



*Swan and Canning Rivers Management Act 2006*

**PART 5**

**DETERMINATION OF DEVELOPMENT APPLICATION**

FILE NUMBER : SRT6437  
APPLICANT : Brent Pollard (on behalf of Honey Sequel Pty Ltd)  
APPLICANT'S ADDRESS : 15 Johnson Parade  
Mosman Park WA 6012  
LANDOWNER : Shire of Peppermint Grove  
LAND DESCRIPTION : Swan Loc 4447, Hobbs Place and Lilla Street  
(Reserve 22156), Keanes Point, Peppermint  
Grove  
DEVELOPMENT : Redevelopment of café and toilet block  
VALID FORM 1 RECEIVED : 17 April 2015  
PLANS : Dwg: SK01 Rev: A  
DETERMINATION : **APPROVAL WITH CONDITIONS**

The application to commence development in accordance with the Plan SK01/A and other information received on 30 March 2015 is APPROVED subject to the following conditions:

**Prior to the commencement of works**

1. Approval to implement this decision is valid for two (2) years from the date of the approval. If the development has not been substantially commenced within this period, a new approval will be required before commencing or completing the development.
2. The applicant shall notify the Trust in writing not less than fourteen (14) days prior to the commencement of works.
3. The final design plans for the café shall be submitted to the Swan River Trust for approval a minimum of thirty (30) days prior to commencement of works (see **Advice Note 1**). Works shall not commence until the approval of the Swan River Trust has been granted.
4. Prior to commencement of works, the applicant shall submit and have approved, a Construction Management Plan that addresses the potential environmental impacts associated with the works, to the satisfaction of the Swan River Trust (see **Advice Notes 2 and 3**).
5. All stormwater to be contained on site to the satisfaction of the Shire of Peppermint Grove, on advice from the Swan River Trust.

### **During works**

6. The approved Construction Management Plan required under **Condition 4** shall be implemented.
7. Up to three peppermint trees may be removed within the building construction footprint. No other existing vegetation, besides turf, shall be damaged or removed during works unless authorised in writing by the Swan River Trust. All remaining trees in close proximity to the building site must be protected from damage during excavation and construction using techniques recommended in the submitted arboriculturalist's report dated 29 May 2015 (see **Advice Notes 3 and 4**).
8. A minimum one (1) metre clearance shall be allowed for between pathways and any established trees.
9. The applicant shall take appropriate preventative measures during the works to ensure that no sedimentation, top soil runoff or other deleterious matter is allowed to enter the river (see **Advice Note 3**).
10. Public access along the foreshore shall be maintained, or an alternative route provided, for the entirety of the works to the satisfaction of the Swan River Trust (see **Advice Note 3**).

### **On completion of works**

11. Upon completion of the development, all waste materials shall be removed and the site cleaned up to the satisfaction of the Trust.
12. The applicant is required to plant no less than three (3) replacement trees for each tree removed. The replacement trees are to be at least 1.5 metres tall at time of planting, they must be locally native and suited to the soil type of the area and planted within 30 metres of each tree removed (see **Advice Note 4**).

### **ADVICE TO APPLICANT**

1. The final design plans required under **Condition 3** for the redevelopment of the café and toilet facilities should include, but not be limited to:
  - The location of mains water and electricity connections;
  - Any fill requirements;
  - Exterior finishes and colours;
  - Storm water management and location;
  - Proposed exterior lighting including location, direction, illumination, timing and efficiency (the lighting should have minimal spill to ensure that it does not have any adverse ecological consequences).
2. The Construction Management Plan (CMP) required under **Condition 4** is to be submitted to the Swan River Trust a minimum of thirty (30) days prior to commencement of relevant works.

3. The CMP required under **Condition 4** shall address, but not be limited to:
- Machinery;
  - Refuelling (preferred to be conducted off-site);
  - On-site storage and bunding material, equipment and chemicals;
  - Site access (provision for trades parking);
  - Access to Lilla Street (how building materials and deliveries to the site will be managed without affecting public use of Lilla Street);
  - Details of excavation (including depths, volumes and any stockpiling of soil);
  - Management of Acid Sulphate Soils;
  - Dewatering;
  - Suppression of dust;
  - Waste management;
  - Public safety (including temporary fencing to restrict access to the construction site, but allowing public access to the foreshore where it is safe to do so);
  - Re-direction to alternative public toilets;
  - Protection of existing vegetation (including drip/root zone);
  - Protection of the river from inputs of deleterious matter; and
  - Complaints and incidents.
4. The Swan River Trust's Riverbank Branch recommends the planting of *Eucalyptus rudis* and *Casuarina obesa* on the foreshore but other suitable tree species can be considered, including peppermint (*Agonis flexuosa*). Advice on the selection of suitable species can be obtained from the Riverbank Branch on 9278 0943.
5. The applicant is advised that a building permit is required from the Peppermint Grove Shire in accordance with the *Building Act 2011*.
6. The applicant is advised that the proposed works are located within a moderate to low acid sulfate soil (ASS) risk area. If any ASS is exposed during the works the Department of Environment Regulation should be contacted for further advice or the soils managed in accordance with the publication 'Treatment and management of soils and water in acid sulfate soil landscapes' (DEC, 2011), and the Swan River Trust notified.



Albert Jacob MLA  
**MINISTER FOR ENVIRONMENT; HERITAGE**

Date: 23.6.2015

FILE No. : SRT6437

TRUST MEETING : 12 MAY 2015

## SWAN RIVER TRUST REPORT

PROPOSAL : Redevelopment of café and toilet block  
COST : \$1,000,000  
LOCATION : Swan Loc 4447, Hobbs Place and Lilla Street (Reserve 22156),  
Keanes Point, Peppermint Grove  
APPLICANT : Brent Pollard (on behalf of Honey Sequel Pty Ltd)  
OWNER : Shire of Peppermint Grove  
LOCAL GOVERNMENT : Shire of Peppermint Grove  
MRS ZONE : Parks and Recreation  
LG ZONE : Parks and Recreation, Town Planning Scheme No. 3  
DECISION TYPE : Part 5, *Swan and Canning Rivers Management Act 2006* –  
Ministerial Determination  
ATTACHMENTS : 1. Location of development site  
2. Aerial photo of development site  
3. Shire of Peppermint Grove Council minutes excerpt (24  
February 2015)  
4. Architectural drawings and site plans  
5. Ground lease  
6. Agreement for lease  
7. Sewer e-plan for Location 4447 Hobbs Place  
8. Photographs of site and existing facilities  
9. Arboriculturalist's report  
RECOMMENDATION : **APPROVAL WITH CONDITIONS**

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## REPORT

### 1.0 INTRODUCTION

- 1.1 The Swan River Trust (the Trust) has received an application from Brent Pollard on behalf of Honey Sequel Pty Ltd for the redevelopment of the existing café and toilet block at Hobbs Place and Lilla Street, Swan Location 4447 (Reserve 22156), Peppermint Grove (**Attachments 1 and 2**).
- 1.2 The existing café and toilet block on Location 4447 are thought to have been built in the 1930s. The café is leased by the Shire of Peppermint Grove (the Shire) to the current lessee on a 21 year lease arrangement. The café and toilet block buildings were considered by the Shire and the community to be in a dilapidated

state and in need of replacement. The Shire requested expressions of interest for the redevelopment of the site and the successful tenderer was Honey Sequel.

- 1.3 The Shire received a Development Application from Honey Sequel for the demolition of the café and public toilet block and the redevelopment of the site for a new integrated café building, including public toilets. This application was considered at the Shire's Council meeting on 24 February 2015, which resolved to support the application subject to four conditions (**Attachment 3**).
- 1.4 Architectural drawings and site plans were submitted with the development application (**Attachment 4**).
- 1.5 Lease documentation has been completed for a 42 year lease (two x 21 year leases) with Honey Sequel (**Attachments 5 and 6**).
- 1.6 The land is wholly within the Trust Development Control Area (DCA) and is reserved under the Metropolitan Region Scheme (MRS) for Parks and Recreation. The application is therefore being assessed pursuant to Part 5 of the *Swan and Canning Rivers Management Act 2006*. The Trust will provide a recommendation on the proposal to the Minister for Environment.

## 2.0 CONSULTATIONS

There were no specific external referrals considered necessary for this development proposal. The Shire consulted the Department of Aboriginal Affairs (DAA) when it considered the proposal.

### Shire of Peppermint Grove

- 2.1 The Shire had no objection to the proposal on local planning grounds and a recommendation of approval was initially sent to the Western Australian Planning Commission (WAPC), subject to four conditions:
  - The applicant obtaining a building permit in accordance with *Building Act 2011*;
  - All stormwater being retained and disposed of on-site, details of which are to be submitted and approved prior to the issue of a building permit by the Shire;
  - The trees located with the reserve shall be protected during the construction and no goods or building materials shall be stored against the trees or within the drip line of reserve trees. Details of the tree protection method shall be submitted and approved prior to the issue of a building permit;
  - The submission of a building management plan prior to the issue of a building permit for the proposed development outlining how building materials and deliveries to the site will be managed without affecting public use of Lilla Street, controlling dust and the provision for trades parking to ensure two way road access is maintained.
- 2.2 The Shire then sent the development application to the Trust for its consideration as the Trust is the determining authority rather than the WAPC, the land being wholly within the DCA.

## **Department of Aboriginal Affairs**

- 2.3 The Shire consulted with the DAA as the proposed development is within the registered Swan River Aboriginal Site. Advice was provided to the Shire in writing that as the site has previously been disturbed and that it was not abutting the foreshore itself, that there would not be a requirement for a Section 18 clearance application.

