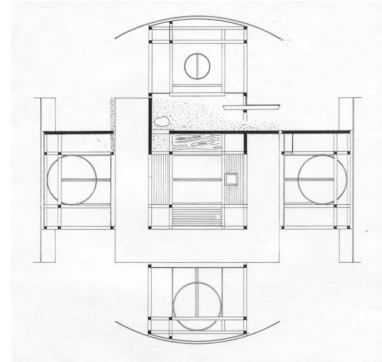


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30<sup>th</sup> July 2017

## **STATEMENT OF ENVIRONMENTAL EFFECTS**

### **New Dwelling**

307 Whale Beach Road, Palm Beach, NSW

# CONTENTS

CONTENTS .....	2
OVERVIEW .....	3
CONTEXT ANALYSISs .....	7
HERITAGE ANALYSIS .....	8
VISUAL EFFECTS ANALYSIS .....	10
GEOTECHNICAL AND ACID SULPHATE SOIL ANALYSIS .....	11
EXISTING VEGETATION AND WILDLIFE ANALYSIS .....	12
ENVIRONMENTAL NOISE .....	12
ACCESS .....	13
ENERGY CONSUMPTION MANAGEMENT .....	13
WATER MANAGEMENT .....	14
OPERATIONAL WASTE MANAGEMENT .....	14
NATURAL INTERNAL ENVIRONMENTAL CONTROL .....	15
WASTEWATER SYSTEM .....	15
CONSTRUCTION MANAGEMENT .....	15
CONSTRUCTION WASTE MANAGEMENT .....	16
RESPONSES TO NORTHERN BEACHES PLANNING SCHEME .....	17

**To be read in conjunction with the Drawings**

## **307 Whale Beach Road, Palm Beach - Drawing Number Key**

181001-181302          Drawings

## OVERVIEW

This document details the envisaged environmental effects of the proposed new small dwelling house at 307 Whale Beach Road, Palm Beach NSW. The site is within the local council area of Northern Beaches Council and is zoned 2b Residential (R2)

Number 307 Whale Beach Road is a vacant lot on a headland position within an eclectic row of vacant lots, original and renovated and recently built small and large and very extensive single and two storied dwellings on varying sized allotments. The property has a site area of some 603.7 SqM with a 15.89m. frontage to Whale Beach Road and ocean frontage to the rear. The site being elongated North East to South West and terraced falling down to the East to the ocean frontage cliff edge about 6.5 metres over the site mostly at the Whale Beach Road frontage with a near level rear garden area. The neighbouring original multiple storeyed heritage listed headland homestead house is in reasonable condition though in need of some ongoing repair and renovation and has a series of rear extensions and decking and pool structures.

It is proposed to build a new small single storied dwelling house on the property on the main garden level terrace facing east towards the ocean views.

The new pavilion is located centrally on the lot and set back a minimum 5m from the rear boundary – behind and well below the general line of development to minimize massing and shading effects in keeping with the objectives of the applicable DCP guidelines. Privacy screening to the adjacent residential property to the north and multi-storied buildings across the road to the west is proposed to maximize amenity. The general form of development is a small monopitched clerestory roof form dwelling sitting slightly above the lawn landscape and nestling into the existing garden areas under the existing tree canopy. This proposal raises the quality of the rear addressing facade to respond to the evolving socio-economic patterning of dense ocean frontage large scale development and use in the area.

This form of development responds to the relevant recommendations of the applicable DCP parts and allows the single storied lowered building to not affect the aesthetics of the street frontage with all garden and trees and view corridors to be retained in tact preserving the street values of that aspect, while allowing the simple residence below to respond to the demands of contemporary lifestyle expectations and environmental performance imperatives.

The new building is designed to maximise natural light and heat from the winter sun and to take advantage of the natural airflow across the site and to have a strong indoor/outdoor integration minimising its energy demands and providing a stable temperature through natural ventilation strategies, passive solar control, high thermal mass and high levels of insulation. The floor of the pavilion will have a AAC base and lightweight highly insulated walls and frame and roof with a vertical void and a row of highlight windows for the ocean side to give excellent natural stack ventilation effects and allow direct winter sun into the new residence.

Large sliding doors and windows to all spaces will assist in achieving a high level of spatial amenity, natural light and ventilation.

A number of contemporary styled multiple storied neighbouring dwellings along the road have upper floor monopitched clerestory roof and zincalume cladding systems, similar in visual effect to the proposal for 307 Whale Beach Road. There are no reflection issues due to the low angle of incidence of sunlight to any adjacent areas and the absence of neighbouring buildings

Following initial Pre DA discussions with planning officers from Northern Beaches Council, it has been determined that this new small dwelling is in line with the general development guidelines of the Council for the area and maintain the residential nature of the existing property and enhance amenity and security to the adjacent dwelling. As such it is suggested that it constitutes a permissible development for the site.

