54 (#27) Hamilton Street & Lots 84-85 (#68-70) Old Perth Rd,
Bassendean

Prepared For:

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1 INTRODUCTION

1.1 BACKGROUND

Aurora Environmental has been engaged by Peter Webb and Associates (PWA) to prepare a Waste Management Plan for a proposed redevelopment of an existing aged care development located at Lot 54 (#27) Hamilton Street and Lots 84-85 (#68-70) Old Perth Road, Bassendean. The total area to be developed is approximately 4,900 m².

Peter Webb & Associates (PWA) acts for T & T Management Services Pty Ltd (T&T). T&T is a company within the Aegis Aged Care Group who is the largest aged care provider in Western Australia.

T&T own and operate the existing Bassendean Aged Care Facility at Lot 54 Hamilton Street. T&T plan to extend this facility into the recently acquired Lots 84 and 85 Old Perth Road, which share a common northern boundary with Lot 54, being situated directly to the south of the Bassendean Aged Care Facility.

Details of the current and proposed capacity of the facility are summarised in Table 1.

TABLE 1: SIZE OF DEVELOPMENT

DEVELOPMENT TYPE	CURRENT DEVELOPMENT	PROPOSED DEVELOPMENT	COMBINED
Aged Care Bed	44 ¹	64	103 ¹
Over 55 Apartments	0	18	18
Shop Tenancies ²	0	3	3
Aged Care Bed	44 ¹	64	103 ¹

Note:

- 1. The number of aged care beds in the existing development will be reduced to 39 with 64 new beds being created in the new development footprint.
- 2. The Shop tenancies are expected to be general retail and not restaurants or food outlets.

1.2 LIAISON WITH CITY OF BASSENDEAN

In developing the facility, the proposed approach to managing waste has been discussed at a number of meetings with Christian Buttel the City of Bassendean who requested a number of changes and modifications to the design of waste management facilities in the development. These requests have been addressed though design modifications.

The key requirements identified were:

- The facility needs to adopt an approach to waste management that facilitates waste minimisation through ready access to recycling services and promotion of the use of recycling facilities;
- The facility design needs to facilitate safe access by both commercial vehicles collecting waste and vehicles contract by City of Bassendean for kerbside collection of waste;

Waste Management Plan, Proposed Aged Care Facility, Bassendean

- Bin storage areas need to be secure and located off the street with sufficient bin capacity to meet waste generation needs without spillage of waste or overfilling;
- Waste storage needs to be in enclosed bins to prevent issues with odour and vermin;
- Bin storage areas and bins need to be regularly cleaned to prevent odour and vermin attraction; and
- Any commercial waste collections need to occur after 0700 to prevent noise impacts for residents in the Aged Care facility and on adjoin properties.

1.3 RELEVANT LEGISLATION AND POLICY

Local Governments are responsible for the collection of municipal solid waste under the Waste Avoidance and Resource Recovery Act 2007 (WARR Act). The focus of this legislation is to promote the safe collection of waste and to minimise the quantity of waste directed to landfill though adoption of the Waste Hierarchy which promotes waste avoidance and recycling in preference to disposal of waste to landfill.

The Health Act 1911 also imposes obligations on local governments as part of its environmental health role in terms of providing efficient and safe waste collection services to all residents which prevents the spread of diseases commonly associate with poor waste management practices through contamination of water or through increased through attraction of vermin such as flies and rodents which act as vectors for the spread of many diseases.

The two key aspects regulated by local governments are:

- Ensuring that larger premises with multiple dwellings or tenancies are designed to accommodate sufficient storage capacity for waste; and
- Ensuring that bin set out area are accessible by pic-up vehicles.

2 ESTIMATED WASTE QUANTITIES AND COMPOSITION

2.1 AGED CARE BEDS

Aegis has good quality data on the quantities and types a waste produced from the aged care bed portion facility having operated such facilities for many years. Based on this data the estimate waste production is summarised in Table 2.

TABLE 2: ESTIMATED WASTE PRODUCTION - AGED CARE BEDS

DEVELOPMENT TYPE	CURRENT DEVELOPMENT			
General (Municipal Solid Waste)	15,480 L			
Cardboard and Paper	3300L			
Co-Mingled Recyclables	1200L			
Grease Trap	333L			

In addition to the waste listed in Table 1, a small amount of clinical waste is generated and stored in specialised containers in the doctor's room. These containers are collected on ad hoc basis by a contractor who picks them up when requested and replaces them with empty containers. The quantities are small and as this is an on demand service, this waste is not discussed further in this plan.

2.2 OVER 55 APARTMENTS

Waste types and volumes from the over 55 Apartments are based on the following assumptions:

- Waste production is similar to that from a typical apartment (ie MSW, Co-mingled recyclables and minimal or no garden waste); and
- Each apartment will be occupied by no more than 2 persons.

Based on these assumptions, the estimated waste quantities for 18 apartments is summarised in Table 3.

TABLE 3: ESTIMATED WASTE PRODUCTION – OVER 55 APARTMENTS

WASTE TYPE	TOTAL VOLUME / WEEK
General (Municipal Solid Waste)	2160 L/week
Co-Mingled Recyclables	2160 L/fortnight

These estimates are consistent with guidance published in WALGA guideline titled "Multiple Dwellings Waste Management Plan Guidelines" (WALGA, 2015a).

2.3 RETAIL TENANCIES

Waste volumes from the three retail tenancies has been calculated using the information contained in Appendix 1 of the WALGA guideline titled "Commercial and Industrial Waste Management Plan Guidelines" (WALGA, 2015a).

As stated in Section 1 the retail tenancies are expected to be gernal retail outlets and will not serve or handle foods. The floor areas of the tenancies are as 99m2, 60 m2 and 60 m2 respectively.

Waste Management Plan, Proposed Aged Care Facility, Bassendean

Based on these floor areas, the nature of the retail premises and the information in Appendix 1 of the cited WALGA Guideline, the estimated waste production from the retail premises is summarised in Table 4.

TABLE 4: ESTIMATED WASTE PRODUCTION – RETAIL TENANCIES

WASTE TYPE	TENANCY 1 (99 M ²⁾ Total Volume/Week	TENANCY 2 (60 M²) Total Volume/Week	TENANCY 3 (60 M²) Total Volume/Week	COMBINED VOLUME/WEEK
General (Municipal Solid Waste)	350 L/week	210 L/week	210 L/week	770 L/week
Co-Mingled Recyclables	175 L/week	105 L/week	105 L/week	385 L/week

3 WASTE MANAGEMENT SYSTEM

3.1 OVERVIEW

The existing Aged Care Facility is serviced by commercial waste contractors using bulk storage bins and a conventional grease trap. Bins are currently stored in an enclosed bin storage area adjacent to the Delivery Bay (See Figure 2 and Appendix 1 Figure Sk3). This bin storage area is enclosed and mechanically ventilated. In order to cater for the increased waste production due to the increased number of beds, the frequency of waste collections will increase. Further information is provided in Section 3.2.1.

The Over 55 Apartments incorporate a waste chute on each floor which directs bagged waste from the apartments to a conventional 240L MGBs housed on a rotary carousel in at the Waste Management Room located in the Lower floor/carpark. As bins on the carousel become full, the carousel indexes to bring an empty bin under the chute. The facility caretaker will monitor the carousel serval times a day and remove bins that are full and replace them with empty bins. Both the full and empty bins are stored in the waste management room which is mechanically ventilated. Further information is provided in Section 3.2.2.

Each floor housing the Over 55 Apartments incorporates 2 storage areas for Yellow lidded 240 L recyclable bins. Up to 5 bins can be stored in each of these bin stores. The caretaker will monitor the bins in these stores and take full bins to the Waste Storage Room, replacing them with empty bins as required. A total of 4 stores exist on the two floor with storage of for up to twenty 240 L MGBs

The retail premises will use 240 L MGBs for both general waste and co-mingled recyclables. The bins for the tenancies will be stored in the Waste storage room on the lower floor. Further information is provided in Section 3.2.3.

3.2 WASTE STORAGE AND HANDLING

3.2.1 Aged Care Facility

The aged care beds are fully serviced with small temporary storage bins which are collected and aggregated by staff into larger mobile bins and eventually deposited in to bulk containers in the Bin storage area adjacent to the Delivery Bay. Waste is separated into three streams:

- General Waste
- Recyclable Paper and Cardboard;
- Co-mingled Recyclables

A similar approach is taken to communal areas, where bins marked for each type of waste are placed for by residents and are serviced by cleaning staff with waste deposited in the large bulk storage bins in the bin storage area.

Transport of waste s from upper floors is facilitated by use of wheeled carts and use of elevators to transport waste between floors.

A significant percentage of the waste stream is generated from the kitchen area which serviced by day bins located within the kitchen which are subsequently emptied by staff in the bulk bins in the bin storage area which is in close proximity to the kitchen. The kitchen is also equipped with a grease trap of 2000 L capacity which is serviced at approximately 6 week intervals by a licensed contractor from the Delivery Bay.

This waste system is already functioning successfully and will simply be expanded to service the larger number of beds.

The bulk solid waste bins are all stored in an enclosed dedicated bin storage room adjacent to the Delivery Bay. The Bin Storage Room is equipped with mechanical ventilation.

Bins from the Aged Care section of the facility will be collected by a commercial contractor using a rear lift truck. Details of the number and size of containers and frequency of collection are summarised in Table 5.

TABLE 5: WASTE STORAGE AND COLLECTION - AGED CARE

Waste Type	Bin Type/Size	Number of Bins	Collection Frequency
General (Municipal Solid Waste)	660L MGB	8	3 times per week (Mon, Wed, Fri)
Recyclable Paper and Cardboard	1100L MGB	3	Weekly Thursday
Co-Mingled Recyclables	240 L MGB	5	Weekly Thursday
Grease Trap	Grease trap	1	Every 6 weeks

3.2.2 Over 55 Apartments

The floors occupied by the over 55 Apartments are each serviced by a waste chute that allows residents to deposit general waste which is then directed to a bins mounted on a rotary carousel in the Waste storage area in the lower floor (See Figures 2 and SK2 in Appendix 1). The carousel is a Rotabin unit and holds 5x 240 L MGBs. Empty bins are indexed under the chute as each bin is monitored as full. Signage will be placed in the vicinity of the chute to confirm that only general waste should be placed in the chute.

The facility caretaker will regularly monitor the status of the bins on the carousel and remove full bins and replace them with empty bins as required.

In addition, two stores are provided on each floor occupied by the over 55 apartments for 240 L yellow lid MGBs dedicated for storage of co-mingled recyclables. The stores will be clearly labelled with signs indicating which waste materials residents can place in these bins. Each store incorporates mechanical ventilation and has the capacity to hold up to $5 \times 240 \text{ L}$ MGBs (20 in total in four stores on two floors) which provides ample storage capacity given the estimated waste production will fill less than bins 10 bins per fortnight. The facility caretaker will monitor the status of the bins and bins and remove full bins to the Waste Storage area in the lower floor and replace them with empty bins.

It is proposed that the waste from the over 55 apartments is collected by the normal Council collection service with the facility caretaker placing the bins on the kerb overnight in Hamilton Street and Old Perth Road depending on the number of bins to be collected (See Figure 2 for the pickup locations). The Council service operates on Mondays in this location with weekly general waste collections and fortnightly collections of co-mingled recyclables. It is estimated that the over 55 Apartments will produce a maximum of 10 general waste bins per week and 10 recycling bins per

fortnight so the maximum number of bins to be collected is 20 on recycling days. The two areas identified for kerbside collection can accommodate up to 30 bins.

The details of the Over 55 Apartment waste handling system are summarised in Table 6.

TABLE 6: WASTE STORAGE AND COLLECTION - OVER 55 APARTMENTS

Waste Type	Bin Type/Size	Number of Bins	Collection Frequency
General (Municipal Solid Waste)	240L MGB	8 bins	Weekly Monday
Co-Mingled Recyclables	240 L MGB	5	Fortnightly Monday

3.2.3 Retail Tenancies

The three retail premises are located on the lower floor and in the main front Old Perth Road. The tenancies have rear access into the car park with ready access to the waste storage area for bin storage. It is anticipated that the retailers will maintain bins in their tenancies and empty them on a daily basis into 240 L MGBs in the Waste Management room. The size of bins held in the tenancies will be determined by the leaseholder but the bins in the waste storage area will be 240 L MGBs with either green top for general waste or a yellow top for co-mingled recyclables.

To cater for the waste volumes outlined in Table 4, there will be a requirement for 3-4 bins for general waste and 1-2 bins for recyclables. The details of the Waste Management systems to serve the retail tenancies is summarised in Table 7.

TABLE 7: WASTE STORAGE AND COLLECTION - RETAIL TENANCIES

Waste Type	Bin Type/Size	Number of Bins	Collection Frequency
General (Municipal Solid Waste)	240L MGB	4 bins	Weekly Monday
Co-Mingled Recyclables	240 L MGB	4 bins	Fortnightly Monday

3.2.4 Bin Storage Areas

Three bin storage areas service the overall facility as follows:

- The existing Aged Care bin storage area adjacent to the delivery driveway will be retained to hold bins for waste generated in the Aged Care Facility. The same number of bins will be held in this stores but eh collection frequency will be increased to cater for the increase bed capacity of the facility. This bin store is in a secure area and mechanically ventilated.
- A new storage area is included in the Waste Management Room in the lower floor of the new building. In addition to the waste carousel, the room has the capacity to store up 30 bins. The store has an automatically closing door which remains closed except when being used to access or egress the room and is mechanically ventilated.
- In addition, 4 bins stores are provided across the two floors of the Over 55 Apartments. These bin stores can hold up to five (5) 240 L yellow topped MGBs for co-mingled recyclables. Each of these stores is fitted with an automatically closing door and will be clearly labelled as a bin store for Co-mingled recyclables only.