### **3.0 PUBLIC COMMENT – SUBMISSIONS ON DRAFT REPORT**

- 3.1 In accordance with the requirements of Part 5 of the *Swan and Canning Rivers Management Act 2006* a copy of the draft report and proposed recommendation has been provided to the applicant, the local government and other consultant agencies. A copy was also published on the Trust website for a period of three (3) weeks between 22 May 2015 and 12 June 2015 with an invitation for public submissions.
- 3.2 One (1) submission was received from the Shire of Peppermint Grove requesting a variation of Condition 7 and Advice Note 4 as the imposition of a five metre exclusion zone around all trees was considered onerous and would unnecessarily impede the development. On closer examination of the site it was found that two smaller peppermint trees would need to be removed and one large mature peppermint tree may need to be removed.
- 3.3 An arboriculturalist's report was commissioned and submitted as recommended in Advice Note 4. This report detailed the condition of five trees in close proximity to the proposed building and provided techniques to protect them during the excavation and construction works.
- 3.4 Condition 7 and Advice Note 4 have been amended to permit the removal of up to three (3) trees and the protection of the remaining trees according to the recommendations in the arboriculturalist's report.
- 3.5 An additional condition has also been applied to require the planting of three (3) replacement trees for each tree removed.

### **4.0 RELEVANT POLICIES AND PLANS**

- ◆ State Planning Policy 2.10 – Swan-Canning River System
- ◆ SRT/EA1 – *Conservation, Land Use and Landscape Preservation*
- ◆ SRT/DE10 – *Restaurants, Cafes, Kiosks and Tearooms*

### **5.0 ENVIRONMENTAL AND PLANNING CONSIDERATIONS**

- ◆ Public use, access and safety
- ◆ Design and visual amenity
- ◆ Wastewater management
- ◆ Environmental protection
- ◆ Vegetation protection
- ◆ Acid sulphate soils

### **6.0 DISCUSSION**

#### **Background**

- 6.1 Trust Policy SRT/D10.1 – *Restaurants, Cafes, Kiosks and Tearooms* sets criteria for preferred development sites. The site of the proposed development is where there is an existing café and toilet block, and it is fully serviced for water, sewerage, electricity and telephone. There is adequate road access and public parking, it is about 3 m above the water line so should be well protected from storm surges, and the natural landscape has already been extensively modified. This site is therefore considered to be an appropriate site for development of a new café.
- 6.2 The proposed café forms part of the Shire’s plan for the redevelopment of the site. Since 2012, and following consultation with the community, the Shire has sought expressions of interest for the redevelopment of the café and public facilities. The decision to seek redevelopment of the site was made on the basis of the need for updated and increased local amenity to residents and visitors to the area.
- 6.3 The new café will be under a commercial lease and the Shire will receive income from the lessee in accordance with that agreement. The Minister for Lands has approved the lease of the land for this purpose and a new building for a period of 42 years, after which the Shire becomes the owner of the building.

#### **Public use, access and safety**

- 6.4 The Shire required a building plan and business concept that was to provide a café and public toilet amenities for the local residents, with restricted opening hours, which was respectful to the residential character of the nearby area. It would not be open for evening meals or functions as this service is already provided by the nearby Royal Freshwater Bay Yacht Club.
- 6.5 Although the new café is considerably larger than the existing café, the demolition of the existing toilet block will increase the area of foreshore reserve close to the river that is available for public use as the new toilets will be incorporated into the new café building. No other existing facilities in the reserve (BBQ, benches, turf) will be affected by this development. The café will cater for 100 seated patrons comprising 60 internal and 40 external.
- 6.6 The lessee is not required to construct any additional car parking facilities on or around the leased premises. The existing car park is open to the public, trade and customers for accessing and running the café, and services the adjoining playground. A new path will connect the car park to the southern entrance of the new café.
- 6.7 The Shire has requested a Building Management Plan be prepared and submitted prior to the issue of a building permit for the proposed development outlining how building materials and deliveries to the site will be managed without affecting public use of Lilla Street, controlling dust and the provision for trades parking to ensure that two way road access is maintained. This plan should ensure that public access to the adjoining roads and car park is maintained during the demolition and construction stages of the development. This requirement can be included as a condition.
- 6.8 A condition to ensure public access to the foreshore, when conditions are safe to do so, should also be applied to the approval. Signage may be required directing customers to other public toilet facilities during construction of the new building.

## Design and visual amenity

- 6.9 The proposed café building will be located on a similar position to the existing building but setback approximately 6 m further south towards the car park and away from the river. This will allow a greater area of turf for passive recreation adjoining the foreshore. The new building will incorporate a set of toilets that will allow the existing toilet block to be demolished, which in itself will improve the visual amenity of the site.
- 6.10 The new building will be single storey (approximately 4 m high) and designed to take advantage of the north facing aspect with extensive folding glass doors on the northern elevation, and a terrace with folding arm awnings for outdoor dining. Large folding glass doors are also a feature on the southern elevation. The central section of the building is transparent, permitting complete 'through' views between the very popular southern playground and the northern foreshore, thereby significantly reducing the visual bulk of the building. The structure will have a galvanized steel frame and walls will be clad in naturally bleached vertical hardwood boards. All materials and finishes are similarly limited to natural timber and light grey tones. Further details of the building and construction materials will need to be provided in the final design plans before commencement of works.
- 6.11 There is a natural slope on this site, which will be accommodated by using cut and fill with a maximum of 1.1 m of fill on the north-eastern corner. The building will be set into the bank with a retaining wall around the south-western end.

## Wastewater management

- 6.12 Trust Policy SRT/DE5 – *On-site wastewater management systems and industrial wastewater* aims to minimise the impact of on-site wastewater management systems on the river system. The existing café and toilet block are connected to mains sewerage and the new building will also need to be connected to this facility (**Attachments 7 and 8**). There is a sewer pump station and overflow tank on this site near the foreshore with a number of manholes and vents. The large overflow tank detracts somewhat from the visual amenity of the foreshore but it is unlikely that this will be altered in the near future.
- 6.13 Public toilets are provided on the western end of the building (one female, one male and one disabled toilet) with access along a concrete pathway from Lilla Street. Additional toilets (one staff, two male and one female toilet) are provided at the eastern end of the building, but access is only from within the café.
- 6.14 Given that the building will be connected to the mains sewer, no other wastewater management system will be required.

## Stormwater management

- 6.15 Swan River Trust policy *Stormwater Disposal* (SRT/D4) states that proposed land use changes should be managed to minimise sediment transport and to prevent mobilisation of nutrients or contaminants from the site to the river.
- 6.16 All storm water for this development is required by the Shire to be retained on site. The details of this facility need to be submitted and approved by the Shire before they issue a building permit. This redevelopment proposal is not changing land use and is not expected to create significant water management issues so there should not be any further requirement other than to ensure that the stormwater management system is maintained appropriately. Stormwater runoff from the grassed foreshore would drain into the soil and turf or run directly into the river



over the retaining bank so it is unlikely to cause any foreshore erosion issues (see **Attachment 8**). A condition will be included to manage stormwater, on advice from the Shire.

### **Environmental Protection**

- 6.17 Trust Policy SRT/EA1 – *Conservation, Land use and Landscape Preservation* promotes development on and adjacent to the river system that maintains and enhances the quality and amenity of the river environment.
- 6.18 The toilet block is to be demolished and included in the new building and this will improve the visual amenity of the foreshore. The new building will be set back by a minimum of 18 m from the river's edge, approximately 10 m further than the existing toilet block.
- 6.19 The demolition of the existing toilet block and café will generate dust, debris and other waste materials that may enter the river (e.g. woody debris, steel rust and concrete and brick rubble). A condition should be applied to require the applicant to take preventative measures to ensure that no sediments or other deleterious matter enters the river. Waste materials should not be stockpiled on site, and upon completion of works, the site must be cleaned up to the satisfaction of the Trust.
- 6.20 The foreshore and area surrounding the café are open parkland with grass and a variety of mature trees. To ensure this A Class reserve is protected from any environmental harm during demolition and construction works, it is recommended that a Construction Management Plan (CMP) is included as a condition of approval. This CMP would address the Shire's requirements for a Building Management Plan and also its requirement for protecting the trees during construction.

### **Vegetation protection**

- 6.21 Trust Policy SRT/EA1 states that the maintenance and restoration of existing native vegetation should be encouraged to protect the biodiversity and ecological systems of the river. Most of the existing trees on this location are planted exotic species. However, these are protected by the *Swan and Canning Rivers Management Regulations 2007* (Regulation 21), which states that a person must not destroy, pull up, cut back or injure any tree, shrub aquatic plant or other perennial plant that is in the Riverpark or DCA, unless they have a permit to do so.
- 6.22 A condition is recommended that requires a minimum of one (1) metre between any new paths and established trees.
- 6.23 Two smaller peppermint trees will need to be removed to accommodate the new building, while several trees in close proximity may be impacted by the excavation and construction works, including one large mature peppermint that may be severely impacted. It is recommended that a condition is applied to permit the removal of up to three peppermint trees and to protect the other trees during excavation and construction using techniques recommended in the arboriculturalist's report. In addition, three replacement native trees will be required to be planted for each tree removed.

### **Acid sulphate soils**

- 6.24 *State Planning Policy 2.10 – Swan-Canning River System* states that any development in the vicinity of the river should identify the risks of acid sulphate

soils (ASS) and measures taken to minimise possible risks associated with disturbance.

- 6.25 The proposed works are to be undertaken within a moderate to low ASS disturbance risk area (<3m from the surface). The applicant has not provided any detail on the volumes of soil required to be excavated or disturbed during demolition of cut and fill for the new building. However, it is expected to be less than the 100 m<sup>3</sup> which usually triggers an ASS investigation. An advice note can recommend that the applicant and/or contractors become familiar with the identification of ASS, and if any ASS is exposed during the works to contact the Department of Environment Regulation for further advice on ASS management.

## **Conclusion**

- 6.26 The redevelopment of the café and toilet facilities at Keanes Point has been sought by the Shire and local community since 2012 to replace the existing dilapidated facilities. The proposal has been accepted by the Shire, which has negotiated a 42 year lease of the land and building. The building design takes advantage of the northerly aspect and is finished in natural timber and glass and is expected to improve the public use and visual amenity of the reserve. The building will be connected to existing sewerage with stormwater retained on site. The demolition and construction works will result in minimal environmental impact to the foreshore reserve. The café development will maintain and enhance the quality and amenity of the locality for the long term benefit of the community.

It is therefore recommended that the proposal be approved, subject to appropriate conditions and advice.

