



*Swan and Canning Rivers Management Act 2006*

**PART 5**

**DETERMINATION OF DEVELOPMENT APPLICATION**

FILE NUMBER : 2018/3071  
APPLICANT : Perth Flying Squadron Yacht Club  
APPLICANT'S ADDRESS : Attn: Glen Deuble  
General Manger  
Perth Flying Squadron Yacht Club  
P.O. Box 3181  
NEDLANDS WA 6009  
LANDOWNER : Swan River Trust (River Reserve 48325)  
LAND DESCRIPTION : Swan River (Reserve 48325) and Lot 254 on Plan 37070  
(Reserve 17391) The Esplanade, Dalkeith  
DEVELOPMENT : Installation of a wave attenuator and boat pens, upgrades to  
the vessel maintenance area, slipway removal and  
replacement with a boat lift, and foreshore landscaping works  
VALID FORM 1 RECEIVED : 29 May 2018  
DETERMINATION : **APPROVAL WITH CONDITIONS**

The application to commence development in accordance with the application received on 29 May 2018, and amended plans and additional information submitted on 30 July 2018 and 8 August 2018, is APPROVED subject to the following conditions:

1. Approval to implement this decision is valid for two (2) years from the date of the approval. If substantial on-site works have not commenced within this period, a new approval will be required before commencing or completing the development.

**Prior to the commencement of works**

2. The applicant shall notify the Department of Biodiversity, Conservation and Attractions and the City of Nedlands in writing not less than seven (7) days prior to the commencement of each stage of the works (see **Advice Note 1**).
3. Prior to the commencement of works, a Construction Environmental Management Plan shall be submitted to and approved by the Department of Biodiversity, Conservation and Attractions, on advice from the City of Nedlands (see **Advice Notes 2 and 7**).
4. Prior to the commencement of works, final design plans/drawings and technical specifications, including details of the external colours, finishes and materials for the wave attenuator and finger jetties and land-based infrastructure within the Club's premises, shall be submitted to and approved by the Department of Biodiversity, Conservation and Attractions, on advice from the Department of Transport and the City of Nedlands (see **Advice Notes 3 and 7**).
5. Prior to the commencement of works, a final Landscaping Plan shall be submitted to and approved by the Department of Biodiversity, Conservation and Attractions, on advice from the City of Nedlands (see **Advice Notes 4 and 7**).

6. Prior to the commencement of works, an amended Site Plan (referenced as the Landscape Overview Plan) shall be submitted to and approved by the Department of Biodiversity, Conservation and Attractions, on advice from the City of Nedlands (see **Advice Notes 5 and 7**).
7. Prior to the commencement of works, the River reserve lease is to be amended (see **Advice Notes 6 and 7**).
8. Prior to any fill and/or topsoil being brought onto the site, the applicant shall ensure that all material is certified clean, uncontaminated, and free from rubble, weeds and disease.

#### **During works**

9. All footings and structures associated with the fencing and gates shall be located wholly within the site boundaries of the Perth Flying Squadron Yacht Club's Land Lease.
10. All works shall be implemented in accordance with the plans approved under **Conditions 3, 4, 5 and 6**.
11. The applicant shall ensure that no damage to the foreshore, riverbank, or waterway (including vegetation and infrastructure) occurs beyond the scope of the approved works. If any inadvertent damage occurs, the applicant is required to notify the Department of Biodiversity, Conservation and Attractions within 48 hours of the damage occurring and rectify the damage at its expense.

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

12. Upon completion of the works, all waste materials, equipment and machinery shall be removed, and the site cleaned up to the satisfaction of the Department of Biodiversity, Conservation and Attractions, on advice from the City of Nedlands.
13. The Environmental Management System and Maintenance Program shall be updated to reflect the amendments to the vessel maintenance area (i.e. area bunding and runoff filtration system) and marine-based expansion (i.e. wave attenuator and berthing pens) (see **Advice Note 11**).

#### **On-going**

14. The applicant shall ensure that noise reduction measures are installed on the boatlift, in accordance with the Environmental Noise Report (Gabriels Environmental Design, 4 June 2009) and addendum (Gabriels Environmental Design, 10 August 2009) (see **Advice Note 14**).
15. Stormwater runoff from constructed impervious surfaces generated by small rainfall events (i.e. the first 15 mm of rainfall) must be retained and/or detained and treated (if required) on-site.
16. Boats, vehicles, materials and/or equipment are not to be stored on the public foreshore reserve outside of the Perth Flying Squadron Yacht Club's lease premises (see **Advice Note 15**).
17. A minimum of 153 car parking bays shall be provided within the Perth Flying Squadron Yacht Club premises, unless otherwise agreed in writing by the Department of Biodiversity, Conservation and Attractions, on advice from the City of Nedlands.

18. All car parking, trailer and boat storage areas are to be contained within defined hardstand areas of the car park.
19. All car parking bays, boat storage bays, vehicle manoeuvring, and vehicle access ways shown on the approved site plan are to be constructed and maintained by the applicant, to the satisfaction of the City of Nedlands.
20. The proposed fencing is to be maintained by the applicant, to the satisfaction of the City of Nedlands.

## ADVICE TO APPLICANT

1. Notification of commencement of works and submission of documents can be emailed to [rivers.planning@dbca.wa.gov.au](mailto:rivers.planning@dbca.wa.gov.au).
2. The Construction Environmental Management Plan required under **Condition 3** shall describe how the proposed works will be managed to minimise potential environmental impacts and shall address, but not be limited to:
  - scope of works, including demolition and construction methodology;
  - site access and management, including fencing requirements;
  - management of machinery and equipment, including a refuelling procedure and spill response;
  - on-site storage and bunding of materials, equipment, chemicals and fuel;
  - protection of the river from inputs of debris, litter, rubbish or other deleterious material;
  - foreshore protection;
  - sediment and turbidity management, including the risk of mobilising riverbed contaminants;
  - wildlife management, including minimising noise and vibration impacts;
  - public access and safety;
  - staging of works;
  - hours of operation and schedule of works; and
  - complaints and incidents.

A site map showing the laydown area, vehicle entry/exit points and pedestrian management (e.g. road closures, alternative routes and public safety signage) shall be included. Emergency spill kits shall be onsite at all times and refuelling of land-based vehicles or machinery is to be undertaken outside the Swan Canning Development Control Area or at a licensed refuelling facility. In the case of pollution events, the Department of Biodiversity, Conservation and Attractions shall be contacted immediately on 9278 0900 or a/h 0419 192 845.

The plan is to address the most appropriate means of sediment and turbidity management for the proposed works. The slipway is located within a potentially contaminated area and the demolition methodology shall be designed to minimise the mobilisation of contaminants. **A silt curtain(s) must be installed during the demolition works.** All reasonable efforts shall be taken to control sediment plumes, but where they occur, work must stop whilst the plume is addressed, and work should only recommence once the integrity of the turbidity management device is restored. If plumes or adverse turbidity levels occur beyond the work area, the applicant shall contact the Department of Biodiversity, Conservation and Attractions within 2 hours on 9278 0900 or a/h 0419 192 845.

Piling operations shall include a soft start up procedure at the commencement of each piling sequence. The contractor shall keep a constant watch for dolphins during piling operations. No pile driving shall start if dolphins are within 200m of the site and piling activity shall cease

if a dolphin comes within 50m of the site and shall not recommence until any dolphin has moved more than 200m away or has not been observed for 20 minutes.

3. Regarding **Condition 4**, the Department of Transport advises that all detailed drawings/plans for the wave attenuator and finger jetties are to be signed and certified by an experienced maritime engineer to confirm that they have been designed in accordance with AS3962-2001 *Guidelines for Design of Marinas*.

Further details of the proposed bunding around the vessel maintenance area and technical specifications for the runoff treatment system shall be provided. The selection of colours, finishes and materials of the proposed infrastructure should complement the character and landscape setting of the Swan River.

4. The final Landscaping Plan required under **Condition 5** shall address the following:
  - Details of the plant species, densities, size and location, and the protection/retention of existing vegetation. It is recommended that the planting list be expanded to include additional plant species from the Karrakatta vegetation complex;
  - Final design drawings and details of the materials finishes and colours of the pathways, hardstand areas, signage and other public safety measures for the crossover points;
  - Monitoring and maintenance requirements; and
  - The City of Nedlands advises that it shall be notified no less than seven (7) days prior to the commencement of the landscaping works and the approved final Landscaping Plan shall be implemented within sixty (60) days of the approval, unless an alternative date is agreed in writing by the City of Nedlands and the Department of Biodiversity, Conservation and Attractions. The landscaping is to be maintained by the applicant, to the City of Nedlands' satisfaction.
5. Regarding **Condition 6**, the Site Plan is to be amended to clearly show the car parking and boat storage bays. The City of Nedlands has advised that a minimum of 153 car parking bays will need to be provided in accordance with Australian Standard 3962-2001 - *Guidelines for Design of Marinas*.
6. Regarding **Condition 7**, an amendment of the River reserve lease (Deed of Partial Surrender and Variation of Riverbed Lease) is required to excise the two portions of existing lease area (total relinquished area 5502m<sup>2</sup>) and extend the lease boundary (total increased area 8483m<sup>2</sup>) to accommodate the wave attenuator and berthing pens, as outlined in Drawing PFS-01-10 (Revision A, 30 July 2018).
7. To allow sufficient time for the Department of Biodiversity, Conservation and Attractions to consider and approve the plans and details required under **Conditions 3 to 6**, the documents shall be submitted to the Department of Biodiversity, Conservation and Attractions at least 30 days before the expected works commencement date.
8. The applicant will need to apply for and obtain a jetty modification licence from the Department of Transport Coastal Facilities Management before works commencement.
9. Regarding marine safety, the applicant is advised to ensure that:
  - a. all in-water operations and activities must be conducted in accordance with Western Australian Marine Safety Legislation; and
  - b. all on-water works areas must be marked with yellow buoys and flashing yellow lights for the duration of the works.

