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29 August 2018

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29 August 2018

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Statement of Validity

Section 75W Application Details

Applicant name	Anglicare (formerly Anglican Retirement Villages)
Applicant address	PO Box 284, Castle Hill NSW 1765
Land to be developed	Lot 2 and Lot 3 in DP1176767
Proposed development	Modification to Hilltop and Ocean View Precincts from Independent Living Units and residential aged care facility to residential dwellings as described in Section 3.0 of this Environmental Assessment Report

Prepared by

Name	Jennie Buchanan
Qualifications	BPlan, MPIA
Address	173 Sussex Street, Sydney
In respect of	Section 75W Modification Application

Certification

I certify that I have prepared the content of this EAR and to the best of my knowledge:

- all available information that is relevant to the environmental assessment of the development to which the statement relates; and
- the information contained in the statement is neither false nor misleading.

Signature



Name

Jennie Buchanan

Date

23 October 2018

Executive Summary

Purpose of Report

This Environmental Assessment Report (EAR) has been prepared by Ethos Urban on behalf of Anglicare in respect of a Section 75W modification to MP06_0094, being the approved Sandon Point Concept Plan (Approved Concept Plan).

This application seeks to facilitate changes to the Sandon Point Concept Plan on the Anglicare (formally Anglican Retirement Villages (ARV)) lands within the Sandon Point Precinct. The proposed modifications to the Part 3A Concept Plan Approval (MP06_0094) arise from a review that Anglicare has undertaken of the market for seniors housing in the Bulli area. This research has revealed that there has been a constant supply of new seniors housing in the locality since 2006, therefore demand for this type of housing has decreased. Further the provision of such a large number of Independent Living Units is likely to be unsustainable in the Bulli context and as such a greater mix of housing types is now proposed.

A request for the issue of Secretary's Environmental Assessment Requirements (SEARs) was sought on 12 December 2017. The Secretary of the Department of Planning and Environment issued the requirements for the preparation of the EAR on 27 February 2018. This EAR has been prepared to address the SEARs and is supported by the relevant technical reports and documents (see Table of Contents).

The Site

The site is located in the suburb of Bulli within the Wollongong Local Government Area (LGA). Sandon Point is approximately 14km north of Wollongong City Centre, 500m west of the coastline and 2.5km east of the Illawarra escarpment. Sandon Point is bound by Thomas Gibson Park and private landholdings in the north; McCauley's Beach to the east; the Point residential estate to the south and the Illawarra railway line to the west.

Further site details are provided in **Section 2** of this EAR.

Planning Context

The Approved Concept Plan comprises the plans, drawings and documents cited by the proponent in its Environmental Assessment, Preferred Project Report and Statement of Commitments, subject to the modifications and further assessment requirements set out in Schedule 2 of the Concept Plan notice of determination. The Approved Concept Plan has been modified on three previous occasions. Together, the planning controls at Schedule 3 of the State Significant Precincts SEPP and the Approved Concept Plan, as modified, establish the statutory planning regime for the development of the Sandon Point precinct.

As per Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*, the Sandon Point Precinct is a transitional Part 3A project, and the repealed Part 3A continues to apply. The request to modify MP06_0094 was lodged prior to the 'cut-off date' specified in clause 3BA and therefore the concept plan can be modified under Section 75W.

Further to the above the proposed modifications are within the modification power conferred by s75W of the EP&A Act having regard to the comments of the Court of Appeal in *Barrick Australia Ltd v Williams* (2009) 74 NSWLR 733 at [40].

Section 6.0 of the EAR considers all applicable legislation in detail.

Proposed Modification

Anglicare is proposing to amend the approved built form and layout of development on the site, including:

- Relocation of the Residential Aged Care Facility (RACF) from the Hilltop Precinct to the Central Precinct and reduction in the number from 120 beds to approximately 80 beds;
- Reduction in the number of Independent Living Units from 250 to approximately 140 units;
- Replacement of three storey apartment buildings and the RACF in the Ocean View and Hilltop Precincts respectively with approximately 55 residential dwellings (including multi dwelling housing / townhouses / terraces / semi-detached dwellings). These will be occupied as either standard residential dwellings or seniors accommodation depending on market feasibility at the time of construction;

- Reduction of the development footprint in the Ocean View Precinct and protection of an Aboriginal Archaeological Site;
- Removal of the vehicular crossing over Cooksons Creek and replacement with a pedestrian board walk;
- Replacement of Asset Protection Zones with defendable zones, consistent with those approved under Mod 1 on the Stockland portion of the Approved Concept Plan;
- Introduction of an additional pedestrian crossing from the Central Precinct to the existing paths down to the beach zone;
- Realignment of a small section of Wilkies Walk to facilitate vehicular access to land zoned for residential purposes to the north-east of the site; and
- Amendments to the water management strategy to reflect the revised development and introduction of an acoustic barrier along the western boundary of the site which will also act as a flood barrier.

The modified Concept Plan is provided at **Appendix A** and a summary comparison table has been provided at **Appendix E**. Tracked changes of the proposed modifications to the conditions of consent and Statement of Commitments are provided at **Appendices G** and **H** respectively.

It is noted that the following aspects of the Approved Concept Plan remain the same as that approved:

- Development footprint in the Hilltop and Central Precincts;
- Provision of the north-south link road (Geraghty Street) and the bridge over Tramway Creek;
- Protection and rehabilitation of the Turpentine Forest;
- Protection and rehabilitation of Cookson Creek;
- Siting of development in four precincts being:
 - Central Precinct;
 - Ocean View Precinct;
 - Hilltop Precinct; and
 - Forest and riparian corridor
- Provision of seniors housing in the form of a RACF and ILUs with ancillary land uses including respite care, health consulting rooms and a food and drink premises;
- Provision of pedestrian connections through and around the site and a shared bike path to connect into existing links;
- Maximum height and FSR controls as prescribed in the Concept Approval;
- Site zoning as prescribed by the State Significant Precincts SEPP;
- Management of electrolysis, noise and vibration associated with the railway line;
- Management of contamination;
- Management of geotechnical constraints; and
- Management of Acid Sulfate Soils.

