# STATEMENT OF ENVIRONMENTAL EFFECTS

## **Statement of environmental effects for:**

Alterations & additions to dwelling, and incline lift Elvina Bay, NSW

**Date:** 18th March 2020

**Address:** 37 Sturdee Lane, Elvina Bay,

NSW 2105 Lot 32 DP 8031.

Prepared By:

Stephen Crosby & Associates Pty. Ltd, PO Box 204 Church Pt. NSW 2105

For: W & E Walker

## **Planning documents:**

- Pittwater LEP 2014
- DCP Pittwater 2014
- SEPP Coastal Management

## The Application:

The application is for alterations and additions to the existing dwelling and installation of an incline lift at 37 Sturdee Lane, Elvina Bay.

The proposal is set out in drawings prepared by Stephen Crosby & Associates Pty. Ltd.-Comprising the following drawings:

2037-DA01	Site Plan
2037-DA02	Floor Plan
2037-DA03	Section & Elevations
2037-DA04	Incline Lift- Plan and Section
2037-DA05	BASIX requirements

Site survey drawing prepared by Base Surveying, Ref. 17-49 and survey of adjoining site and boundary survey plan by CMS Surveyors Ref. 17778detail.

Bushfire Risk Assessment and Assessment Certificate prepared by Planning for Bushfire Protection dated 05/09/2019.

Geotechnical Risk management Report and Form 1 & 1a prepared by Hodgson Consulting Engineers Ref. QY 00089 dated 11th March 2020.

Tree Assessment & Management Plan prepared by Julia Stanton dated March 2020.

Basix Certificate No. A372433

Site: No.37 Sturdee Lane, Elvina Bay, Lot 32 DP 8013.

## This property is only accessible by water.

This site is located on the saddle between Elvina and Lovett Bays addressing the waterfront in Elvina Bay to the south, and Sturdee Lane to the north. The ground rises from the Mean High Water Mark at a steep grade to around the 9m AHD contour before easing to a level grade where the existing dwelling is sited, and then descending at a grade of 8 to 10 degs to Sturdee Lane.

The site contains a small (122m2) cottage, including a detached bedroom and studio, and decks on both north and south sides.

There is a water storage tank close to the western boundary at the northern end of the site, and wastewater system in the lawn to the north of the dwelling.

The existing single storey timber framed dwelling stands in the centre of the site, in parts close to the western side boundary.

The proposal is to demolish the existing detached bedroom and bedroom/studio to the north of the cottage and construct a new detached bedroom linked to the cottage by a covered deck, and a new detached studio and bedroom pavilion. These two detached structures will be located generally in the area of the demolished structures.

There are minor landscaping works immediately to the north of the existing dwelling, incorporating new paving and steps to the new studio and bedroom.

Parallel with the western boundary an incline lift is proposed to provide access from the MHWM in Elvina Bay to the south facing cottage deck to access the dwelling.

The existing wastewater system with a sub-surface absorption field to the north of the dwelling is to be maintained. There are no additional bedrooms or bathrooms proposed with this development application, with no increase to wastewater loads.

To the west is a residence known as "Ventnor" at No.39 Sturdee Lane, on Lots 33 & 34 DP 719172.

To the east are a residence known as No.35 Sturdee Ln. on Lot 3 DP 1180405 fronting Elvina Bay, and a residence known as No.33 Sturdee Ln. addressing Sturdee Ln. to the north.

Each these properties have single storey dwellings located well clear of the applicant's dwelling and proposed additions.

Two detailed survey plans of the site and adjoining site to the west are submitted with the application identifying site boundaries, topography, trees, paths and adjacent built structures.