## **7.0 RECOMMENDATION – APPROVAL WITH CONDITIONS**

That the Trust advises the Minister for Environment that it recommends approval for the redevelopment of the café and toilet block at Location 4447 (Reserve 22156), Hobbs Place and Lilla Street, Peppermint Grove as described in plans received by the Trust on 30 March 2015, subject to the following conditions:

### **Prior to the commencement of works**

1. Approval to implement this decision is valid for two (2) years from the date of the approval. If the development has not been substantially commenced within this period, a new approval will be required before commencing or completing the development.
2. The applicant shall notify the Trust in writing not less than fourteen (14) days prior to the commencement of works.
3. The final design plans for the café shall be submitted to the Swan River Trust for approval a minimum of thirty (30) days prior to commencement of works (see **Advice Note 1**). Works shall not commence until the approval of the Swan River Trust has been granted.
4. Prior to commencement of works, the applicant shall submit and have approved, a Construction Management Plan that addresses the potential environmental impacts associated with the works, to the satisfaction of the Swan River Trust (see **Advice Notes 2 and 3**).

5. All stormwater to be contained on site to the satisfaction of the Shire of Peppermint Grove, on advice from the Swan River Trust.

#### **During works**

6. The approved Construction Management Plan required under **Condition 4** shall be implemented.
7. Up to three peppermint trees may be removed within the building construction footprint. No other existing vegetation, besides turf, shall be damaged or removed during works unless authorised in writing by the Swan River Trust. All remaining trees in close proximity to the building site must be protected from damage during excavation and construction using techniques recommended in the submitted arboriculturalist's report dated 29 May 2015 (see **Advice Notes 3 and 4**).
8. A minimum one (1) metre clearance shall be allowed for between pathways and any established trees.
9. The applicant shall take appropriate preventative measures during the works to ensure that no sedimentation, top soil runoff or other deleterious matter is allowed to enter the river (see **Advice Note 3**).
10. Public access along the foreshore shall be maintained, or an alternative route provided, for the entirety of the works to the satisfaction of the Swan River Trust (see **Advice Note 3**).

#### **On completion of works**

11. Upon completion of the development, all waste materials shall be removed and the site cleaned up to the satisfaction of the Trust.
12. The applicant is required to plant no less than three (3) replacement trees for each tree removed. The replacement trees are to be at least 1.5 metres tall at time of planting, they must be locally native and suited to the soil type of the area and planted within 30 metres of each tree removed (see **Advice Note 4**).

#### **ADVICE TO APPLICANT**

1. The final design plans required under **Condition 3** for the redevelopment of the café and toilet facilities should include, but not be limited to:
  - The location of mains water and electricity connections;
  - Any fill requirements;
  - Exterior finishes and colours;
  - Storm water management and location;
  - Proposed exterior lighting including location, direction, illumination, timing and efficiency (the lighting should have minimal spill to ensure that it does not have any adverse ecological consequences).
2. The Construction Management Plan (CMP) required under **Condition 4** is to be submitted to the Swan River Trust a minimum of thirty (30) days prior to commencement of relevant works.

3. The CMP required under **Condition 4** shall address, but not be limited to:

- Machinery;
- Refuelling (preferred to be conducted off-site);
- On-site storage and bunding material, equipment and chemicals;
- Site access (provision for trades parking);
- Access to Lilla Street (how building materials and deliveries to the site will be managed without affecting public use of Lilla Street);
- Details of excavation (including depths, volumes and any stockpiling of soil);
- Management of Acid Sulphate Soils;
- Dewatering;
- Suppression of dust;
- Waste management;
- Public safety (including temporary fencing to restrict access to the construction site, but allowing public access to the foreshore where it is safe to do so);
- Re-direction to alternative public toilets;
- Protection of existing vegetation (including drip/root zone);
- Protection of the river from inputs of deleterious matter; and
- Complaints and incidents.

4. The Swan River Trust's Riverbank Branch recommends the planting of *Eucalyptus rudis* and *Casuarina obesa* on the foreshore but other suitable tree species can be considered, including peppermint (*Agonis flexuosa*). Advice on the selection of suitable species can be obtained from the Riverbank Branch on 9278 0943.

5. The applicant is advised that a building permit is required from the Peppermint Grove Shire in accordance with the *Building Act 2011*.

The applicant is advised that the proposed works are located within a moderate to low acid sulfate soil (ASS) risk area. If any ASS is exposed during the works the Department of Environment Regulation should be contacted for further advice or the soils managed in accordance with the publication 'Treatment and management of soils and water in acid sulfate soil landscapes' (DEC, 2011), and the Swan River Trust notified.

**FINAL REPORT ENDORSED**

Signed:



Date:

22/6/2015

Rod Hughes  
General Manager, Swan River Trust

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**Legend**

- Swan River Trust Development Control Area (2014)
- Swan River Trust Riverpark boundary (2012) - where it deviates from the Development Control Area
- Note: Unless otherwise defined, the Riverpark coincides with the Development Control Area (red line).
- Local Government Authority boundary
- Cadastral
- Bridge
- Note: The area above the high water mark or the 1:100 year flood level (which ever is applicable) on the bridge alignment, is excluded from the Development Control Area and Riverpark.
- Parks and recreation reserve
- Waterway
- Railway

SCALE 1: 10,000 (MGA Zone 50)

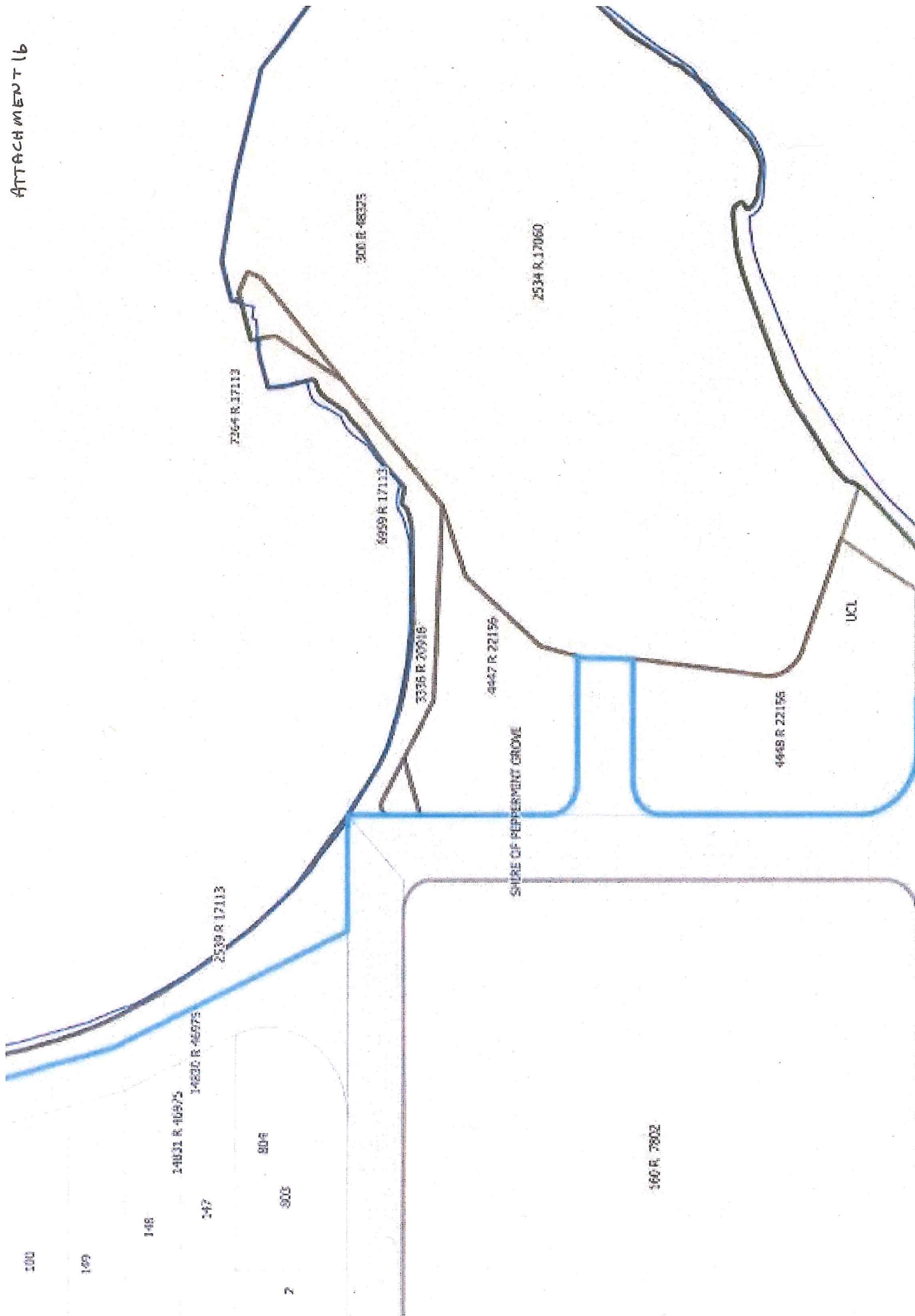
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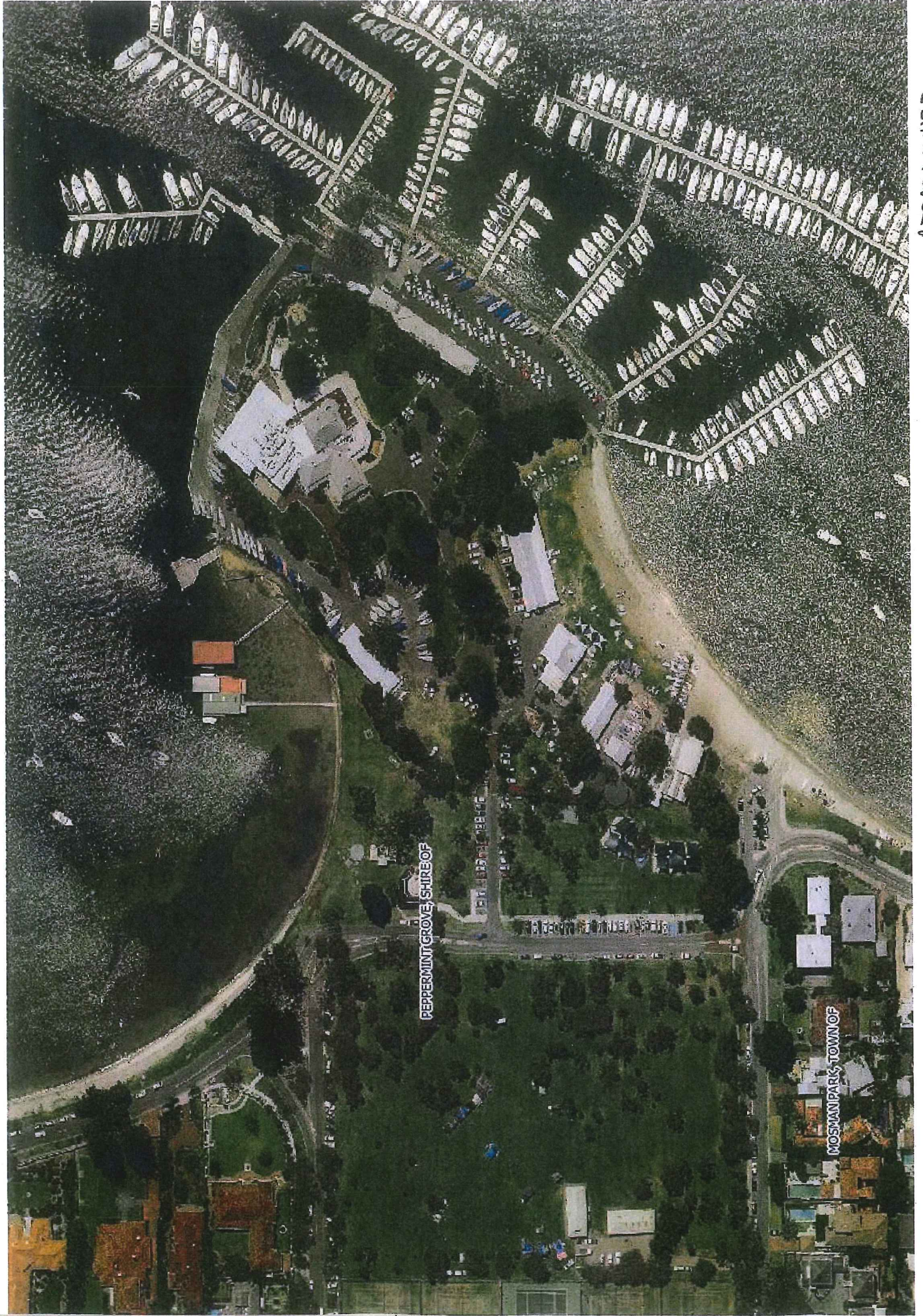
The Development Control Area (DCA) managed by the Swan River Trust may be described as comprising the waters of the Swan River upstream of the Fremantle Port Authority boundary, the Avon River to its confluence with Moondyne Brook, the Helena River to the lower diversion dam on the river, the Southern River to Allen Road crossing and the Canning River to its confluence with Sinton Creek. The DCA includes the area reserved under clause 12 of the Metropolitan Region Scheme for "waterways" and lands adjoining those waters that are reserved as "parks and recreation."