10. It is recommended that the applicant, or any third party contractor it engages to undertake the works, notify Department of Transport Navigational Safety by email to [navigational.safety@transport.wa.gov.au](mailto:navigational.safety@transport.wa.gov.au) at least 21 days before works commencement, to enable a Temporary Notice to Mariners (TNTM) outlining the scope of the works to be published. The TNTM is to be funded by the applicant or its contractor.
11. A monitoring record of the runoff treatment system should be retained to verify that the system is functioning as intended and the water quality outcomes are achieved.
12. The applicant is advised that the proposal has the potential to be affected by the 1% annual exceedance probability flood level and potential sea level rise. The onus is on the applicant to undertake a risk assessment and exercise their judgment in determining the level of risk they are prepared to accept.

The Swan River Trust's Climate Change Risk Assessment Project (2010) sets out a methodology to assess the vulnerability of foreshore areas, which is available on request from the Department of Biodiversity, Conservation and Attractions. It is also recommended that applicants undertake their own research and obtain appropriate independent professional advice relevant to the particular circumstances.

13. If any development encroaches into the nature-strip (verge), the City of Nedlands advises:
  - No street trees in the nature-strip (verge) shall be removed. Any approved street tree removal shall be undertaken by the City of Nedlands and funded by the applicant, unless otherwise approved.
  - Any development in the nature-strip (verge), including footpaths, will require a Nature-Strip Development Application (NSDA) to be lodged with and approved by the City's Technical Services department, before works commencing within the nature-strip.
14. All noise levels produced by the development construction are to comply with the provisions of the Environmental Protection (Noise) Regulations 1997 (as amended). The applicant is advised that all mechanical equipment is required to comply with the Environmental Protection (Noise) Regulations 1997.
15. The applicant is advised that boats, materials and/or equipment being stored on the Club's premises shall not obstruct vehicle manoeuvring areas, vehicle access ways, pedestrian access ways, car parking bays or unloading bays. Any boats and vehicles currently being stored or parked outside of the lease premises are to be moved into the designated parking and storage bays shown on the approved site plan referred to in Condition 6 within 28 days of the development approval decision.
16. The Department of Water and Environmental Regulation, Contaminated Sites advises that the site is classified under the *Contaminated Sites Act 2003* as 'remediated for restricted use'. It is recommended that adequate health and safety measures are implemented to minimise the risk of disturbing the suspected contaminated sediments.
17. The *Acid Sulphate Soils Guideline Series for guidance on the identification, assessment and management of acid sulphate soils in Western Australia* is available from the Department of Water and Environmental Regulation website at [www.dwer.wa.gov.au](http://www.dwer.wa.gov.au). If any acid sulphate soils are exposed during the works, the Contaminated Sites Branch of the Department of Water and Environmental Regulation shall be contacted for further advice on 1300 762 982.
18. The applicant is advised to contact the Department of Planning, Lands and Heritage to ensure that the proposed works do not breach any section of Part IV (Protection of

Aboriginal Sites) of the *Aboriginal Heritage Act 1972* (the AHA). Approval under section 18 of the AHA may be required. It is recommended that the applicant consult the recognised knowledge holders for Aboriginal Site 3536 on whether the works will impact the Swan River. Please refer to the *Aboriginal Heritage Due Diligence Guidelines* (Department of Aboriginal Affairs and the Department of the Premier and Cabinet 2013) when planning specific development within an Aboriginal Heritage area, which provides guidance when undertaking a self-risk assessment regarding the proposal's potential impact to Aboriginal Heritage.



Hon Stephen Dawson MLC  
**MINISTER FOR ENVIRONMENT**

Date: 3/4/19

**DEPARTMENT OF BIODIVERSITY, CONSERVATION AND ATTRACTIONS REPORT**

- PROPOSAL : Installation of a wave attenuator and boat pens, upgrades to the vessel maintenance area, slipway removal and replacement with a boat lift, and foreshore landscaping works at the Perth Flying Squadron Yacht Club
- COST : \$3.68 million
- LOCATION : Swan River (Reserve 48325) and Lot 254 on Plan 37070 (Reserve 17391) The Esplanade, Dalkeith
- APPLICANT : Perth Flying Squadron Yacht Club
- LANDOWNER : Swan River Trust (River reserve 48325) and City of Nedlands (Lot 254 on Plan 37070)
- LOCAL GOVERNMENT : City of Nedlands
- MRS CLASSIFICATION : Parks and Recreation reserve and Waterways
- DECISION TYPE : Part 5, *Swan and Canning Rivers Management Act 2006* – Ministerial Determination
- ATTACHMENTS : 1. Aerial photo of subject land  
2. City of Nedlands' comments  
3. Existing River reserve lease area  
4. Proposed landscaping plans (showing land lease area)  
5. Proposed River reserve area and new jetty layout (current)  
6. Details of the wave attenuator  
7. Proposed upgrades to the vessel maintenance area  
8. River reserve lease extension area (previously proposed)
- RECOMMENDATION : **APPROVAL WITH CONDITIONS**
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**REPORT**

**1.0 INTRODUCTION**

- 1.1 The Department of Biodiversity, Conservation and Attractions (DBCA) received an application from the Perth Flying Squadron Yacht Club (the Club) proposing to install a wave attenuator with finger jetties and mooring pens, upgrade the vessel maintenance area and remove (and fill in) the existing slipway, and undertake foreshore landscaping works. The works will occur on Lot 254 on Plan 37070 (Reserve 17391) The Esplanade, Dalkeith and the Swan River (Reserve 48325) (see **Attachment 1**). The subject land and the Swan River are reserved for 'Parks

and Recreation' and 'Waterways', respectively, under the *Metropolitan Region Scheme*.

- 1.2 Lot 254 on Plan 37070 is vested with the City of Nedlands (the City) and the Swan River is vested with the Swan River Trust (the Trust).
- 1.3 The proposed development is to occur on land and waters completely within the Swan Canning Development Control Area (DCA) and therefore requires an approval from the Minister for Environment in accordance with Part 5 of the *Swan and Canning Rivers Management Act 2006* (SCRM Act).
- 1.4 The Acting Director General of DBCA has prepared this report in accordance with section 76 of the SCRM Act.

## **2.0 CONSULTATION**

### **City of Nedlands**

- 2.1 The City advised that the application be deferred until amended plans have been provided to clearly define car parking bays and boat storage bays. In accordance with Australian Standard 3962-2001 - *Guidelines for design of marinas*, a total of 153 car parking bays are required to be provided at the Club.
- 2.2 Notwithstanding the above advice, the City has provided recommended conditions relating to foreshore protection, landscaping details, noise and traffic management to be incorporated in the approval, if the application is progressed.
- 2.3 Given that the requested amendments are in relation to car parking arrangements, this can be addressed as a condition of approval. The City has provided further recommendations to address car parking arrangements.
- 2.4 The City's comments are in **Attachment 2**.

### **Department of Water and Environmental Regulation, Floodplain Management**

- 2.5 The Department of Water and Environmental Regulation (DWER) Floodplain Management advised that the proposed area is affected during major flooding, with the 1 in 100 annual exceedance probability (AEP) flood level being 1.35m AHD (approx.), increasing to 2.2m AHD (approx.) if sea levels rise by 0.9m by 2110.
- 2.6 DWER advised that the proposed development is unlikely to cause a significant impact to the existing flood regime of the Swan River. The proposed wave attenuator may be subject to potential flooding and flood damage in major flood events.

### **Department of Water and Environmental Regulation, Contaminated Sites**

- 2.7 DWER Contaminated Sites advised that the site is currently classified as 'remediated for restricted use' under the *Contaminated Sites Act 2003*. Further discussion on historical contamination and subsequent remediation of the site is discussed in Section 6 of the report.
- 2.8 DWER Contaminated Sites has assessed the proposal and advises that it has no objections to the proposed development, subject to the following recommendations:



- In-water works will need to be managed to minimise sediment disturbance and water turbidity to be contained within the immediate works area.
- Upgrades to the Club's stormwater management system is recommended to separate clean and contaminated runoff, including the treatment of contaminants associated with boat maintenance, and to prevent its discharge to the river.
- The site is located within an area identified as having a low to medium risk of encountering acid sulphate soils (ASS) within 3m of the natural ground surface, and the Swan River has medium to high risk of encountering ASS. It is recommended that the applicant is referred to DWER's guidelines for information on the investigation and management of ASS disturbance.

### **Department of Transport, Maritime Planning**

- 2.9 The Department of Transport (DoT) Maritime Planning advised that it has no in-principle objection to the proposed development, subject to the following recommendations:
- The Club will need to apply for, and obtain, a jetty modification licence from DoT Coastal Facilities Management.
  - The wave attenuator design shall be signed and certified by an experienced maritime engineer to confirm that it has been designed in accordance with AS3962-2001 *Guidelines for Design of Marinas*.

### **Department of Transport, Navigation Safety**

- 2.10 DoT Navigational Safety advised that it has no objections to the proposal, subject to the following recommendations:
- All on-water operations and activities must be conducted in accordance with the relevant marine legislative provisions.
  - Prior to the commencement of works, a temporary notice to mariners (TNTM) outlining the scope of works and works area, navigational marking (lighting) and date of works must be issued. It is recommended that DoT be notified at least 21 days prior to works commencing to enable a TNTM to be published.
  - The on-water works area must be marked with yellow buoys with flashing yellow lights for the duration of the works.