Environmental Impacts and Mitigation Measures

This EAR provides an assessment of the environmental impacts of the project in accordance with the SEARs and sets out the undertakings made by Anglicare to manage and minimise potential impacts arising from the development. Overall, it is considered that the proposed modifications of the Approved Concept Plan have limited environmental consequences beyond those which have been the subject of assessment under the Approved Concept Plan. Importantly, any limited environmental consequences or impacts associated with the proposed modifications can be appropriately managed and mitigated. The environmental assessment of the proposed modifications is set out at **Section 5.0** of this EAR and a consolidated set of mitigation measures is provided at **Section 6.0**.

Development Layout

The indicative subdivision is similar to the approved concept plan in that the development will terrace down the Ocean View Precinct, responsive to the site topography and is setback to natural features of the site including the riparian corridors and the Turpentine Forest. Smaller semi-detached, attached and detached residential dwellings will be located on the sloping land to the north in the Ocean View and Hilltop Precincts resulting in less visual impact and creating less overshadowing than the approved three storey residential flat buildings approved in the Concept Plan. Two storey dwellings will align Wilkies Street creating a consistent height, bulk and scale with the street and the existing dwellings immediately to the north of the site

Small apartment buildings will be located on the lower flat section of the site in the Central Precinct. These buildings will be screened by the existing riparian vegetation and have been limited in height such that the Turpentine Forest will remain a dominant feature in the landscape.

The civil plans prepared for the development demonstrate that there will not be any additional cut or fill required in the E2 zone with the small exception of a portion of a road in the Central Precinct where fill has been minimised by way of introduction of a retaining wall. It is noted that a detention pond for flood management purposes always envisaged in the E2 zone and this is maintained, albeit relocated, in the revised scheme.

Built Form

No change is proposed to the key built form controls applying to the site as prescribed by condition A4 of the Concept Plan being:

- Maximum height of 3 storeys
- Maximum Floor Space Ratio of 0.5:1

The proposed modified development continues to comply with these controls with all building being 2 - 3 storeys height and the overall FSR of 0.5:1.

Whilst there is no maximum site coverage control applying to the site, an analysis of the indicative layout scheme demonstrates that a feasible outcome on the site could be achieved similar or better than that of the Approved Concept Plan in respect of site coverage.

Public Domain

Turf Design has prepared a revised Landscape Concept Master Plan for the modified scheme. The scheme has been modified to reflect the revised configuration of the site but maintains the key principles of:

- Communal areas for residents to congregate;
- Pedestrian access over Cooksons Creek; and
- Street tree planting.

The public domain will be further detailed and designed at the detailed development application stage to complement that existing within the Concept Plan area and will be designed to be consistent with Council's public domain policies where possible.

Residential Amenity

JSA Studio Architects has prepared an architectural statement which assesses the modified Concept Plan for compliance with the *State Environmental Planning Policy (Housing for Seniors and People with a Disability) 2004* and the *Apartment Design Guide* (ADG).

JSA Studio's report confirms that the development is capable of achieving compliance with the ADG key Design Criteria set out under Part 3 and Part 4, in that:

- 3 or more hours of solar access is provided to more than 70% of the proposed apartments;
- Separation distances generally comply with the 12m recommended in the ADG for 3 storey buildings – minimum separation of 10.8m is proposed in some instances however this is addressed by screens and offsetting of openings/blank walls;
- 70% of the proposed apartments are dual aspect, corner or cross through apartments;

- 28% of the Central Precinct will comprise communal open space;
- 32% of the Central Precinct will comprise deep soil planting; and
- All of the proposed apartments will meet or exceed the minimum apartment sizes.

It is noted that the detailed design of the apartment buildings will be the subject of separate development applications and that these will provide detailed layouts of the apartment buildings and will be accompanied by a detailed assessment against the design criteria contained within the ADG.

Visual Impacts

JSA Studio Architects has undertaken a revised Visual Impact Analysis. The photomontages prepared demonstrate that the proposed development will be less visually prominent than the Approved Concept Plan due to the lower building heights proposed within the Ocean View and Hilltop Precincts. In light of this no additional mitigation measures are required beyond that already contained in Commitment 33.

Flora and Fauna

While the EPBC Act assessment remains valid, it is noted that since the Concept Plan was approved the *Biodiversity Conservation Act 2016* (BC Act) has come into force, replacing the now repealed TSC Act. Cumberland Ecology has prepared a Biodiversity Development Assessment Report (BDAR) for the modification application in accordance with the BC Act. The BDAR focuses on the changes proposed in the modification application and also the change in condition of the vegetation to be impacted within the development footprint. The report provides a worst case scenario assessment and estimate of the credits that are likely to be required under the *Biodiversity Conservation Act 2016* (BC Act). Any future development application lodged will be subject to the assessment provisions of the BC Act and will further refine assessments based on detailed design and confirm the amount of vegetation to be removed and the exact number of credits that will be required to be obtained to offset the impact.

Cumberland Ecology has also prepared a Draft Vegetation Management Plan (VMP) for the ongoing management of the Turpentine Forest and riparian corridors. The VMP outlines management measures to be implemented during Construction, provides details on weed management and outlines a revegetation plan. The VMP also proposes ongoing monitoring and management of the VMP outcomes.

Bushfire

The application seeks to delete the requirement for provision of Asset Protection Zones and instead proposes the introduction of defendable zones, consistent with those provided on the Stockland part of the Concept Plan site. Defendable space is essentially a space or workable area reserved between a structure and a hazard where property protection operations can be based, such as thoroughfare and manoeuvring of vehicles, fire fighter access, running of hoses, and access to hydrants.

In assessing the application, Peterson Bushfire conclude:

- the change in use reduces the bushfire risk further as it significantly decreases the amount of Special Fire Protection Purpose (SFPP) development on site, hence limiting bushfire vulnerable uses;
- although the 'Planning for Bushfire Protection' document has been updated from the 2001 to 2006 version, the defendable space strategy as approved on the Stockland land, remains valid. The process and methodology of assessing defendable space has not changed between the two versions of the guidelines; and
- the proposal is capable of complying with Planning for Bushfire Protection 2006, and future applications will also be assessed against these provisions.

Flooding and Stormwater

Cardno has undertaken a Flood impact Assessment for the modified development which also incorporates the updated flood data contained within the Hewitt Creek Flood Study which was prepared for Wollongong Council.