**307 Whale Beach Road, Freshwater, NSW  
Certificate of Title - Lot 233 DP 16362**

**Northern Beaches Council  
ex Northern Beaches Council  
Palm Beach Village Precinct  
Zoned E4 – Environmental Living – with Coastal Overlays**

Lot Area	670.8 sqm
Street frontage	12.35 m.
Lot Length	44.105m.
Lot width at building line	12.35m.
Existing Floor Area	0 sqm
Existing FSR	Vacant Property

Proposed Building	
Additional Residential Floor Area	21.6 sqm
Total Proposed Floor Area	21.6 sqm
Proposed FSR	0.04:1
Proposed Side Setback	3.8m
East	3.8m
West	3.8m
Proposed Rear setback	27.0m
Proposed Front setback	12 m.

Proposed vehicle parking	offsite - topographical constraints
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Development Consent Authority – Northern Beaches Council -  
DA .....

Zincalume roofing, rainwater goods and cladding.

Australian Hardwood - Victorian Ash timber frames for windows and

Australian Hardwood - Tallowwood decking and dress timbers.

**BASIX CERTIFICATE**

307 Whale Beach Road Basix Certificate 1031559S issued 08-08-19

**SURVEY**

Survey - REF : 53048 / 6457 PC 2 DTM 12.09.2011

Lot 233 DP 16362

HILL & BLUME - Registered Land Surveyors

## SITE ANALYSIS

The site is suburban, enclosed by steep slopes, neighbouring multi-storied residential oceanfront residential buildings to the west and north, large established trees to east and south sides and fences, with existing pedestrian and vehicle access to the wide rear parking area and garage access lane. There are significant ocean views over the property from the main whale beach road. Natural light and ventilation are available from the exposed ocean frontage in winter and summer heat and glare are lessened through the steep western embankment and nearby buildings to the north and west. The proposed design and orientation of the ecoshelta construction system building uses passive solar design strategies to improve access to light and air while reducing incident summer sun in the new dwelling spaces indoor and outdoor.

The side boundary setbacks have been established to meet Council's DCP guidelines for a maximum envelope of a 5.0m height from existing grade at the boundary and a 1in1 setback above that level. The steeply sloping site allows for an upward pitched roof to remain well below the setback envelope and still access sunlight effectively. A series of shadow diagrams has been developed to explore the overshadowing issues of the proposal which are negligible and there are no affected neighbours. Due to the site orientation and general topography no useable habitable spaces of adjacent buildings are further shade affected and no extra shading is generated in private or public open spaces.

The existing side windows in the adjacent residence at 309 Whale Beach Road are a source of acoustic penetration. Turning the building to face east and south east reduces privacy issues between the affected properties. There are no direct neighbours to the east, west or south.

Noise issues for the site are generated by coastal surf and wind and some minor airport approach and departure air traffic and some vehicular traffic noise. Minimal noise issues are evident.

Street parking availability is usually reasonable with principally local residential use.

The Ocean front lawns and road side embankment front garden is to be retained and enhanced with all vegetation on the property to be retained and reinforced with further planting. The lawn terrace and retaining walls are to be retained intact.

The site is well sheltered from the south and west against prevailing winter winds though it is open and exposed to occasional coastal storms from the North and East. There is good access to significant coastal breezes in summer and the general easterly exposure of the property lead to a milder summer and winter microclimate. Effective shading and a natural ventilation strategy are important to achieving an amenable microclimate for the building and associated outdoor recreational areas.

Vehicle Access is not currently available off Whale Beach Road for the subject property and extensive investigations have shown that on site parking is impractical in terms of physical construction, street aspect view over the property and neighbouring privacy and sunlight access amenity if a large structure was required to be constructed

for off street parking. It is proposed to rely on the existing roadside parking for the dwelling.

From site observations, there is exposed rock along the ocean side of the site and down the steeper sloped areas, there is a shallow layer of organic based topsoil over the terraced lawn areas. From site descriptions of nearby recent developments there is a varying depth 0.5m to 1.2m clay loam subsoil over a clay substrata merging down to a shattered limestone rock strata extending down to bedrock. Given the exposed visible rock faces it is reasonable to expect a solid bedrock foundation at reasonably shallow depth on the terraced areas.

The Sydney climate is mild and this is a sheltered site though with coastal offshore wind exposure. Strategies for natural ventilation will have to be employed to generate stack effects to enable summer cooling and good winter heat transmission through the building.

## **CONTEXT ANALYSIS**

The existing vacant lot is one of a small row of vacant lots along the headland around the heritage homestead building. No other buildings are visible from the lot. Some other large residential dwelling buildings can be seen from the street face to either side and to the uphill inland side of Whale Beach Road. The lot slopes steeply away from the street allowing dramatic ocean vistas from the road and footpath forming a strong visual connection to place.

