

REFERRAL RESPONSE – ENVIRONMENT & SUSTAINABILITY

FILE NO: DA223/2020/1
ADDRESS: Vaucluse Road VAUCLUSE 2030
PROPOSAL: Demolition of existing seawall and promenade
FROM: Senior Environment and Sustainability Officer
TO: Mr D Booth

1. ISSUES

- The proposed development will be a high use site and therefore sustainability issues need to be considered.
- The proposed development site borders Sydney Harbour, therefore any proposed works may have an ongoing effect on the waterway's health and effects on coastal processes.
- The proposed development includes the removal of native and non-native vegetation and therefore issues include:
 - Removal of potential habitat trees.
 - Effects on local biodiversity.

2. DOCUMENTATION

I refer to the following documents received for this report:

- Draft Construction Management Plan Nielsen Park Seawall, prepared by Oculus dated July 2020 (20/115929).
- Overland Flow and Flooding Investigation (Issue: PO1), Nielsen Park Seawall, prepared by Robert Bird Group dated June 2020 (20/115943).
- Site Waste Minimisation and Management (Attachment 1), Nielsen Park Seawall, prepared by Adrian Collins NPWS dated June 2020 (20/115944).
- Statement of Environmental Effects, Reconstruction of existing Seawall and Promenade, Nielsen Park, Vaucluse, prepared by HMUP Helen Mulcahy Urban Planning, dated June 2020 (20/115945).
- Aboriginal Cultural Heritage Assessment Progress Statement, Nielsen Park Seawall, prepared by Coast History and Heritage, dated June 2020 (20/115956).
- Arboriculture Impact Assessment (Rev B) Tree Protection Specification, Nielsen Park Seawall, prepared by Tree IQ, dated June 2020 (20/115957).
- Coastal Studies, Nielsen Park Seawall, prepared by Oculus, drafted June 2020 (20/115959, 20/115960, 20/115961).
- Flora and Fauna Assessment, prepared by Ecological, drafted May 2020 (20/115967).
- Landscape Plan (Rev A), prepared by Oculus, drafted 2020 (20/115986).

3. RESEARCH

The following research was undertaken in the preparation of this assessment:

- Desktop review of the property undertaken on 31 July 2020 for the development at Nielsen Park Vaucluse Road VAUCLUSE 2030, using Council's Geocortex Web Mapping and Google Maps Data 2019.
- Review of documents as listed above.

- Site inspection undertaken 17 August 2020
- Review of the Woollahra Biodiversity Conservation Strategy 2015 – 2025.
- Review of relevant legislation:
 - NSW Biodiversity Conservation Act 2016.
 - Commonwealth Environment Protection and Biodiversity Conservation Act 1999.
 - Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005.

4. PROPOSAL SUMMARY

The proposed development is located at Shark Beach, Nielson Park Vacluse.

The proposal includes:

- Demolition and reconstruction of existing seawall and promenade.
- Construction of a pedestrian ramp incorporating terraced retaining walls, paved areas and planter beds at the eastern end of the foreshore.
- The removal of approximately 12 trees.

5. ASSESSMENT

5.1 NSW Biodiversity Conservation Act 2016

5.1.1 NSW Biodiversity Offset Scheme

In regards to the Biodiversity Offset Scheme (BOS) entry requirements as set out under the NSW Biodiversity Conservation Act 2016 the proposed development was evaluated and found to:

- NOT be mapped on the Biodiversity Values Map published by the Environment Agency Head.
- NOT trigger the native vegetation clearing area thresholds.
- NOT significantly affect threatened species.

The Flora and Fauna Report provided reviews the potential for the project to affect threatened species. The Report includes a likelihood of occurrence (Appendix B) and determines which species require a Test of Significance. A Test of Significance has been completed for those species identified and is included in Appendix C. It was determined that there was no significant impact.

Relevant sections of the Biodiversity Conservation Act 2016 have been addressed.

5.1.2 Protected Species

All relevant protected species have been identified within the Flora and Fauna Report which demonstrates how the works will not impact on the species identified on site.

5.1.3 Key Threatening Process

Loss of hollow bearing trees is as a Key Threatening Processes under the Biodiversity Conservation Act 2016.

Tree hollows are cavities formed in the trunk or branches of a living or dead tree. Hollows are usually more characteristic of older, mature to over mature trees. Hollows may develop in the trunk and branches of trees as a result of wind breakage, lightning strikes, fire and/or following the consumption and decay of internal heartwood by fungi and invertebrates, primarily termites. Hollow

entrances are more common in larger trunks and branches because damage is less likely to be covered by growth of external sapwood.