### **Department of Planning, Lands and Heritage**

- 2.11 The application was referred to the Department of Planning, Lands and Heritage (DPLH) for comment. However, no response was provided within the 42-day comment period.
- 2.12 DPLH was provided further opportunity to comment on the proposal during the public comment period (see Section 3.2).

## **3.0 PUBLIC SUBMISSIONS**

- 3.1 In accordance with the requirements of Part 5 of the SCRM Act, a copy of the draft report and proposed recommendation was provided to the applicant and the referral agencies. A copy was also published on DBCA's website between 27 November 2018 and 14 December 2018.

- 3.2 One (1) submission was received from DPLH to advise that Advice Note 18 (Section 10 – Recommendations) is considered appropriate to inform the applicant of the requirements under the *Aboriginal Heritage Act 1972* regarding potential impacts of the proposed works to an Aboriginal Heritage Site (Swan River ID 3536). It also provided further advice on the Aboriginal Heritage Due Diligence Guidelines, which has been incorporated in Advice Note 18.

#### 4.0 RELEVANT POLICIES AND PLANS

- ◆ State Planning Policy 2.10 – *Swan-Canning River System* (SPP 2.10)
- ◆ Corporate Policy Statement No. 42 – *Planning for Land Use, Development and Permitting Affecting the Swan Canning Development Control Area* (Policy 42)
- ◆ Corporate Policy Statement No. 43 – *Planning for Marinas, Yacht Clubs and Aquatic Clubs in the Swan Canning Development Control Area* (Policy 43)
- ◆ Corporate Policy Statement No. 44 – *Planning for Jetties in the Swan Canning Development Control Area* (Policy 44)

#### 5.0 ENVIRONMENTAL AND PLANNING CONSIDERATIONS

- ◆ River Reserve Lease Extension
- ◆ Environmental Protection
- ◆ Environmental Management System
- ◆ Public Access and Safety
- ◆ Jetty Design
- ◆ Visual Amenity
- ◆ Car parking
- ◆ Staging of works
- ◆ Heritage
- ◆ Acid Sulphate Soils
- ◆ Contamination
- ◆ Flood Prone Land

#### 6.0 BACKGROUND

- 6.1 The Club site covers approximately 2.11ha of land and approximately 4.66ha over water (see **Attachment 1**). It has a land lease from the City for its land-based facilities (e.g. clubroom, car park, storage sheds, fuel storage tank and maintenance/workshop areas) and a River reserve lease from DBCA for its river-based facilities (e.g. jetties and mooring pens) (see **Attachments 3 and 4**). Some components of the Club's land-based infrastructure (e.g. slipway, emergency storage shed and hardstand) extends into the public foreshore reserve, between the river and the Club's land lease area (see **Attachment 4**).
- 6.2 The Club was originally located at the former William Street Jetty, Perth (near Riverside Drive, Perth). It was relocated to the current site at Dalkeith in 1961 after the Narrows Bridge was constructed, which impacted on its sailing course.

- 6.3 Wave conditions along this section of the Dalkeith foreshore area are mostly determined by wind generated waves and vessel wakes. The Club is exposed to strong wave conditions due to the large fetch area in Melville Water and boat wake from passing vessels.
- 6.4 The Club was granted a Part 5 Development Approval on 17 December 2009 (SRT 755), with a Section 84 minor variation and extension to the development approval granted on 23 October 2013, to undertake major redevelopment of its land and marine based infrastructure (SRT 5222). The project consisted of additions to the clubhouse building, extension and upgrades to jetties and pens, installation of a wave attenuator, upgrades to the vessel maintenance area (including a washdown runoff treatment system), filling in the slipway and installation of a boat lift, upgrade/relocation of the fuel storage facilities, upgrades to the car park with additional parking bays, and landscaping works. The project was estimated to cost \$11.1 million. However, it was not implemented, and the approval has lapsed.
- 6.5 In recent years, DBCA has approved a number of applications for jetty infrastructure repairs. These repairs have subsequently been undertaken.
- 6.6 The current application proposes the following works:
- Installation of a wave attenuator (97m x 25m x 153m long sections), access gangway, 32 steel piles (approx.) and 14 finger jetties (floating pontoons) to create 27 fixed mooring pens (see **Attachments 5 and 6**);
  - Filling in and removing the existing slipway, and installing a boat lifting service (Marine Travelift – Mariner Forklift) and reinforced concrete apron within the public foreshore reserve adjacent to Jetties D and E.
    - The Club commissioned an acoustic report to examine the noise emissions from the boat lift. The report recommended several noise mitigation measures to reduce noise impacts to the surrounding residential areas.
    - Noise insulation and louvre kits will be fitted on the boat lift and the high frequency reversing beepers will be replaced with a broadband alarm and flashing warning lights, as recommended in the acoustic report. The operation hours will be Mondays to Fridays, between 9am and 5pm.
  - Upgrades to the vessel maintenance area. Bunding will be constructed around the vessel maintenance area and a treatment system will be installed to treat the runoff from the vessel maintenance and washdown areas (see **Attachment 7**);
  - Landscaping enhancement works to the foreshore area adjacent to the Club's premises by replacing most of the existing hardstand with turf, constructing a shared public access pathway and planting native species (see **Attachment 4**); and
  - Fence installation (1.8m-high garrison fence) along the river boundary of the Club's lease area, with vehicle and pedestrian gates and appropriate pedestrian safety signage and markings (see **Attachment 4**).
- 6.7 The Club advised that the proposed wave attenuator is designed to protect its marine-based infrastructure (e.g. jetties and members' boats) against further damage from wind generated waves and boat wake. The additional fixed mooring pens are intended to assist with funding the project through increased revenue. The upgrades to the vessel maintenance area, slipway and foreshore will improve the

quality of the water discharging to the river and will enhance visual and amenity values of the public foreshore reserve.

## 7.0 DISCUSSION

### River Reserve Lease Extension

- 7.1 Policy 43 requires new development associated with yacht clubs, marinas and other aquatic-based clubs to be located within its existing River reserve lease area, with a presumption against developing outside an existing lease boundary. Lease extensions have the potential to preclude use and access of the river reserve by the wider community. Where significant development is proposed, the applicant will need to apply for a new lease or amend the existing lease.
- 7.2 For the Part 5 Development Approval granted in 2009, the Club proposed a 28% expansion of the River reserve lease. It sought to relinquish 5009m<sup>2</sup> of its existing lease area between Jetty A and the shoreline near the north-east edge of the Club and acquire an additional 1.85ha to the south-east, to create a total lease area of 5.98ha (see **Attachment 8**). The increase in lease area was to accommodate the wave attenuator and additional boat pens. At the time, the lease expansion was supported because the wave attenuator would improve protection of the marina. In addition, the Club was also proposing a major redevelopment that included significant improvements to the runoff treatment system within its new boat yards, stormwater management system for the Club's premises (e.g. installation of rainwater tank and vegetated swales), upgrades to its fuel facilities and foreshore landscaping works. The proposal would have provided a net public benefit and positive environmental outcome.
- 7.3 The original plans submitted for the current application proposed a River reserve lease expansion of 19% (net increase of 8998m<sup>2</sup>) to accommodate the wave attenuator and additional boat pens. However, following negotiations with DBCA, the Club submitted amended plans with a modified lease expansion of 6.3% (net increase of 2981m<sup>2</sup>), by reducing the proposed fairway channel.
- 7.4 If the application is approved, the Club will need to amend its River reserve lease to include the wave attenuator and additional boat pens.
- 7.5 The proposed River reserve lease variation will consist of the following:
- relinquish 5002m<sup>2</sup> of its existing lease area between Jetty A and the shoreline near the north-eastern edge of the Club;
  - relinquish 500m<sup>2</sup> of its existing lease area between Jetty F and the shoreline near the north-western edge of the Club; and
  - expand the lease area to the south by 8483m<sup>2</sup> (net increase of 2981m<sup>2</sup>) (see **Attachment 5**).
- 7.6 To support the lease expansion, the Club has also committed to improving the runoff management system within its vessel maintenance area, consistent with recent recommendations from the Environmental Management System audits, and undertake foreshore works to enhance amenity and public access.

## **Environmental Protection**

- 7.7 Policy 42 aims to ensure that land use and development on and adjacent to the river system maintains and enhances the quality and amenity of the river environment.
- 7.8 The construction works have the potential to impact on the foreshore and waterway, including disturbance to the riverbed, water quality degradation, foreshore degradation, wildlife (noise) impacts and disruption to public access and safety.
- 7.9 To ensure that all potential environmental impacts are identified and managed appropriately, it is recommended that a construction environmental management plan (CEMP) be included as a condition of approval. The CEMP will be required to include details of demolition and construction methodology, protection of water quality, machinery and equipment management (including refuelling), site access and management, public access and safety, waste management and spill response, foreshore protection and minimisation of potential noise and vibration impacts to fauna.

## **Environmental Management Systems**

- 7.10 Policy 43 states that marinas and yacht clubs are required to update and implement an environmental management system (EMS) that addresses environmental impacts associated with boat maintenance, facility use, pollution prevention and foreshore management.
- 7.11 Recent EMS audits conducted by DBCA recommended improvements to the vessel maintenance area, such as the provision of adequate bunding and clearly marked hardstand areas for vessel maintenance, and the separation of clean (e.g. roof runoff) and contaminated (e.g. from the vessel maintenance area) runoff.
- 7.12 The Club is proposing to provide bunding (and clear markings) around the vessel maintenance and washdown areas to ensure that contaminated runoff is confined and treated. A treatment system is proposed to ensure that runoff from the boat cleaning and maintenance area will pass through a water treatment system. This system will consist of primary and secondary filter sumps (for gross pollutants), a sand filter and hydrocarbon filters prior to discharge to sewer.
- 7.13 The proposed upgrades to the vessel maintenance area are likely to improve water quality outcomes and are supported.