The area is not within a heritage conservation area. The property is adjacent to a heritage 'contributory' large dwelling building in an eclectic rendered brickwork international modernist / art deco revival style with a range of elements apparently added ad hoc in different styles over an extended period.

The lot is within a coastal management area.

The proposed envelope for the construction of the new small dwelling is within the DCP designated constraints for suburban density residential buildings in this area generated by the alignments of the adjacent buildings. The proposed rear setback aligns generally with the rear developments further along the street.

The setback from the rear for the proposed new pavilion aligns with the existing rear setback of other nearby developments and other similar rear fronting buildings along the street.

The front alignment and ridgeline and front roof are set very low, well below line of sight from the main road. The roof ridge height of the new rear pavilion is generated by the building construction to maximise eastern light and minimising the hot western sun. The building sits well within the wall and ridge height limitations set by the DCP side setback guidelines for the zone.

## HERITAGE ANALYSIS

The following is a Statement of Heritage Impact Analysis for the new small dwelling on 307 Whale Beach Road, Palm Beach. The Northern Beaches Council - Pittwater LEP identifies this property as not being located within a listed mapped Conservation Area but is proximate to a 'contributory' heritage item identified in the LEP.

The property is not a specific heritage item and is not listed by the National Trust. The LEP guidelines for assessment suggest the neighbouring property and large homestead fronting onto Whale Beach Road provide a 'Contributory' factor to the neighbourhood and streetscape, with a moderate heritage importance rating.

Whale Beach Road is an occasionally heavily trafficked through road to Palm Beach and also acts a major residential street. The road is constrained by topography and title to a narrow confined carriageway. There is some space for street kerb parking, and no local signage constraints on this or heavy parking use issues.

Native tree and understory species in remnant copses and reserves line the road in sporadic locations between larger scale residential developments in a range of styles and forms. The street is, in the vicinity of the subject property, characterised by multiple storey residential suburban dwellings.

307 Whale Beach Road is a vacant lot with an established garden of terraced lawns and specimen trees and steep garden areas.

The general residential neighbourhood comprises of single and two storey houses of a range of styles and eras with varying levels of decoration and detail with scattered contemporary dwellings and larger three to five storey grand residential buildings.

This development proposal has considered in detail the significance of the existing dwelling and streetscape. The intention of the development proposal is to enhance and contribute to the neighbourhood streetscape principally by keeping all new work to the centre of the lot and of a small scale to ensure it is low and does not interfere with the ocean vistas over the property from the road. The proposed pavilion to keep all contemporary styled works to the middle and rear of the allotment.

The main strategies are as follows:

- The retention of the ocean vista view lines over the property from the road.
- The addition of a new visually and structurally isolated single storied pavilion in the middle of the lot to DCP guidelines for residences.
- New dwelling visually separated from the neighbouring original homestead.
- The proposed development has considered the visual impact and bulk by restricting the height of the new pavilion roof form and maintaining the floor level at the rear lawn terrace level.
- Visually, from the road this will form a small discrete 'cabin' type coastal dwelling within a garden context, reminiscent of coastal culture historically associated with the locality and evoking a sense of simplicity and restraint of those bygone places.
- The new works will not be visible in any significant way from Whale Beach Road.



Visibility to the rear of the property is not available from the public domain – except from some distance out to sea due to the high sea cliffs and ocean frontage of the property. This low visibility will be strengthened by the massing and envelope of the proposal set back from the coastal edge, at ground level and sheltered within the existing garden and specimen trees .

The proposed envelope for the construction of the new small dwelling is designed to follow the DCP designated guidelines for the designated area.

The setback from the rear for the proposed pavilion aligns with the relevant rear setback provisions of the DCP, and is well behind the setback lines for recent buildings further to the north and south. The front alignment and ridgeline setback are central to the property and set well below street level.

In an initial discussion with Council’s planning officers it was stated that current interpretation of the DCP pertaining to the locality suggests that a compliant residential building of this pavilion form would be supported by Council.

As the neighbouring properties are vacant or well set back from the boundary there are no significant overshadowing or overlooking issues from the new dwelling which will face predominantly out to the ocean to the east and to the screened well established garden area to the south. Some slight mid winter shadow will fall on existing garden areas within the lot but none on neighbouring habitable areas or private open spaces.

It is proposed that this discrete small scale traditionally styled oceanfront ‘writer’s cabin’ type dwelling will contribute to the sense of place without compromising the streetscape or heritage values of the neighbouring heritage building or the locality.