The information provided in Tables 3-6 shows that the total waste production from the Over 55 Apartments and Retail Tenancies can be handled in 21 bins. Between the main bin store and the

recycling stores, the capacity exists to store up to 50 bins, although it is envisaged that no more than 30 bins will be required at any time, assuming peak wast periods such as Christmas and the fact that some bins may not be totally filled.

The each bin store has been located to provide ready access to those placing wast in the bins while also providing a location secure from the public and away from sensitive areas such as residences.

The state of the bins and bin stores will be monitored by the facility Caretaker. The Caretaker will be responsible for:

- Moving full bins of the waste carousel and replace them with empty bins.
- Monitoring and transferring empty and full bins between the recycling bin stores over 55
 Apartments and the lower floor waste storage area.
- Transferring full bins to the kerbside on waste pick up days and returning them to the bin stores after they have been collected.
- Collecting any litter and sweeping up accumulated dirt in the bin stores and placing this in the bins.
- Regularly washing and disinfecting the floors in the bin stores to keep them free of odour.
- Placing insect and rodent baits or using topical sprays as required to control pests.

As indicated earlier, the operators of the retail tenancies will be responsible for the type of waste receptacles they use in their premises but will have access to 240 L yellow top and green top bins in the waste store for bulk waste storage. The facility Caretaker will manage the bins used by the retail tenants in the same way as those used for waste from the over 55 Apartments.

3.2.5 Bin Collection

The Bins from the Aged Care Facility Bin store will be collected from the same location and under the same commercial contract that is currently used. The only change will be that in view of an overhead obstruction introduced as part of the new building, the bins will be collected by a rear-lift truck and the frequency will increase to three times per week (Monday, Wednesday and Friday).

Full bins from the over 55 Apartments and the Retail Tenancies will be transferred from the lower floor bin store and placed in kerbside collection zones on Hamilton Street and Old Perth Road (see Figure 1). It is anticipated that on average 21 bins will be placed on the kerb every second Monday when recyclables are collected (12 general waste bins and 9 recycling bins). It is estimated that up to 30 bins could be placed on the kerbside in the two areas indicated in Figure 1.

The facility Caretaker will be responsible for deploying and recovering the bins at the kerb.

4 EDUCATION AND AWARENESS

Consistent with Government policy, the owners of the facility are committed to minimising the volume of general waste that is directed to landfill. To this end the following actions will be taken:

- An ample number of yellow topped recycling bins will be provided for co-mingled recyclables generated in the Over 55 Apartments and the Retail tenancies;
- The Aged Care Facility has ample bin capacity to store separated and cardboard and comingled recyclables;
- All staff handling waste in the Aged Care Facility will be educated in the need to handle and store general waste and recyclable materials separately;
- Separate, clearly labelled bins will be provided in bed and communal areas of the Aged Care Facility for general waste and recyclables;
- All residents in the Over 55 Apartments will be briefed on the waste management system
 when they take residence with an emphasis on the need to segregate general waste and
 co-mingled recyclables and this briefing will be supported by written materials and brochures;
- The general waste chute and co-mingled bin stores will be clearly labelled to indicate the
 waste types that can be placed in each location. In the case of the general waste chute this
 will include notification not to place readily combustible or hazardous materials in the chute.
 Arrangements will be made with the Caretaker to handle, store and dispose of such materials
 separately in the Waste Store; and
- All tenants in the retail premises will also be briefed on the waste management system when
 they take up the lease with an emphasis on the need to segregate general waste and comingled recyclables and this briefing will be supported by written materials and brochures.

The Caretaker will be given the necessary support by the owners to ensure that his duties can be conducted effectively and efficiently.

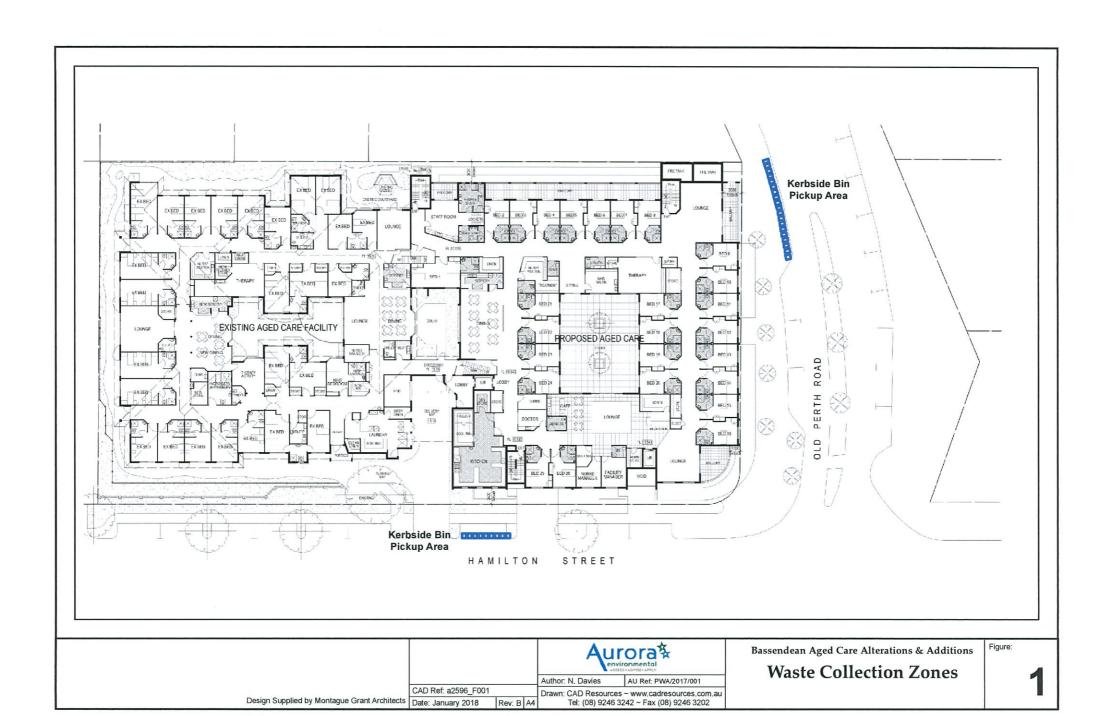
Waste Management Plan, Proposed Aged Care Facility, Bassendean

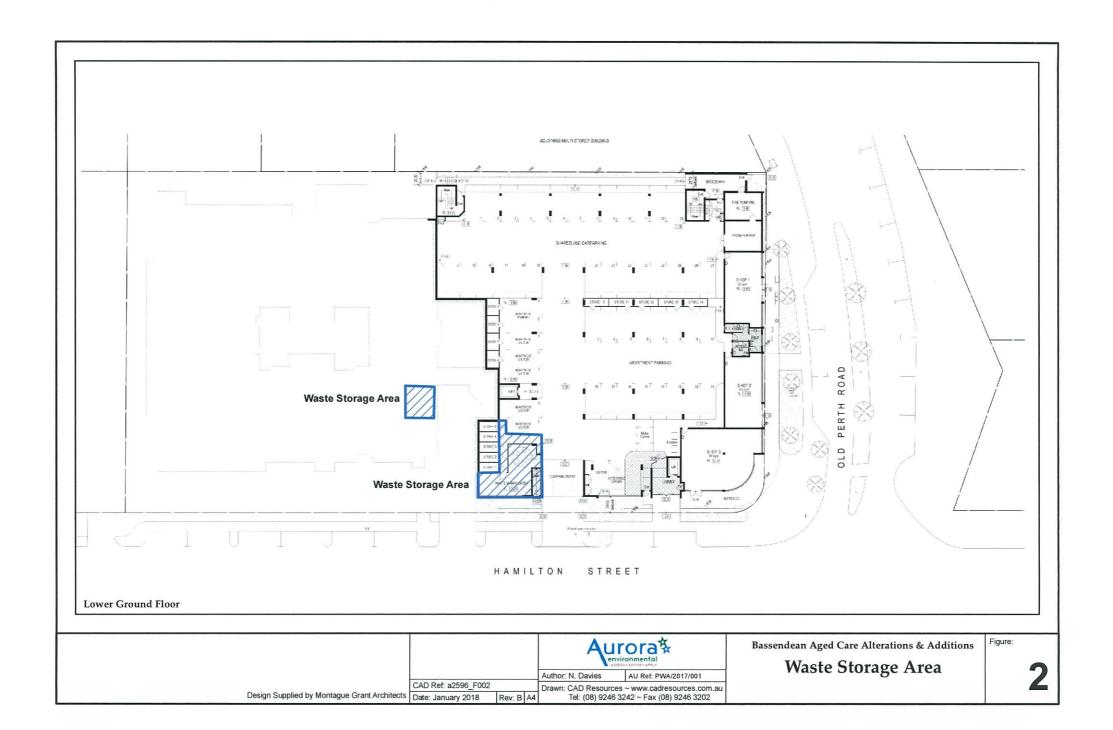
5 REFERENCES

WA Local Government Association (WALGA) (2015a) Multiple Dwelling Waste Management Plan Guidelines, 2015.

WA Local Government Association (WALGA) (2015b) Commercial and Industrial Waste Management Plan Guidelines, 2015

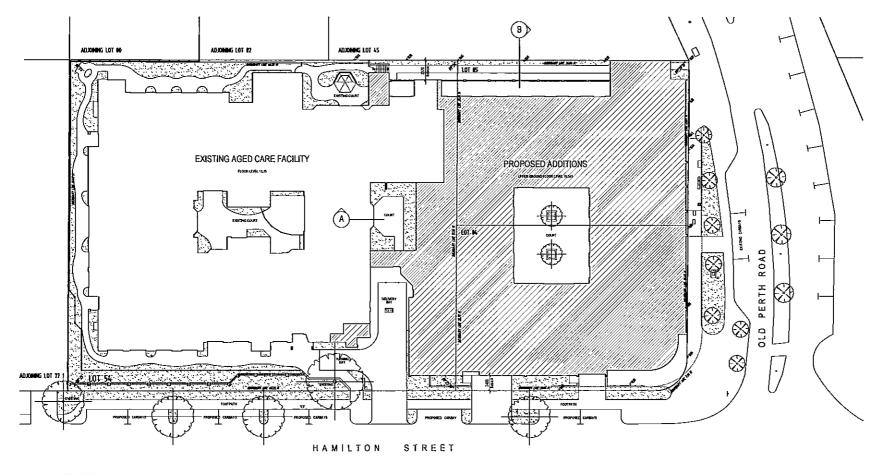
FIGURES





APPENDIX 1

Architectural Drawings



SITE PLAN 1:200



AEGIS BASSENDEAN ALTERATIONS & ADDITIONS

MONTAGUE GRANT ARCHITECTS PTY LTD

26 BRISBANE ST, PERTH WA 6000 TELEPHONE: 9328 2233 FAX: 9227 6346

CUENT AGED CARE GROUP PTY LTD

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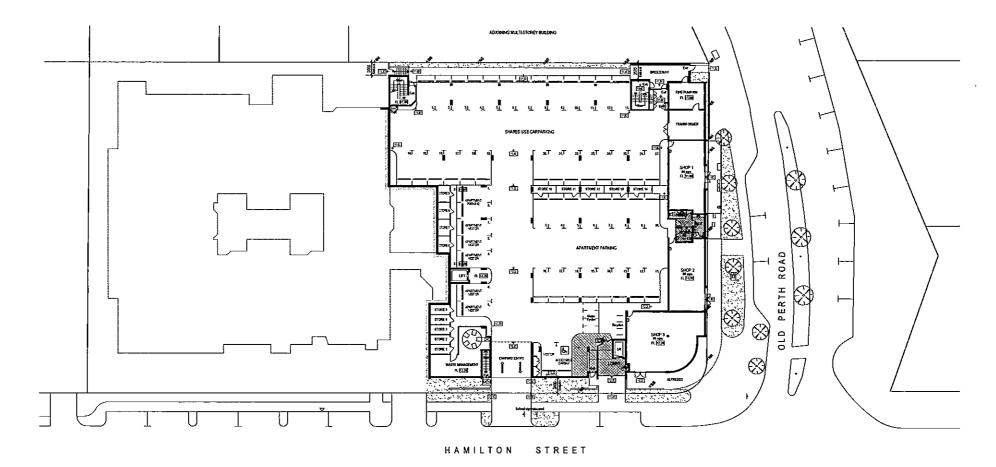
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LOWER GROUND FLOOR 1:200