In order to manage flood impacts, the following mitigation measures are proposed:

- The ground level of the residential development is set at the Probable Maximum Flood (PMF) level;
- A sound barrier wall is proposed along the western boundary of the site which will act as a flood barrier as well as an acoustic barrier;

- A new culvert is proposed replacing an existing pipe under Geraghty Street which will discharge into Cookson Creek.

The above flood mitigation measures result in Increases in Maximum Water Surface Elevation (MWSE) of up to 1m are predicted against the proposed sound barrier wall and within the rail corridor. However, Cardno notes that this increase is limited to the drain area and no impacts on the rail formation or closure time of the track is predicted. No impacts are predicted elsewhere as a result of the proposed development in the flood events up to and including PMF.

Cardno has also prepared a concept drainage plan based on the updated layout which includes the following components:

- Pit and piped drainage for Geraghty Street
- Internal road pit and pipework for the retirement village area
- Vegetated swale drainage for the southern end of the retirement village
- Vegetated swale drainage for the western properties adjacent to the turpentine forest
- Water quality treatment using raingardens/bio-retention for individual properties and isolated parking areas
- Two on site detention and water quality basins at the eastern end of the property adjacent to Cookson's Creek outside the 100 year flood extents
- Internal road pit and pipework for the RACF /independent living area including raingardens for water quality treatment
- Gross pollutant traps at the south east and south west corners of the development

In general, the drainage concept has been prepared consistent with the approved concept previously proposed by GHD with updates to reflect the changes to the development layout and taking into the account the site constraints.

Contamination

EIS has prepared a report which provides a summary of the additional investigations that they undertook on the site in 2015, the previous investigations undertaken in 2005 and a site visit that they undertook in June 2018. EIS concluded that further site investigations would be required to determine how the site should best be remediated for the future residential use. Their specific recommendations are the following:

- A Hazardous Building Material assessment should be undertaken of all structures on site prior to demolition. Potential friable asbestos may be associated with the old pipe lagging in the south section of the site. If the presence of this material is confirmed it should be removed as soon as possible;
- A comprehensive Stage 2 investigation should be undertaken to characterise the contamination conditions in the south section of the site. The investigation should include the following:
 - Ground penetrating radar (GPR) scan in the south section of the site in the approximate location of the suspected USTs;
 - Soil sampling across the south section of the site; and
 - Assessment of groundwater contamination conditions in the south section of the site.
- Further inspection, sampling and analysis of the areas where potential tipping may have occurred since 2015 should be undertaken;
- The groundwater in the north section of the site should be sampled and analysed. The analysis should include VHCs;
- The additional investigation should also include some sampling for ASS on the east boundary of the site to confirm the absence of acid sulfate soil; and
- Following demolition of the buildings (and preferably prior to removal of the hardstand), an asbestos clearance certificate should be provided.

In accordance with Commitment 43, future detailed applications will be submitted with detailed investigations and Remediation Action Plans, if required, confirming how the site is to be remediated to be suitable for future residential use. Commitment 44 also requires further assessment of acid sulfate soils and as such no further action is required in respect of these two issues.

Heritage

Mary Dallas Consulting Archaeologists (MDCA) has undertaken a review of the potential impacts on the European and Aboriginal Cultural heritage of the site.

In respect of European Heritage, the assessment has found that the site has been previously used for dairying and industry (refractory complex) but that neither of these uses or the remains of the building on the site exhibit any heritage significance. MDCA also concluded that the site has no archaeological sensitivity.

MDCA found that the Turpentine Forest, which is mapped as a heritage item under the SSP SEPP, does exhibit local significance. As this item is to be preserved and rehabilitated as part of the proposed development, MDC concluded that the proposal will not modify or otherwise impact the historic heritage values of the place directly.

In order to acknowledge the history and heritage of the site, MDCA has recommended the following:

- The study area overlooks Bulli (Sandon) Point; is part of an early Illawarra land grant; features a unique Turpentine forest; and has Aboriginal significance and an industrial history. In association with the development, the history of the locale should be interpreted to new residents and visitors alike via low-key information plaques/interpretive signage.
- Consideration should be given to the naming of any intra-site access roads or landscape features in a manner that reflects the past history and/or heritage of the site. Examples may include Turpentine Lane; Refractory Place; Westmacott Lookout; Tramway Gardens; Cooksons Street.

In respect of Aboriginal Heritage, MDCA has prepared an Aboriginal Cultural Heritage Assessment Report which summarises the findings of previous archaeological investigations and provides an assessment of the proposed modification on the archaeologically sensitive parts of the site.

MDCA report that the investigations involved the manual excavation of nineteen 0.5m x 0.5m pits located across the area of Aboriginal archaeological sensitivity. This resulted in the retrieval of 37 stone pieces, representing at least eight discrete stone artefacts. The majority of the stone pieces (27/37 or 70%) were retrieved from just four pits along the eastern and southern boundary of the site. Most pits contained zero or one stone pieces. On the basis of these investigations, part of the area of Aboriginal Archaeological Sensitivity was defined as an open campsite (stone artefact scatter) and was labelled Sturdee Avenue OC1 and registered with the OEH (AHIMS # 52-2-4239)

On archaeological grounds MDCA considers that the Sturdee Avenue OC1 site contains evidence that is neither rare nor unusual in a local context, and is a less diverse and lower density artefact assemblage than other investigated Aboriginal sites in the local area. Nonetheless, it is evidence of a facet of the local Aboriginal past that complements the more substantial evidence derived from these other sites in the broader Sandon Point area. For this reason, MDCA recommends that the most intact and densest portion of the site should be preserved, and the artefacts retrieved from the test excavations should be reburied within the footprint of one of the pits excavated within this area. In order to reflect this recommendation, the Concept Plan has been modified to exclude the sensitive archaeological area from the development footprint such that it can be preserved.

The remainder of Sturdee Avenue OC1 is very sparse and discontinuous and in the opinion of MDCA does not warrant preservation on archaeological grounds. When development proceeds MDCA note that a National Parks & Wildlife Act (1974) s90 Aboriginal Heritage Impact Permit (AHIP) may be required to allow partial impact to this portion of Sturdee Avenue OC1 (AHIMS # 52-2-4239), while preserving the remainder of the site.

In recognition that the Turpentine Forest is of significance to local RAPs, MDCA have also recommended that the draft Vegetation Management Plan (VMP) is also provided to the RAPs for consultation and comment before it is finalised.