## **Public Access and Safety**

- 7.14 SPP 2.10 states that public access to the river and foreshore should be maintained. It is important that development near the river does not restrict public access.
- 7.15 It is understood that as part of the Club's land lease agreement with the City, the Club is required to maintain public access through the foreshore between its land lease premises and the river. Although public access is currently available through the lower foreshore, there is no defined public access path and the Club's infrastructure, such as the slipway and boat hardstand area (including boat traffic) have the potential to impede public access through the foreshore reserve.

- 7.16 The development application proposes to remove the slipway, construct a formal pedestrian access path and undertake landscaping improvements (e.g. turfing and additional planting) works in the foreshore, which will improve public access and amenity. It is noted that sections of hardstand will remain in the public foreshore area to accommodate the Club's proposed boat lift, existing boat crane and boat ramp. The Club's emergency shed adjacent to the refuelling jetty, which contains fire service equipment and fuel spill kits, will also remain on the public foreshore reserve.
- 7.17 The preliminary Landscaping Plans indicate that several sections of hardstand areas will be retained within the public foreshore reserve for boat access to the river:
- from the vessel maintenance area to boat lift area adjacent to Jetty D and E,
  - from the Club's land premises to the boat crane adjacent to Jetty C to launch small sailing boats, and
  - from the Club's land premises to the boat ramp adjacent to the fuel jetty.
- 7.18 A fence will be installed along the riverside boundary of the Club's premises. The fence will include sliding gates to provide controlled access to the boat lift area, boat crane, boat ramp and pedestrian access to the foreshore reserve. It is anticipated that the proposed fencing will also deter Club members from storing their boats within the public foreshore reserve, which has occurred in the past.
- 7.19 The development application and the preliminary Landscaping Plan indicate that crossover points to the boat ramp and boat lift area will include public safety measures, such as signage, a crossing gate and 'zebra style crossing' markings on the hardstand.
- 7.20 The preliminary Landscaping Plan indicates that native plants (e.g. Brown Boronia, Swan River Pea, Flame Pea, etc.) will be planted in the public foreshore reserve. However, details regarding the planting size and densities have not been provided.
- 7.21 It is recommended that provision and approval of a final Landscaping Plan is included as a condition of approval. This plan is to provide further landscaping details for the public foreshore reserve, such as plant species and densities, fencing and public safety measures.
- 7.22 Public access during the construction works should be maintained, unless closure (with an alternative route provided) is necessary for public safety purposes. This can be addressed as part of the CEMP.

### **Jetty Design**

- 7.23 Policy 44 recognises that appropriately designed and located commercial and community boating facilities, such as jetties and boat ramps, form an integral part of the river system setting and are an important recreational and tourist resource. Policy 44 also seeks to ensure that the location of boating infrastructure does not interfere with vessel navigation.
- 7.24 DoT standard advice to address navigational safety, such as the requirement to ensure all on-water operations and activities are conducted in accordance with relevant marine legislation and a TNTM is organised, will be included on the approval.

- 7.25 Policy 43 requires new jetties and similar structures at yacht clubs to be constructed to the standards set by DoT and relevant Australian Standards. The applicant has provided preliminary drawings for the wave attenuator and finger jetties, and it appears the new mooring pens will accommodate vessels with a maximum length of 20m.
- 7.26 DoT Maritime Planning advised that the proposed jetty structures will need to comply with AS3962-2001 *Guidelines for Design of Marinas* and be certified by a qualified and practising marine engineer. These requirements can be included as a condition of approval about the submission of final design plans/drawings.

#### **Visual Amenity**

- 7.27 SPP 2.10 states that development proposals should be considered in the context of the river setting and the characteristics of the development site, particularly regarding building height, bulk, scale, form, orientation and location. Policy 42 states that the design, materials and colour scheme of developments adjacent to the river and foreshores should complement and protect the character and landscape setting of the river.
- 7.28 The preliminary design drawings provided with the application contain limited information regarding the construction materials proposed for the wave attenuator, finger jetties and fencing. It is understood that the wave attenuator will be made from concrete blocks and the finger jetties will be a floating pontoon system.
- 7.29 A condition of approval will require the provision of final design drawings for the wave attenuator, jetties and fencing that detail the colours, materials and external finishes. It is recommended that colours, materials and finishes that complement the surrounding river environment are used.
- 7.30 The proposal to remove the slipway and sections of hardstand areas from the foreshore (including landscaping works) are also expected to enhance the visual amenity of the foreshore area.

#### **Car Parking**

- 7.31 Policy 43 requires applications for marinas, yacht clubs or other aquatic clubs to demonstrate that adequate parking is proposed, and that the provisions for parking are in accordance with the relevant local planning scheme and Australian Standards.
- 7.32 The City has advised that the Club is to provide a total of 153 car bays, in accordance with Australian Standards AS3962-2001 *Guidelines for Design of Marinas* (AS3962-2001). The City also advises that the car parking area on the opposite side of The Esplanade, Dalkeith, which is managed by the City, (adjacent to the eastern pedestrian entrance of the Perth Flying Squadron Yacht Club) may be upgraded in the future, and the Club may be requested to contribute funds to it.
- 7.33 The Site Plan (referred to as the Landscape Overview Plan) provided by the Club indicates the bays within the Club's premises. However, it is unclear if the bays are for boat storage or for car parking. It is recommended that an amended Site Plan is required as a condition of approval, and that adequate car parking is provided to address AS3962-2001.

## Staging of Works

- 7.34 The application indicates that the proposed works will be implemented in stages, with the intention of completing the slipway replacement and wave attenuator (and associated boat pens) installation within 9 and 11 months, respectively, of receiving approval. The foreshore landscaping works are proposed to be completed within 12 months of receiving approval, with fencing (and associated safety markings) to be completed within 14 months of receiving approval. The Club has not indicated when the vessel maintenance area will be upgraded.
- 7.35 The proposed improvement works within the public foreshore reserve, including the creation of a formalised public pathway, should be undertaken in the early stages of the works program. Further details of the staging of the works, including completion dates for the vessel maintenance area, will need to be addressed in the CEMP.

## Heritage

- 7.36 Policy 42 states that places of cultural and heritage significance, both Aboriginal and European, and of natural heritage are to be conserved.
- 7.37 The proposal is within the boundaries of an Aboriginal site DAA 3536 (Swan River). An advice note will be included to advise the Club to contact the Department of Planning, Lands and Heritage to ensure that the proposed works will not impact on DAA 3536 and that an approval under section 18 of the *Aboriginal Heritage Act 1972* may be required.

## Acid Sulphate Soils

- 7.38 The proposed works are to be undertaken within a high to moderate (Swan River) and moderate to low (public foreshore reserve) acid sulphate soils (ASS) disturbance risk area within 3m of the natural surface. The proposed works will require minor ground excavation during the piling works and the slipway removal.
- 7.39 Infrastructure installation, such as the proposed infiltration system to treat runoff from the vessel maintenance area, may require localised dewatering.
- 7.40 DWER Contaminated Sites advised that the risk of disturbing ASS from the proposed works is expected to be low.
- 7.41 The potential for disturbance of ASS during works and dewatering operations can be addressed through conditions of approval or advice notes.

## Contamination

- 7.42 The site was originally classified as 'possible contaminated – investigation required' due to a series of assessments detecting antifouling agents (e.g. TBTs) within river sediments near the slipway and vessel maintenance infrastructure. The site was then reclassified to 'contaminated – remediation required' when a petroleum leak was detected from the Club's refuelling bowser in September 2010.
- 7.43 Remediation of hydrocarbons within the soils was undertaken at the site, which included the excavation and removal of contaminated soil, and replacement with 'clean fill'. However, an area (approx. 200m<sup>2</sup>) adjacent to the river wall contains low



levels of hydrocarbon contamination. Recent groundwater investigations have indicated that groundwater hydrocarbon concentrations were decreasing through natural attenuation. The site is now classified as 'remediated for restricted use'.

- 7.44 The site is considered to be suitable for its current use as a recreational public open space and yacht club related purposes.
- 7.45 The proposed slipway removal has the potential to disturb contaminated sediments. The CEMP will need to address the management of potential contaminants during the slipway demolition.
- 7.46 The proposed upgrades to the maintenance area, such as the installation of bunding and a water treatment system are expected to contain and treat contaminants associated with boat maintenance and will minimise contaminants from entering the Swan River.

### **Flood Prone Land**

- 7.47 Policy 42 states that development within the floodway that will significantly affect the normal flow of the Swan and Canning rivers during floods and/or will lead to the degradation of the natural features of the river system should not be supported.
- 7.48 DWER Floodplain Management advised that the site will be affected by flooding, with the 1% AEP flood level estimated to be 1.35m AHD, increasing to 2.2m AHD if sea levels rise by 0.9m by 2110. An advice note will be included to advise the applicant that the jetty designs should account for potential flood risks and sea level rise.

### **8.0 SWAN RIVER TRUST ADVICE**

- 8.1 In accordance with section 75 (3A) of the SCRM Act, the Trust considered DBCA's draft report at a meeting on 13 November 2018, where the Trust resolved to support the report and recommendation.