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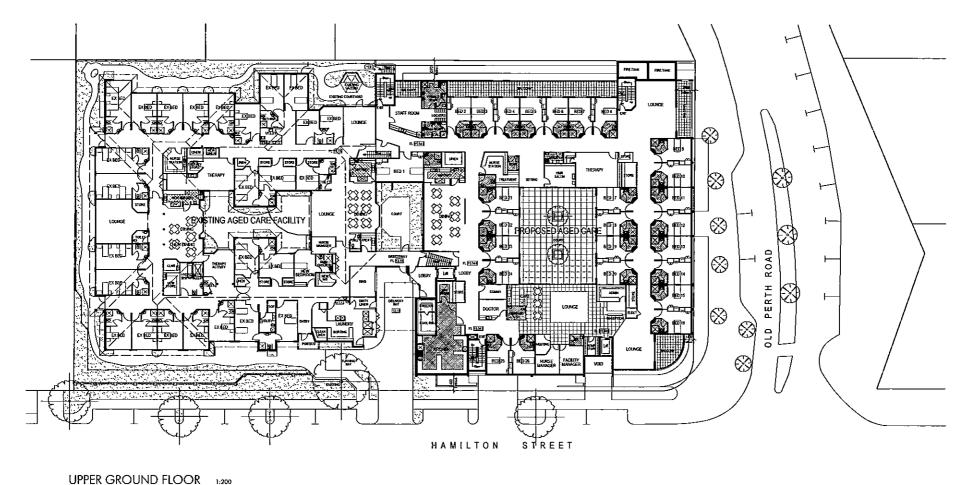
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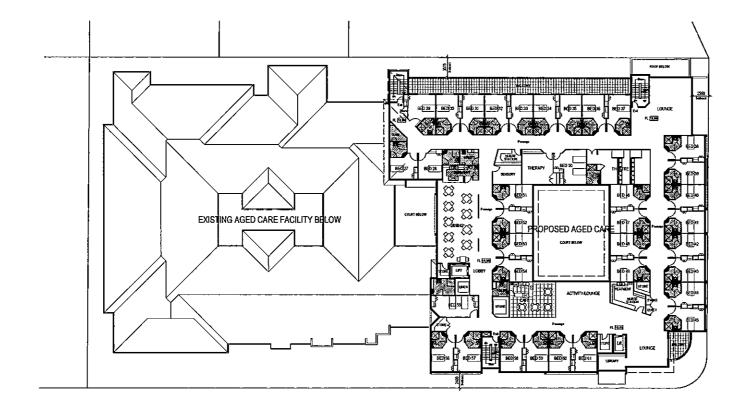
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FIRST FLOOR PLAN



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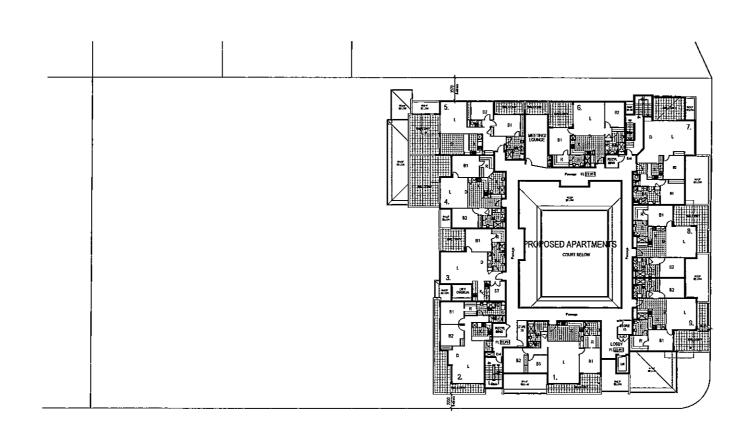
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SECOND FLOOR PLAN 1:200



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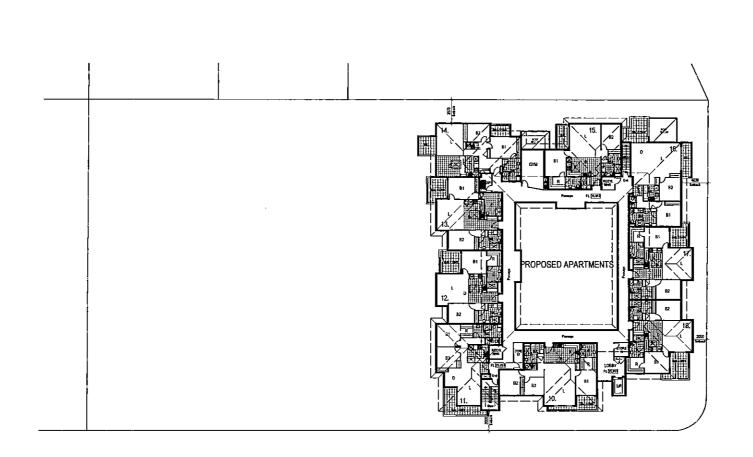
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THIRD FLOOR PLAN 1:200



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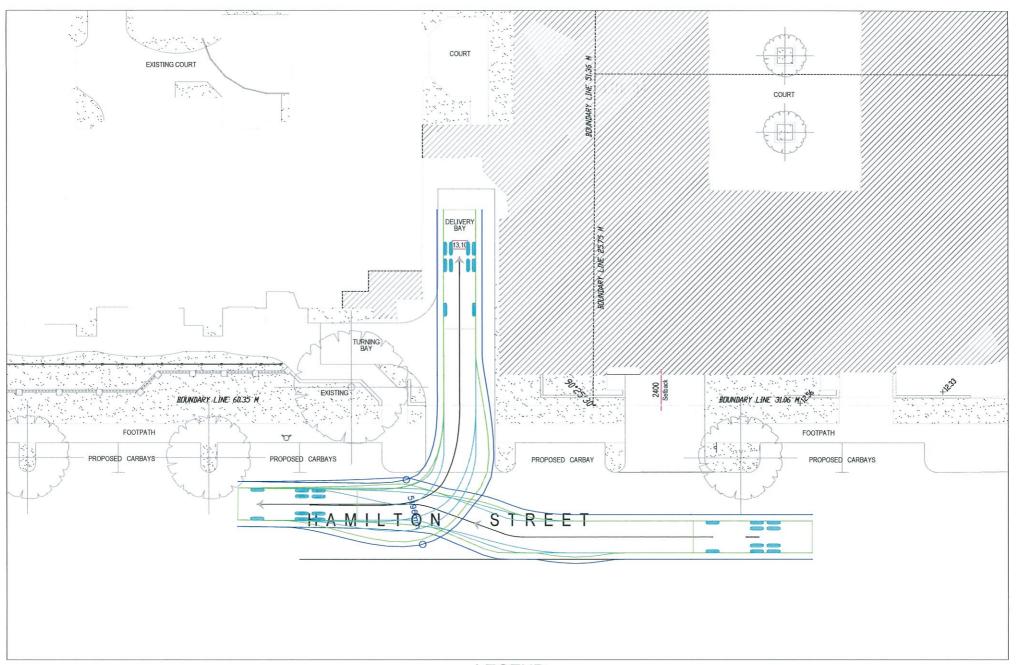
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Aegis Bassendean

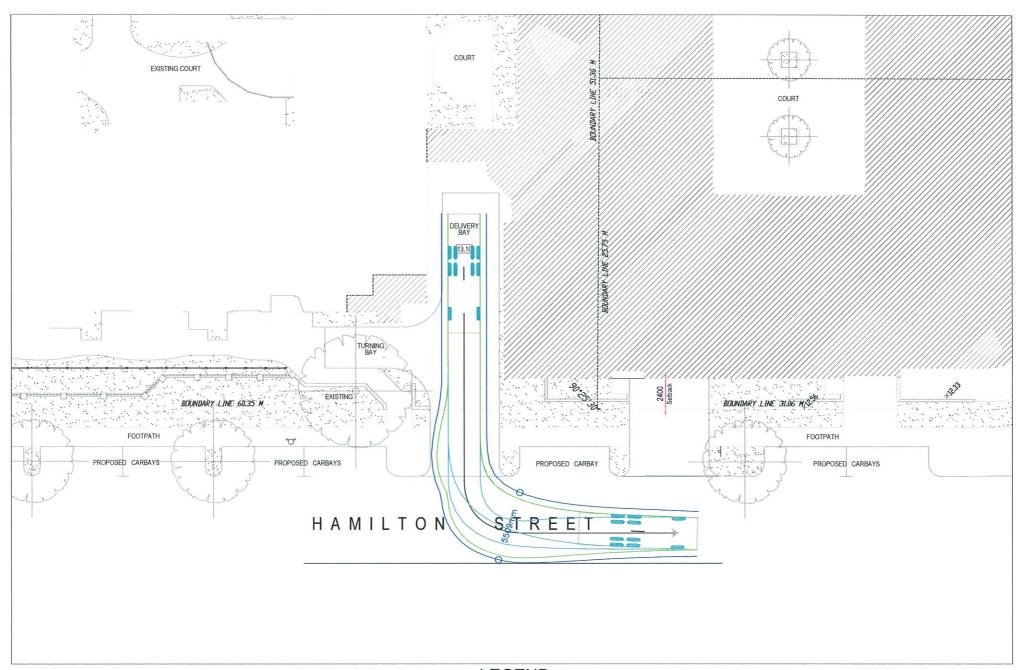
Turn Path Analysis - 9.25m Suez Waste Truck Truck Reverse Entry into Loading Area LEGEND Vehicle Body Wheel Path 500mm Clearance



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Scale: 1:200 @ A3





Aegis Bassendean
Turn Path Analysis - 9.25m Suez Waste Truck
Truck Forward Exit from Loading Area

LEGEND Vehicle Body Wheel Path 500mm Clearance



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Proposed Aged Care Facility Extensions

27 Hamilton Street & 68-70 Old Perth

Road, Bassendean

Transport Impact Statement

PREPARED FOR:
Aegis Aged Care Group

February 2018

Document history and status

Author	Revision	Approved by	Date approved	Revision type	
Paul Ghantous	r01	P Ghantous	09/09/17	Final	
Paul Ghantous	r01a	P Ghantous	31/10/17	Final	
Paul Ghantous	r01b	B Bordbar 02/02/18		Revised Final	
					

File name: t17234pgr01b

Author: Paul Ghantous

Project manager: Behnam Bordbar

Client: Aegis Aged Care Group

Project: Aegis Bassendean

Document revision: r01b

Project number: t17.234

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1.0 Introduction

This Transport Impact Statement has been prepared by Transcore on behalf of Aegis Aged Care Group with regards to the proposed Aged Care Facility (ACF) extensions, located at Lot 54 (27) Hamilton Street & Lots 84-85 (68-70) Old Perth Road, Bassendean, in the Town of Bassendean.

The subject site is located at the north-east corner of the intersection of Old Perth Road and Hamilton Street, as shown in Figure 1.

As shown in Figures 1 & 2, the existing ACF is bound by Hamilton Street to the west, residential properties to the north, existing development to the east and vacant land to the south. The existing land to the south previously accommodated a car sales yard.

The proposed development entails a five (5) storey building, with a basement car park, three (3) shop tenancies at street level with primary frontages to Old Perth Road, two (2) levels of aged care accommodation providing a total of 64 beds and two (2) upper floor levels of residential Over-55's apartments (18 multiple dwellings). The new development incorporates a connection to the existing Aged Care Facility at the upper ground level.

The existing Aged Care Facility at Lot 54 Hamilton Street includes 46 aged care beds which will be reduced to 39 aged care beds when the construction of the new aged care extension begins.

In the post development situation, 39 aged care beds will be accommodated in the existing facility, with 64 new aged care beds being accommodated in the extension (total 103 aged care beds).

The key issues that will be addressed in this report include the traffic generation and distribution of the proposed development, access and egress movement patterns, and access to the site for alternative modes of transport.

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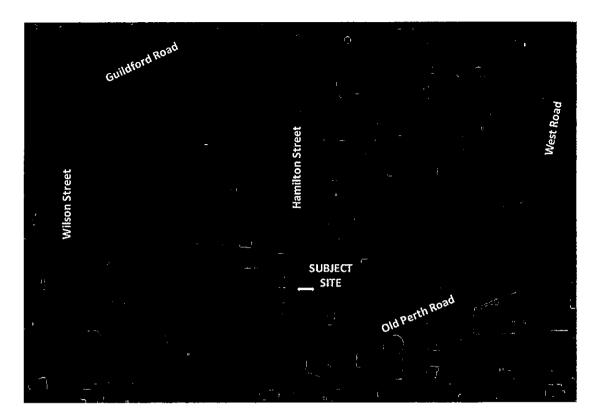


Figure 1: Location of the subject site

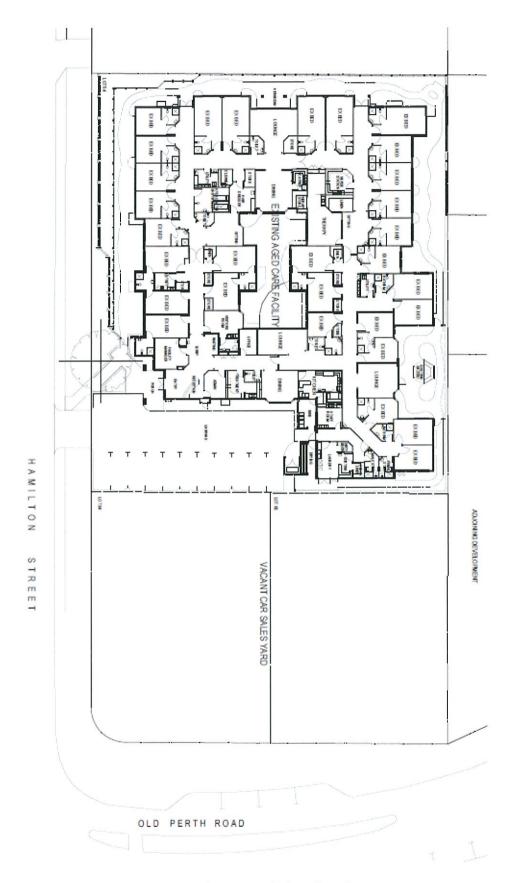


Figure 2: Existing situation

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2.0 Proposed Development

The proposal for the subject site is for extension of the aged care facility (ACF), comprising:

- 4 Three new shop tenancies on the lower ground level (total floor area of 219m²);
- Lower ground level car park providing a total of 52 car bays, 4 motorcycle bays and 4 bicycle racks;
- ♣ Net addition of 57 care beds in the new building upper ground and First floor levels (total of 103 beds post-development);
- 4 Integration with the existing facility on the upper ground level; and,
- 4 18 over 55's residential apartments on the second and third floors.