The Riverpark managed by the Swan River Trust may be described as comprising all of the above, excluding freehold land in private ownership.

The Swan Canning Riverpark does not include any private property within the meaning of that term in regulation 2 of the Swan and Canning Rivers Management Regulations 2007.

ATTACHMENT 16

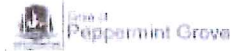




PEPPERMINT GROVE, SHIRE OF

MOSMAN PARK, TOWN OF

SRT 6437


 8.1.9 PROPOSED FRESHWATER BAY CAFÉ: KEANES POINT RESERVE LILLA STREET,  
 PEPPERMINT GROVE

## URBAN PLANNING

ATTACHMENT DETAILS

<u>Attachment No</u>	<u>Details</u>
Attachment 9	Freshwater Bay Cafe

Voting Requirement	: Simple Majority
Subject Index	: RES12
Location / Property Index	: Reserves
Application Index	: TBA
TPS No 3 Zoning	: Open Space
Land Use	: Parks and Reserves
Lot Area	: 2.7 Hectares (Lease area)
Disclosure of any Interest	: Nil
Previous Items	: N/A
Applicant	: Paul Burnham Architect
Owner	: Western Australian Planning Commission
Responsible Officer	: Michael Whitbread, Manager of Development Services

COUNCIL ROLE

- Advocacy** *When Council advocates on its own behalf or on behalf of its community to another level of government / body / agency.*
- Executive** *The substantial direction setting and oversight role of the Council eg. adopting plans and reports, accepting tenders, directing operations, setting and amending budgets.*
- Legislative** *Includes adopting local laws, town planning schemes & policies.*
- Review** *When Council reviews decisions made by Officers.*
- Quasi-Judicial** *When Council determines an application / matter that directly affect a person's right and interests. The judicial character arises from the obligation to abide by the principles of natural justice. Examples of quasi-judicial authority include town planning applications, building licences, applications for other permits / licences (eg under Health Act, Dog Act or Local Laws) and other decisions that may be appealable to the State Administrative Tribunal.*



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## **PURPOSE OF REPORT**

Council to make a recommendation to the Western Australian Planning Commission in regard to the application for the re development of the Keane Point Café.

## **SUMMARY AND KEY ISSUES**

- The Shire is the referral authority for development of land reserved under the Metropolitan Region Scheme.
- The proposed café forms part of the Shire's community plan for the redevelopment of the site.
- There is no objection to the proposal on local planning grounds and a recommendation of approval to the Western Australian Planning Commission can be made.

## **LOCATION**

Please refer to the location plan in the attachments

## **BACKGROUND**

Council awarded a Tender to Mosman's for the construction of a new café and the removal of the existing public amenities block at Keanes Point.

The Minister for lands has approved a lease of the land for this purpose and a new building for a period of 42 years following which the Shire becomes the owner of the building.

Council approved the conditions of the lease of the building and a construction schedule, both of which have now been signed by the successful tenderer.

The application lodged for the development of a new café is the next step in the process of the replacement of the café and public toilets that both the Council and the community have concluded are in a dilapidated state and no longer provide the level of amenity expected on such a facility.

## **CONSULTATION**

There has been no specific consultation undertaken in respect to this matter.

## **STRATEGIC IMPLICATIONS**

There are no Strategic Plan implications evident at this time.

## **POLICY IMPLICATIONS**

There are no significant policy implications evident at this time.

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## **STATUTORY IMPLICATIONS**

### **Metropolitan Region Scheme**

The subject land at Keanes Point is zoned Parks and Reserves under the Metropolitan Region Scheme and Clause 32 delegation to Local Authorities does not apply. This means that the Western Australian Planning Commission (WAPC) is the determining authority for any development on this reserve.

Nevertheless, the Shire is required to submit a recommendation to the WAPC within 42 days of the lodgement of the application outlining its Town Planning response to the application.

### **Town Planning Scheme No.3**

Town Planning Scheme No.3 is silent, as are all Town Planning Schemes, on development on regional reserves, which is the province of the WAPC. The WAPC is nevertheless required to obtain the recommendation of the Local Authority as part of its assessment process.

### **Aboriginal Heritage Act Section 18**

The entire Swan River is a registered Aboriginal Site due to the spiritual and religious associations of this waterway with indigenous mythological cosmology.

The Shire has consulted with the Department of Aboriginal Affairs (DAA) in regard to this development on the Swan River foreshore and whether prior to an approval being considered if a section 18 would be invoked.

Under the Aboriginal Heritage Act a section 18 clearance is required prior to carrying out works on registered sites where artefacts and /or sites of significance may be disturbed.

Advice provided to the Shire by the DAA in writing that as the site has previously been disturbed and that it was not abutting the foreshore itself that there would not be a requirement for a Section 18 clearance application.

## **FINANCIAL IMPLICATIONS**

The new café will be the subject of commercial lease and the Shire will receive income from the lessee in accordance with that agreement.

In the event the applicant is not satisfied or any conditions of approval or grounds of refusal by the WAPC there is a right of review under the State Administrative Tribunal Act

## **ENVIRONMENTAL IMPLICATIONS**

There are no environmental implications at this time.

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## **SOCIAL IMPLICATIONS**

Council has been aware for some time that the current facilities at Keanes Point are at the end of their useful life. Since 2012 Council has, following consultation with the community, sought expressions of interest for the redevelopment of the café and public facilities.

The decision to seek redevelopment of the site was made on the basis of the need for updated and increased local amenity to residents and visitors to the area.

Given the restriction of use outlined in the lease agreement, the new café will have some tangible community benefits while being respectful of the surrounding residential character of the nearby area.

## **OFFICER COMMENT**

The use of Reserve land for such a facility is acceptable in town planning terms provided the size and scale of the development does not impede on the key function of the reserve which has been set aside for the purpose of public recreation.

The proposed café building will be located on a similar position to the extant building, but setback approximately 6 metres further south towards the public carpark adjoining the entrance to Royal Freshwater Bay Yacht Club. At the same time this new building will incorporate a set of toilets, which will allow the existing amenities block to be demolished.

In terms of the building itself it is assessed as a single storey affair designed to take advantage of this natural features of this particular site which includes the ideal situation of a north facing view of Freshwater Bay. The architect has taken full advantage of this situation and has proposed a building that has extensive glass to the northern elevation, as well to the south facing back wall. In dealing with the natural gradient of the site where the building is to be located the architect has sensitively cut and filled so that the rear of the building is partially buried into the land, which means that there is a maximum of 1.1 metres of fill at the northern eastern corner of the building diminishing to less than 200mm at the northern western corner.

In summary the building is considered an elegant solution to the given site conditions, and can be seen as a respectful treatment of the public reserve it will occupy. Furthermore the new building will provide a public amenity to replace an outdated building. The removal of the public toilet block, which is a blight on the landscape, will by its removal enhance this portion of the Keanes Point Reserve to a noticeable degree.

There are no objections to the proposal on planning grounds and subject to the conditions suggested below the application may be forwarded to the WAPC with a recommendation of approval.