NSW Biodiversity Conservation Act 2016, Schedule 4. Loss of Hollow-bearing trees – Key Threatening Process Listing, Gazetted 5th October, 2007.

The proposal has been reviewed to retain trees that have suitable form, as identified in the Woollahra Council - Tree Referral. Conditions will be placed on any trees being removed to retain and reuse any hollows identified.

5.2 Commonwealth Environment Protection and Biodiversity Conservation Act 1999

All relevant protected species have been identified within the Flora and Fauna Report. Council does not regulate the EPBC Act and as such the Department of Agriculture, Water and the Environment (Commonwealth) would need to provide advice on the assessment of the Act and its relation to the proposed development.

5.3 Woollahra Local Environment Plan 2014

The Woollahra LEP 2014 notes the following relevant aims (section 1.2):

- (f) to conserve built and natural environmental heritage,
- (g) to protect amenity and the natural environment,
- (h) to minimise and manage stormwater and flooding impacts,
- (i) to protect and promote public access to and along the foreshores,

The proposed development has the potential to meet the above aims as set out by the Woollahra LEP 2014. The above aims have been assessed throughout the documents provided, controls are to be placed on the works as outlined in the Recommendation section.

5.4 Woollahra Development Control Plan 2015

Chapter B3 – General Development Controls

B3.7 External Areas, B3.7.1 Landscaped areas and private open space

Control C16 - Existing trees and vegetation of landscape value are incorporated into the landscape area and treatment.

The Statement of Environmental Effects notes that 17 new trees will be planted as part of the works, while 12 trees are proposed to be removed. Various shrub and ground cover species (referred to as mass planting) are also to be planted as part of the proposed development.

Control C17 - Native species are preferred, and landscape designs are encouraged to provide at least 50% of the plants as native species.

Control C17 has been met as 50% of the proposed planting will be native species.

Control C18 - Landscaping provides for a diversity of native species and a complexity of habitat through vertical layering. Note: Vertical layering, by planting a variety of vegetation in different sizes and heights provides more cover and feeding opportunities for wildlife species.

Control C18 has been met as the landscape planting schedule and incorporates a range of native species that will provide some vertical layering along the planted southern section. Ongoing management of the plantings will be required to ensure continued ecological function within the landscape.

Control C19 - Landscaping facilitates the linking of open space reserves through wildlife corridors and reduces habitat fragmentation and loss.

The proposed development and proposed planting schedule will meet the above control as the planting proposed will assist with landscape connection with the larger site where considerable biodiversity is present.

Chapter E6 – Sustainability

Control C10 - For landscaped garden areas in commercial developments, building design incorporates the following measures to minimise mains water demand and consumption:

- a) rainwater tanks to supply water for plant watering, toilet flushing, outdoor cleaning and cooling systems for the building;*
- b) where suitable, roof gardens to reduce stormwater run-off and provide insulation;*
- c) an irrigation system to minimise waste water; and*
- d) water retention within gardens to direct run-off from impervious uses and water tanks to deep soil areas.*

The proposed development does not include rainwater tanks which appears to be due to the limited space. The current understanding is that, after initial establishment, watering of lawn and plantings will be limited in nature. As this is not a commercial development it is not considered to be in conflict with the above control.

Although not set out in the Development Control Plan, it would be preferable to use materials that have lower embodied energy i.e. using recycled materials and/or supplementing cementing materials (above industry standard), use of recycled steel and reuse and/or recycle demolition material where possible. These will assist in reducing the carbon footprint of these works. This align with the aims of both Council and NSW National Parks and Wildlife Service both of which acknowledge climate change and encourage action to mitigate and address this.

5.5 Woollahra Biodiversity Conservation Strategy

The Woollahra Biodiversity Conservation Strategy 2015-2025 has several references to the proposed development site. It notes that it is located within the Sydney Harbour National Park which is not managed by Council. It notes that the site is a Key Habitat Area and that it is:

- The most extensive patch of remnant vegetation in the LGA
- The largest area of foreshore bushland south of Sydney Harbour
- Characterised by sandstone woodland and heathland vegetation habitat on slopes, gullies and coastal headlands
- Home to the endangered plants, *Acacia terminalis subsp. terminalis* and *Allocasuarina portuensis*
- Habitat for and the vulnerable Powerful Owl and Sooty Oystercatcher and a number of regionally significant flora and fauna species.