## VISUAL EFFECTS ANALYSIS

The mass and bulk of the proposed small building are sited in the centre of the lot allowing it to visually retreat behind the existing topography and garden areas. The new works are aligned to the centre of the lot and the existing ground levels maintaining a minimal aspect and coherent visual patterning with the only neighbouring building. The proposed pavilion will not break the existing skyline from the street and from the rear will be of a small residential scale commensurate with the surrounding buildings taking its visual cues from traditional ocean front cabin type building envelopes in the area. For this building the rear residential context is generated by the wider context of the large scale oceanfrontage dwellings and intermittent remnant garden and bush reserve spaces.

The building's location within its row of vacant lots with single and double storied dwellings to either side and above provides a consistent strong built context from the rear while being essentially out of site from the street above, sited below the steep embankments and terraced gardens. The rear of the buildings in the coastal context (and other neighbouring buildings) have been substantially modified in an ad hoc and eclectic manner. The form of the proposed new small dwelling responds to this context, the built heritage of the place and its coastal cabins and the aesthetic aims of the owners.

The siting of the dwelling is designed to retain the essence of the suburban coastal residential nature of the landscape. It is intended that the bulk of the building is not visible from the main street sight lines. The rear of pavilion building is located out of sight from any public areas due to the cliff face and elevation of the site and low floor level established.

The exterior of the proposed new pavilion will be predominantly fenestrated to the east to the coastal views and screened to the rear and to the neighbouring homestead to the north and highlight clerestorey windows to ensure privacy while achieving maximum internal light and winter solar access to maximise natural light.

The new contexturally designed façade to the rear to the East and South is reflective of the contemporary lifestyle amenity expectations and environmental performance imperatives.

## **GEOTECHNICAL AND ACID SULPHATE SOIL ANALYSIS**

The soil type has been initially assessed as likely Class M over a rock base at moderate depth and the new footings and adnate piling have been provisionally designed to adequately support the construction loads with this foundation type. Preliminary Geotechnical assessment and initial footing design have been undertaken to confirm the suitability of the proposed structural system. All new footings are contained within the allotment and are designed to avoid loads passing to neighbouring lots and to retain the structural integrity of the neighbouring structures. The existing walls and footings that are to be retained have been preliminarily assessed as capable of carrying the loads proposed.

Some minor excavation of the site is proposed to allow for the proposed concrete pad footings and service trenching for the new works. All excess spoil will be used on site in garden areas as clean fill.

The property is not within an at risk Acid Sulphate Soil designated area under *Northern Beaches – Pittwater Local Environmental Plan -Acid Sulfate Soils Planning Maps*.

A Sydney Water TapIn assessment shows a 225mm Vitreous ceramic sewer main line running along the street at the front of the property of sufficient depth to project a zone of influence for the protection of the Sydney Water asset over the rear 5m of the subject site. Due to the topography the proposed footings will found well below the ZoI

A sewer drainage system will be required to take sewer blackwater to a holding tank with a macerator high pressure pump, and pumping up to the sewer .

A stormwater drainage system will be required to act as a surge tank and soakage pit on the terraced lawn area.

Any useable topsoil or clean subsoils will be stored on site. All excavated clean rock material will be used as aggregate in backfilling service trenching. It is expected that no exporting of fill will be required.

## **EXISTING VEGETATION AND WILDLIFE ANALYSIS**

The external areas of the allotment are, terraced levelled lawn areas and steep garden beds sloping up to the main road with a number of significant exotic species trees on the lot. There are no endangered or rare native plant species observable in the vicinity of the proposed building footprint or surrounds. The significant native trees and associated plantings in neighbouring allotments to the south are noted and all construction access to the site will be carried out from the street to the west along the northern boundary via the designated pathway - with due care of neighbouring and street trees. There will be no significant excavation near any existing trees.

The biodiversity mapping shows an area overlaying the SE corner of the site which site analysis indicates is an indeterminate area of lawn and large established palm trees with a copse of dense temperate exotic species. The cliff face beyond the levelled lawn areas contains various native species and these are well away from the designated building area and care will need to be taken to ensure the building zone is fenced and screened with run off barricading to that area to prevent contamination.

The area has been used for suburban residential property for many years, resulting in the reduced species diversity of the site with terraced lawns and exotic plantings.

There are no visible signs of wildlife activity on or near the proposed building location. As far as can be determined the area does not function as a wildlife corridor or active use area. There are no major habitat trees or stumps in the vicinity of the building footprint. While some minimal activity from native and exotic wildlife in the area is expected it is not envisaged that the proposed building would disrupt this to any significant extent. There are a number of substantial trees on neighbouring allotments which will be sufficiently far from any works for any adverse effects. The existing front garden will be retained in its current state and protected.

The existing trees and plantings will be retained in tact.

## **ENVIRONMENTAL NOISE**

Whale Beach Road is typically reasonably quiet in this area being narrow and steep on both sides of the street, though becomes very busy on holiday periods and sunny weekends.