Transport and Accessibility

Transport and Traffic Planning Associates (TTPA) has undertaken a traffic survey of the McCauleys Beach estate to generate an estimate of the likely traffic generation of the proposed dwellings in the Hilltop and Ocean View Precincts. The calculated traffic generation rates are shown in the table below.

As can be seen in the table, the modified development has the potential to generate an addition 13VTPH in the AM peak and an additional 7VTPH in the PM peak if the dwellings in the Hilltop and Ocean View Precincts are occupied as standard residential accommodation and not seniors accommodation (worst case scenario). TTPA are of the opinion that this very minor increase in generated traffic would be quite imperceptible when it is distributed in 2 directions along Geraghty Street and as such no unacceptable traffic impacts would arise.

If the dwellings were to be occupied as seniors accommodation then the trip generation rates would reduce down by 15 trips in the AM peak and 17 trips in the PM peak thus reducing the impact of the approved development on the road network.

Approved Concept Plan				Proposed (Standard dwellings)			Proposed (Seniors dwellings)		
		AM vtpH	PM vtpH		AM vtpH	PM vtpH		AM vtpH	PM vtpH
RACF	120 beds	21	27	80 beds	14	18	80 beds	14	18
ILUs	250	50	50	140	28	28	140	28	28
Dwellings				55	42	42	55	13.75	13.75
Total		71	77		84	88		55.75	59.75
Difference					+13	+11		-15.25	-17.25

In addition to reviewing the traffic generation impacts of the proposed modification, TTPA has reviewed the proposed road layout and has concluded that all of the vehicle access will be capable of complying with the design requirements of AS2890.1 and 2.

Parking provision on site will be in accordance with either the Seniors SEPP or Council's DCP, whichever is the relevant control in each instance. Several on street parking spaces are also proposed throughout the precinct for visitors to the development.

Ecologically Sustainable Development

Cundall has prepared an Ecologically Sustainable Development (ESD) Strategy for the proposed development. The strategy includes recommended ESD measures that can be implemented into the detailed design of the development to ensure that the future buildings are energy and water efficient. A new commitment (47) is proposed which requires future development applications to demonstrate how ESD measures have been implemented into each proposal.

Contributions

The Minister, in assessing the application, determined that the planning agreements be excluded from the Concept Plan approval as the matters proposed in the contributions document related to local matters. The Minister considered it inappropriate to approve the terms of any planning agreements as part of the Concept Plan given that it may either pre-empt the outcomes of negotiations or not reflect the current state of negotiations between the parties.

In respect of the modification application, Anglicare is proposing the following contributions:

- Sandon Point Drive connection and Tramway Creek road bridge;
- Cooksons Creek pedestrian boardwalk;
- Internal road works and carparking within the Anglicare site;
- Regional parkland and riparian corridor rehabilitation on Cooksons Creek;
- Turpentine Forest rehabilitation and embellishment;

- Regional parkland and riparian corridor rehabilitation on Tramway Creek along the northern bank adjacent to the site; and
- Stormwater management works.

Geotechnical

Douglas Partners has prepared a preliminary geotechnical assessment for the proposed development. The report provides commentary on subsurface conditions and construction methods. Whilst further investigation will be required at the detailed design stage, Douglas Partners are of the opinion that the proposed development is feasible from the geotechnical perspective.

Commitment 42 states that a further geotechnical assessment is to be undertaken at a later stage prior to works commencing to manage land stability. This has been amended to require that a detailed geotechnical investigation is to be submitted with each detailed development application.

Structural

A Structural Statement has been prepared by Partridge for the modification application. The statement includes a review of the original Concept Plan, and the modified proposal and provides recommendations and guidance as to any new structural considerations that need to be factored into the detailed design phases.

Conclusion and Justification

The proposed modification will result in a decrease in density on the site and an increase in the variety of dwelling types permissible on the site. The proposal will retain seniors housing in the form of ILUs and a RACF in the Central Precinct and will allow for the construction of dwellings in the Hilltop and Ocean View Precincts which will be occupied as either standard residential dwellings or seniors housing, depending on market conditions at the time of their construction.

This Environmental Assessment Report has demonstrated that the impacts as a result of this modification are limited and will generally remain consistent with the approved development and mitigation measures are recommended where required. Overall, it is considered that the proposed modifications of the Concept Plan have limited environmental consequences beyond those which have been the subject of assessment under the Approved Concept Plan. Importantly, any limited environmental consequences or impacts associated with the proposed modifications can be appropriately managed and mitigated. In light of these planning merits, it is recommended that the modification to the Approved Concept Plan be approved.

1.0 Introduction

This Modification Application is submitted to the NSW Department of Planning & Environment (the Department) in relation to the Part 3A Concept Plan (MP06_0094) approval for the Sandon Point Precinct in accordance with section 75W and Clause 3C of Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*.

This application seeks to facilitate changes to the Sandon Point Concept Plan on the Anglicare (formally Anglican Retirement Villages (ARV)) lands within the Sandon Point Precinct. The proposed modifications to the Part 3A Concept Plan Approval (MP06_0094) arise from a review that Anglicare has undertaken of the market for seniors housing in the Bulli area. This research has revealed that there has been a constant supply of new seniors housing in the locality since 2006, therefore demand for this type of housing has decreased. Further the provision of such a large number of Independent Living Units is likely to be unsustainable in the Bulli context and as such a greater mix of housing types is now proposed.

The proposed changes are described in detail at **Section 3.0**, however the key changes include:

- Relocation of the Residential Aged Care Facility (RACF) from the Hilltop Precinct to the Central Precinct and reduction in the number from 120 beds to approximately 80 beds;
- Reduction in the number of Independent Living Units from 250 to approximately 140 units;
- Replacement of three storey apartment buildings and the RACF in the Ocean View and Hilltop Precincts respectively with approximately 55 residential dwellings (including multi dwelling housing / townhouses / terraces / semi-detached dwellings). These will be occupied as either standard residential dwellings or seniors accommodation depending on market feasibility at the time of construction;
- Reduction of the development footprint in the Ocean View Precinct and protection of an Aboriginal Archaeological Site;
- Removal of the vehicular crossing over Cooksons Creek and replacement with a pedestrian board walk;
- Replacement of Asset Protection Zones with defendable zones, consistent with those approved under Mod 1 on the Stockland portion of the Approved Concept Plan;
- Introduction of an additional pedestrian crossing from the Central Precinct to the existing paths down to the beach zone;
- Realignment of a small section of Wilkies Walk to facilitate vehicular access to land zoned for residential purposes to the north-east of the site; and
- Amendments to the water management strategy to reflect the revised development and introduction of an acoustic barrier along the western boundary of the site which will also act as a flood barrier.