The existing ACF crossover on Hamilton Street serving the existing 11 car bays and loading area is proposed to be retained. Construction of the ACF extensions will require the removal of the 11 existing car parking bays on the ground level, however the existing location of the Hamilton Street crossover and loading area will be retained.

Waste collection, delivery and other service vehicle activity for the ACF will be accommodated within the site in the loading area accessed from the existing Hamilton Street crossover, similar to existing arrangements.

Pedestrians will access the development from the external footpath network abutting the site.

The proposed development plans are included for reference in Appendix A.

3.0 Vehicle Access and Parking

3.1 Access

Vehicular access to the existing ACF is provided via an existing crossover on Hamilton Street (Figure 3). This crossover is currently used to access 11 car bays and the loading / waste collection area. The crossover is proposed to be retained as part of the development for service vehicle and waste collection access only. The 11 existing car bays will be removed as part of the proposal.



Figure 3: Existing Hamilton Street crossover

Vehicle access to the existing vacant car sales yard is via one crossover at the corner of Hamilton Street and Old Perth Road (Figure 4) and one crossover on Old Perth Road at the eastern end of the site (Figure 5).



Figure 4: Existing crossover on Hamilton Street/Old Perth Road



Figure 5: Existing crossover on Old Perth Road

It is proposed to close the existing Old Perth Road crossover located at the eastern end of the site.

The crossover at the intersection of Hamilton Street / Old Perth Road is also proposed to be closed and relocated on Hamilton Street further north of the intersection. The proposed relocated crossover on Hamilton Street will provide access to the proposed new lower ground level car park as detailed on the development plans.

3.2 Parking Demand and Supply

The existing 11 on site car bays are proposed to be removed as part of the development. A new lower ground floor car park is proposed to be constructed providing a total of 52 car bays allocated as following:

- 18 bays for 18 residential apartments;
- 5 bays for residential visitors;
- 1 general visitor bay;
- 1 ACROD bay; and,
- 27 shared use bays for ACF and shop staff and visitors.

It is also proposed to provide four (4) motorcycle bays and four (4) bicycle racks in the lower ground floor car park.

Three (3) on-street bays are currently in place on Old Perth Road adjacent to the site.

The information in Table 1 has been extracted from the planning application report prepared by Peter Webb & Associates (document reference - C2062appln3DA) regarding the parking requirements as set out in the Local Planning Scheme:

The existing ACF and post development extensions will result in a total calculated parking requirement of 61.5 bays.

A total of 55 bays will be available within the site and on-street adjacent to the site on Hamilton Street and Old Perth Road. The proposed development will entail a minor shortfall from the LPS parking requirement.

Table 1: LPS parking assessment

Use Class	Ratio	Calculation	Proposed
Nursing Home	1 bay per 5 beds	103 beds = 21 bays	
Shop	8 bays per 100m ² GFA	219m ² GFA = 17.5 bays	
Multiple Dwellings	1 bay per dwelling plus	18 dwellings = 18.5 bays	
	0.25 visitor bays per dwelling	18 dwellings = 4.5 visitor	
Total Required		61.5	
TOTAL PROVIDED			52
<u> </u>			

Source: Peter Webb & Associates, 31 July 2017

4.0 Provision for Service Vehicles

Waste collection for the Aged Care Facility will be by a private contractor as per the existing situation.

Collection will occur at the existing crossover location to Hamilton Street in the designated "delivery bay". A bin store is adjacent to that delivery bay.

Waste collection trucks will reverse into the bay as per existing operations since 2003.

Service trucks will also use the delivery bay crossover and driveway only. No trucks will be required to access the site via the proposed new lower ground level car park crossover. A service/goods lift is provided from the delivery bay down to the lower ground level to service deliveries to the shops and bring bins up from the basement waste management room.

The existing crossover and delivery bay driveway has accommodated service vehicles satisfactorily since the ACF was developed in 2003.

Swept path analysis has been undertaken to confirm satisfactory truck movements and is presented in Appendix B of this report.

Waste collection for the Over 55's Apartment component will be from Old Perth Road, undertaken by the Town's Waste Collection team. A caretaker of the facility will ensure that general waste and recycling bins are placed onto the street verge on collection day.

Waste collection for the Shop tenancies will be by the Town's Waste Collection team, through the use of conventional rubbish and recycling bins. Tenants will have access to the bin store. The caretaker will be responsible for placing the shop bins onto the Old Perth Road street verge on collection days.

5.0 Hours of Operation

Based on Transcore's experience with multiple aged care facilities, the afternoon staff changeover typically occurs at around 3:00pm, with the morning care staff departing the site and evening care staff arriving.

There are several schools and other community facilities in the locality. Therefore, the peak traffic period is anticipated to occur sometime between 2:00pm and 4:00pm, when school traffic and the Aged Care Facility staff changeover overlaps.

Transcore traffic surveys at the intersection of Old Perth Road / Hamilton Street undertaken on 5 September 2017 confirmed that the afternoon peak hour on Hamilton Street adjacent to the site occurs between 2:45pm and 3:45pm.

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6.0 Daily Traffic Volumes and Vehicle Types

6.1 Existing Traffic Flows

A traffic turning movement survey was undertaken at the intersection of Old Perth Road / Hamilton Street on Tuesday 5 September 2017. The survey was undertaken between the hours of 2:00pm and 4:00pm, and established that the afternoon peak hour occurs between 2:45pm and 3:45pm.

The surveyed existing peak our traffic volumes are detailed in Figure 6.

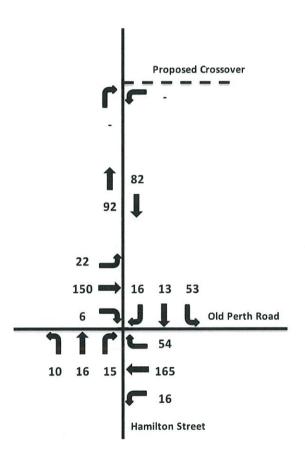


Figure 6: Existing traffic flows near subject site (survey results) – Weekday PM peak hour

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6.2 Traffic Generation

6.2.1 Proposed Development Traffic Generation

The traffic volume that will be generated by the proposed residential apartments, additional care facility beds and shop land uses has been estimated using trip generation rates derived from the Roads and Traffic Authority of New South Wales Guide to Traffic Generating Developments (2002) and the updated trip rates in the RTA TDT 2013/04a.

As detailed in Table 2, the proposed development is estimated to generate an additional 417 daily vehicle trips and 45 trips during the PM peak hour.

These trips include both inbound and outbound vehicle movements. It is anticipated that most of the vehicle types would be passenger cars and to a lesser extent 4WDs.

Table 2 is based on the following directional split assumptions:

₩ PM peak split estimated at 50%/50% inbound/outbound.

Table 2. Additional peak hour trips generated by the proposed development

Landina	Ougantitus	Daily Date	DAA Daak Data	Doily Tring	DNA Tring	PM P	PM Peak Trips	
Land use	Quantity	Daily Rate	PM Peak Rate Dai	Daily Ilips	PIVI IMPS	IN	OUT	
Residential Units	18	2.1	0.4	38	7	4	3	
Additional ACF Beds	57	2	0.2	114	11	5	6	
Shop - Retail <10,000m2	219	1.21	0.125	265	27	14	13	
Total				417	45	23	22	

The distribution of traffic has been modelled based on the existing PM peak hour traffic flows at the intersection of Old Perth Road / Hamilton Street.

The distribution of the additional proposed development traffic is detailed in Figure 7. All traffic shown in Figure 7 is assumed to enter and exit the subject site via the proposed development crossover on Hamilton Street.

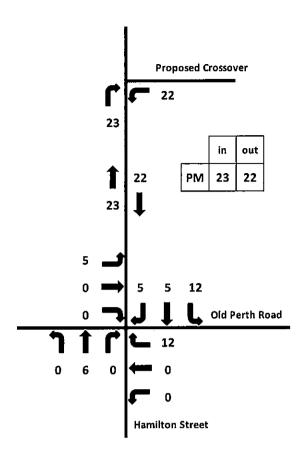


Figure 7: Additional traffic generated by the proposed development – Weekday PM peak hour

6.3 Impact on Surrounding Roads

The WAPC Transport Impact Assessment Guidelines for Developments (2016) provides the following guidance on the assessment of traffic impacts:

"As a general guide, an increase in traffic of less than 10 percent of capacity would not normally be likely to have a material impact on any particular section of road, but increases over 10 percent may. All sections of road with an increase greater than 10 percent of capacity should therefore be included in the analysis. For ease of assessment, an increase of 100 vehicles per hour for any lane can be considered as equating to around 10 percent of capacity. Therefore, any section of road where development traffic would increase flows by more than 100 vehicles per hour for any lane should be included in the analysis."

The proposed aged care facility extensions will not increase traffic flows on any roads adjacent to the site by the quoted WAPC threshold of +100vph to warrant further analysis.

Therefore, the impact on the surrounding road network is minor.

7.0 Traffic Management on the Frontage Streets

Hamilton Street near the subject site is an approximately 6.7m wide, two-lane undivided road. A combination of 90-degree and parallel on-street parking bays are marked on the road.

Hamilton Street is classified as an *Access Road* in the Main Roads WA *Functional Road Hierarchy* and operates under a default built-up area speed limit of 50km/h. A 40km/h school zone is in place between the hours of 7:30 am to 9:00 am and 2:30 pm to 4:00 pm on school days.

Footpaths are provided on both sides of the road. Traffic counts undertaken by Transcore on 5 September 2017 indicated that Hamilton Street carried 221 vehicles (two-way trips) during the peak afternoon period between 2:00pm and 4:00pm.

It is estimated that Hamilton Street carries average weekday traffic flows of around 1,500 vehicles per day.

Old Perth Road near the subject site is an approximately 15m wide, two-lane divided road with a raised, kerbed and vegetated central median. Parallel on-street parking bays are provided on both sides of the road and the road surface is treated with red asphalt.

Old Perth Road is classified as a *Local Distributor Road* in the Main Roads WA *Functional Road Hierarchy* and operates under a sign posted speed limit of 40km/h.

Footpaths are provided on both sides of the road. Traffic counts undertaken by Transcore on 5 September 2017 indicated that Old Perth Road carried 752 vehicles (two-way trips) during the peak afternoon period between 2:00pm and 4:00pm.

It is estimated that Old Perth Road carries average weekday traffic flows below 4,000 vehicles per day.

8.0 Public Transport Access

The subject site has access to the following bus services:

• Bus Service 55: Perth – Bassendean via Guildford Rd & Lord St.

Bus service 55 runs along Old Perth Road adjacent to the subject site. The nearest bus stop is located near the intersection of Old Perth Road / Hamilton Street. This bus service also provides connectivity to the rail network at Bassendean Train Station.

Nearby public transport services are shown in Figure 8.

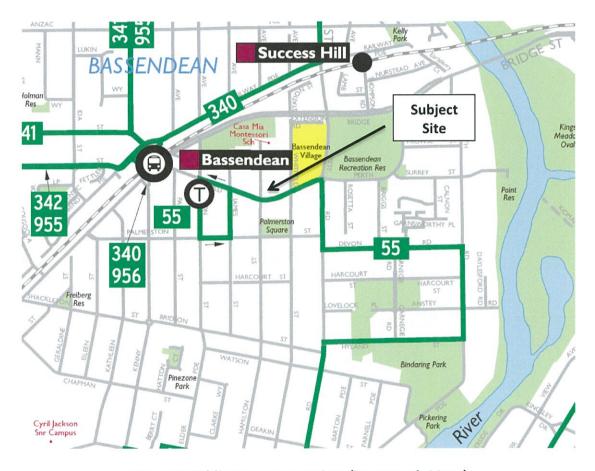


Figure 8: Public transport services (Transperth Maps)

9.0 Pedestrian Access

Pedestrian access to the proposed development is via the existing external footpath network running along the road frontages of the site.

10.0 Cycle Access

The Perth Bicycle Network Map (see Figure 9) shows the existing cyclist connectivity to the subject site.

The PSP running alongside the rail line is accessible a short distance to the north and west. Old Perth Road forms part of a walking trail through Bassendean.



Figure 9: Extract from Perth Bicycle Network (Department of Transport)

11.0 Site Specific Issues

No site specific issues were identified within the scope of this assessment.

12.0 Safety Issues

No safety issues were identified within the scope of this assessment.

13.0 Conclusions

This Transport Impact Statement has been prepared by Transcore on behalf of Aegis Aged Care Group with regards to the proposed Aged Care Facility (ACF) extensions, located at Lot 54 (27) Hamilton Street & Lots 84-85 (68-70) Old Perth Road, Bassendean, in the Town of Bassendean.

The site features good connectivity with the existing road and pedestrian network. There is good public transport coverage through nearby bus services.