This area is under the high coastal flight path for Sydney Airport and is mildly overflown with aircraft several evenings a week. There is occasional mild vehicle noise from the nearby heavy traffic on Whale Beach Road dependent on prevailing wind direction.

There is occasional heavy surf noise and wind noise from the exposed coastal location.

There can be mild noise pollution from time to time which encroaches on the amenity of the site and will require some response with noise protection strategies. The

building is proposed to have 6mm glazing to the main ocean facing windows and glazed doors and be well insulated with plywood lined SIPs Panels for walls and STYROANEL panels for the sub floor and twin zinalume skinned foamed roof panels, with 13mm pine timber ceiling linings. Well sealed doors and highlight windows with 6mm glazing are proposed. Consequently minimal sound intrusion problems are anticipated.

## **ACCESS**

The existing pedestrian only access off Whale Beach Road to the property will be retained. Given the severe topographical constraints of the site it is proposed to retain the existing street verge parking provisions for the dwelling.

All construction access will be from Whale Beach Road and material delivery by manual means is proposed.

## **ENERGY CONSUMPTION MANAGEMENT**

The design incorporates passive solar thermal control strategies including fenestration and pavilion orientation, eave shading, louvred highlight windows, high insulation levels and a layered opening system to give an effective natural ventilation strategy. A natural gas boosted solar hot water system will be installed and passive heat exchange cooling technologies employed. Photovoltaic power cells may be deployed on the available viable roof areas and directed to a grid feedback meter system. The project uses the following strategies to ensure minimal external energy requirements:

- Foam core SIPS walls and roofs and effective sealing detailing.
- 6mm toughened glazing for all fixed glazing and glazed doors
- The use of controllable natural stack ventilation strategies.
- Recognition of prevailing winds and breezes and relevant cross ventilation.
- Vaulted ceilings and highlight windows to the East for natural light and winter solar penetration
- Wide varying width eaves positioned to shade the buildings from summer sun and to protect from winter storms and excessive weathering.
- The use of natural gas boosted mass storage Solar Hot Water heating.
- The installation of energy efficient appliances and lighting fixtures
- Ultra low wattage LED and compact fluorescent lighting systems
- Potential for Roof mounted photo-voltaic solar power arrays with grid feedback system.

## **WATER MANAGEMENT**

It is estimated that the residence with two permanent occupants and using a stormwater dispersal system for garden irrigation, 4 star and 5 star water appliances, and low flush WCs, the building will require about 110 000 litres of water annually. Water for laundry, WCs, hot water supply and spa pool and garden irrigation will be provided from rainwater collection from the roofs to be held in a rainwater storage tank system under the new pavilion roofline with electronic pressure pump supply. A stormwater overflow dispersal system will provide garden irrigation.

Rain water will be collected from the corrugated sheet roof and gutter system and piped to a 5000 litre rain water storage system. There will be a roof area of about 42 SqM for the new pavilion which can be directed to the rainwater harvesting system. Sydney averages about 1250mm per annum with a monthly median of about 80mm giving about 3,360litres a month and 40,000litres per annum. Pressure will be supplied from an electronic pressure pump system. This water will be used for the laundry and all WC flushing, pool filling and garden irrigation.

AAAAA (5A) rated integrated WC and handbasin systems will be installed, together with AAAA (4A) aerated shower fixtures and vanity faucets to ensure minimisation of water usage while maximising resident amenity.

## **OPERATIONAL WASTE MANAGEMENT**

A dedicated bin storage bay has been planned for the rear under eave space to take a standard Council Issue waste bin, green waste bin and recycling bin.

The following strategies will ensure the minimisation of requirement for disposal of waste materials from the ongoing operation of the Residence:

- Organic Kitchen refuse collection and on site composting.
- Packaging collection and sorting for recycling.
- Use of recycled and recyclable minimally packaged products
- Use of biodegradable products wherever feasible.

## **NATURAL INTERNAL ENVIRONMENTAL CONTROL**

The proposed building makes use of controllable/openable doors and windows around the living areas and openable highlight louvred windows to control internal temperatures through cross flow ventilation and natural stack ventilation. The buildings are all fully insulated, walls and floors and ceiling panels achieve R3.5 insulation. Openings in the walls are located to collect summer breezes and channel them through the building.

The small size of the building and large mass provided by sub floor panel type construction combined with natural stack ventilation effects allows for the maintenance of a steady temperature and humidity throughout the year with minimal requirements for external energy for each individual and room.

The Passive Solar Design features allow for extensive glazed areas which are provided to the eastern faces of the building to allow ingress of winter sunlight and solar gain. Highlight vents provide summer cooling. Wide varying width eaves are designed and positioned to provide summer shade and allow winter sun ingress.