**OFFICER RECOMMENDATION/S – ITEM No. 8.1.9**

That Council forward a recommendation of approval to the Western Australian Planning Commission for a café at the Keanes Point Reserve, Peppermint Grove subject to the following conditions;

1. The applicant obtaining a building permit in accordance with Building Act 2011.
2. All stormwater being retained and disposed of on-site, details of which are to be submitted and approved prior to the issue of a building permit by the Shire.
3. The trees located with the reserve shall be protected during construction and no goods or building materials shall be stored against the trees or within the drip line of the reserve trees. Details of the tree protection method shall be submitted and approved prior to the issue of a building permit.
4. The submission of a building management plan prior to the issue of a building permit for the proposed development outlining the how building materials and deliveries to the site will be managed without affecting public use of Lilla Street, controlling dust and the provision for trades parking to ensure two way road access is maintained.

**COUNCIL DECISION – 700**

MOVED: Cr K Farley, Seconded: Cr G Peters

**That:**

**Council forward a recommendation of approval to the Western Australian Planning Commission for a café at the Keanes Point Reserve, Peppermint Grove subject to the following conditions;**

1. **The applicant obtaining a building permit in accordance with Building Act 2011.**
2. **All stormwater being retained and disposed of on-site, details of which are to be submitted and approved prior to the issue of a building permit by the Shire.**
3. **The trees located with the reserve shall be protected during construction and no goods or building materials shall be stored against the trees or within the drip line of the reserve trees. Details of the tree protection method shall be submitted and approved prior to the issue of a building permit.**
4. **The submission of a building management plan prior to the issue of a building permit for the proposed development outlining the how building materials and deliveries to the site will be managed without affecting public use of Lilla Street, controlling dust and the provision for trades parking to ensure two way road access is maintained.**

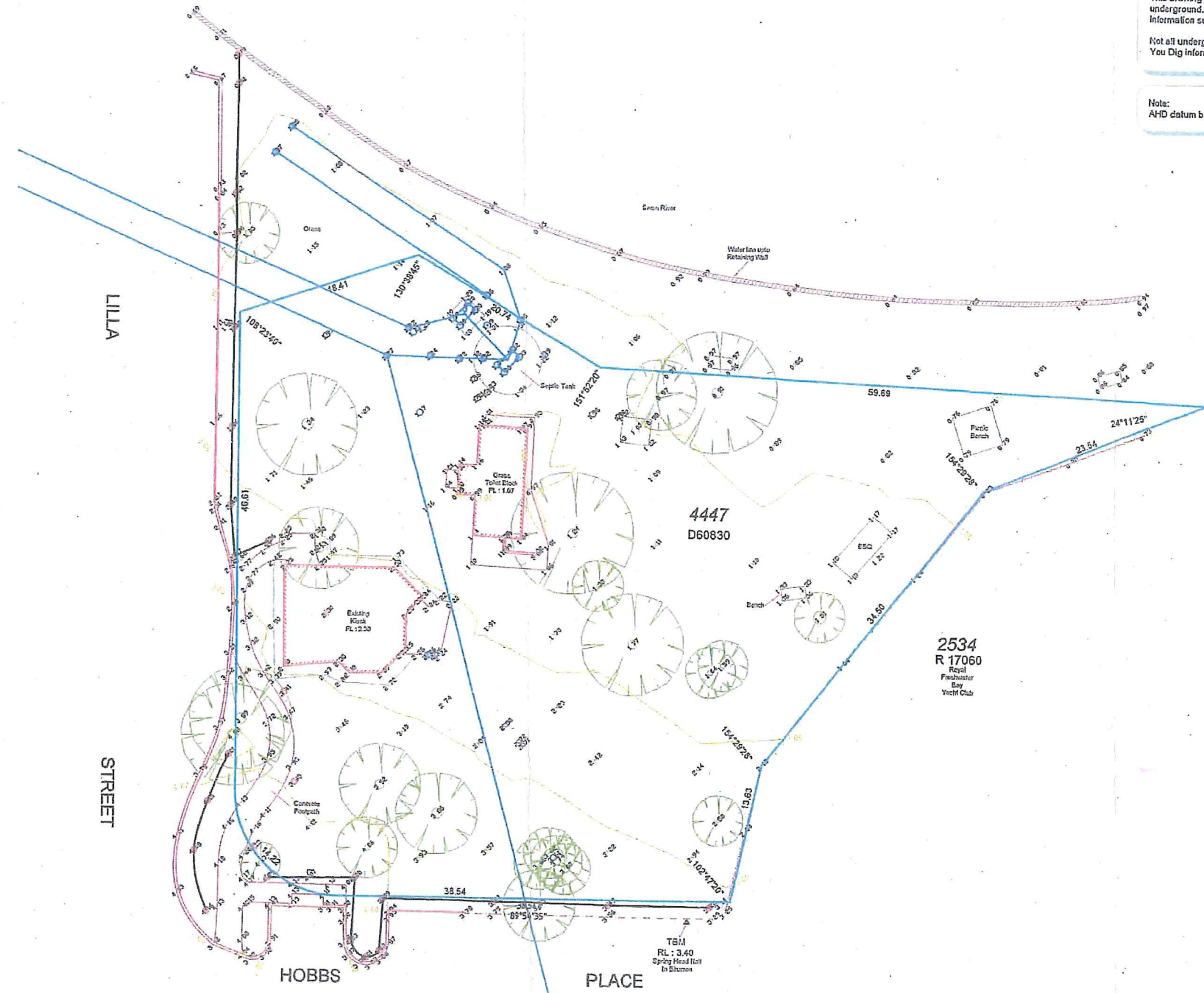
**CARRIED: 6/0**



Note:  
The boundaries shown on this plan were not re-established as part of this survey. Prior to any structure or feature modification, the boundaries should be verified by a boundary re-establishment survey.

Note:  
This drawing indicates the presence of some services which may be located underground. Some services may have been plotted using a "best fit" interpretation of information supplied by relevant Government departments and private companies.  
Not all underground services have been shown on this drawing and current Dial Before You Dig information should be obtained before commencing any excavation works.

Note:  
AHD datum based on sewer manhole 1419



**LEGEND**

**Points**

- Hot Surface Pt
- △ TBM
- ⊙ Telecom Pit
- Distribution Board
- Power Pole
- Consumer Pole
- Tree
- Bellard
- Single Sign
- Gas Valve
- Water Stop Valve
- Retic Control Valve
- Floor Level
- Hydrant Ground
- Sewer Manhole
- Sewer W/H Surround
- Sewer Vent
- Drainage H/Hole

**Lines**

- Garden
- Fence
- Retain Wall
- Edge Conc.
- Road Seal
- Footpath
- Kerb Sollar
- Top of Kerf
- Brick Paving
- Building Line
- Bollards
- Sewer Line
- Boundary

Shire of Peppermint Grove  
30 JAN 2015  
RECEIVED

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Willetton WA 6955 Fax: (08) 8457 7922  
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AI

DATE	2014	BY	BE
DESCRIPTION	LOCAL	DATE	2014
REVISION	01	DATE	2014

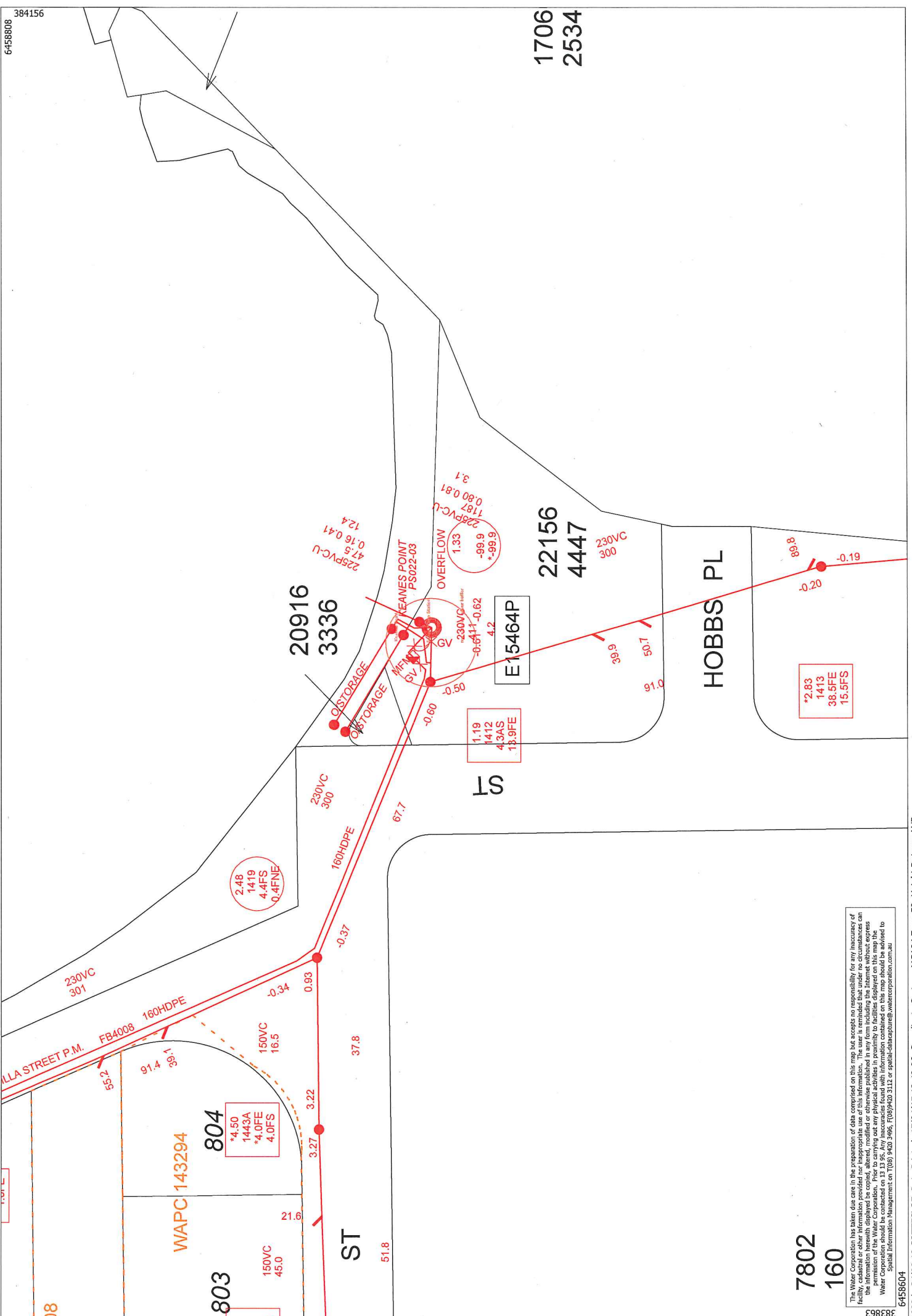
SCALE	1:100
PROJ	LOCAL
DATE	2014

FEATURE AND CONTOUR SURVEY  
Lot 4447 Lilla Street, Mosman Park  
Shire of Peppermint Grove