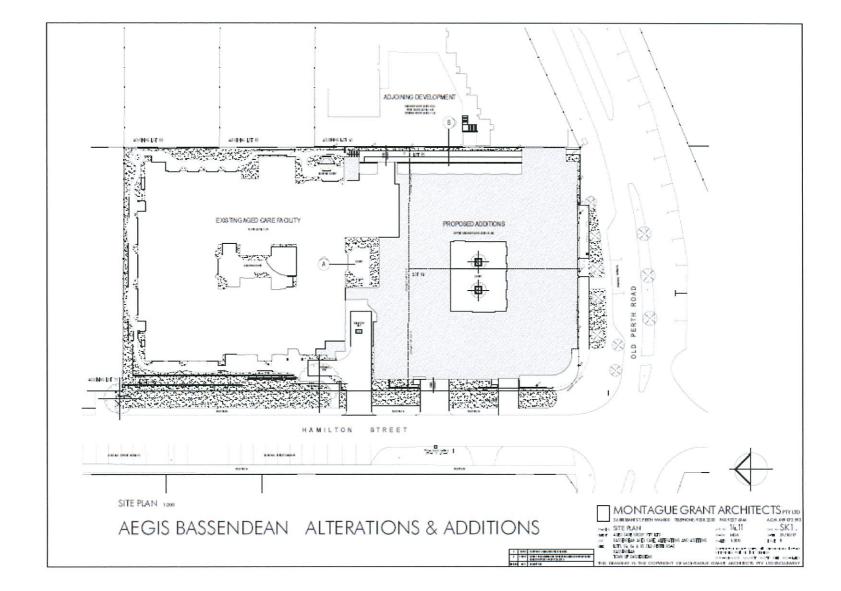
The traffic analysis undertaken in this report shows that the traffic generation of the proposed development is minimal (less than 100vph on any lane) and as such would have insignificant impact on the surrounding road network.

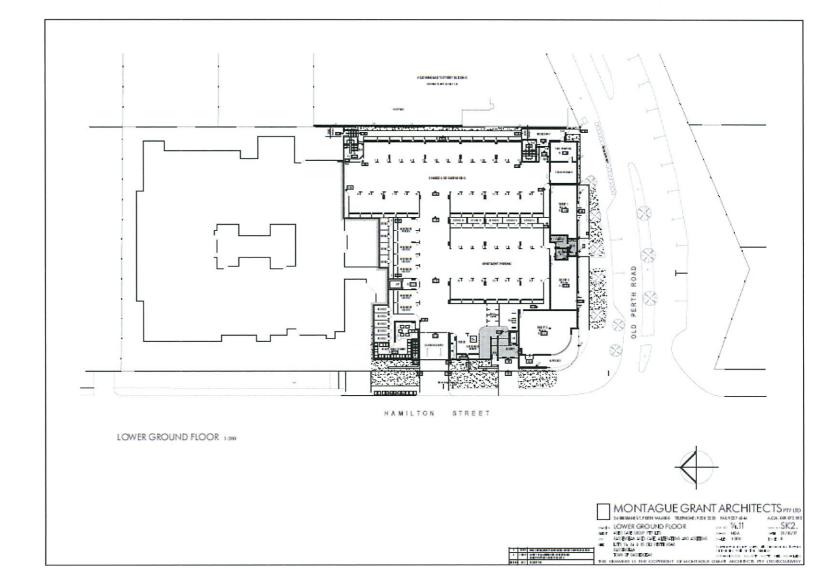
It is concluded that the findings of this Transport Impact Statement are supportive of the proposed aged care facility extensions.

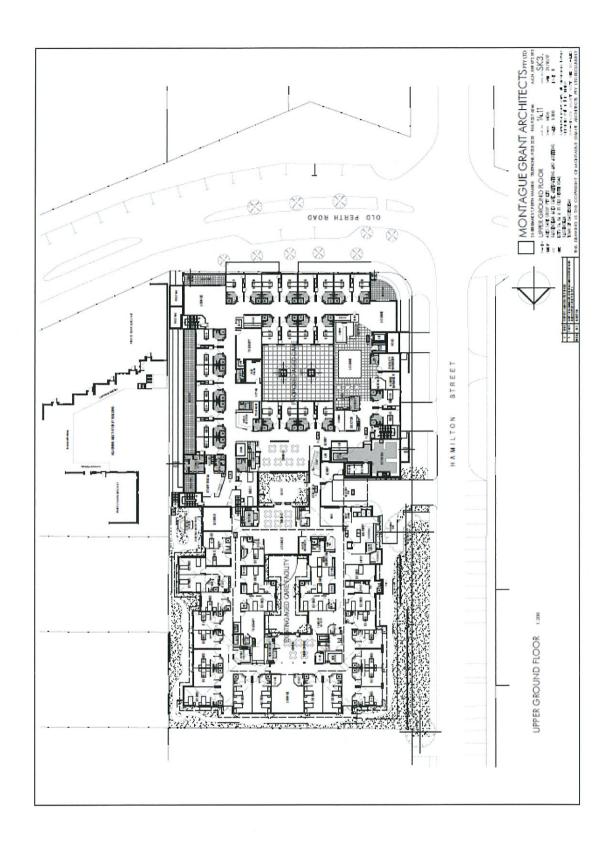
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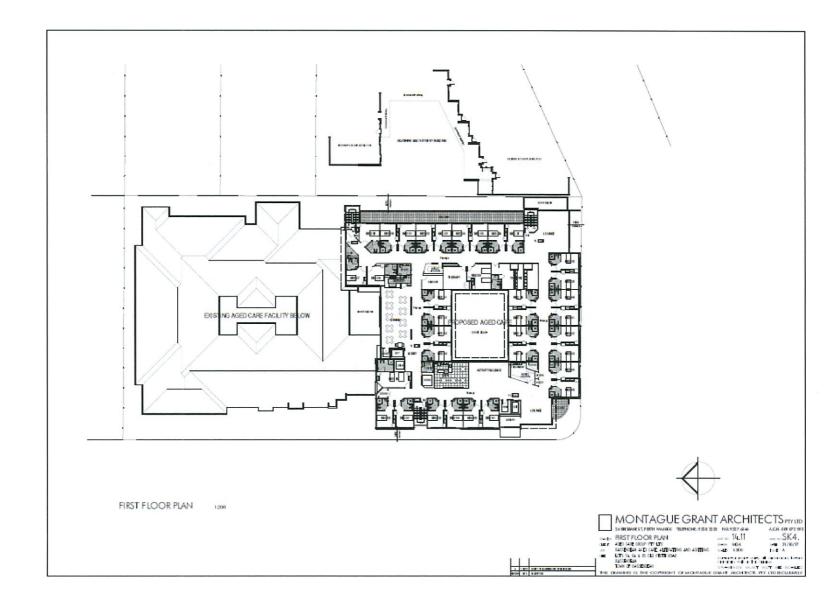
Appendix A

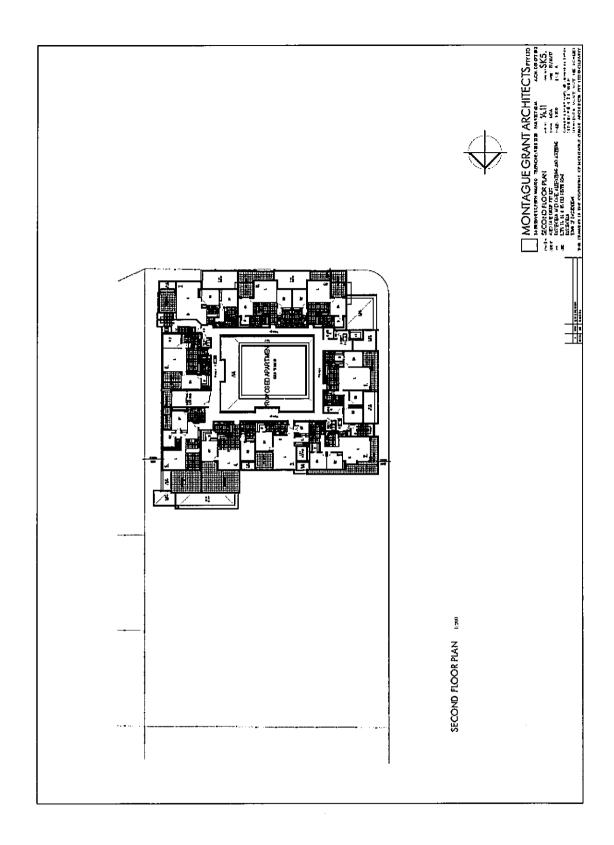
PROPOSED DEVELOPMENT PLANS

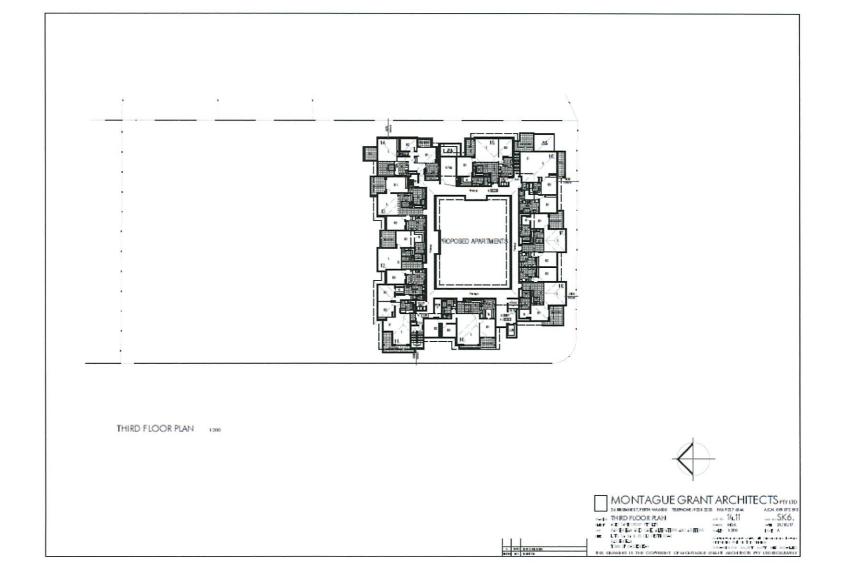






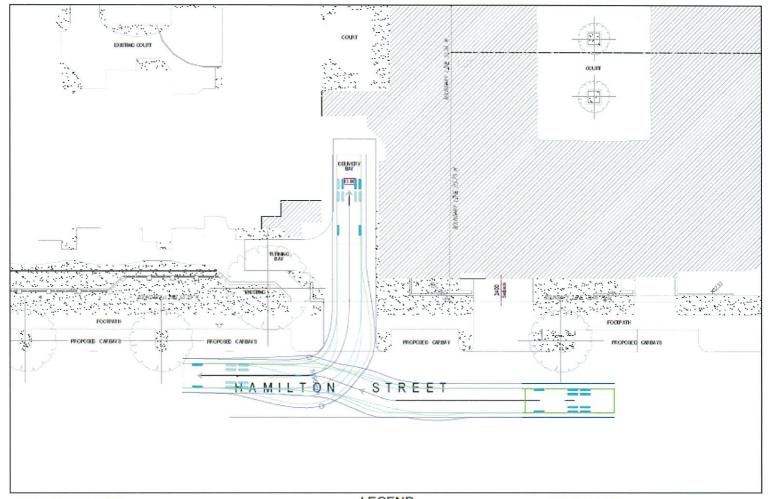






Appendix B

SWEPT PATH ANALYSIS

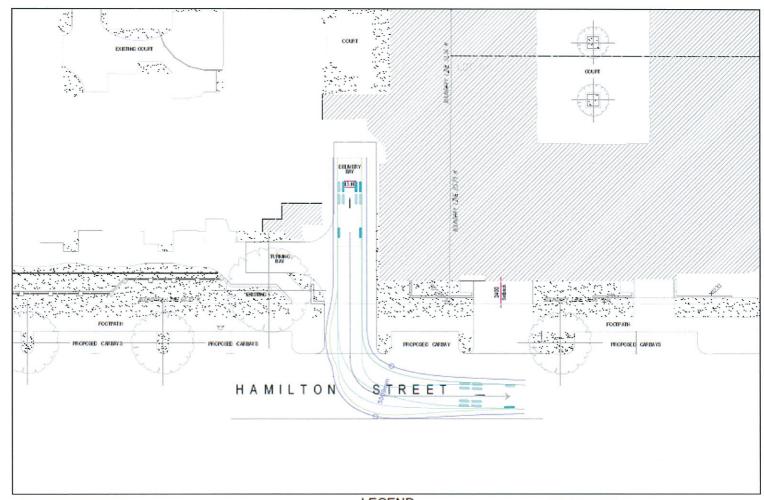


Aegis Bassendean Turn Path Analysis - 9.25m Suez Waste Truck Truck Reverse Entry into Loading Area

LEGEND Vehicle Body Wheel Path 500mm Clearance

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Aegis Bassendean Turn Path Analysis - 9.25m Suez Waste Truck Truck Forward Exit from Loading Area LEGEND Vehicle Body Wheel Path 500mm Clearance

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Senversa Pty Ltd Level 25, 108 St Georges Terrace, Perth WA 6000 ABN 89 132 231 380 www.senversa.com.au

11 January 2016

Michael Cross Aegis Aged Care Group 90 Goodwood Parade, Burswood, WA 6100

Dear Michael,

Re: Status of Contaminated Site Audit Lots 84 & 85 Old Perth Road, Bassendean, Western Australia

1. Introduction

Aegis Aged Care Group (the 'Client') has engaged myself (Vanessa Bryant) to undertake a contaminated sites audit and produce a Mandatory Auditors Report (MAR) for the site located at Lots 84 & 85 Old Perth Road, Bassendean, WA (hereafter referred to as "the Site").

The site has historically been used as a service station, car workshop and more recently a car yard. A Development Approval (DA) has been issued by the Western Australian Planning Commission (WAPC), with the lots to be combined in to one land parcel.

Condition 2 of the planning approval states:

"Prior to commencement of subdivision works, investigation for soil and groundwater contamination is to be carried out to determine if remediation is required" and that "if required, remediation, including validation of remediation, of any contamination identified shall be completed prior to the issuing of titles to the satisfaction of the Western Australian Planning Commission on advice from the Department of Environment Regulation, to ensure that the lots created are suitable for the proposed use. Investigations and remediation are to be carried out in compliance with the Contaminated Sites Act 2003 and current Department of Environment Regulation Contaminated Sites Guidelines".