The works are limited to a small portion of the site and there is no removal of high value biodiversity vegetation. A summary of this has been outlined in the Flora and Fauna Report provided by the applicant.

5.6 Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005

The Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 sets out objectives to provide a set of clear planning principles for land within the Sydney Harbour Catchment (Part 2, Section 12(2)).

Part 2 lists the planning principles for land within the Sydney Harbour Catchment, of the 12 principles three of the most relevant are listed below:

- (a) development is to protect and, where practicable, improve the hydrological, ecological and geomorphological processes on which the health of the catchment depends,
- (b) the natural assets of the catchment are to be maintained and, where feasible, restored for their scenic and cultural values and their biodiversity and geodiversity,
- (j) development is to protect and, if practicable, rehabilitate watercourses, wetlands, riparian corridors, remnant native vegetation and ecological connectivity within the catchment,

The principles outlined in the Sydney Regional Environmental Plan (Sydney Harbour Catchment) 2005 require developments to protect natural features and protect and improve the catchment. This project largely replaces an aging structure with a fit for purpose updated design of the existing structure.

Coast stability has been considered in the provided Coastal Studies which consider a range of coastal scenario assessments.

5.7 Eastern City District Plan

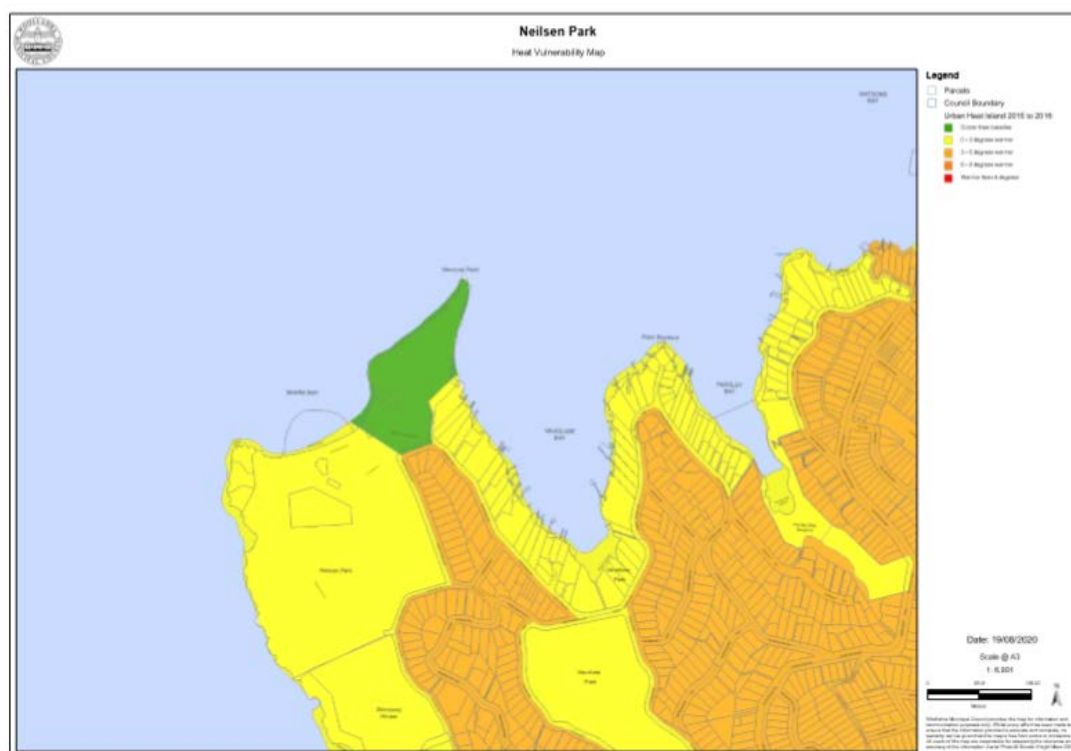
The Eastern City District Plan contains the planning priorities and actions for implementing the Greater Sydney Region Plan at a district level and is a bridge between regional and local planning. It is to inform local strategic planning statements and local environmental plans, the assessment of planning proposals as well as community strategic plans and policies.

As such the following planning policies have been considered in the review of the proposed development application.

- Planning Priority E17 – Increasing urban tree canopy cover and delivering Green Grid connections.
 - o Objective 30 – Urban tree canopy cover is increased.

Planning Priority E17 has been identified as a Premiers Priority.