Details of the proposal are as follows:

Site area: 910m2

#### **DWELLING ADDITIONS**

Maximum Height	5.0m	addition
Storeys	1	existing & addition
Floor area	122.7m2	existing dwelling incl. detached bedrooms/studio
	35.1m2	additions - replacement bedrooms and studio
Total	157.8m2	19.3% site cover
Setbacks-		
East (No.35)	4.3m	dwelling - existing
	10.1m	dwelling - addition
West (No.39)	0.4m min.	studio - existing, to be demolished
	1.0m	dwelling - additions
	2.7m	incline lift track

## **Site Coverage:**

Site area:	910.0 m2	
Permitted site cover 25% Permitted hard landscape 6%	227.5 m2 54.6 m2	
Total hard surface area permitted	282.1 m2	
Hard surface site cover- dwelling- exist.  dwelling- addition decks >1m existing decks >1m addition lift access addition deck <1m + paving	122.7 m2 35.1 m2 25.5 m2 3.7 m2 7.1 m2 36.7 m2	(excluding demolition)

# **Dwelling additions:**

Total

Additions to the dwelling comprise a replacement bedroom of 25sqm and a detached studio and bedroom of 42m2 replacing the existing detached bedroom/studio. The new buildings are set back 1.0m from the west side boundary to comply with the BCA and Council DCP standards.

230.8 m2 = 25.4% complies

The dwelling additions are a minimum of 1.0m from the side boundary with No.39 to the west, and 9.0m (small balcony) from No.33 to the east.

The additions are low to the ground and within the building envelope having a minimal visual impact on adjoining properties. The walls of the additions fit within the Building envelope DCP Cl. D 8.8. The additions are behind the 6.5m street setback to Sturdee Lane and 32m from the Elvina Bay mean high water mark, behind the Foreshore Building Setback Line (FBSL).

## **Incline passenger lift:**

The proposal includes an incline lift from the foreshore behind the MHWM to the existing dwelling's south waterfront deck to supplement the access stair leading from the jetty to the top of the steep foreshore bank to a pathway on up to the house.

An access walkway shall be built in hardwood to meet the requirements of BAL 12.5 construction in AS 3959-2009 from the jetty deck to the base of the lift track. The location of the incline lift track is shown on drawing No. 2037-DA04 Incline Lift.

Incline passenger lifts are permitted within the Foreshore Setback Area.

There are 11 trees within 5m of the proposal, 5 within 5m of the incline lift. These have been assessed in the Tree Assessment accompanying this application. One tree T 4 is to be removed for a lift track footing. The report recommends trunk protection fencing for trees T2 & T3, along with hand excavation for incline lift piers. The recommendations of this report shall be adopted for the work.

The geotechnical assessment of the proposal concluded there is an acceptable level of risk in accordance with the 2009 Geotechnical Risk Management Policy for Pittwater. The recommendations of the report shall be adopted.

## **Existing and future character:**

This proposal is to slightly increase the floor space of the existing small dwelling by demolishing the existing two small bedrooms and art studio to the north of the original cottage, and creating a new bedroom accessed off the covered north deck, with a separate bedroom and studio pavilion accessed by a short pathway.

The property shall retain its existing wastewater treatment system and as no additional bedrooms or bathrooms are proposed there shall be no increase in wastewater.

Those parts of the site not occupied with the buildings or decking shall be largely vegetated with a mix of the existing lawn areas around the cottage, and native ground covers and shrubs on the sloping land down to Elvina Bay.

The matching form, character and finishes of the additions compliment the existing dwelling and are sympathetic to the residential structures in the Elvina Bay/Lovett Bay community.

## **Survey:**

Two survey plans of the site, and adjoining site next to the additions and lift track, give details of the landform and indicate location of property boundaries, built structures and trees. Spot levels and contours to AHD are shown.

## Designated slip area:

The site is zoned potential landslip. A Geotechnical Risk Analysis report has been prepared and accompanies this application. Refer report Ref. QY 00089 prepared by Hodgson Consulting Engineers that supports this application.

The site is mapped by the Northern Beaches Council 'Pittwater LEP 2014' Geotechnical Hazard Map with only the very steep southern end of the property being in the 'H1 Hazard' category. The northern end of the property is unclassified.

The report notes the development is considered suitable for the site, with no geotechnical hazards created if constructed in accordance with the requirements of the geotechnical report. The site can achieve the Acceptable Risk Management criteria following the recommendations given in Section 10 of the report.

#### **Construction methods:**

The unmade road Sturdee Lane provides access from the landing area on the southern side of Lovett Bay to the site. Materials may also be brought to the site by barge.

Signs shall be placed on the Lane frontage warning of the danger of construction and advising of restricted access.