In accordance with regulation 31(1)(c) of the Contaminated Sites Regulations 2006, a Mandatory Auditor's Report, prepared by an accredited contaminated sites auditor, will need to be submitted to the Department of Environment Regulation in order to "sign off" that the above mentioned condition has been met

2. Works Completed

Strategen were engaged to conduct environmental assessments for the site. I have reviewed the following reports prepared by Strategen.

Strategen Environmental (July 2015) Preliminary Site Investigation, Lots 84 & 85 Old Perth Road,
 Bassendean



 Strategen Environmental (December 2015) Detailed Site Investigation, Lots 84 & 85 Old Perth Road, Bassendean

Following my review of the two above mentioned reports, I confirm the following.

- The Auditor is satisfied that the information contained in the reviewed reports are generally complete, accurate and compliant with the requirements of the Department of Environment Regulation (DER) Contaminated Sites Guidelines, National Environment Protection (Assessment of Site Contamination) Measure and other relevant published technical guidance.
- The assessments were sufficient to define the potential extents and types of contaminated media with an appropriate level of confidence.
- Investigation methodologies were sufficient to assess risk.
- Based on the results of investigation there is soil and groundwater contamination which requires remediation and management to ensure that the site is suitable for the proposed development.

3. Nature and Extent of Contamination

Investigations conducted confirmed the following.

- · Presence of surficial ACM fragments and asbestos fines in soil.
- Concentrations of heavy metals (nickel, lead and zinc) and total recoverable hydrocarbons (TRH) above the adopted assessment criteria in soil.
- Concentrations of dissolved heavy metals across the site (aluminium, copper and zinc), VOCs (benzene, toluene, ethylbenzene, styrene [vinyl benzene] and vinyl chloride) and naphthalene above adopted groundwater criteria within a perched groundwater zone.
- Soil and groundwater contamination is unlikely to pose a risk to human health or the environment in the context of the current use (commercial/industrial purposes), however remediation would be required to ensure that the site is suitable for the proposed use.

4. Works Required

Strategen make the following recommendations, which I concur with.

- Further investigation of groundwater should be undertaken before developing a groundwater management plan for implementation during construction.
- Soil remedial works and/or management of asbestos, heavy metal and hydrocarbon impacted soils are required.
- Remedial works will require the preparation of a Remedial Action Plan (RAP), which will detail the approach and methodology for the remediation/management of the impacted soil and groundwater.
- Following the successful remediation and/or management of the impacted soils in accordance with the approved RAP, a Site Remediation and Validation (SRV) report will need to be prepared.

Note that the soil remediation works are best conducted as part of development works as access to site soils beneath existing infrastructure is required.



It is therefore my recommendation that these works be allowed to be completed prior to issue of the MAR and approval and reclassification of the site (subject to their review) by DER. The remediation will allow the intent of the condition (i.e. ensuring the site poses no unacceptable risk to human health in the context of the proposed use) to be met.

5. Concluding Remarks

I trust that this information is suitable for your purposes at this time. If you (or any other relevant party) have any questions or would like to discuss further, please do not hesitate to contact me on 0419 951 532 or vanessa.bryant@senversa.com.au.

Yours sincerely,

Vanessa Bryant

Principal Contaminated Sites Auditor (WA)

VB/CS

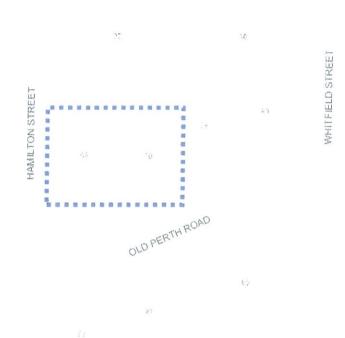
ANNEXURE 11

Stormwater Drainage Management Plan (BPA Engineering)



File: C2062appln3DA





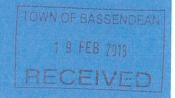
Bassendean Aged Care

Stormwater Drainage Management Plan

September 2017

PREPARED FOR

Montague Grant Architects





 460 Roberts Road, Subiaco, Western Australia 6008

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 ABN: 42 076 143 130

Document Information

Project Name	Bassendean Aged Care	
BPA Project	M09417	
Document Title	Stormwater Drainage Management Plan	
Client	Montague Grant Architects	

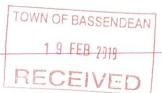
Document Control

Revision	Description	Date	Prepared	Checked	Approved
А	Draft issued for information	15/09/2017	AB	ARW	ARW



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1. Executive Summary

BPA Engineering (BPA) was commissioned by Montague Grant Architects (MGA) on behalf of Aegis Aged Care Group (Aegis) to produce a stormwater management plan for a new aged care facility proposed to be built on Lots 84 and 85 Old Perth Road, Bassendean. The lots are under the jurisdiction of the Town of Bassendean (ToB).

The Town drainage policy no. 14 requires managing the critical 1 in 20-year storm event. Initial geotechnical investigation suggests the site is unsuitable for soakage of stormwater.

To cater to council requirements, a detention system and pump unit was proposed to be installed under the lower ground floor parking. Detention storage is provided to attenuate flows prior to discharge to the council system. The total storage volume provided in the detention tank to cater for critical storm events was approximately 27m³.

2. Introduction

BPA have been commissioned to undertake a stormwater drainage management plan for the proposed development at Lot 84 (#68) and Lot 85 (#70) Old Perth Road, Bassendean 6054. The site is within the jurisdiction of the Town of Bassendean.

Based on schematic design by Montague Grant Architects, the development is a 4 storey + lower ground floor aged care development for Aegis. Please refer to Appendix A for supplied architectural drawings.



Figure 1: West Elevation, Received Design Drawings (Montague Grant Architects 2017)

This plan outlines the water quantity and quality management measurers required to satisfy Town of Bassendean relevant stormwater drainage policies for the proposed development.



3. Existing Conditions

3.1. Site Features and Location

The site is bounded by Hamilton Street (West), Existing Bassendean Aged Care site (North), Lot 45 (East), and Old Perth Road (South).

Lot 84 is currently mostly gravel surfaced with half the lot area being asphalt paving. Lot 85 features include an existing commercial building and a storage shed with asphalt paving for access. ToB drainage information shows an existing side entry pit on Old Perth Road, south of Lot 85. The site area is approximately 1845 m². The site is located approximately 1km west of the Swan River. Department of Water flood maps (Appendix E) suggest that the site is outside the 100-year flood fringe.

Survey information supplied the site surface generally falls from North to South along Hamilton Street, and West to East along Old Perth Road. Site surface levels are between 12.8 m (Northwestern corner of lot 84) and 11.2 m AHD (South-eastern corner of lot 85).

Figure 2: Site Aerial August 2017



3.2. Site Geology

The Perth Metropolitan Region Geological Atlas (WA 1985) indicates the area is characterised as:

- "SAND - as S8 over sandy clay to clayey sand of the Guildford Formation of eolian origin".

Initial geotechnical investigation by ATC Williams on 15/09/2017 (Appendix F) indicates the possible presence of clayey soils at shallow depth, and mentions that the site is unlikely to be suitable for stormwater disposal on site.

Site excavation by BPA (September 2017) found perched groundwater approximately 300mm below the surface.

Based on the geotechnical investigation and site excavation by BPA the infiltration of stormwater on site is not a practical solution, therefore discharge to the council system is recommended.

3.3. Site Hydrology

Based on correspondence with the geotechnical engineer ATC Williams (Appendix F) we understand that previous geotechnical investigations conducted on the nearby sites in 2012 and 2013 reported the groundwater levels at the site to be between 0.6m and 4.2m below ground level: approximately 10.9m AHD and 7.8m AHD respectively. BPA site excavation in September 2017 found perched groundwater 0.3m below natural surface.

3.4. Existing Drainage Infrastructure

A site visit by BPA in September 2017 indicates no existing dedicated stormwater drainage for impervious areas, it is assumed that the entire lot runoff currently discharges to road reserve.

Based on ToB as constructed information, drainage pits and pipe alignments in Old Perth Road run towards the east.





Figure 3: Site Aerial and Town of Bassendean stormwater drainage overlay

Existing side entry pit (SEP) WS39-2914 is located south of the existing Lot 85 crossover. The SEP is on an alignment which flows from west to east, assumed to discharge towards the Swan River. No existing pit and pipe infrastructure is shown in Hamilton Street. Refer Appendix D for existing stormwater drainage information received from ToB.

4. Proposed development

4.1. Proposed Works

The proposed development is a four storey plus lower ground car parking aged care facility. The building has one main courtyard with rooves generally falling towards the exterior perimeter of the building. Access to the lower ground floor parking is from Hamilton Street. The proposed development is over the entire area of Lots 84 and 85.



4.2. Catchment Information

Roof areas and hard landscaping are proposed over approximately 99% of the site area. Catchment information is outlined in Table 1 Below.

Description	Runoff Coefficient (C)	Pre-Development Equivalent Impervious Area (A _{imp,pre}) m ²		Post-Development Equivalent Impervious Area (A _{imp,post}) m ²	
Roof	1	310	310	1464	1464
Hard Landscaping	0.9	845	761	379	341
Soft Landscaping	0.3	690	207	2	0.6
Total	Site area: 1845m²		1278		1806

Table 1: Catchment Information

5. Stormwater Quantity Management

The purpose of this management plan is to satisfy Town of Bassendean stormwater drainage criteria, protect public using the facilities from flooding, and provide an efficient and maintainable stormwater drainage management solution.

Rainfall runoff from critical storm events must be kept away from habitable areas. Runoff is conveyed away from the proposed buildings and structural and non-structural controls are used to meet design requirements below.

5.1. Council Drainage Criteria

Town of Bassendean stormwater drainage criteria is outlined in local planning policy number 14. The first preference is for onsite disposal of stormwater via infiltration into the subgrade. It is our understanding the town will consider connection to the council stormwater drainage system if the site is in clayey soils or high groundwater.

Based on council correspondence (Appendix C) the 1 in 20-year event is required to be contained on site. BPA recommends the detention of stormwater prior discharge to council system in lieu of onsite infiltration, due to evidence of perched groundwater and clayey soils.

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5.2. Stormwater Detention

There is an array of stormwater detention systems which can be employed to manage stormwater on-site however are dependent on hydrological, geometrical, geotechnical and cost constraints.

Based on the proposed building layout, levels, and existing ground conditions we recommend the use of an in-situ cast concrete detention tank below the proposed lower ground parking. Due to height and layout restrictions and position of the council system connection point, we recommend a pump unit is used to convey stormwater to a silt pit within the site boundary. The silt pit will trap any sediment prior to gravity discharge to the council pit.

5.3. Hydrological Data and Inflow

Intensity-Frequency-Duration (IFD) data was obtained from the Bureau of Meteorology (BOM). Please refer Appendix B for BOM IFD data.

An assessment was carried out to determine peak flows and resulting stormwater volumes due to runoff from impervious areas.

5.4. Hydraulic Design

Based geotechnical information the hydraulic conductivity (k_h) of the subgrade was assumed to be very low. As such, a system providing detention storage only was chosen for the site. The system assumes no infiltration is possible in the in-situ soil.

ToB provided a standard calculation spreadsheet using the modified COPAS equation to determine the required on-site storage. Based on council correspondence (Appendix C), this is the preferred method of calculation for council submission.

The modified COPAS Equation (Appendix D) was used to calculate the critical storm and required detention. The total impervious area was 1806 m². For a 1 in 20-year ARI, the critical event was the 30-min storm. Based on an obtained pre-development flow rate of 11.6 l/s, the calculated restrictive orifice diameter was 100mm. The calculated required storage was 26.6m3. The tank system capacity was based on the allowable inflow volume during the critical storm event. Detention tank inlets from roof and hard catchments are to be confirmed during detailed design. The pump unit is to be sized to cater for the required detention volume of 27m³ and consider the capacity of the restricting device inside the silt pit.

5.5. 100 Year Flood Management

Overland flow paths are provided around the site. Natural surface falls are maintained along the building envelope. Trapped courtyards are provided with a pit and pipe system which allows excess stormwater to overflow to the lower ground floor stormwater detention tank. A high-level gravity overflow pipe is provided to the boundary silt pit.

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The Department of Water flood data shows both Lot 84 and Lot 85 are outside the 100-year flood fringe. Refer Appendix E for the 100-year Swan River flood map received 14/09/2017.

5.6. Structural Controls

To attenuate flows prior to discharge to the council system, detention is provided in an underground concrete tank below the parking surface. A silt pit is provided within the site boundary to trap sediment prior to discharge to the council system. A 100mm diameter 'T' piece is fitted inside the silt pit to restrict outflows to the council system. To increase the safety factor of the system and decrease risk of overflow during the 20-year event, the volume in the pit and pipe system is not considered for detention.

Detention volumes are outlined in Table 2 below:

Description	Approximate Detention Volume Provided			
Description				
Concrete detention tank	27			
Pits and pipes	Not included			

Events higher than the 20-year storm are conveyed via a high-level overflow pipe from the detention tank to the boundary silt pit and bubble up in the Old Perth Road verge.

5.7. Non-Structural Controls

Site maintenance staff will be responsible for maintaining any litter filters / traps that are needed for management of gross pollutants. The waste will be picked up on a regular basis. TOWN OF BASSENDEAN

6. Stormwater Quality Management

Stormwater is routed via a silt pit to capture any sediment and gross pollutants. The 1 in 1-year or the "first flush" event is captured via the on-site detention system and routed via the detention tank and pump unit. Silt pits are provided prior discharge to the detention tank for parking and roof catchments. Pump outflow is routed via the boundary silt pit to capture any remaining sediment.