This report has been prepared by Ethos Urban on behalf of the proponent, Anglicare. The report describes the proposed modifications; outlines the purpose of the modifications; and provides a detailed assessment of the potential environmental impacts. This report should be read in conjunction with the amended Concept Drawings prepared JSA Studio Architects (refer to **Appendix A**) and other supporting technical information appended to the report (see Table of Contents).

1.1 Background

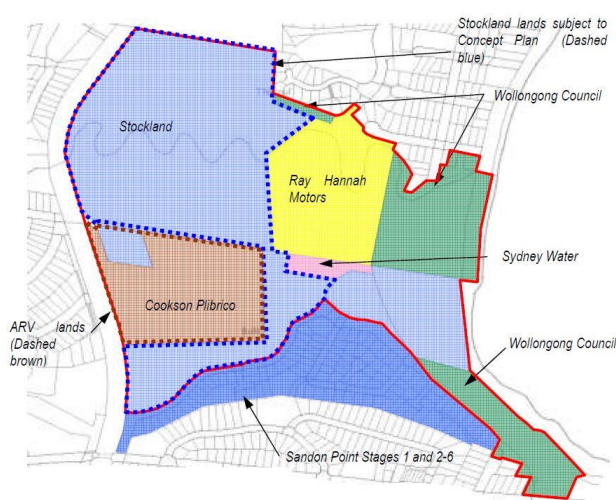
1.1.1 Concept Plan Approval (MP06_0094)

On 21 December 2006, the Minister for Planning issued a Concept Plan Approval (MP 06_0094) for the redevelopment of Sandon Point. The Concept Plan granted approval in concept for a large residential subdivision on the Stockland lands and approval in concept for development of a retirement village on the Anglicare lands. Specifically, the original Concept Approval provides for:

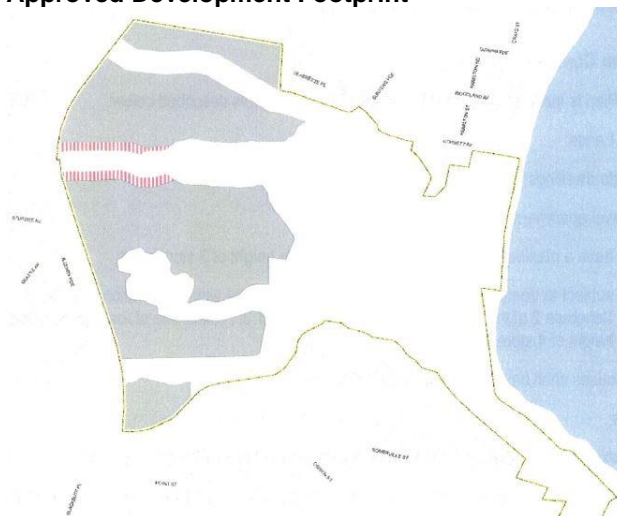
- Stockland Lands:
 - Subdivision into a maximum of 180 detached dwelling lots;
 - Subdivision to create 1 super lot to accommodate up to 80 apartments;
 - Subdivision of 2 super lots for up to 25 town houses;
 - Potential for the development of up to a total of 285 dwellings on the proposed lots;
 - Building envelopes for the 3 super lots;
 - Preliminary road layout; and
 - Associated civil and service works including landscaping, recreation of riparian corridors, construction of water quality ponds, stormwater and flood management.
- Anglicare Lands:
 - RACF of up to 4 storeys containing up to 120 beds;
 - A mix of apartment buildings of up to 3 storeys containing up to 250 independent living units (ILUs);
 - Community facilities & services to support residents of the retirement village;
 - Access and car parking;
 - Landscaping, including rehabilitating riparian corridors and the Turpentine Forest; and
 - Civil works such as road, stormwater management and utility services.

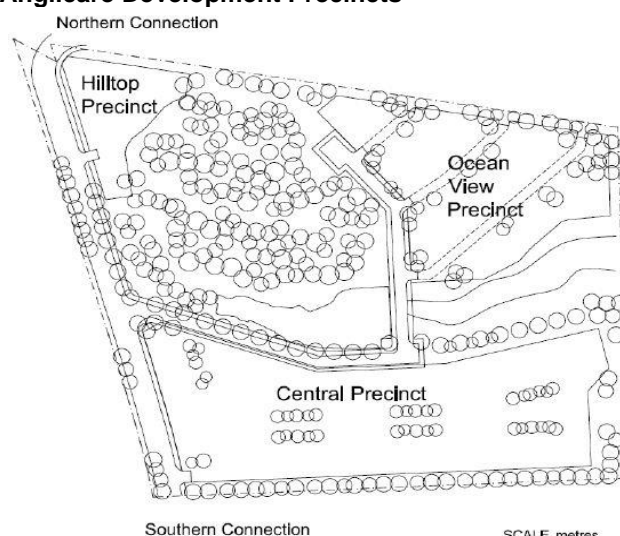
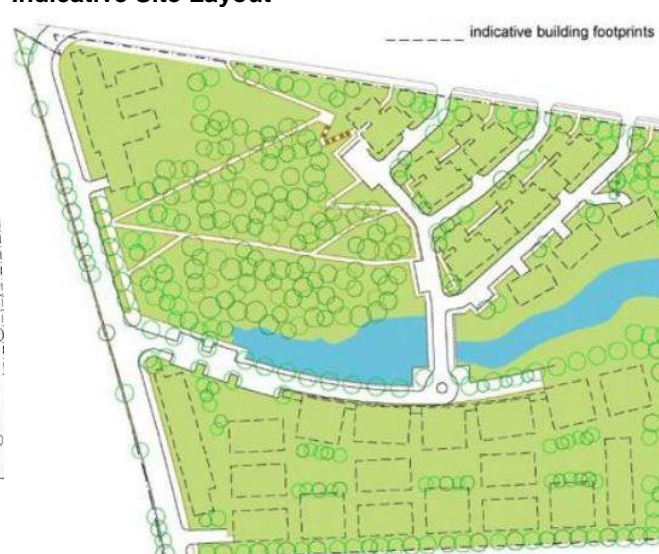
Figure 1 illustrates the original land holdings (note Anglicare now owns the small landholding originally owned by Stockland in the Central Precinct), the approved development footprint, the Anglicare precinct and the indicative site layout. The proposed modifications exclusively relate to the Anglicare site. The Notice of Determination and Approved Concept Plan drawings are provided at **Appendix B**.