Storage areas for building materials and sediment control barriers are shown on the Site Plan No.2037 - DA01.

#### Site disturbance:

Refer to Site Plan drawing No. 2037 - DA01 for areas of the site to be worked on and the location of sediment barriers.

## **Dwelling Construction Materials:**

The proposed dwelling addition is a single storey section behind the Sturdee Lane street building setback line, and behind the Foreshore Building Setback Line (FBSL) from Elvina Bay. The design follows similar forms to the existing dwelling and neighbouring dwellings in Elvina & Lovett Bays.

The form, materials and colouring of the additions shall compliment the existing dwelling on the site.

The dwelling additions shall be built to BAL 12.5 of AS 3959 2009 plus addendum to Appendix 3 of PBP.

Proposed construction;

- Timber floor with concrete footings
- FC splay board lower wall cladding, with Mini-Orb cladding above the windowsill line
- Fire retardant sarking to external walls
- Windows and Doors BAL 12.5 pre-painted aluminium frames
- Roof Colorbond metal sheeting matching the existing
- Decking Bal 12.5 hardwood

#### Parking:

No provision for on-site parking is included with this proposal.

#### Solar access:

The dwelling additions extend the existing ground floor level and fall within the building envelope as described in DCP Cl. D 8.8. No significant overshadowing results from the dwelling or deck structures.

Morning (9.00AM), noon and afternoon (3.00PM) shadows from the additions generally fall on the existing dwelling, boundary fence and site at mid winter.

The trees on the adjoining property to the west diffuse morning sunlight on No.39 Sturdee Lane.

No shadow diagrams have been prepared for these low-level single storey additions.

## **Ecologically sustainable development:**

Stormwater from the existing building is collected in an existing collection tank down hill and to the north of the dwelling. This tank will be supplemented with a second storage tank under the proposed studio. Overflow from the storage tanks shall be piped to Sturdee Lane in accordance with existing Council recommendations. The location of the stormwater tanks and overflow pipe is shown on the Site Plan No. 2037 - DA 01.

Wastewater is collected and treated in the existing wastewater tank and piped to a series of absorption trenches under the lawn to the north of the site, below the dwelling.

The design of the new habitable rooms includes glazed areas for good sunlight with opening sashes and doors for cross ventilation. The site experiences good cooling sea breezes over the summer months ensuring good ventilation throughout the building.

BASIX Certificate No. A372433 supports this application. Document 2037-DA05 BASIX Requirements lists the energy commitments for the proposal. Insulation and energy use shall be in accordance with requirements of this certificate. Water shall be from rainwater collected and stored in a tank on site.

## View sharing:

Views from neighbouring properties are unaffected by the proposal.

#### Visual privacy:

East facing windows in the additions are over 10m from the adjoining neighbour's (No.33) common boundary and over 18m from the neighbouring dwelling to the west (No.39). These significant separation distances ensure privacy for all parties.

## **Land Vegetation:**

The southern portion of the site fronting Elvina Bay supports scattered native vegetation with small, medium and large native trees endemic to the area. Their location is shown on the survey drawing and in the Arborist's Tree Assessment supporting this application. The remainder of the site has been cleared and grassed for a number of decades.

Five trees are located within 5m of the proposed incline lift track. Tree T4 is a semi-mature Eucalyptus umbra in fair health and condition and it is proposed to be removed. Trunk protection is to be installed around trees T2 and T3, Corymbia maculata species in good health and condition, for the duration of the works.

Tree T5 is a Corymbia maculata on the neighbouring property 4.2m from a proposed incline lift footing. This tree is to be protected and retained.

To reduce the risk of bushfire attack the whole of the site shall be maintained as an Asset Protection Zone and Inner Protection Area.

#### **Bushfire Risk:**

The site is in an area with a recognised bush-fire risk. Elvina and Lovett Bays are served by a Rural Fire Service Brigade based nearby in Lovett Bay. Building work will be to the standards recommended in the Australian Standard for building in bush-fire prone areas, AS 3959-2009, and Part 3.7.4 of the BCA.