Urban heat island mapping provided by Department of Planning, Infrastructure and Environment (formally OEH) for the subject site indicates temperature is 0-3 degrees warmer than baseline for the majority of the site and ‘cooler than baseline’ for the remainder.



Planning Priority E17 is met by the application as removed trees are being replaced and additional planting is being completed. Considerable mature trees exist, and will continue to, within the National Park site. This will assist in maintaining canopy cover while planted species are able to establish.

6. RECOMMENDATION

Council's Senior Environment and Sustainability Officer has determined that the proposal is SATISFACTORY, subject to the following conditions.

Council Strategy/ Legislation		Clause, Section etc.	Condition
Biodiversity Conservation Act 2016 (NSW)	Biodiversity	Various	Recommendations made within the Flora and Fauna Assessment Report are to be carried out: - Delineate exclusion areas at the edges of the construction site to prevent encroachment into offsite vegetation to be retained. - Implement Erosion and Sediment Control Measures that have been proposed in the Overland Flow and Flooding Investigation (Section 6) which are to be in place and maintained throughout the duration of the project to ensure no construction material (including solid or liquid) enters the harbour. - Secure storage of materials and equipment to minimise risk of pollution and adverse impact to the marine ecosystem of Sydney Harbour. - Weeds are to be managed in accordance with Greater Sydney Regional Strategic Weed Management Plan 2017 – 2022 (LLS 2017)

	Key Threatening Processes	<i>Section 4.31 Schedule 4</i>	Trees being removed must be searched for hollows prior to removal. Any hollows identified are to be collected and reused on site. Any trees to be removed are to be searched for any fauna present before removal. Fauna is to be removed by a trained wildlife carer or ecologist and relocated to a safe location with suitable habitat.
Woollahra Development Control Plan 2015		<i>B3.7.1 Control C16</i> <i>B3.7.1 Control C18</i> <i>B3.7.1 Control C19</i>	Retention of trees, as per Tree Referral and inclusion of planting as set out in the provided Landscape Plans at indicated densities. Preferential use materials that have lower embodied energy i.e. using recycled materials and/or supplementing cementing materials (above industry standard), use of recycled steel and reuse and/or recycle demolition material where possible. This will assist in reducing the carbon footprint of the works.
Woollahra Biodiversity Conservation Strategy 2015-2025		<i>Section 8 Habitat and Wildlife Corridors (8.2)</i>	Implement Erosion and Sediment Control Measures that have been proposed in the Overland Flow and Flooding Investigation (Section 6) which are to be in place and maintained throughout the duration of the project to ensure no construction material (including solid or liquid) enters the harbour.
Eastern City District Plan		<i>Various</i>	Retention of trees, as per Tree Referral and inclusion of planting as set out in the provided Landscape Plans at indicated densities.

Council expects that the controls in the *Woollahra DCP, Section 6 - Sustainability*, will be complied with throughout the demolition, construction and operational phases of the development, as set out in the Woollahra Council Development Control Plan.

Karen Harper

Senior Environment and Sustainability Officer

Date: 21 August 2020

Neilsen Park

Legend

- Parcels
- Council Boundary
- Threatened Fauna**
 - Potential Only
 - Trillium Oenothera
 - Eastern Garter Snake
 - Eastern Pufferfish
 - Grey Headed Flying Fox
 - Large Faced Myotis
 - Little Bunting Bird
 - Southern Myotis
 - Protected Fauna (Native, not threatened)
 - Masked Lapwing
 - Redback Loach
 - Trillium Oenothera
 - Little Pufferfish
 - Eastern Water Dragon
 - Eastern Water Snake
 - Reef Star
 - Eastern Dwarf Tree Frog
 - Leaf Green Tree Frog
 - Parrot Tree Frog
 - Tiger Tree Frog
 - Bird
 - Common Mouldy Wood
- Threatened Flora**
 - Sunshine Wattle
 - Redback Park Elm Oak
 - Magenta Clematis
- Seagrass Communities**
 - Thalassia Algae
 - Halodule
 - Posidonia
 - Zostera
 - Zostera & Halodule
 - Zostera & Posidonia
- Key Habitat Areas**
 - Managed by Council
 - Not Managed by Council
- Local Habitat Areas**
 - Locally Significant Habitat
 - Complementary Habitat
 - Habitat areas outside of Woollahra

Date: 19/08/2020
Scale @ A3
1:6,901

0 500m 1000m 1500m

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