Sandon Point Land Holdings



Approved Development Footprint



Anglicare Development Precincts**Indicative Site Layout****Figure 1: Concept Plan Approval MP06_0094**

Source: JSA, NSW Department of Planning and Environment

Modification of the Concept Plan (MP06_0094)

The Concept Plan has been subject to four modification applications. Modifications 1, 2 and 4 related to the Stockland lands only and did not affect development on the Anglicare lands. Modification 3 was proposed by Anglicare but was never formally submitted or approved. The approved Concept Plan modifications are summarised at **Table 1**.

Table 1: Concept Plan MP06_0094 modifications

Modification	Description	Date Approved
Mod 1	<ul style="list-style-type: none"> - Reduction and relocation of the townhouse precinct. - Correction of a number of errors and inconsistencies to the Concept Plan approval/conditions of consent including bushfire management strategies on the Stockland lands. 	29/11/2009
Mod 2	<ul style="list-style-type: none"> - Amendments/deletion of conditions relating to Aboriginal and European Heritage. 	09/08/2010
Mod 3	<ul style="list-style-type: none"> - Refer to discussion below. 	Withdrawn
Mod 4	<ul style="list-style-type: none"> - Modification to replace the apartment super lot (stage 6) with 16 single dwelling lots to facilitate single dwelling houses and imposition of a 9m maximum building height across the 16 lots. 	25/07/2014

Stockland Lands

Subsequent to the approval of the Concept Plan, Stockland lodged a Project Application (MP07_0032) for the residential subdivision of the Stockland lands. This application proposed the following:

- Subdivision of 181 allotments for, 167 single dwellings and 14 townhouse/terrace style houses in two distinct precincts
- One super lot for up to 80 apartments
- Display village, roads, bridges, cycle paths etc
- Landscaping creek design and riparian corridor protection.

The Project Application was approved on 29 November 2009. It was subsequently modified on four separate occasions, including amendments to delete the apartment buildings and replace them with residential dwellings and also in respect of traffic access.

The approved project subdivision has been delivered and all the associated residential houses have been completed and are occupied.

Anglicare (ARV) Lands

Whilst construction has been completed on the Stockland lands, no development has occurred on the Anglicare lands. It is noted that in September 2007, Anglicare lodged a Project Application (MP07_0132) for the construction of the first stage or the 'Ocean View Precinct' of the approved retirement village. Specifically, the Project Application sought approval for the construction of seven apartment buildings (up to height of 12.6m) as well as vehicle access, visitor car parking and associated services and infrastructure.

In order to facilitate the development of the Stage 1 Application, as well as future stages of the Anglicare development on site, a concurrent application was lodged to modify the Concept Plan, which was listed as Mod 3 to MP06_0094. The Director General's Assessment Requirements were issued for these applications however a formal application was never lodged.

1.2 Planning Context

The Approved Concept Plan comprises the plans, drawings and documents cited by the proponent in its Environmental Assessment, Preferred Project Report and Statement of Commitments, subject to the modifications and further assessment requirements set out in Schedule 2 of the Concept Plan notice of determination. The Approved Concept Plan has been modified on three previous occasions. Together, the planning controls at Schedule 3 of the State Significant Precincts SEPP and the Approved Concept Plan, as modified, establish the statutory planning regime for the development of the Sandon Point precinct.

As per Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*, the Sandon Point Precinct is a transitional Part 3A project, and the repealed Part 3A continues to apply. The request to modify MP06_0094 was lodged prior to the 'cut-off date' specified in clause 3BA and therefore the concept plan can be modified under Section 75W.

Section 5.0 of the EAR considers all applicable legislation in detail.

The Department of Planning and Environment issued a Landowners Designation for the Concept Plan Approval on 24 October 2017. A copy of the designation is provided at **Appendix X**.

1.3 Secretary's Requirements

The Secretary of the Department of Planning and Environment issued the requirements for the preparation of the EAR on 27 February 2018. A copy of the Secretary's Environmental Assessment Requirements (SEARs) is included at **Appendix C**.

Table 2 provides a detailed summary of the matters listed in the SEARs and identifies where each of these requirements has been addressed in this report and the accompanying technical studies.

Table 2: Secretary's Requirements

Requirement	Location in Environmental Assessment Report
General	
The modification Request must include: 1. An executive summary which includes a summary of the proposed changes, a rationale for the proposal and a conclusion based on the findings of the assessment;	Page 7
2. A site analysis, including site plans, aerial photographs and a description of the existing and surrounding environment;	Section 2 and Appendix A
3. A background section covering the approval history of the site;	Section 1
4. A thorough description and numerical table of the proposed modifications, compared with the Concept Plan Approval	Section 3 and Appendices E, G & H