## **WASTEWATER SYSTEM**

The dwelling will use a new macerator transfer pressure pumped system to transfer black water to a new connection to the existing sewerage main system in the street for all blackwater from the kitchen sink, and WC and bathroom and laundry greywater.

A Stormwater Dispersal system for the property, with a 5000 litre rainwater storage and surge tank with outlet filter will be installed at the rear of the dwelling, with gravity fed subsurface irrigation for overflow over the garden areas.

All pipework will be laid out in floors, walls or underground. See Drainage Concept Drawing for details.

## **CONSTRUCTION MANAGEMENT**

The following strategies will be employed to minimise the environmental impact of the building process during the construction phase:

The use of off site prefabricated framing system to minimise site intrusion, waste and incidental site damage.

Recycling of all offcuts, excess and left over building materials generated from on site construction

The use of minimal environmental impact materials as assessed by the EcoCost ecological impact rating system;

- ie Hebel aerated concrete blockwork for masonry walls
- Wool/polyester blend non-irritant insulation
- Environmentally Certified sourced Timber Cladding

Lightweight Alloy Structural Frame  
Corrugated steel sheet roofing maximum coverage for minimal material  
Re-use of excavated material as aggregate for on-site works  
Re-Use through on-sale and removal of existing building fabric

## **CONSTRUCTION WASTE MANAGEMENT**

The following strategies will ensure the minimisation of requirement for disposal of waste materials from the construction works:

- All existing trees and vegetated areas to be securely barricaded to prevent damage to foliage or roots.
- A sullage soakage pit will be excavated on site and lined with filtration mat to allow safe, on site, deep strata dispersal of used water and washing outs. The pit will be cleaned out, backfilled and site made good on completion.
- Excavated material from footings and service trenches and underground tank excavations to be sorted and stored on the site. Topsoil to be sifted of debris to 32mm grid and re-used in landscaping works. Subsoils to be mixed thoroughly, sifted for organic debris and stored for use in backfilling works.
- All organic debris to be collected, shredded and composted on site for use in landscaping works.
- Render and concrete rubble will be broken up on site, sifted for dust and retained for use in drainage works around the perimeter of the new building and for drainage bedding around underground septic tank and trenches.
- Timber offcuts will be stored in a bin on site for use as firewood or for shredding for mulch chips.
- Aluminium and other metal offcuts will be stored in a bin on site for recycling.
- Wrappings, packaging and binding materials will be sorted and stored on site for recycling through the local recycling programs.
- Dust, dirt and unrecyclable waste materials will be collected and stored in covered bins on site for regular disposal through waste disposal contractors.
- No skips or bins will be stored anywhere off the site without a council approval.
- All site access will be via the existing street pedestrian access. A drainage barrier will be employed at the main site entrance(s) to catch any waterborne sediment or trafficked material from the works.



# RESPONSES TO NORTHERN BEACHES PLANNING SCHEME

Northern Beaches - Pittwater Local Environment Plan 2014

Northern Beaches - Pittwater Development Control Plan 2014

307 Whale Beach Road, Palm Beach – Coastal Village

Zone E4 Environmental Living

- Residential Low Density Requiring Residential Scale Preservation.

Heritage Zone N/A - not in a Conservation area – adjacent to a listed Heritage Item

## **E4 Environmental living Low Density Residential Pittwater Local Environmental Plan 2014**

Current version for August 2019

### **Zone E4 Environmental Living**

#### **1 Objectives of zone**

- a. To provide for low-impact residential development in areas with special ecological, scientific or aesthetic values.
- b. To ensure that residential development does not have an adverse effect on those values.
- c. To provide for residential development of a low density and scale integrated with the landform and landscape.
- d. To encourage development that retains and enhances riparian and foreshore vegetation and wildlife corridors.

#### **2 Permitted without consent**

Home businesses; Home occupations

#### **3 Permitted with consent**

Bed and breakfast accommodation; Boat sheds; Building identification signs; Business identification signs; Centre-based child care facilities; Community facilities; Dwelling houses; Environmental protection works; Group homes; Health consulting rooms; Home-based child care; Home industries; Jetties; Oyster aquaculture; Places of public worship; Pond-based aquaculture; Respite day care centres; Roads; Secondary dwellings; Tank-based aquaculture; Water recreation structures

#### **4 Prohibited**

Industries; Service stations; Warehouse or distribution centres; Any other development not specified in item 2 or 3

While there are no detailed requirements in the Council Planning Scheme or associated DCPs which specifically apply to this site or the specific area, the statements of intent for the zoning of Residential 2b Medium Density and the applicable sections of the DCP provide guidelines for responses. This proposal has been designed to be in keeping with the stated intents for the zone and objectives of the relevant DCP provisions. Analysis of applicable DCP clauses forms part this SoEE Report.

This proposal for a new small single storeyed dwelling is considerably smaller than the heights and alignments of its nearest neighbours on either side.