### **9.0 CONCLUSION**

- 9.1 The proposed works are not considered excessive in scale or bulk. The proposed wave attenuator is expected to improve protection of the marina from wind waves and boat wake, and the land-based development (e.g. replacement of the slipway with a boat lift, vessel maintenance area upgrades and foreshore enhancement works) are expected to provide positive public amenity and environmental outcomes.
- 9.2 Potential environmental impacts from the works can be addressed through the preparation and approval of a CEMP, which would be required as a condition of approval.
- 9.3 For these reasons, the proposal is recommended for approval, subject to conditions and advice.

## 10.0 RECOMMENDATION – APPROVAL WITH CONDITIONS

That the Acting Director General of the Department of Biodiversity, Conservation and Attractions advises the Minister for Environment that the Perth Flying Squadron Yacht Club's proposal to install a wave attenuator with finger jetties and mooring pens, upgrade the vessel maintenance area and remove (and fill in) the existing slipway, and undertake foreshore landscaping works within the Swan River and Lot 254 The Esplanade, Dalkeith, as described in the application received on 29 May 2018 and amended application and plans submitted on 30 July 2018 and 8 August 2018, be approved, subject to the following conditions:

1. Approval to implement this decision is valid for two (2) years from the date of the approval. If substantial on-site works have not commenced within this period, a new approval will be required before commencing or completing the development.

### Prior to the commencement of works

2. The applicant shall notify the Department of Biodiversity, Conservation and Attractions and the City of Nedlands in writing not less than seven (7) days prior to the commencement of each stage of the works (see **Advice Note 1**).
3. Prior to the commencement of works, a Construction Environmental Management Plan shall be submitted to and approved by the Department of Biodiversity, Conservation and Attractions, on advice from the City of Nedlands (see **Advice Notes 2 and 7**).
4. Prior to the commencement of works, final design plans/drawings and technical specifications, including details of the external colours, finishes and materials for the wave attenuator and finger jetties and land-based infrastructure within the Club's premises, shall be submitted to and approved by the Department of Biodiversity, Conservation and Attractions, on advice from the Department of Transport and the City of Nedlands (see **Advice Notes 3 and 7**).
5. Prior to the commencement of works, a final Landscaping Plan shall be submitted to and approved by the Department of Biodiversity, Conservation and Attractions, on advice from the City of Nedlands (see **Advice Notes 4 and 7**).
6. Prior to the commencement of works, an amended Site Plan (referenced as the Landscape Overview Plan) shall be submitted to and approved by the Department of Biodiversity, Conservation and Attractions, on advice from the City of Nedlands (see **Advice Notes 5 and 7**).
7. Prior to the commencement of works, the River reserve lease is to be amended (see **Advice Notes 6 and 7**).
8. Prior to any fill and/or topsoil being brought onto the site, the applicant shall ensure that all material is certified clean, uncontaminated, and free from rubble, weeds and disease.

### During works

9. All footings and structures associated with the fencing and gates shall be located wholly within the site boundaries of the Perth Flying Squadron Yacht Club's Land Lease.
10. All works shall be implemented in accordance with the plans approved under **Conditions 3, 4, 5 and 6**.

11. The applicant shall ensure that no damage to the foreshore, riverbank, or waterway (including vegetation and infrastructure) occurs beyond the scope of the approved works. If any inadvertent damage occurs, the applicant is required to notify the Department of Biodiversity, Conservation and Attractions within 48 hours of the damage occurring and rectify the damage at its expense.

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

12. Upon completion of the works, all waste materials, equipment and machinery shall be removed, and the site cleaned up to the satisfaction of the Department of Biodiversity, Conservation and Attractions, on advice from the City of Nedlands.
13. The Environmental Management System and Maintenance Program shall be updated to reflect the amendments to the vessel maintenance area (i.e. area bunding and runoff filtration system) and marine-based expansion (i.e. wave attenuator and berthing pens) (see **Advice Note 11**).

#### **On-going**

14. The applicant shall ensure that noise reduction measures are installed on the boatlift, in accordance with the Environmental Noise Report (Gabriels Environmental Design, 4 June 2009) and addendum (Gabriels Environmental Design, 10 August 2009) (see **Advice Note 14**).
15. Stormwater runoff from constructed impervious surfaces generated by small rainfall events (i.e. the first 15 mm of rainfall) must be retained and/or detained and treated (if required) on-site.
16. Boats, vehicles, materials and/or equipment are not to be stored on the public foreshore reserve outside of the Perth Flying Squadron Yacht Club's lease premises (see **Advice Note 15**).
17. A minimum of 153 car parking bays shall be provided within the Perth Flying Squadron Yacht Club premises, unless otherwise agreed in writing by the Department of Biodiversity, Conservation and Attractions, on advice from the City of Nedlands.
18. All car parking, trailer and boat storage areas are to be contained within defined hardstand areas of the car park.
19. All car parking bays, boat storage bays, vehicle manoeuvring, and vehicle access ways shown on the approved site plan are to be constructed and maintained by the applicant, to the satisfaction of the City of Nedlands.
20. The proposed fencing is to be maintained by the applicant, to the satisfaction of the City of Nedlands.

#### **ADVICE TO APPLICANT**

1. Notification of commencement of works and submission of documents can be emailed to [rivers.planning@dbca.wa.gov.au](mailto:rivers.planning@dbca.wa.gov.au).

2. The Construction Environmental Management Plan required under **Condition 3** shall describe how the proposed works will be managed to minimise potential environmental impacts and shall address, but not be limited to:
- a. scope of works, including demolition and construction methodology;
  - b. site access and management, including fencing requirements;
  - c. management of machinery and equipment, including a refuelling procedure and spill response;
  - d. on-site storage and bunding of materials, equipment, chemicals and fuel;
  - e. protection of the river from inputs of debris, litter, rubbish or other deleterious material;
  - f. foreshore protection;
  - g. sediment and turbidity management, including the risk of mobilising riverbed contaminants;
  - h. wildlife management, including minimising noise and vibration impacts;
  - i. public access and safety;
  - j. staging of works;
  - k. hours of operation and schedule of works; and
  - l. complaints and incidents.

A site map showing the laydown area, vehicle entry/exit points and pedestrian management (e.g. road closures, alternative routes and public safety signage) shall be included. Emergency spill kits shall be onsite at all times and refuelling of land-based vehicles or machinery is to be undertaken outside the Swan Canning Development Control Area or at a licensed refuelling facility. In the case of pollution events, the Department of Biodiversity, Conservation and Attractions shall be contacted immediately on 9278 0900 or a/h 0419 192 845.

The plan is to address the most appropriate means of sediment and turbidity management for the proposed works. The slipway is located within a potentially contaminated area and the demolition methodology shall be designed to minimise the mobilisation of contaminants. **A silt curtain(s) must be installed during the demolition works.** All reasonable efforts shall be taken to control sediment plumes, but where they occur, work must stop whilst the plume is addressed, and work should only recommence once the integrity of the turbidity management device is restored. If plumes or adverse turbidity levels occur beyond the work area, the applicant shall contact the Department of Biodiversity, Conservation and Attractions within 2 hours on 9278 0900 or a/h 0419 192 845.

Piling operations shall include a soft start up procedure at the commencement of each piling sequence. The contractor shall keep a constant watch for dolphins during piling operations. No pile driving shall start if dolphins are within 200m of the site and piling activity shall cease if a dolphin comes within 50m of the site and shall not recommence until any dolphin has moved more than 200m away or has not been observed for 20 minutes.

3. Regarding **Condition 4**, the Department of Transport advises that all detailed drawings/plans for the wave attenuator and finger jetties are to be signed and certified by an experienced maritime engineer to confirm that they have been designed in accordance with AS3962-2001 *Guidelines for Design of Marinas*.

Further details of the proposed bunding around the vessel maintenance area and technical specifications for the runoff treatment system shall be provided. The selection

of colours, finishes and materials of the proposed infrastructure should complement the character and landscape setting of the Swan River.

4. The final Landscaping Plan required under **Condition 5** shall address the following:
  - a. Details of the plant species, densities, size and location, and the protection/retention of existing vegetation. It is recommended that the planting list be expanded to include additional plant species from the Karrakatta vegetation complex;
  - b. Final design drawings and details of the materials finishes and colours of the pathways, hardstand areas, signage and other public safety measures for the crossover points;
  - c. Monitoring and maintenance requirements; and
  - d. The City of Nedlands advises that it shall be notified no less than seven (7) days prior to the commencement of the landscaping works and the approved final Landscaping Plan shall be implemented within sixty (60) days of the approval, unless an alternative date is agreed in writing by the City of Nedlands and the Department of Biodiversity, Conservation and Attractions. The landscaping is to be maintained by the applicant, to the City of Nedlands' satisfaction.
5. Regarding **Condition 6**, the Site Plan is to be amended to clearly show the car parking and boat storage bays. The City of Nedlands has advised that a minimum of 153 car parking bays will need to be provided in accordance with Australian Standard 3962-2001 - *Guidelines for Design of Marinas*.
6. Regarding **Condition 7**, an amendment of the River reserve lease (Deed of Partial Surrender and Variation of Riverbed Lease) is required to excise the two portions of existing lease area (total relinquished area 5502m<sup>2</sup>) and extend the lease boundary (total increased area 8483m<sup>2</sup>) to accommodate the wave attenuator and berthing pens, as outlined in Drawing PFS-01-10 (Revision A, 30 July 2018).
7. To allow sufficient time for the Department of Biodiversity, Conservation and Attractions to consider and approve the plans and details required under **Conditions 3 to 6**, the documents shall be submitted to the Department of Biodiversity, Conservation and Attractions at least 30 days before the expected works commencement date.
8. The applicant will need to apply for and obtain a jetty modification licence from the Department of Transport Coastal Facilities Management before works commencement.
9. Regarding marine safety, the applicant is advised to ensure that:
  - a. all in-water operations and activities must be conducted in accordance with Western Australian Marine Safety Legislation; and
  - b. all on-water works areas must be marked with yellow buoys and flashing yellow lights for the duration of the works.
10. It is recommended that the applicant, or any third party contractor it engages to undertake the works, notify Department of Transport Navigational Safety by email to [navigational.safety@transport.wa.gov.au](mailto:navigational.safety@transport.wa.gov.au) at least 21 days before works commencement, to enable a Temporary Notice to Mariners (TNTM) outlining the scope of the works to be published. The TNTM is to be funded by the applicant or its contractor.
11. A monitoring record of the runoff treatment system should be retained to verify that the system is functioning as intended and the water quality outcomes are achieved.