Requirement	Location in Environmental Assessment Report	
5. An assessment of the key issues (specified below) and a table outlining how those key issues have been addressed. This shall include a detailed assessment of the potential impacts of the proposal, particularly any additional impacts associated with the modification beyond those already assessed and approved;	Section 5	
6. A description outlining how the potential impacts associated with the modification would be mitigated and managed, including any new or amended statement of commitments;	Section 5 & 6 and Appendices G & H	
7. The plans and documents (outlined below) clearly showing the proposed changes compared with the Concept Plan Approval;	Refer below	
8. Details of any proposed changes to the Terms of Approval; and	Appendix G	
9. A conclusion justifying the proposed modification taking into consideration the environmental impacts of the proposal, the suitability of the site and whether it is in the public interest.	Sections 7 & 8	
Key Issues	Report / EAR	Technical Study
1. Land Use Planning <ul style="list-style-type: none"> Address the statutory provisions applying to the site and all relevant strategic planning objectives outlined in the documents listed at Attachment A. 	Section 5	various
2. Comparison with the Concept Plan Approval (MP 06_0094) <ul style="list-style-type: none"> Demonstrate how the proposed modification can be assessed and determined within the scope of section 75W of the Environmental Planning and Assessment Act 1979, and in particular address any environmental impacts beyond those already assessed for the Concept Plan Approval; and Provide a comparative assessment (qualitative and quantitative) of the proposed modification against the Concept Plan Approval, a provide a clear rationale for the amendments. This should particularly address the road network and vehicular connectivity, site coverage, character and scale. 	Section 1.2	Appendix E
	Section 3	
3. Development Layout <ul style="list-style-type: none"> The modification request shall include details of the proposed subdivision layout, design and staging, which: demonstrates that the revised development will be wholly contained within the approved footprint, and there will be no encroachment on the Turpentine Forest; includes an indicative subdivision pattern responsive to the site conditions and constraints, including aspect, orientation, slope, drainage lines and vegetation; addresses the need for any filling of land and batters, and assesses any associated impacts on the adjacent Turpentine Forest and Aboriginal areas; demonstrates future development lots would be orientated to maximise solar access to future dwellings; maintains perimeter roads around development boundaries and appropriate buffer areas to riparian corridors; includes an indicative layout which can accommodate the revised built form, including adjustments to the internal road network; includes measures to minimise land use conflicts, including appropriate landscaping and buffer areas; addresses the relationship to surrounding areas, including visual impacts from public coastal locations; provides sufficient passive and active open space for the expected additional population and demographic; maintains permeability through the site and linkages/connections to the beach; and 	Section 5.2	Appendix A

Requirement	Location in	Environmental Assessment Report
<ul style="list-style-type: none"> minimises potential for vehicle, bicycle and pedestrian conflicts. 		
<p>4. Built form</p> <ul style="list-style-type: none"> Provide an assessment of the proposed building envelopes with consideration of the proposed height, bulk and scale, massing, setbacks, building articulation, typologies and separation; Demonstrate that the proposed building envelopes would facilitate appropriate design within the site's setting; and Demonstrate the proposed building envelopes would achieve compliance with the approved maximum height, site coverage and FSR controls. 	Section 5.3	Appendix A
<p>5. Public Domain</p> <ul style="list-style-type: none"> Assess any changes to the public domain and landscaping design as a result of the proposal. 	Section 5.4	Appendix F
<p>6. Residential Amenity</p> <ul style="list-style-type: none"> Demonstrate future residential buildings would be capable of complying with SEPP 65 - Design Quality of Residential Apartment Development, and the Apartment Design Guide, including justification for any compliance(s)/noncompliance(s); and Demonstrate future Seniors' Living Development would be consistent with the requirements of SEPP (Housing for Seniors or People with a Disability) 2004. 	Section 5.5	Appendix A
<p>7. Visual Impacts</p> <ul style="list-style-type: none"> Provide a visual impact assessment and view analysis of the proposal from key view points and visual catchments, including a comparative analysis of the potential impacts of the approved concept plan against the proposed modification. 	Section 5.6	Appendix O
<p>8. Flora and Fauna</p> <ul style="list-style-type: none"> Assess any additional biodiversity impacts associated with the proposal, including any additional impacts on adjoining areas, in a Biodiversity Development Assessment Report in accordance with the Biodiversity Conservation Act 2016 (NSW). Management and mitigation actions shall be developed to address any identified impacts of the proposal on biodiversity; Provide a Vegetation Management Plan for the riparian area and areas of vegetation to be retained outside of the development footprint area; and Provide a Landscape Concept Plan and Arborist Report in accordance with the Council's requirements. 	Section 5.7	Appendix P
<p>9. Bushfire</p> <ul style="list-style-type: none"> Demonstrate compliance with the relevant provisions of Planning for Bushfire Protection 2006. 	Section 5.9	Appendix R
<p>10. Flooding, Stormwater and Soils</p> <ul style="list-style-type: none"> Provide an assessment of any additional flood risks associated with the proposal in accordance with the NSW Floodplain Development Manual (2005), including consideration of the potential impacts of climate change; Provide a revised stormwater management concept plan which identifies any changes to the stormwater management concept arising from the proposed modification; and Assess any additional impacts of the proposal on surface and groundwater and provide a detailed and consolidated site water balance. 	Section 5.10	Appendix S
<p>11. Contamination</p> <ul style="list-style-type: none"> Provide a revised Remediation Action Plan in accordance with SEPP 55 - Remediation of Land. 	Section 5.11	Appendix M
<p>12. European Heritage and Aboriginal Cultural Heritage</p> <p>Include a revised:</p> <ul style="list-style-type: none"> Heritage Impact Assessment prepared in accordance with the NSW Heritage Manual which addresses the significance, and provides an assessment of, 	Section 5.12	Appendices J & T

Requirement	Location in Environmental Assessment Report	
<p>impacts on the heritage significance of heritage items, landscape features and vegetation on the site and items in the vicinity; and</p> <ul style="list-style-type: none"> Aboriginal Cultural Heritage Assessment in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011), and Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW). 		
<p>13. Transport and Accessibility</p> <p>Include a revised transport and accessibility assessment prepared in accordance with the RMS' Guide to Traffic Generating Developments and the Austroads Guideline to Traffic Management, including the following:</p> <ul style="list-style-type: none"> modelling of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips; address any additional road/intersection upgrades to manage any additional traffic generated by the proposal; address whether the proposed road layout is capable of complying with the relevant standards taking into consideration the needs of all road users and appropriate facilities; address timing for the delivery of vehicular connectivity between Wrexham Road and Point Street, including the provision of a bridge over Tramway Creek, and address connectivity between the site and Beattie Avenue; and any required changes to pedestrian and cycle networks and access. 	Section 5.13	Appendix L
<p>14. Ecologically Sustainable Development (ESD)</p> <ul style="list-style-type: none"> Identify how best practice ESD principles would be incorporated into the development. 	Section 5.14	Appendix U
<p>15. Contributions</p> <ul style="list-style-type: none"> Address the need for any changes to contributions in accordance with the relevant Development Contributions Plan or provide details of a planning agreement for appropriate developer contributions in consultation with Wollongong City Council. 	Section 5.15	
<p>16. Statement of Commitments</p> <ul style="list-style-type: none"> The modification request shall include any new or modified Statement of Commitments detailing measures for environmental management, mitigation measures and monitoring for the project. 		Appendix H
Plans and Documents	Report / EAR	Technical Study
<p>The modification request must include all relevant plans and relevant documentation, including:</p> <ul style="list-style-type: none"> A table in the EAR identifying the section of the EA where each component of the SEARs is addressed Locality / context plan and site analysis plan; Site survey plan, showing existing levels, locations and heights of existing and adjacent structures/buildings to AHD; Revised concept plan drawings, staging plan and photomontages clearly illustrating the proposed amendments compared with the Concept Plan approval; Changes to approval conditions (by use of strikethrough and bold text); Housing typology drawings; A table outlining any proposed changes to the conditions of the Concept Plan approval; and Geotechnical report and structural report. 	<p>Section 1.3</p> <p>Section 2</p>	<p>Appendix A</p> <p>Appendix D</p> <p>Appendices A and Appendix O</p> <p>Appendix G</p> <p>Appendix A</p> <p>Appendix G</p> <p>Appendices V & W</p>
Consultation		
<p>During the preparation of the EA, you are required to consult with the relevant local, State or Commonwealth Government authorities, service providers and other landholders within the Concept Plan land, including:</p>	Section 4	Appendix I