The proposal meets the in-principle objectives of E4 Environmental Living zoning for Low Density Residential development, in that:

The new building will be used as a residence.

The envelope meets DCP guidelines for setback and heights as designated and ensures minimal visibility of the new building and retains the integrity of the street outlook.

The side and rear setbacks allow for effective natural light penetration, minimise overshadowing and lessen bulk and scale effects. The forms and masses proposed are in keeping with the general pattern of development for the locality with a past history of this form of small dwelling cabin within the immediate area.

While this is an atypical suburban residence in the area of predominantly substantial extensive multilevel houses, this proposal is to be used only for residential purposes and has been designed in compliance with the relevant provisions of the NCC BCA Part 2 – Residential Construction for the amenity, health and safety of the occupants.

The site is not in a heritage area and neither is not a specifically listed heritage item though is proximate to a listed heritage items and within its visual curtilage. The small size of the proposed new building will have minimal effect on the existing heritage contributory homestead and site adjacent to it in a garden context allowing its identity and status to be retained in tact. The general street pattern and façade features of the neighbourhood are to be respected and retained in full in this proposal. The building proposed is designed to ensure it is not out of context from the street and does not interfere with the preservation of the streetscape values.

The proposal does not involve subdivision of the land.

The proposed building will not affect the views of any neighbouring dwellings.

The proposal achieves compliance with the applicable sections of the LEP and DCP, to achieve the objectives of the Planning Scheme.

The design has been developed in response to the particular features of the site, the context of the neighbourhood the particular neighbouring dwelling to the north and the vacant lot to the south and the particular aspirations of the applicants. The location, orientation and form of the building is specifically designed to ensure that the dwelling is not to be out of context from the main public road or adjacent rear inland developments and will not be a dominant mass from the road or any existing nearby dwellings or public spaces. All existing vegetation and boundary planting and hedging levels are to be retained to ensure significant landscape screening reinforced with further native plantings.

The living areas of the building are oriented to the East and to the southern private garden area and screened to the north to maximise the available natural light and use a light scoop highlight up to the east to bring in the available direct morning sunlight. Dense insulation, thermal mass, thick glazing and screened louvring are specified to enhance the passive solar design principles and natural stack ventilation strategies to ensure the building meets or exceeds the Housing Energy Rating Scheme (HERS) requirements for a 6 Star + Rating. A BASIX Certificate has been achieved for the proposal and is attached.

The building is designed to occupy already manipulated and previously terraced areas of the allotment. The new pavilion floor and the upper terrace lawn area of the site is approximately level requiring no removal of existing trees, subdivision or clearing. The proposed building utilises careful planning and side screening on the rear of the upper floor to ensure it does not overlook any usable outdoor areas of nearby property or dwellings. The roof forms and side setbacks have been developed to ensure they cast minimal shadow outside the allotment and on the windows of neighbouring dwellings or usable outdoor spaces. The new building works will not break the skyline nor be visible from the main street frontage. There are a significant number of examples of recently constructed residences with similar architectural style and cladding in the immediate neighbourhood. .

Given the above the building is proposed as a permissible development for the site.

**307 Whale Beach Road, Palm Beach, NSW  
Certificate of Title - Lot 233 DP 16362**

**Northern Beaches Council  
ex Pittwater Council - Palm Beach Precinct - Pittwater LEP 2014 applicable**

- **Zoned E4** Environmental Living - Coastal Overlay area
- Outside Flood Risk Area
- Landscaped Area Mapping – Area 1
- Foreshore Building line runs through the property
  - – approximately 10m – 12m from ocean side boundary
- Height of Buildings Class I - 8.5m.
- Minimum Lot size - 700sqm
- Not land scheduled for acquisition
- Adjacent to Heritage Item – # 2270087
- Not in a designated heritage conservation area -
- Class 5 Acid Sulphate Soil Area – No action required
- Class R Coastal Erosion Risk – Bluff/ Cliff Instability – rock face stable.
- Not classified for permitted additional uses
- Floor Space Ratio – undefined or 1:1
- Biodiversity overlay partially over property to SE corner
- Geotechnical Hazard H1 – Coastal Exposed Cliff Face

Lot Area	670.8 sqm
Street frontage	12.35 m.
Lot Length	44.105m.
Lot width at building line	12.35m.
Existing Floor Area	0 sqm
Existing FSR	Vacant Property

Proposed Building	
Additional Residential Floor Area	21.6 sqm
Total Proposed Floor Area	21.6 sqm
Proposed FSR	0.04:1
Proposed Side Setback	3.8m
East	3.8m
West	3.8m
Proposed Rear setback	27.0m
Proposed Front setback	12 m.
Proposed vehicle parking	offsite - topographical constraints

Development Consent Authority – Northern Beaches Council -  
DA .....- TBA

Zincalume roofing, rainwater goods and cladding.