A separate report prepared by Planning for Bushfire Protection Pty Ltd has been prepared, Ref 1358 identifying the bushfire attack level as BAL 12.5 and recommending a minimum construction standard of BAL 12.5 AS 3959- 2009 for the dwelling additions, and, construction requirements shall be varied to comply with the requirements of the NSW Rural Fire Service Addendum to Appendix 3 of Planning for Bushfire Protection

2006.

Water tanks with a total capacity of 45,000L are to be provided on site. One tank is to have a 35mm storz fitting and ball gate valve.

A portable fire pump 3kW (5hp) with hose and fittings shall be maintained on site.

Vegetation on the site shall be suitable for maintaining the whole of the site as an effective Inner Protection Area.

Where gutter guards are installed the material shall be non-combustible.

#### **Access and Services:**

Site access is via Sturdee Lane or the property's private jetty in Elvina Bay. The site is serviced with power and telephone. Water is from roof collection and stored on site. The water supply is supplemented by spring water piped to this and neighbouring sites.

Construction materials can be brought to Lovett Bay by barge and trucked to the site, or the private jetty in Elvina Bay and brought up the site with the incline lift.

#### **Excavation:**

Refer to Site Plan No. 2149 - DA01 for location of sediment barriers, to be installed prior to excavation. A sign advising of restrictions to unauthorised personnel entering the site shall be displayed adjacent to Sturdee Lane.

Excavation for the incline lift base pit and footings will be by small machine and hand tools. This work to be carried out during weekday 'authorised construction' hours.

## Side Boundary Setback and Spatial separation- Dwelling addition:

The minimum western side boundary clearance with No.39 Sturdee Lane "Ventnor" is 1.0m. Setback for new lift track is 2.7m.

The minimum eastern side boundary clearance with No.33 Sturdee Lane is 10.0m for the addition and 8.9m for the attached deck.

## **Building Height- Dwelling additions:**

Permitted maximum ridge height: 8.5m Proposed maximum height: 5.0m

Refer drawing 2037 - DA 03 Section and Elevations for building heights and Building Envelope compliance in accordance with DCP D8.8.

#### **Waste Management:**

Construction waste generated during building shall be taken to Kimbriki Tip for sorting and recycling where appropriate. Waste will be dealt with in accordance with the Northern Beaches Waste management Plan submitted with this application.

Sediment fences shall be installed prior to pier excavation works where shown on Site Plan drawing No. 2037 - DA 01.

#### Storm water:

Stormwater from the existing building is collected in two collection tanks down hill to the north of the dwelling. Overflow from the storage tanks shall be piped to Sturdee Lane in accordance with existing Council recommendations. The locations of the stormwater tanks are shown on the Site Plan No. 2037 - DA 01.

#### **SEPP COASTAL MANAGEMENT 2018**

The policy applies to this site.

#### **Division 3 Coastal environment area**

- (1) (a) The alterations and additions to the dwelling shall have no adverse impact on the integrity and resilience of the biophysical, hydrological and ecological environment.
  - **(b)** The size, bulk and scale of the proposed additions are in keeping with similar dwellings on the foreshore of Pittwater
  - (c) N/A
  - (d) N/A
  - **(e) Access** There are no changes to foreshore public access below the MHWM with this proposal.
  - (f) No impact envisaged.
  - (g) N/A
- (2) (a) The alterations and additions to the dwelling shall have no adverse impact as above.
  - **(b)** The proposed additions are modest in area and have been designed to minimise impacts on the natural environment.
  - (c) N/A
- (3) N/A

#### **Division 4 Coastal use area**

- (1) (a) (i) Public access along the foreshore is unchanged with this proposal
  - (ii) No overshadowing or loss of views.
  - (iii) N/A
  - (iv) N/A
  - (v) N/A
  - (b) (i) No adverse impacts anticipated
  - (ii) N/A
  - (iii) N/A
  - **(c)** The size, bulk and scale of the proposed additions are in keeping with similar structures on the foreshore of Pittwater.
- (2) N/A

#### **Division 5 General**

15 No increase to coastal hazards as the works are above the Foreshore Building Setback

- Line.
  16 Consent authority to consider.
  17 Consent authority
  18 N/A

## STEPHEN CROSBY