Mosmans Restaurant

MOS-KEANE-01





6458808  
384156

1706  
2534

20916  
3336

22156  
4447

E15464P

HOBBS PL

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7802  
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\*4.0FE  
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WAPC 143294

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1413  
38.5FE  
15.5FS

1.19  
1412  
43AS  
13.9FE

The Water Corporation has taken due care in the preparation of data compiled on this map but accepts no responsibility for any inaccuracy of facility, cadastral or other information provided nor appropriate use of this information. The user is reminded that under no circumstances can the information herewith displayed be copied, altered, modified or otherwise published in any form including the Internet without express permission of the Water Corporation. Prior to carrying out any physical activities in proximity to facilities displayed on this map the user should contact the Water Corporation for further information. For more information please contact the Spatial Information Management on (08) 9420 3965, F(08)9420 3112 or spatial-datacapture@watercorporation.com.au



**ATTACHMENT 8 - REDEVELOPMENT OF CAFÉ AND TOILET BLOCK AT KEANES POINT PEPPERMINT GROVE SRT 6437**



1. Old toilet block to be demolished



2. Existing café to be demolished



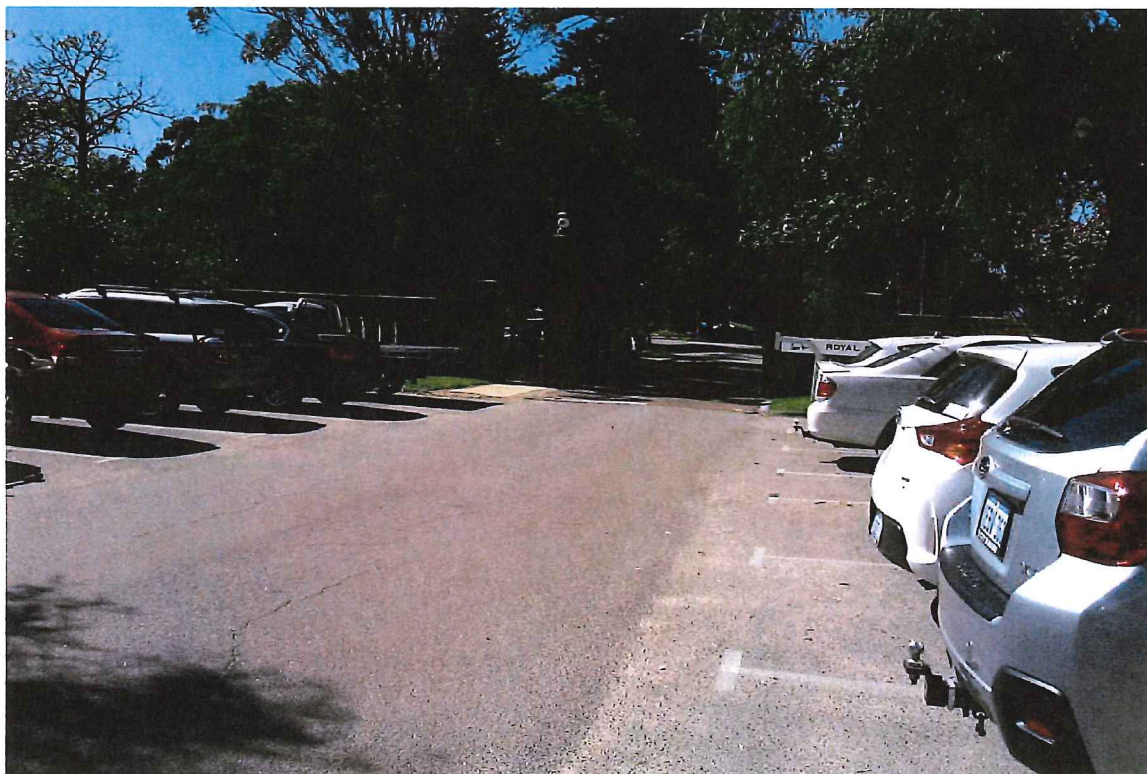
3. Sewer mains pump station and overflow tank with inspection manholes to be retained



4. View of existing facilities from eastern side where new café will be built



5. Inside view of existing café



6. View of existing car park and entrance into Royal Freshwater Bay Yacht Club on southern side of location

29<sup>th</sup> May 2015

Donovan Norgard  
Manager Infrastructure Services  
Shire of Peppermint Grove  
1 Leake Street  
PEPPERMINT GROVE WA 6011



Dear Donovan,

***ARBORICULTURAL ASSESSMENT AT THE KEANES POINT RESERVE***

Please find enclosed the results of the arboricultural assessment undertaken recently for a number of trees located adjacent to the proposed café redevelopment project at the Keane's Point reserve, Peppermint Grove.

Where recommendations for remedial arboricultural work have been made, it is imperative that it is undertaken as outlined in the Australian Standard 4373-2007: Pruning of Amenity Trees and/ or Australian Standard 4970-2009: Protection of Trees on Development Sites. It is also strongly advised that any remedial pruning works be undertaken by, or supervised by, a qualified arborist (AQF Level 3 in Arboriculture).

If you have any questions regarding the assessment or if I can be of service to you again in the future, please feel free to contact me.

Yours sincerely,

A handwritten signature in black ink, appearing to be "BB" followed by a stylized flourish.

Brad Bowden  
Principal  
Bowden Tree Consultancy®

B.Sc. Sustainable Forestry  
Dip. Arboriculture & Parks Management  
ISA Certified Arborist – Municipal Specialist AU-0020AM & Tree Risk Assessment Qualified (TRAQ)

## **1.0 Introduction**

### **1.1 Scope of Report**

- 1.2 The purpose of this report is to summarise the results of the walkby arboricultural assessment and provide recommendations for a number of mature local native trees (mixed species) located adjacent to the proposed café redevelopment at Keane's Point reserve, Peppermint Grove. The site visit and optical assessment was undertaken from ground level on the 29<sup>th</sup> May 2015 at 1630hrs and was accurate at the time of inspection. No soil excavation or below ground inspection was undertaken unless specified. Viewing conditions were fine. Concern has been raised by the Swan River Trust and subsequently Donovan Norgard from the Shire of Peppermint Grove regarding the condition of the trees adjacent to the proposed buildings and techniques to protect the trees during the excavation and construction works.

### **1.3 Executive Summary**

- 1.4 The assessed trees identified within this report provide a range of benefits including shade and local fauna food source and habitat, and contribute to the amenity, ecological and environmental value of the surrounding urban area. To ensure tree health and longevity is not compromised during the proposed development it is imperative that tree protection measures are utilised as outlined in the Australian Standard 4970 (2009): Protection of Trees on Development Sites. These measures include identifying tree protection zones for trees adjacent to the excavation, the installation of protective fencing prior to and for the duration of the project, and the use of irrigation during periods of high temperature and low rainfall.
- 1.5 The excavation of soil required for footings and/ or foundations or the addition of fill soil to provide a level building site as part of the construction of the proposed café and toilet block should occur outside the tree protection zone (trunk diameter x 12) of the trees where possible, or utilise the footprint of the existing buildings; to preserve both the large woody roots responsible for tree anchorage and the fine non-woody roots that absorb water and mineral solutes. Extensive root damage and loss can compromise tree stability and result in a rapid decline in tree health condition.
- 1.6 Where a proposed retaining wall or building foundation/ footing cannot be sited outside the tree protection zone of a tree it is recommended to use a building design incorporating methods such as cantilever, pier and beam (lintel) or screw pile footings that spans the retaining wall or footing structure across the root plate of the trees. A root sensitive excavation technique such as air-spading, hand digging or soil vacuum should also be used, and it is recommended that contractors be advised to avoid pouring liquid construction wastes such as paints, oils and concrete/ mortar wash into the soil of the tree root plate as this can be toxic and deleterious to tree health.

## 2.0 Site Investigation

### 2.1 Tree Locations



Figure 1. Aerial photo of the Keane's Point reserve with the four assessed trees (T1-4) located adjacent to the proposed café redevelopment.

### 2.2 Tree Dimensions

Tree #	Species	Height	DBH	SRZ	TPZ
1	tuart	17.7m	73cm	3.7m	8.8m
2	WA weeping peppermint	5.4m	29cm	1.5m	3.5m
3	WA weeping peppermint	11.7m	75cm	3.8m	9m
4	marri	14.7m	53cm	2.7m	6.4m

Table 1. Summary of tree dimensions and calculation of the structural root zone radius (SRZ) and the tree protection zone radius (TPZ).