Australian Hardwood - Victorian Ash timber frames for windows and

Australian Hardwood - Tallowwood decking and dress timbers.

## **BASIX CERTIFICATE**

Certificate # 1031559S Issued - 08.08.19

## **SURVEY**

**Northern Beaches – (Northern Beaches) Council Planning Control Requirements regarding the site are summarized as follows:**

Pittwater Local Environment Plan 2014

**ZONE E4 Environmental Living**

*Compliance is achieved with Low density requirements by constructing a small discrete building for use as single dwelling house on a large area property which meets density and open space and setback and height requirements of the DCP. All existing significant vegetation to be retained – new building entirely within existing terraced lawn area.*

The Pittwater Development Control Plan will apply to the development.

**Public Notification of Proposal is Council Policy**

*Council will be required to notify all affected neighbours and call for submissions on the proposal from any interested party. It not foreseeable what these objections may be. Public representations are unpredictable and may give rise to issues if substantial objections were raised. Council's planners are required to address any submissions in their analysis of the proposal.*

A BASIX certificate will be required for the proposal demonstrating compliance with the energy and water use requirements of that scheme.

*Compliance is achieved by the preparation and issue of a BASIX Certificate for the proposal.*

**DCP Building Envelope – (within a 45 degree slope envelope projected from 5m above boundary line)**

*Compliance achieved - as shown on section and elevation drawings*

**DCP Landscaped Open Space and Bushland Setting – 40% of site**

*Compliance achieved - as shown on Landscape Plan drawing*

**DCP Private Open Space - 60 sqm min dimension 5m.**

*Compliance achieved - as shown on Landscape Plan drawing*

**DCP Maximum Wall height - 7.2m (Note 20 degree slope exemption to 8.5m)**

*Compliance achieved - as shown on section and elevation drawings with RLs to AHD for existing and proposed ridge gutter and floor levels.*

**DCP Site Coverage**

*Compliance achieved - as shown on Landscape Plan drawing*

**DCP Front boundary setback – 6.5m**

*Compliance achieved - as shown on Site Plan and Landscape Plan drawing*

**DCP Rear Boundary setback - 6.0m**

*Compliance achieved - as shown on Site Plan and Landscape Plan drawing*

**DCP Side Boundary setbacks – R2 Zone – 0.9m**

*Compliance achieved - as shown on Site Plan and Landscape Plan drawing*

LEP Acid Sulphate Soils – Class 5 – Minimum influence –  
*Compliance achieved – no specific requirements for Class 5 soils – noted on documentation for Construction Certification*

LEP Flood Planning Level – (0) –  
*Compliance achieved – no specific requirements for proposed construction area of site.*

LEP Height of buildings Map – all of site area 8.5m  
*Compliance achieved - as shown on section and elevation drawings with RLs to AHD for existing and proposed ridge gutter and floor levels.*

LEP Land Slip Risk Map  
*Compliance achieved by commitment to Assessment by Geotechnical Engineer with foundation soil type analysis and recommendations for suitable footings for Construction – Structural Engineering Design .*

LEP Lot Size Map – Minimum lot size 700sqm.  
*Compliance achieved – existing lot – single dwelling proposed.*

DCP Appendices – Car Parking – 2 carparking spaces required.  
*Compliance achieved by negotiation with Council regarding special conditions applicable to site due to topographical constraints - .*

Bushfire prone area assessment under Council Mapping – BAL Low - This is not a cited bushfire risk area.  
*Compliance achieved - as BAL Low – inner urban medium density area with extensive buffers and urban response bushfire protection services available- no specific construction requirements.*

Main Sewer Connection –  
*Sydney Water Compliance will require a plumbing permit for a waste water transfer pump system to mains on Whale Beach road achieved - new connection required. No applicable Zone of Influence for Sydney Water assets within footing requirements.*

Issued Section 149 Certificate  
*A Certificate has been obtained and has identified critical planning controls and design parameters.*

Geotechnical Issues – Flood, Landslip, Foundations  
*Council has advised that a Geotechnical Report will be required for Construction Certification. The site exhibits steep sloping clay surfaced terrain with terraced concrete retaining walls and large stone floaters and possible bedrock emergent. And is in a noted Land Slip Risk Area.*

Existing Vegetation Issues  
*Referral to Council's Tree Officer will be required or possibly an Arborist's Report. Large existing trees on neighbouring property. Extensive exotics (palms) are evident on site. Counter to this the very small footprint and isolated pier footings should give minimal issues.*

Within the Palm Beach Village buffer area, but outside visual context.  
*No applicable controls should be applied to the site as there are no visual or commuter links between the site and the Palm Beach Village area. The proposal will have no observable effect on the village and vice versa.*