There is no significant runoff expected from the lower ground parking, the proposed pits will mostly capture nuisance water.

Stormwater detention systems will be designed for storm intensities up to the 20-year ARI to manage quantity, this means the 1-year 1-hour storm is included in the capture flow rate, and 1 9 FEB 2018

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provided periodic maintenance is conducted, pollutants (if present) will be removed from the system prior to disposal into the council system and downstream catchments.



7. References

Town of Bassendean. 2017. TOWN OF BASSENDEAN POLICY MANUAL.

WA Department of Water. 2016. "Decision process for stormwater management in WA." July. Accessed 2017.

https://www.water.wa.gov.au/__data/assets/pdf_file/0007/8683/110370.pdf.

-. 2017. Perth Groundwater Map.

WA. 1985. Perth Metropolitan Region Geological Atlas.



Appendix A – Architectural Drawings



EXISTING AGED CARE FACILITY PROPOSED ADDITIONS 0 A HAMILTON STREET

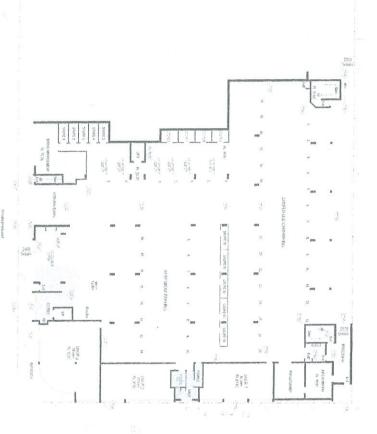




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TOWN OF BASSENDEAN

HAMILTON STREET



OLD PERTH ROAD

SOUTH ELEVATION (OLD PERTH ROAD)



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WEST ELEVATION (HAMILTON STREET)

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Appendix B – BOM Data



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IFD Design Rainfall Intensity (mm/h)

Issued:

14-Sep-17

Location

Label:

Bassendean

Requested Latitude -31.9049 Longitude 115.9517 Nearest gri Latitude 31.9125(S) Longitude 115.9625(E)

Annual	Exceed	ance	Proba	bility	(AEP)
--------	--------	------	-------	--------	-------

Duration	Duration in	63.20% 5	0%# 20	0%*	10%	5%	2%	1%
1 min	1	97.8	108	143	168	193	229	258
2 min	2	84.9	93.4	121	141	162	191	216
3 min	3	76	83.8	109	128	147	174	196
4 min	4	69.1	76.3	99.9	117	135	160	180
5 min	5	63.6	70.2	92.3	108	125	148	167
10 min	10	46.4	51.5	68.1	80.2	92.5	110	123
15 min	15	37.4	41.5	54.9	64.6	74.4	88.1	99.1
30 min	30	24.9	27.5	36.2	42.5	48.9	57.9	65.1
1 hour	60	16.1	17.7	23.2	27.1	31.3	37.2	42
2 hour	120	10.3	11.3	14.7	17.3	20	24.1	27.5
3 hour	180	7.95	8.71	11.3	13.3	15.5	18.8	21.6
6 hour	360	5.12	5.6	7.29	8.64	10.1	12.4	14.4
12 hour	720	3.3	3.61	4.71	5.58	6.56	8.04	9.35
24 hour	1440	2.1	2.31	3	3.53	4.1	4.97	5.71
48 hour	2880	1.33	1.46	1.87	2.17	2.46	2.9	3.26
72 hour	4320	1.01	1.11	1.42	1.62	1.81	2.1	2.32
96 hour	5760	0.838	0.92	1.17	1.32	1.47	1.69	1.85
120 hour	7200	0.728	0.798	1.01	1.14	1.27	1.45	1.58
144 hour	8640	0.652	0.714	0.902	1.02	1.14	1.3	1.42
168 hour	10080	0.596	0.652	0.826	0.942	1.05	1.21	1.32



Appendix C – Council Correspondence and Criteria



Alex Briscan

From:

Nicole Baxter <nbaxter@bassendean.wa.gov.au>

Sent:

Monday, 11 September 2017 1:36 PM

To:

Alex Briscan

Cc:

Trent Macpherson (tmacpherson@bassendean.wa.gov.au)
Town's Storm Water Drainage Lot 68 and 79 Old Perth Road

Subject: Attachments:

Modified COPASEQ5 Rev01.xls; STD-13.pdf; ASSET SERVICES - Application for

Permits 2017.pdf

Follow Up Flag:

Follow up

Flag Status:

Flagged

Dear Alex

Town of Bassendean stormwater connection and the procedure.

Not all properties within the Town can connect to the Towns drainage network.

The Towns first preference is for onsite disposal of stormwater where appropriate ie. properties are to contain stormwater on site in soak wells. (sandy soils)

If stormwater infiltration is not achievable within the property (the property has **clay**, **high water table**, **other**) the following process is to be followed:

Town of Bassendean has a Stormwater policy, this shall be adhered to . Planning policy No 14 link provided http://www.bassendean.wa.gov.au/profiles/bassendean/assets/clientdata/document-centre/policies/section_1.pdf

- Application form to be completed and returned with supporting documents, being;
- Geotechnical report
- Drainage design. Being and not limited to;
 a site plan indicating roof/paved area, proposed soakwell locations and sizes, indicating containing 1:20yr
 stormwater event, proposed silt pit —within the property boundary and indicating the restrictive orifice 'T'
 piece as per COPAS calculator, proposed new manhole where the private drainage connection meets the
 Towns existing drainage infrastructure.
- Completed COPAS calculation sheet

Asset Services will review their design and supporting documents.

If the application is approved, a conditional approval letter is returned to applicant advising of the conditions and the following shall be paid prior to construction.

- Stormwater Drainage Connection Security Deposit (Refundable) \$ 995.00 (as per financial year fees and charges)
- Stormwater Drainage Assessment to Connect to the Town's Drainage Network -Administration Fee(Non Refundable) \$ 1,275.00(as per financial year fees and charges)
- Drainage Infrastructure Contribution Fee (Non Refundable) \$ 2,231.00(as per financial year fees and charges)



Engineering Design Officer Town of Bassendean



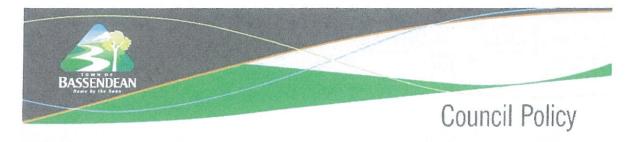
Phone (08) 9377 9000 Direct Line (08) 9377 9025 Facsimile (08) 9279 5416

Email: nbaxter@bassendean.wa.gov.au Web: www.bassendean.wa.gov.au

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LOCAL PLANNING POLICY NO. 14 - ON-SITE STORMWATER POLICY

1.0 OPERATION OF THIS PLANNING POLICY

This planning policy has been prepared in accordance with Part 2 of the Town Planning Amendment Regulations 1999.

2.0 PURPOSE OF THIS POLICY

The purpose of this policy is to:

- 1. Clearly outline the circumstances in which the Town will permit a connection to the Town's drainage system.
- 2. State the design standards that the Town will have regard to in assessing applications to connect to the drainage system; and
- Outline the conditions that will be imposed on any approval to connect to the drainage system.

3.0 APPLICATION OF THE POLICY

This policy applies to any application for new development that proposes to connect to the Town's drainage system.

4.0 BACKGROUND

Urbanisation leads to changes in both the quantity and quality of water that is delivered to receiving waters. The built environment has many sources of pollutants that can contaminate stormwater as it passes through the catchment, including metals, oils, petrol, organic debris, litter, silt and dust, fertilisers, animal waste, pesticides and detergents.

Within the Town of Bassendean, there are areas which have soils that are largely clay in nature. As a result, stormwater runoff may pool on the surface of properties due to reduced capacity to infiltrate the soil. Traditionally, Council has permitted this stormwater to be discharge into the stormwater system via a silt trap and temporary on site storage system.



Increases in housing density and infill development have increased demand from developers to have private stormwater disposed via the Town's street drainage system. However, this system was designed several decades ago for road stormwater runoff only. Even with over capacity margins built into the system there is likely to be increasing pressure on the Town's drainage systems and its ability to effectively drain the area during storm events.

There is also concern about the quality of stormwater discharging into the drainage system and into water bodies, such as the Swan and Canning Rivers, particularly from industrial areas. Stormwater runoff from urban areas carries sediments and pollutants, such as nutrients and heavy metals from impervious surfaces. Unmanaged, the cumulative impact of these pollutants can result in considerable damage to the environment.

To address this issue, the Town of Bassendean proposes that all new drainage applications for connection and drainage to the Town's stormwater system be assessed against Sections 5 and 6 of this policy.

5.0 ASSESSMENT PROCEDURE

The Town will only permit applications to connect to the Town's stormwater system, in the following circumstances:

- a) all on-site stormwater retention options have been investigated and exhausted;
- b) only developments in areas where the natural soil is high in clay content, and deemed unsuitable for on-site disposal via infiltration, shall be considered for connection to the Council's stormwater system. This should be verified as part of the geotechnical investigation in addition to the site classification and it can be demonstrated by a qualified civil engineer to the Town's satisfaction that on site disposal is not feasible;
- c) if connection to the Town's stormwater system is necessary in industrial areas, that the stormwater discharging from the area be independently tested, in accordance with the Unauthorised Discharge Regulations 2004 enacted under the *Environmental Protection Act 1986*.



6.0 Design Requirements

6.1 Off-Site Drainage System

For pre and post development discharge calculation, the required discharge design storm shall be the minor system design ARI (Average Recurrence Interval) of the municipal drainage system, to which the storage will be connected. This is the 1 in 5 year ARI. The design storm for calculating the total storage volume above and below ground and for overall design of the onsite detention facility shall be the 1 in 20 year ARI.

A standard pre-development runoff coefficient of C=0.35 applies over the whole of the development area. Considering the post-development site conditions, a respective runoff coefficient appropriate for the development over the whole of the lot area will have to be found and applied. The underlying factor for the specification of this runoff coefficient is that the postdevelopment site discharge is reduced to pre-development levels and is estimated on the basis, that flow rates within the downstream stormwater drainage and conveyance system will not be increased. For calculation of the PSD, the roof-to-gutter time of concentration shall be taken as 9 minutes for residential areas and 5 minutes to on-site facilities for commercial and industrial sites. The designer will then have to determine the permissible site discharge value, e.g. by using the Rational Method combined with a Hydrograph Estimation Method, and a suitable outflow regulating device will have to be designed to meet this requirement. Alternatively, the attached standard design can be utilised in accordance with the site discharge values and subsequent site storage requirements to be determined

Required Storage Volume:

Given the aforementioned, a respective storage volume appropriate for the development and the layout of the lot area will have to be found. Regarding the respective design storm durations, typically the critical storm duration that produces the largest required storage volume is longer than the time of concentration used for peak flow estimation. Therefore, corresponding storage volumes must be determined for a range of storm durations to find the maximum storage required. This value will have to be logically comprehensible from the hydraulic calculations.

Depth of Underground Storage:

The base level of any underground storage system must be such that the flow stormwater into the Town's adjacent street stormwater system is possible. The applicant must be able demonstrate this as part of the design process.



Point of Discharge:

The point of discharge into the municipal drainage system will have to be determined through consultation with Council. In some cases, an extension of the municipal drainage system may be required at the developer's cost and to the specification and satisfaction of the Town of Bassendean.

Application Procedure

Applicants wishing to connect to the Town's drainage system are required to complete the modified COPAS equation for stormwater retention which is available of the Town's website, and an example of which is shown on Appendix 1.

The onus is on the property owner to fully design the internal stormwater system and submit a comprehensive stormwater drainage plan to Council, for approval by the Director Operational Services, prior to the commencement of works. All surveys for existing invert levels and pipe alignment etc are the responsibility of the owner to obtain. This design be carried out and certified by a consulting engineer. These plans and specifications for this system must be to the Towns satisfaction.

A comprehensive stormwater plan is to detail sizes and types of all materials, invert levels, pit levels – top and bottom, design return period, site retention capacity and outlet capacity for the design return period and grades of all pipes.

Where there is an existing manhole, gully or side entry pit within the verge and within the extent of the frontage of the property, a connection from the silt pit may be made directly to that structure (provided levels are suitable). If there is no manhole, gully or side entry pit within the property frontage, and a stormwater pipe exists within the verge.

Where the Town has no drainage infrastructure accessible from the property the Town may extend the Town's network or provide an outlet structure on the kerb at the owners cost. Where an outlet structure is provided the stormwater exiting at the kerb will then flow down the road to the nearest road gully at the same cost.

The Town may construct a manhole over the pipe as per the sketch detailed on appendix 2 The property owner shall be responsible for all costs associated with the construction of the manhole.



Conditions to be imposed on approvals to connect to the Town's Drainage System

The owner of the land, will be required to place a notification under section 70A of the Transfer of Land Act. 1893 as amended, to be placed on the Certificate(s) of Title advising of the stormwater detention system installation, the restrictions, drainage limitations and the requirement for the current and future property owners to maintain the detention system in good working order.

All works associated with connecting the internal system to the street drainage system are to be carried out by the property owner.

Prior to backfilling of trenches, the works are to be inspected by the Engineering Officer. All pipes and connection points to pits are to be easily visible by the inspecting Council Officer.

A security deposit of \$750 is to be lodged with Council prior to the commencement of works within the road reserve. This deposit is fully refundable at the completion of the works, provided that the site has been left in a clean and tidy state to the standard which existed prior to works commencing. Council will retain part or all of the deposit held should reinstatement works not be to the satisfaction of the Director Operational Services.