## 2.3 Tree Structure and Health

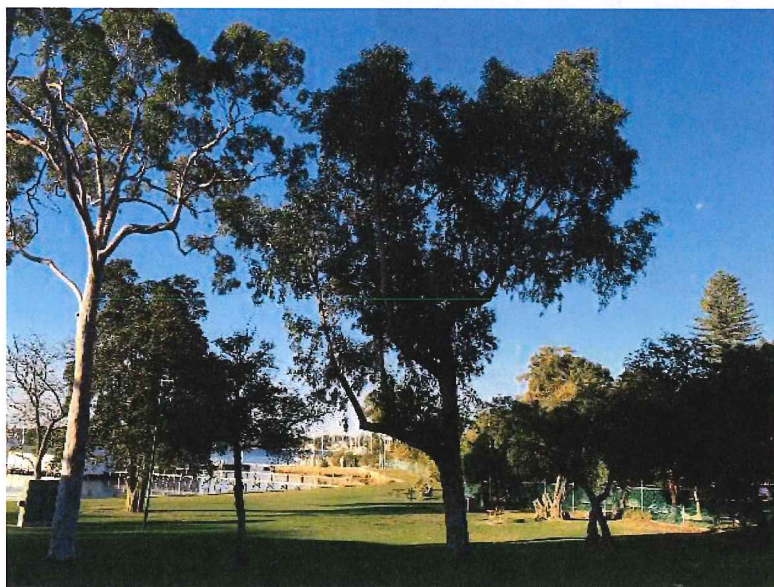
2.4 The structural condition ('Structure') for each tree or group of trees has been assessed using the following qualitative criteria:

- Good – generally free of structural defects
- Fair – defects evident that may be typical for the species and age class, and which could be corrected through remedial pruning works
- Poor – significant defects that are not likely to be corrected through remedial pruning or arboricultural works

2.5 The vitality ('Health') for each tree or group of trees has been assessed using the following qualitative criteria:

- High – consistent crown density and foliage colour, good shoot extension and an insignificant number of naturally-occurring internal dead branches
- Average – crown condition that may be representative for the species and/or seasonal, possessing satisfactory shoot extension and/or minimal decline and dead branches
- Low – poor shoot extension, sparse crown density and not likely to be corrected through improvement of site resources and plant nutrition

<b>Tree Number:</b> 1	<b>Botanical Name:</b> <i>Eucalyptus gomphocephala</i>
<b>Common Name:</b>	tuart
<b>Height:</b>	17.7m
<b>DBH:</b>	73cm
<b>Structure:</b>	Fair
<b>Health:</b>	High
<b>SRZ radius:</b>	3.7m
<b>TPZ radius:</b>	8.8m
<b>Location:</b>	12.4m from southeast wall of the toilet block and 21.7m from the east wall of the café
<b>Comments:</b>	Previous pruning evident within the middle crown of the tree is likely to have been undertaken to remove a declining main stem, wood decay and cavity visible at 8m above ground level is currently providing habitat for avian fauna

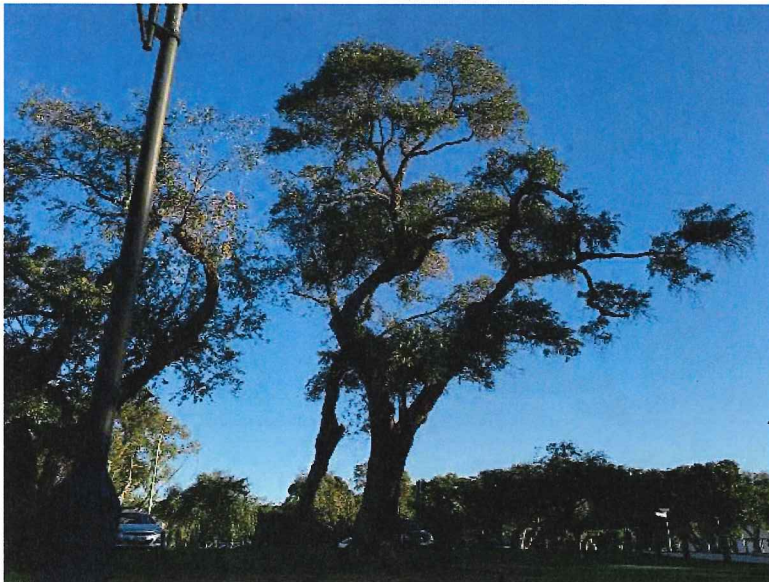




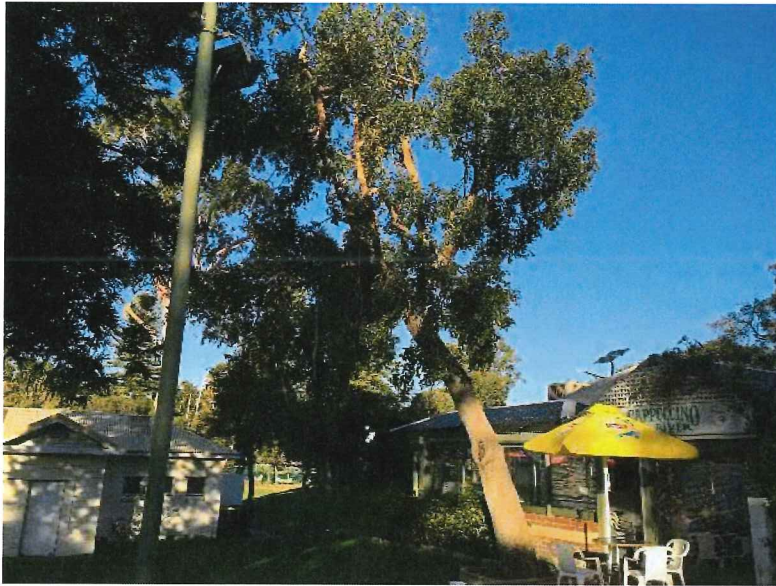
**Tree Number: 2**      **Botanical Name:** *Agonis flexuosa*  
**Common Name:** WA weeping peppermint  
**Height:** 5.4m  
**DBH:** 29cm  
**Structure:** Poor  
**Health:** Average  
**SRZ radius:** 1.5m  
**TPZ radius:** 3.5m  
**Location:** 9.1m from the yacht club fence towards the southeast  
**Comments:** Cambium necrosis and exposed sapwood with extensive wood borer damage and decay evident on the trunk section of both stems, apical decline evident and indicative of a decline spiral



**Tree Number:** 3      **Botanical Name:** *Agonis flexuosa*  
**Common Name:** WA weeping peppermint  
**Height:** 11.7m  
**DBH:** 75cm  
**Structure:** Fair  
**Health:** Average  
**SRZ radius:** 3.8m  
**TPZ radius:** 9m  
**Location:** 10.7m from the southern wall of the café  
**Comments:** A significant cavity was evident at the trunk basal area, recent deadwooding works visible to remove the dead and/ or declining branches



**Tree Number:** 4      **Botanical Name:** *Corymbia calophylla*  
**Common Name:** marri  
**Height:** 14.7m  
**DBH:** 53cm  
**Structure:** Fair  
**Health:** Average  
**SRZ radius:** 2.7m  
**TPZ radius:** 6.4m  
**Location:** 1.3m from low retaining wall to the south  
**Comments:** Recent dead wooding works visible to remove the dead and/ or declining branches



### 3.0 Discussion and Recommendations

#### 3.1 Discussion

#### 3.2 Tree Protection During Construction & Development

3.3 The most important goal of tree preservation on construction/ development sites is the long term survival and stability of the tree/ s. To achieve this goal, three core principles must be recognised and they include:

- To preserve existing trees, the planning/ design/ construction process must respect patterns of tree growth and development.
- Tree preservation must focus on preventing construction injury to trees; and includes mitigating soil cut/ fill, trenching and root damage, and collision injury to trunks and branches.
- Mature trees require undisturbed space to retain a healthy root system and growth of the crown.

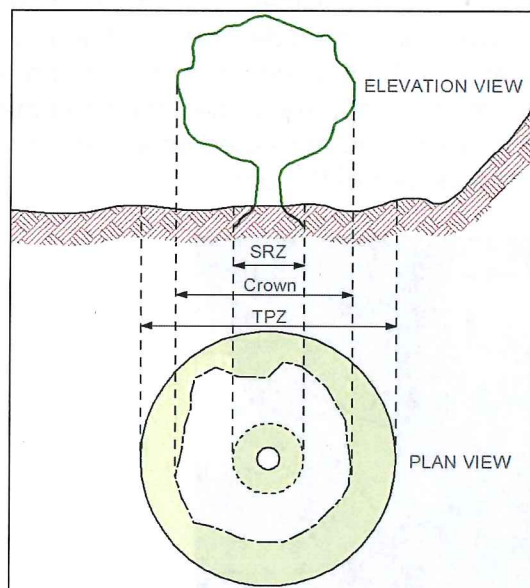
3.4 Tree protection measures include a range of activities and structures and should be in place prior to any site works including demolition (AS4970, 2009). Protective fencing comprised of 1.8m high chain-wire mesh panels should be erected, where possible, at the periphery of the Tree Protection Zone radius (trunk diameter x 12) for each tree assessed as a material constraint and subsequently retained as part of the project.



**Figure 2.** Protective fencing comprised of 1.8m high chain-wire mesh panels and signage providing information (see arrow) regarding access within the fencing should be erected prior to the commencement of construction activities that involve machinery and have the potential for collision injury.

### 3.5 Tree Root Plate

- 3.6 Root plate composition for most tree species consists of a structural root zone (SRZ) and an absorbing root zone, responsible respectively for the support/ anchorage of the tree and the uptake of water/ mineral nutrients in solution. Severance of the large diameter woody roots within the structural root zone (the root plate area immediately adjacent to the tree and generally determined as trunk diameter x 5) can compromise tree stability and also result in the loss of a significant proportion of the absorbing roots, subsequently placing considerable stress upon the tree in the short term. The severance of large diameter woody structural roots also provides an entry opportunity for infection by wood decay fungi, increasing the potential for the degradation of wood tissue at the root collar and trunk basal area and compromising tree stability and health condition in the long term. Root development for most tree species generally occurs in the upper layers of the soil profile (0-1m) due to higher levels of organic matter and oxygen as required by the absorbing roots, and where tap or sinker roots exist in naturally occurring local native tree species they are generally located beneath the main trunk section of the tree.