12. The applicant is advised that the proposal has the potential to be affected by the 1% annual exceedance probability flood level and potential sea level rise. The onus is on the applicant to undertake a risk assessment and exercise their judgment in determining the level of risk they are prepared to accept.

The Swan River Trust's Climate Change Risk Assessment Project (2010) sets out a methodology to assess the vulnerability of foreshore areas, which is available on request from the Department of Biodiversity, Conservation and Attractions. It is also recommended that applicants undertake their own research and obtain appropriate independent professional advice relevant to the particular circumstances.

13. If any development encroaches into the nature-strip (verge), the City of Nedlands advises:
  - a. No street trees in the nature-strip (verge) shall be removed. Any approved street tree removal shall be undertaken by the City of Nedlands and funded by the applicant, unless otherwise approved.
  - b. Any development in the nature-strip (verge), including footpaths, will require a Nature-Strip Development Application (NSDA) to be lodged with and approved by the City's Technical Services department, before works commencing within the nature-strip.
14. All noise levels produced by the development construction are to comply with the provisions of the Environmental Protection (Noise) Regulations 1997 (as amended). The applicant is advised that all mechanical equipment is required to comply with the Environmental Protection (Noise) Regulations 1997.
15. The applicant is advised that boats, materials and/or equipment being stored on the Club's premises shall not obstruct vehicle manoeuvring areas, vehicle access ways, pedestrian access ways, car parking bays or unloading bays. Any boats and vehicles currently being stored or parked outside of the lease premises are to be moved into the designated parking and storage bays shown on the approved site plan referred to in Condition 6 within 28 days of the development approval decision.
16. The Department of Water and Environmental Regulation, Contaminated Sites advises that the site is classified under the *Contaminated Sites Act 2003* as 'remediated for restricted use'. It is recommended that adequate health and safety measures are implemented to minimise the risk of disturbing the suspected contaminated sediments.
17. The *Acid Sulphate Soils Guideline Series for guidance on the identification, assessment and management of acid sulphate soils in Western Australia* is available from the Department of Water and Environmental Regulation website at [www.dwer.wa.gov.au](http://www.dwer.wa.gov.au). If any acid sulphate soils are exposed during the works, the Contaminated Sites Branch of the Department of Water and Environmental Regulation shall be contacted for further advice on 1300 762 982.
18. The applicant is advised to contact the Department of Planning, Lands and Heritage to ensure that the proposed works do not breach any section of Part IV (Protection of Aboriginal Sites) of the *Aboriginal Heritage Act 1972* (the AHA). Approval under section 18 of the AHA may be required. It is recommended that the applicant consult the recognised knowledge holders for Aboriginal Site 3536 on whether the works will impact the Swan River. Please refer to the *Aboriginal Heritage Due Diligence Guidelines* (Department of Aboriginal Affairs and the Department of the Premier and Cabinet 2013) when planning specific development within an Aboriginal Heritage area which provides

guidance when undertaking a self-risk assessment regarding the proposal's potential impact to Aboriginal heritage.

**FINAL REPORT ENDORSED**

Signed:  Date: 11.1.19

Peter Dans  
ACTING DIRECTOR GENERAL

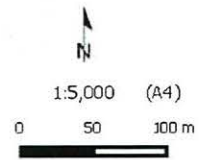


# Attachment 1

## Legend

- Swan River Leases
- Swan River Trust - DCA
- Perth Central Cadastre (Land Parcels)

Perth Flying Squadron  
River reserve lease area



Projection: MGA Zone 50  
Datum: GDA94



Produced by DBCA,  
Department of Biodiversity,  
Conservation and Attractions



Job Ref: 01  
Produced at 03:37 PM on October 24, 2018





Enquiries: Mr A Bratley – 9273 3500  
Our Reference: DA18/30719

6 September 2018

Department of Biodiversity, Conservation and Attractions  
Locked Bag 104  
BENTLEY DC WA 6983

Dear Sir / Madam,

**Lot Number: 254**

**Property Address: No. 78 Esplanade, Dalkeith**

**Proposal: Wave Attenuator, Boat Pens, Maintenance Area Upgrades  
and Landscaping for Perth Flying Squadron Yacht Club**

Thank you for your correspondence dated 16 August 2018 regarding the above application.

Please be advised the City recommends that the Department **defers** making a decision until amended plans are provided by the applicant which clearly show which onsite bays are proposed to be used for car parking and boat storage purposes.

Based on the information provided to date and the City's records, a total of 153 car bays are required in accordance with AS3962-2001.

If the Department decides to approve the application despite the above, it is recommended that it be subject to the following conditions and advice notes:

### Conditions

1. The development shall at all times comply with the application and the approved plans, subject to any modifications required as a consequence of any condition(s) of this approval.
2. This development approval only pertains to the proposed wave attenuator, the 36 additional boat pens, the 1.8m high garrison fencing and sliding gates, the maintenance area upgrades and the landscaping.
3. The applicant and the landowner complying with the acoustic report (report 2) to the City's satisfaction.
4. All footings and structures to the fencing and gates shall be constructed wholly inside the site boundaries of the property's Certificate of Title.

5. Any damaged caused to the foreshore area as a consequence of activities associated with the yacht club such as, but not limited to, the movement of vehicles between the Yacht Club premises and the river, are to be repaired at the applicant's expense to the satisfaction of the City and the Department of Biodiversity, Conservation and Attractions.
6. The landscaping shown on the approved landscaping plan being planted within 60 days of this decision, or by an alternative date agreed to in writing by the City. Then be maintained thereafter by the applicant to the City's satisfaction.
7. No boats, materials and/or equipment being stored on the property which obstructs vehicle manoeuvring areas, vehicle access ways, pedestrian access ways, parking bays and/or (un)loading bays.
8. No boats, other vehicles, materials and/or equipment being stored on the foreshore area outside of the Yacht Club premises.
9. The proposed fencing being maintained by the applicant to the City's satisfaction.
10. All car parking bays, boat storage bays, manoeuvring areas and vehicular access ways shown on the approved site plan being constructed, marked, sealed and drained, and be maintained thereafter by the landowner to the City's satisfaction.
11. All stormwater from the development, which includes permeable and non-permeable areas shall be contained onsite.
12. Prior to commencement of works on the public foreshore:
  - i. The Applicant shall notify the City of Nedlands in writing not less than seven (7) days prior to the commencement of works in accordance with this Approval.
  - ii. At least 30 days prior to the commencement of works on the public foreshore, the Applicant shall submit for approval to the City of Nedlands a Landscape Plan detailing the location, number and type of proposed plants, including size and planting density, and any existing vegetation and/or landscaped areas to be retained or reinstated.
  - iii. At least 30 days prior to the commencement of works on the public foreshore, final detailed plans of the works to be undertaken shall be submitted for approval by the City of Nedlands. Detail to be provided is to include construction material and colours of pathways and hardstand areas, details of any signage or other visual means to identify pathway and hardstand crossing points and a schedule of colours and materials for all new structures to be installed (see Advice Note 1).
  - iv. Prior to the commencement of works, the Applicant shall submit for approval to the City of Nedlands a Pedestrian Management Plan addressing the maintenance of pedestrian access around or along the foreshore during works and highlighting any closures required to paths or pedestrian access routes and detailing and diversions or temporary measures required to allow safe access.


13. Upon completion of the works, all waste material, equipment and machinery shall be removed and the site made safe and tidy to the satisfaction of the City of Nedlands.

### Advice Notes

1. With regard to Condition 12 iii, the Applicant is advised that the selected colour scheme and finishes for the development on the public foreshore should reflect the character and landscape setting of the Swan River and surrounding public foreshore areas. The vegetation species list is to be provided, including only species native to the Perth region, preferably from the Karrakatta vegetation complex.
2. All street tree assets in the nature-strip (verge) shall not be removed. Any approved street tree removals shall be undertaken by the City of Nedlands and paid for by the owner of the property where the development is proposed, unless otherwise approved under the Nature Strip Development approval.
3. Any development in the nature-strip (verge), including footpaths, will require a Nature-Strip Development Application (NSDA) to be lodged with, and approved by, the City's Technical Services department, prior to construction commencing.
4. The applicant is advised that the carparking area on the opposite side of the Esplanade (adjacent to the eastern pedestrian entrance of the Perth Flying Squadron Yacht Club) will be maintained by the City. The Yacht Club may be required to contribute to the City's costs to upgrade this car park in future.
5. The landowner is advised that all mechanical equipment is required to comply with the *Environmental Protection (Noise) Regulations 1997*, in relation to noise.
6. This decision constitutes planning approval only and is valid for a period of **two years** from the date of approval. If the subject development is not substantially commenced within the two year period, the approval shall lapse and be of no further effect.

If you have any queries please do not hesitate to contact the City's Coordinator Statutory Planning Andrew Bratley via [abratley@nedlands.wa.gov.au](mailto:abratley@nedlands.wa.gov.au) or on 9273 3500.