The Director Operational Services reserves the right to vary the deposit in line with the extent of the proposed works.

A fee is payable for connection to the Town's drainage network where all stormwater is disposed of into the Town's drainage system. Details of the fee is included in the Town's Schedule of Fees and Charges.

Permits for connection to the drainage system will be valid for a period of 2 years. If the works are not undertaken in this time a new approval will be required.

Regular maintenance of an on-site detention system is required to keep the system fully functioning and is the responsibility of the property owner. The required maintenance schedule and drawings will identify the key components of the system, their locations and will provide a tool to ensure that ongoing maintenance is carried out as required, including cleaning of accumulated debris from screens and removal of sediment from the base of the pit or tank.

Applicants are advised:

In the event of a severe stormwater or flooding event, that the Town of Bassendean drainage system may not have sufficient capacity to manage the stormwater from the subject lot. It is therefore essential that property owners make necessary



enquires to obtain suitable and adequate private insurance coverage for such events.

It is an offence under the Environmental Protection Act J986 (WA) to discharge contaminants or discharge waste that will cause harm to the environment. Applicants are responsible for ensuring that they do not allow any contaminants to enter the retention system as overflow discharged water from the subject lot will subsequently enter the Swan River.

The uncertain and often inexact nature of stormwater management and flood mitigation, together with the increased level of liability and litigious potential of flooding, can pose an increased and unknown level of risk to property owners. The Town of Bassendean. its employees, servants and agents, shall not be held responsible for any loss, damage or injury (fatal or otherwise), whether to property or person, howsoever suffered by the Applicant, unless such loss is shown to have occurred due to the direct negligence of the Town of Bassendean.



APPENDIX 1

Worked example

Lot area = 800m²
Total roof and paved area = 500m²
Natural surface level = 7.5
Council stormwater system invert level = 6.1
From spreadsheet:

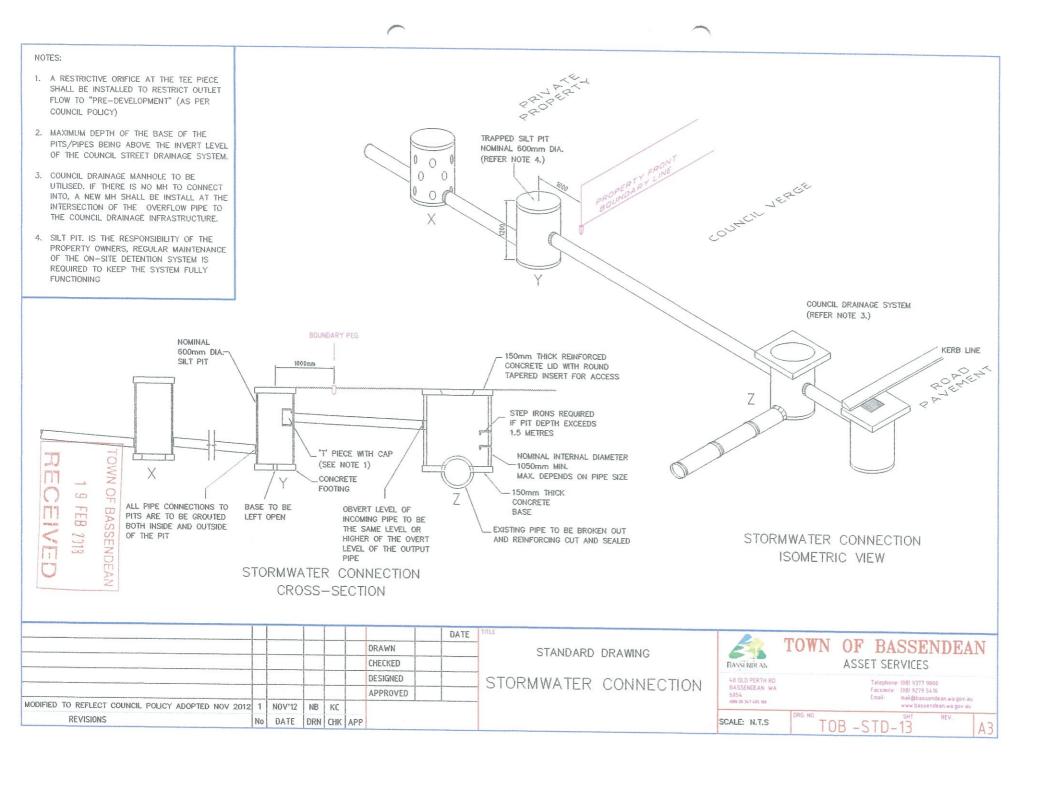
	M	И	0	F	0	R	S	T		
						TENTION				
1	MODIFIED COPAS EQUATION FOR STORMWATER RETENTION									
2	Town of Bas	sendean								
3										
4	Lot Area (ha)				0.08					
5	Roof & Paved Area (ha) Time of Concentration (mins) Predevelopment Flow (1/s)				0.0500					
6					5					
7					5.04					
8	Orifice di	ameter (mm	.)	==	66					
9			1	l 1 :- F	1 3 10 10	1 in 20vr	1 in 50 yr	1 in 100		
10			1 in 2yr	1 in 5yr	1 in 10yr			2000000		
11			cu.m	Cu.m	ou.m	cu.m	Cu.m	Cu.m		
13	Maximum St	orage Regu	1.24	2.50	3.45	5.03	7.63	9.82		
14	TIME		***************************************							
15	minutes/ho	ours								
16	5	5	0.94	1.80	2.47	3.44	4.94	6.23		
17	6	6	1.07	2.05	2.81	3.88	5.54	6.95		
18	10	10	1.24	2.50	3.45	4.81	6.88	8.73		
19	20	20	0.52	2.10	3.29	5.03	7.63	9.82		
20	30	30	-0.91	0.87	2.20	4.14	7.06	9.55		
21	1	60	-6.66	-4.55	-3.00	-0.72	2.74	5.73		
22	2	120	-20.37	-18.05	-16.25	-13.57	-9.60	-6.16		
23	3	180	-35.26	-32.80	-30.90	-28.00	-23.61	-19.89		
24	6	360	-82.43	-79.71	-77.60	-74.40	-69.28	-65,00		
25	12	720	-181.09	-178.11	-175.71	-171.80	-165.81	-160.52		
26	24	1440	-384.38	-381.09	-378.21	-373.50	-365.90	-359.35		
27	48	2880	-799.49	-796.35	-793.09	-787.47	-777.73	-769.19		
28	72	4320	-1218.99	-1216.94	-1213.88	-1208.00	-1197.82	-1188.06		

Total storage volume = 5.03m^3 Maximum tank depth = 7.5 - 6.1 = 1.4mUse 1.2m dia x 1.2m deep tanks each with a volume of 1.36m^3 Use 4 tanks (total volume) = 5.44m^3 Outlet orifice diameter = 66mm (max)

Interactive Stormwater Retention Calculator (Modified COPASEQ5 Rev01.xls) can be found on the Town's website.

The Appendix 2 Standard Stormwater Connection Details is currently draft, the updated drawing will be provided shortly.





Appendix D – Stormwater Drainage Design Calculations and Site Plans



MODIFIED COPAS EQUATION FOR STORMWATER RETENTION

Town of Bassendean

Lot Area (ha)
Roof & Paved Area (ha)

Time of Concentration (mins)

Predevelopment Flow (1/s)

Orifice diameter (mm)

= 0.1845

= 0.1806

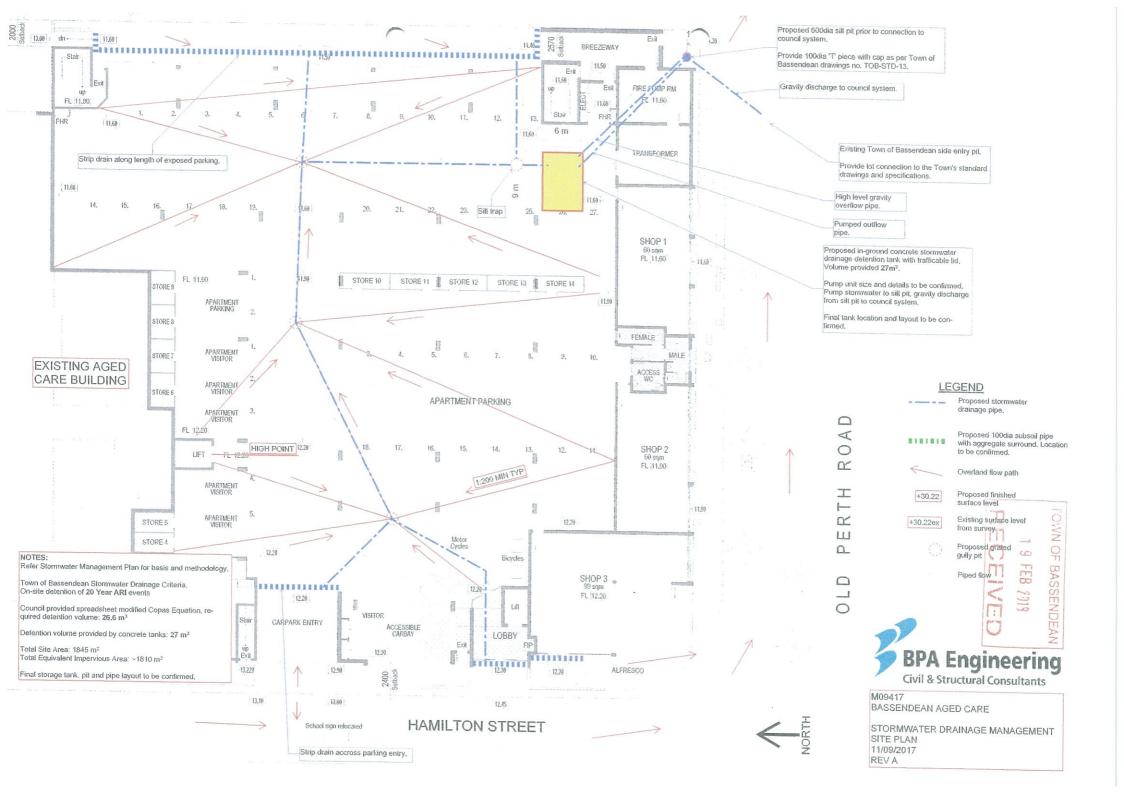
= 5

= 11.6235

= 101

			1 in 2yr cu.m	1 in 5yr cu.m	1 in 10yr cu.m	1 in 20yr cu.m	lin50yr cu.m	lin 100yr cu.m
Мах	Maximum Storage Required		8.83	15.19	19.80	26.64	37.56	46.79
T	IME							
min	utes/hours							
	5	5	5.83	9.31	11.90	15.55	21.16	25.93
	6	6	6.60	10.52	13.45	17.48	23,68	28.85
	10	10	8.39	13.42	17.06	22.21	29.88	36.72
	20	20	8.83	15.19	19.80	26.39	36.10	44.1
	30	30	6.85	14.07	19.23	26.64	37.56	46.79
	1	60	-4.04	4.73	10.86	19.66	32.80	43.93
	2	120	-33.06	-23.01	-15.65	-5.07	10.19	23.1
	3	180	-65.84	-54.83	-46.90	-35.24	-18.19	-4.05
	6	360	-171.69	-158.63	-149.43	-136.11	-115.73	-99.1
	12	720	-396.05	-380.36	-369.26	-352.32	-327.85	-306.96
	24	1440	-861.77	-842.03	-827.79	-806.48	-774.48	-748.16
	48	2880	-1818.88	-1794.23	-1776.09	-1748.80	-1706.22	-1671.0
	72	4320	-2789.90	-2764.54	-2744.64	-2713.64	-2667.07	-2625.7







Appendix E – WA Department of Water 100-Year Flood Map



Old Perth Road BASSENDEAN Lots 84 & 85 LOCALITY MAP

THOMPSON RD



LEGEND

CALNON ST

NORTH RD

HAMILTON'S

SOURCES

BECEINED 1 8 EEB 5318

CARNEGIE RD

ANSTEY RD

TOWN OF BASSENDEAN

5.20

Appendix F – Geotechnical Investigation



Excerpt from initial geotechnical investigation by ATC Williams, correspondence received 15.09.2017 below: Final geotechnical investigation is in progress.

" The available geological map for the area indicates the site to be underlain by thin Bassendean sand over clayey soils of the Guildford Formation. The Perth groundwater atlases (1^{st} and 2^{nd} editions) indicate groundwater levels at the site to be between 11.5 m AHD and 2.7 m AHD respectively.

The previous geotechnical investigations conducted on the nearby sites in 2012 and 2013, reported the groundwater levels at the site to be between 0.6 m and 4.2 m below ground level which corresponds to elevations of between approximately 10.9 m AHD and 7.8 m AHD.

The site surface slopes to the east from approximately 13 m AHD at the northwest corner to approximately 11.5 m AHD at the southeast corner of the site.

Due to the possible presence of clayey soils at shallow depth it is very unlikely that the site will be suitable for the stormwater disposal at the site.

The stormwater will likely be discharged into the public stormwater system using subsoil drains installed at the site perimeter to prevent accumulation of groundwater on the top of the low permeability clayey soils. "







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Email: mail@bassendean.wa.gov.au

Disclaimer: The Town Of Bassendean accepts no responsibility for the accuracy of this image or the results of any actions taken when using this image. This map is based on information provided by and with the permission of the Western Australian Land Information Authority.

Aerial Photo / Location Plan Red Border around Lots Comprising Development Site 12/04/2018

Scale: 1:1000