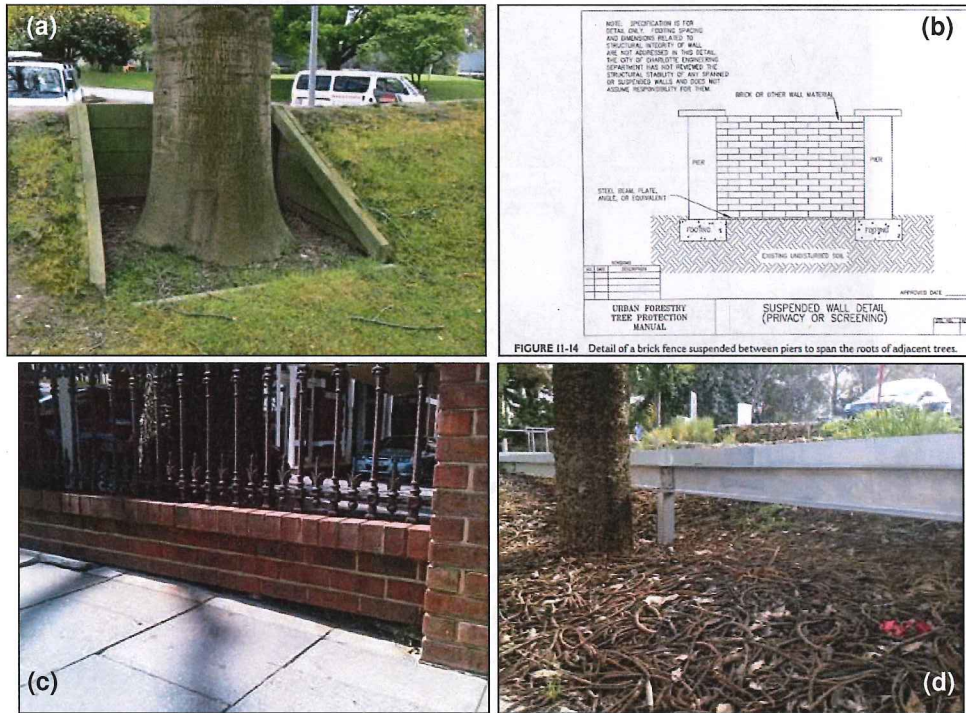


**Figure 3. Comparative views outlining the structural root zone (SRZ) and the tree protection zone (TPZ) for trees on development sites. Source: AS4970-2009: Protection of Trees on Development Sites.**

### 3.7 Fill Soil

- 3.8 Raising the ground level in the absorbing root zone by 150mm+ with the addition of fill soil has the potential to create aeration, water movement, temperature and root growth problems. For mature trees, a new (adventitious) root system often develops in the fill soil as the original root system subsequently declines. The new root system may be adequate to keep the tree looking green and healthy however as the old root system decays, the stability of the tree may be compromised. Fill soil within the

structural root zone only is of a lower concern and where increases to the existing grade cannot be avoided the use of a low retaining wall installed in a root sensitive method (avoiding root severance) is recommended to keep soil off the trunk and root collar sections of the tree.



**Figure 4.** (a) Fill soil within the structural root zone, where it cannot be avoided, should be kept off the trunk and root collar area by use of a retaining wall installed in a root sensitive manner; (b) – (d) The pier and beam construction technique provides an option for spanning a lightly-loaded structure (lintel) such as single course brick or block wall across the root plate of a tree to alleviate root damage that can compromise tree health and stability.



**Figure 5.** The suspended slab is a design technique often used for heavily loaded structures where excavation options are limited, supported by piers or screw piles.



**Figure 6.** (a) & (b) Construction of a new workshop within several metres of a mature 30m+ tree (see arrow) using three lintels (L1-3) attached to screw pile footings and spanning across the rootplate of the tree, alleviating damage to the large woody roots responsible for tree stability and maintaining aeration to the small non-woody roots within the upper soil profile and located further away from the trunk N.B. the depth of each lintel in contact with the ground surface is less than 100mm (hand digging used) and each lintel is connected to approximately eight screw piles.

### 3.9 Recommendations

- 3.10 Identify a tree protection zone (TPZ) for each of the four assessed trees adjacent to the proposed construction and consider the use of 1.8m high chainmesh temporary fencing at the TPZ periphery to exclude construction activity and/ or machinery traffic and the potential for collision injury to trunks and branches.
- 3.11 Consider using the existing building footprint/s for the location of the proposed café redevelopment. Where this is not possible and encroachment into the TPZ of the four trees occurs, it is recommended to use a building design that incorporates methods such as cantilever, pier and beam (lintel) or screw pile footings that spans the building foundation or footing structure across the root plate of the trees. A root sensitive excavation technique such as air-spading, hand digging or soil vacuum should also be used for the preparation of footings/ foundations into the ground. N.B. Continuous open trenching within the TPZ of a mature tree can significantly compromise tree health and stability and is strongly discouraged. Furthermore, the addition of significant fill soil (>200mm depth) can create anaerobic soil conditions and result in the death of the fine non-woody roots, reducing the capacity for water and nutrient uptake.
- 3.12 Consider fertilisation where required using liquid compost such as Seasol™ as per label directions and/ or vertical mulching for the trees to improve the soil nutrition status and subsequent tree vitality. Soil moisture levels must be adequate prior to fertiliser application and fertilisation should be undertaken into the absorbing root zone of the tree/s, and can be followed by the application of a composted wood chip mulch.
- 3.13 Minor pruning works where and if required, such as that of crown lifting for clearance, should be undertaken by a qualified arborist and be kept to a minimum to avoid increasing tree stress.



## 4.0 Appendix I

### 4.1 Arboricultural Terminology

- 4.2 Crown – the leaves and branches of a tree measured from the lowest branch on the trunk to the top of the tree.
- 4.3 DBH - diameter of the main trunk, measured at breast height approximately 1.3m above ground level for urban trees.
- 4.4 Deadwooding – the removal of dead, diseased or damaged branch wood from the crown of the tree.
- 4.5 Dripline – the width of the crown of the tree, measured by the lateral extent of the foliage.
- 4.6 First order structural branch – the large branches arising from the trunk that form the main structure of the crown.
- 4.7 Included bark defect – ingrown bark from adjacent parts of the tree that are in contact with each other; usually forks, acutely angled branches or basal stems – often a high failure potential.
- 4.8 Reduction prune – pruning to reduce the extension of a branch, back to a lateral branch that is at least one-third the diameter of the branch being removed.
- 4.9 Root collar – area at the base of the tree where the roots and trunk merge.
- 4.10 Second order branch – a branch arising from a first order structural branch.
- 4.11 Structural root zone (SRZ) – the zone of the root plate most likely to contain roots that are critical for anchorage and the stability of the tree; generally trunk diameter x 5.
- 4.12 Targets – an object, person or structure that would be damaged or injured in the event of tree or branch failure is referred to as the target or target area. The hazard evaluation of the target area is relative to the expected use and occupancy of that area.
- 4.13 Topping and Lopping – deleterious tree and branch reduction work often at indiscriminate points and generally resulting in weakly attached regrowth branches.
- 4.14 Tree Protection Zone (TPZ) – the zone of the root plate most likely to contain roots that are critical for anchorage as well as the absorbing roots responsible for the uptake of water and essential plant nutrients; generally determined as trunk diameter x 12.

## **5.0 Appendix II**

### **5.1 Author Formal Qualifications**

- 5.2 Bachelor of Science (Sustainable Forestry) – 2012  
Edith Cowan University, Joondalup & Murdoch University, Murdoch, WA.
- 5.3 Diploma of Applied Science (Horticulture) – 2000  
Major studies Arboriculture and Parks/ Gardens management  
University of Melbourne, Burnley campus, VIC.
- 5.4 Certificate IV (TAE40110) in Training & Assessment – 2014  
Plenty Training, Robina, QLD.
- 5.5 Certificate of Horticultural Practice – 1994  
Challenger TAFE, Murdoch campus, WA.

### **5.6 Additional Certifications**

- 5.7 ISA Certified Arborist Municipal Specialist (AU-0020AM) - 2012  
International Society of Arboriculture  
[www.isa-arbor.com/certification/benefits/credentialsExplained.aspx](http://www.isa-arbor.com/certification/benefits/credentialsExplained.aspx)
- 5.8 ISA Tree Risk Assessment Qualification (TRAQ) - 2013  
International Society of Arboriculture  
<http://www.isa-arbor.com/certification/becomequalified/becomequalified.aspx>

### **5.9 Limitation of Liability**

- 5.10 Bowden Tree Consultancy are tree specialists who use their qualifications, education, knowledge, training, diagnostic tools and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of this assessment and report.
- 5.11 Bowden Tree Consultancy cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways that the arboriculture industry does not fully understand. Conditions are often hidden within trees and below ground. Unless otherwise stated, observations have been visually assessed from ground level. Bowden Tree Consultancy cannot guarantee that a tree will be healthy or a low risk of harm under all circumstances, or for a specified period of time. Likewise, remedial treatments cannot be guaranteed.
- 5.12 Treatment, pruning and removal of trees may involve considerations beyond the scope of Bowden Tree Consultancy's service, such as property boundaries and ownership, disputes between neighbours, sight lines, landlord-tenant matters and other related incidents. Bowden Tree Consultancy cannot take such issues into account unless complete and

accurate information is given prior or at the time of the site inspection. Likewise Bowden Tree Consultancy cannot accept responsibility for the authorisation or non-authorisation of any recommended treatment or remedial measures undertaken.

- 5.13 In the event that Bowden Tree Consultancy recommends retesting or inspection of trees at stated intervals, or installs any cable/s, bracing systems and support systems, Bowden Tree Consultancy must inspect the system installed at intervals of not greater than 12 months, unless otherwise specified in written reports. It is the client's responsibility to make arrangements with Bowden Tree Consultancy to conduct the re-inspection.
- 5.14 Trees can be managed, but they cannot be controlled. To live or work near a tree involves a degree of risk. All written reports must be read in their entirety; at no time shall part of the written assessment be referred to unless taken in full context with the whole written report. If this written report is to be used in a court of law, or any other legal situation, Bowden Tree Consultancy must be advised in writing prior to the written assessment being presented in any form to any other party.

#### **5.15 Business Details**

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#### **5.17 Literature Cited**

- 5.18 Harris, R.W., et al. (2004). *Arboriculture – Integrated Management of Landscape Trees, Shrubs & Vines*, Upper Saddle River, NJ: Prentice Hall
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- 5.20 Urban, J., (2008). *Up By Roots – Healthy Soils and Trees in the Built Environment*, Champaign, IL: International Society of Arboriculture