Yours faithfully



Kate Bainbridge  
Senior Statutory Planning Officer

**Suzanna Chan**

---

**From:** Andrew Bratley <abratley@nedlands.wa.gov.au>  
**Sent:** Tuesday, 23 October 2018 4:47 PM  
**To:** Suzanna Chan  
**Subject:** RE: 2018-3071 - Part 5 Development Application - Perth Flying Squadron Yacht Club - Installation of a Wave Attenuator, Boat Pens, Upgrades to the Vessel Maintenance Area and Landscaping Works

Hi Suzanna

Thank you for contacting the City regarding the above.

If the SRT approve the application despite the City's request for further information please include the following conditions and advice, in addition to those in the City's correspondence dated 6 September 2018:

Condition:

- 1. Prior to any work commencing associated with this development approval, an amended site plan is to be provided to, and approved by, the City showing which bays on the Yacht Club premises are to be used for car parking and/or boat storage purposes (refer to advice note 1).*
- 2. All boats and any vehicles currently being stored or parked outside of the Yacht Club premises being moved into the designated parking and storage bays on the Yacht Club premises as shown on the approved amended site plan referred to under condition 1, within 28 days of this development approval decision.*
- 3. All on site bays being used for car parking or boat storage purposes as shown on the approved amended site plan referred to under Condition 1.*

Advice:

- 1. A separate development application will be required to be submitted to, and approved by, the DBCA should it be determined once the amended site plan is received that a shortfall in the required amount of car parking bays is proposed, and/or modifications are proposed to the existing storage bay and/or parking bay layout on site.*

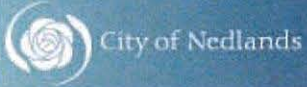
If you have any queries please do not hesitate to ask.

Yours sincerely



Andrew Bratley  
Coordinator Statutory Planning

Administration Centre  
71 Stirling Hwy Nedlands WA 6009  
PO Box 9 Nedlands WA 6009  
T 9273 3500 F 9273 3670



[nedlands.wa.gov.au](http://nedlands.wa.gov.au)



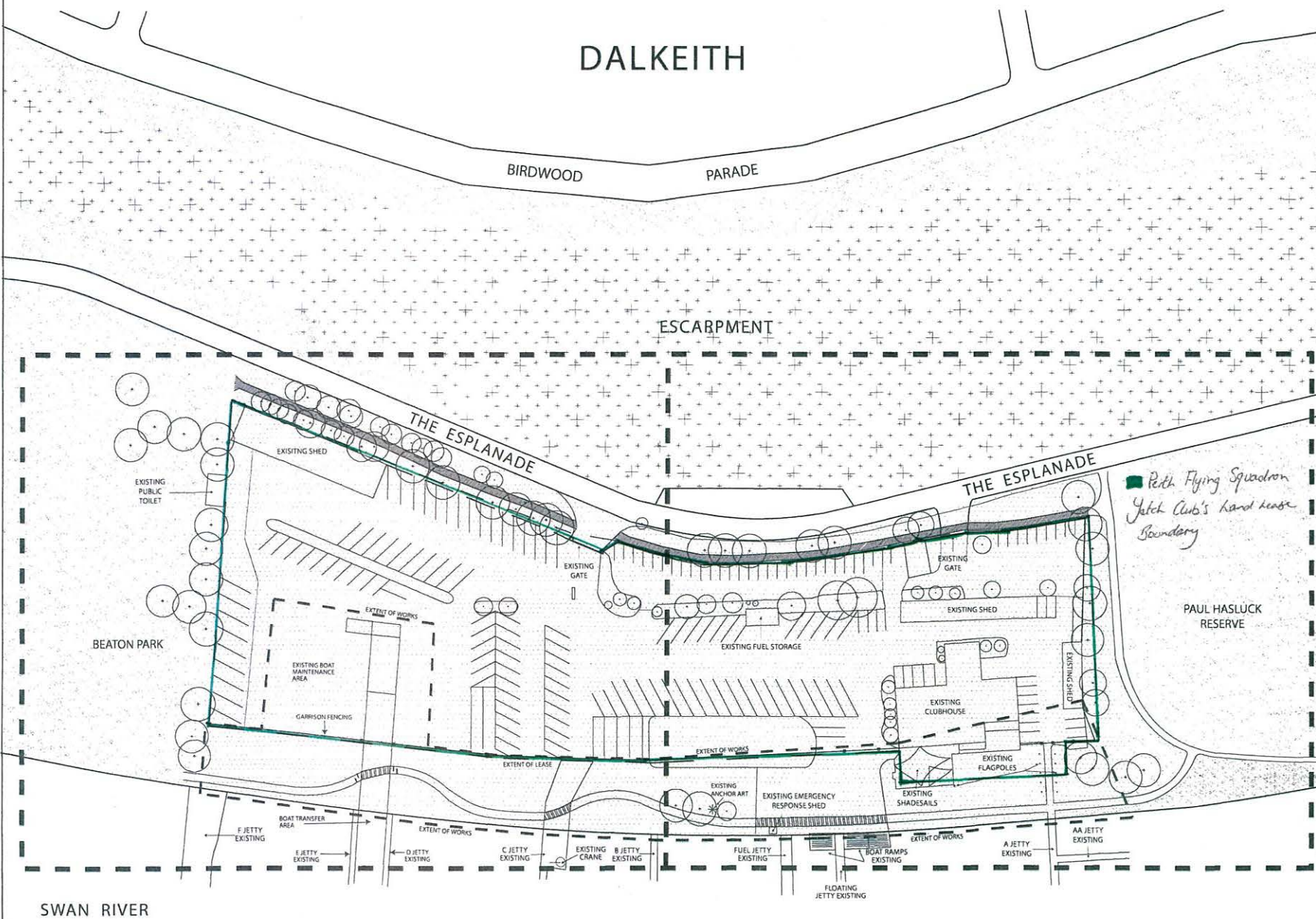
**Centenary of Armistice  
Remembrance Day Service**



**10.40am Sunday 11 November 2018  
Perth War Cemetery, Smyth Rd, Nedlands**







- STANDARD NOTES**
1. SET OUT & DIMENSIONS. THE CONTRACTOR SHALL SET OUT ALL PATHS, WALLS, HARD SURFACES AND ELEMENTS EITHER ON OR OFFSITE PRIOR TO CONSTRUCTION AND SHALL OBTAIN THE SUPERVISOR'S SET OUT APPROVAL PRIOR TO WORKS COMMENCING. WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALE. CHECK ALL DRAWING SCALES IN CONJUNCTION WITH DRAWING SIZE.
  2. SERVICES & SITE ASSETS. THE CONTRACTOR SHALL INVESTIGATE THE NATURE AND LOCATION OF ALL EXISTING SERVICES AND RELATED SITE ASSETS AFFECTED BY THEIR WORKS. FAILURE TO TAKE DUE CARE SHALL NOT LIMIT THE CONTRACTOR'S LIABILITIES.
  3. REFERENCE. THE CONTRACTOR SHALL REFER TO ALL CONTRACT DOCUMENTS, THE SPECIFICATION AND DRAWINGS PRIOR TO AND DURING THE WORKS.
  4. DISCREPANCIES. NOTIFY SUPERVISOR OF ANY SUSPECTED OR KNOWN DISCREPANCIES OR ERRORS PRIOR TO THE ORDERING OF AFFECTED MATERIALS AND OR CONSTRUCTION OF AFFECTED WORKS.
  5. RELEVANT STANDARDS. THE CONTRACTOR SHALL UNDERTAKE ALL PRICING AND WORKS IN ACCORDANCE WITH CURRENT INDUSTRY BEST PRACTICE AND ALL RELEVANT AUSTRALIAN STANDARDS.

NO.	DATE	BY	REVISION
A	01/05/18	GD	ISSUE FOR APPROVAL
B		JR	ISSUE FOR AMENDMENT

THIS IS AN UNCONTROLLED DOCUMENT ISSUED FOR INFORMATION ONLY UNLESS SPECIFICALLY NOTED OTHERWISE BY EACH REVISION STATE.

EXTERNAL DESIGN REVIEW  
 NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
 TITLE: \_\_\_\_\_

INTERNAL PROJECT/DESIGN REVIEW  
 NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
 TITLE: \_\_\_\_\_

AUTHORISED FOR CONSTRUCTION  
 NAME: \_\_\_\_\_ DATE: \_\_\_\_\_  
 TITLE: \_\_\_\_\_


PROJECT:  
**PERTH FLYING SQUADRON YACHT CLUB**

STAGE OR PHASE:  
**PHASE 1**

DRAWING TITLE:  
**LANDSCAPE OVERVIEW**

CLIENT:  
 PERTH FLYING SQUADRON YACHT CLUB INC.



DESIGNED BY	CC	PAUL M DESIGN REVIEWED BY	CC
DRAWN BY	JR	PAUL M DESIGN REVIEWED BY	JR
DATE INITIALLY DRAWN			
SCALE	AS SHOWN	AT A 1	
DRAWING NUMBER	PFS-01-01	REV	A

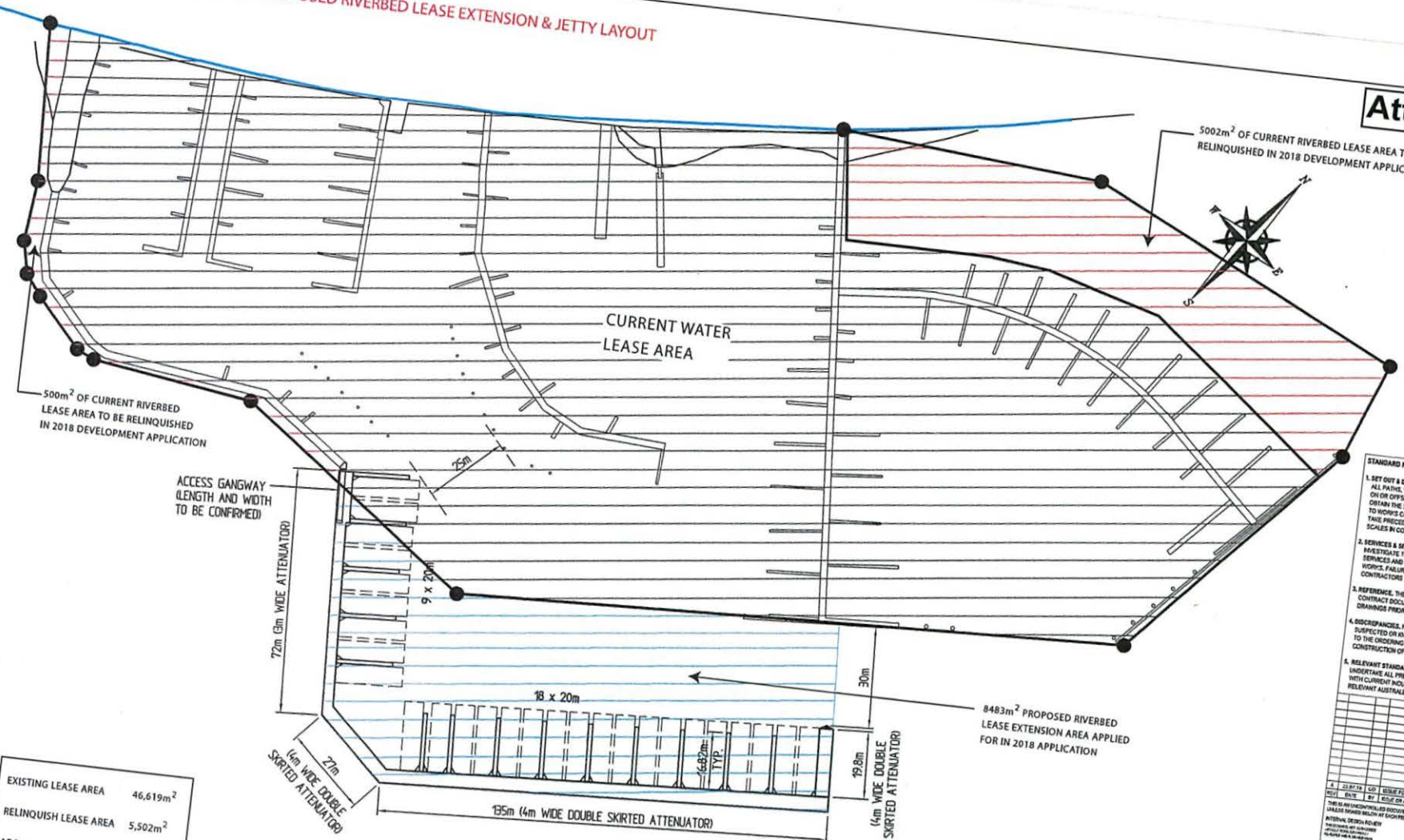
SWAN RIVER











5002m<sup>2</sup> OF CURRENT RIVERBED LEASE AREA TO BE RELINQUISHED IN 2018 DEVELOPMENT APPLICATION

500m<sup>2</sup> OF CURRENT RIVERBED LEASE AREA TO BE RELINQUISHED IN 2018 DEVELOPMENT APPLICATION

ACCESS GANGWAY (LENGTH AND WIDTH TO BE CONFIRMED)

8483m<sup>2</sup> PROPOSED RIVERBED LEASE EXTENSION AREA APPLIED FOR IN 2018 APPLICATION

EXISTING LEASE AREA	46,619m <sup>2</sup>
RELINQUISH LEASE AREA	5,502m <sup>2</sup>
ADDITIONAL LEASE AREA	8,483m <sup>2</sup>
INCREASE IN LEASE AREA	2,981m <sup>2</sup>
TOTAL LEASE AREA	49,600m <sup>2</sup>
PERCENTAGE INCREASE	6.3%

STANDARD NOTES

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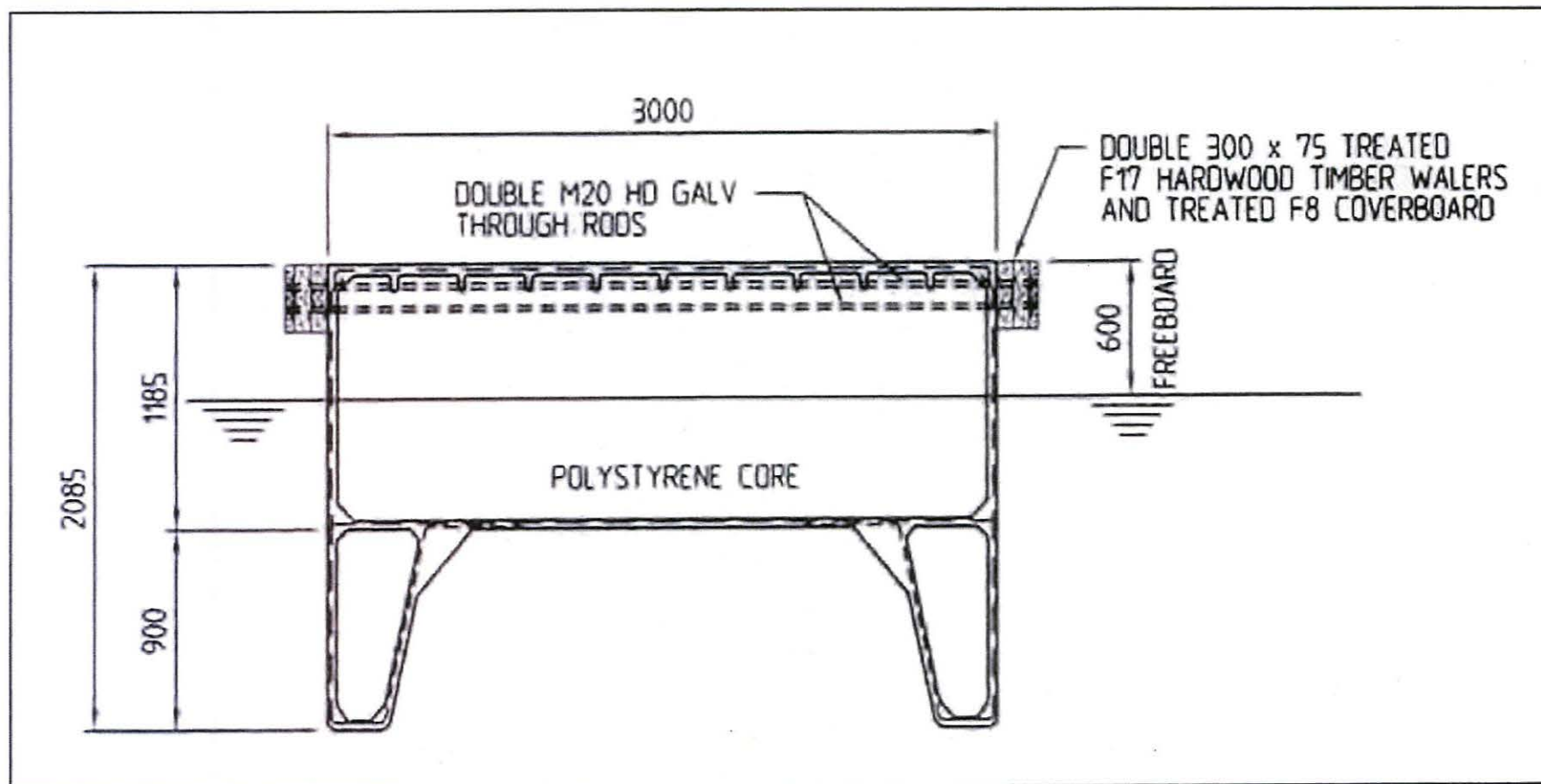
A. 2017/18 CON. DATE FOR APPROVAL  
 REV. DATE BY: DATE OF REVISION  
 THIS IS AN UNCONTROLLED DOCUMENT WHEN INFORMATION DOES  
 CHANGE UNDER REVIEW AT ANY RELEVANT STAGE.  
 INTERNAL DESIGN REVIEW  
 PROJECT MANAGER: \_\_\_\_\_ DATE: \_\_\_\_\_  
 INTERNAL PRETENDER REVIEW  
 PROJECT MANAGER: \_\_\_\_\_ DATE: \_\_\_\_\_  
 AUTHORIZED FOR CONSTRUCTION  
 PROJECT MANAGER: \_\_\_\_\_ DATE: \_\_\_\_\_

PROJECT  
**PERTH FLYING SQUADRON  
 YACHT CLUB**  
 STAGE OR PHASE  
**PHASE 1**  
 DRAWING TITLE  
**PROPOSED RIVERBED LEASE  
 & JETTY LAYOUT**  
 CLIENT  
 PERTH FLYING SQUADRON YACHT CLUB INC.

DESIGNED BY: CC PROJECT CHECK REVIEWED BY: CC  
 DRAWN BY: JR FINAL CHECK REVIEWED BY: JR  
 DATE PERMANENT DRAWN:  
 SCALE:  
 AS SHOWN AT A 1  
 DRAWING NUMBER  
**PFS-01-10**  
 REF  
**A**



## ATTACHMENT 7 - WAVE ATTENUATOR SCHEMATICS







ATTACHMENT 6 – WAVE ATTENUATOR IN ACTION





ATTACHMENT 8 – WAVE ATTENUATOR ON DRY LAND