Requirement	Location in Environmental Assessment Report	
<ul style="list-style-type: none"> • Wollongong City Council • Office of Environment and Heritage • Environmental Protection Authority • Department of Industry • NSW Office of Water • Transport for NSW • Roads and Maritime Services • Rail Corporation New South Wales • Rural Fire Service • The relevant Local Aboriginal Land Council. <p>You are encouraged to consult with the local community in the preparation of your modification request. This includes the Registered Aboriginal Parties (RAPs) which were consulted for the initial proposal, and Wollongong Council Neighbourhood Forum 3.</p> <p>The modification request must describe the consultation process and the issues raised and identify where the design of the development has been amended in response to those issues. Where amendments have not been made to address an issue, a short explanation should be provided.</p>		

2.0 Site Analysis

2.1 Site Location and Context – Sandon Point

The site is located in the suburb of Bulli within the Wollongong Local Government Area (LGA). Sandon Point is approximately 14km north of Wollongong City Centre, 500m west of the coastline and 2.5km east of the Illawarra escarpment. Sandon Point is bound by Thomas Gibson Park and private landholdings in the north; McCauley's Beach to the east; the Point residential estate to the south and the Illawarra railway line to the west.

Further locational context is illustrated at **Figure 2**.

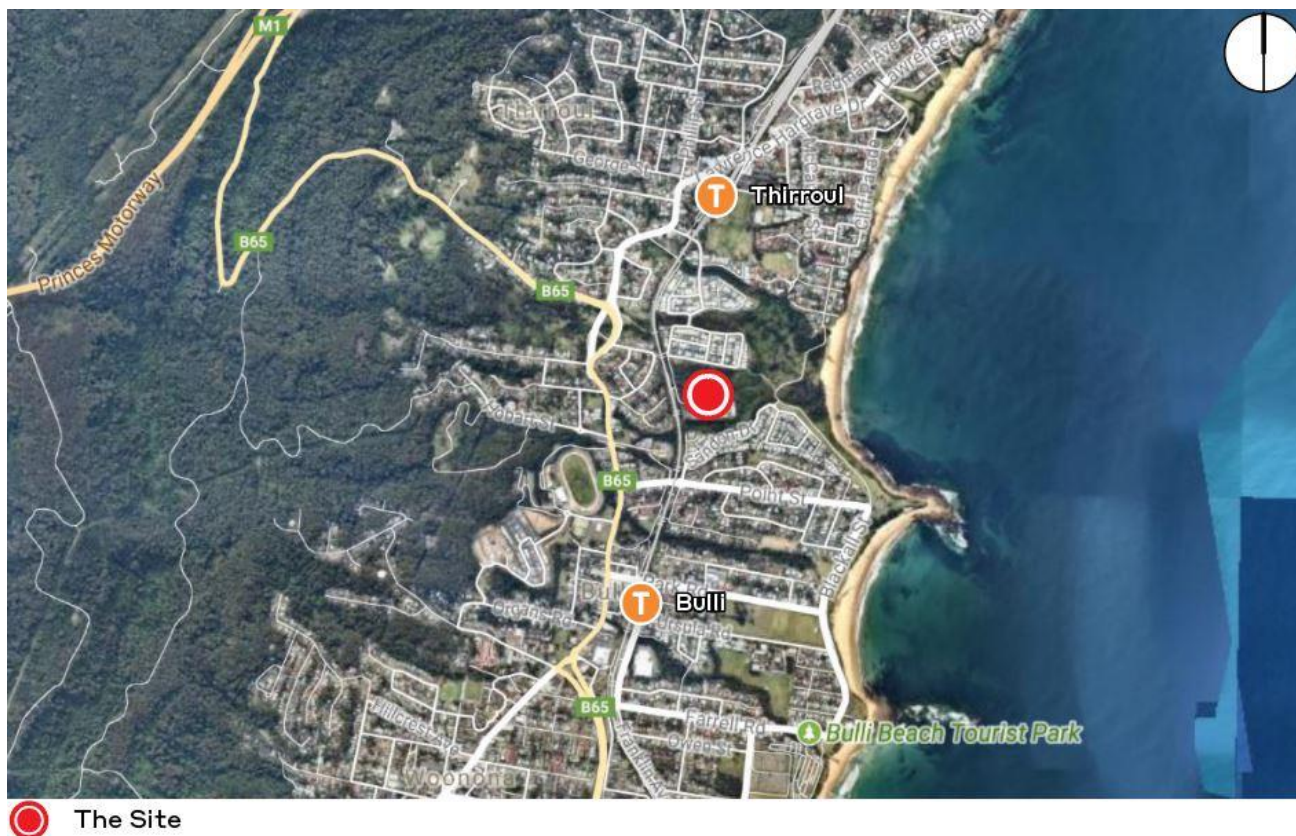


Figure 2: Site context

Source: Nearmap and Ethos Urban

2.2 Site Description

The site, shown in **Figure 3**, is irregular in shape and contains two lots legally identified as Lot 2 and Lot 3 in DP1176767. The site contains approximately 8.1 hectares with dimensions of approximately 360m along the northern boundary, 280m along the southern boundary, 220m along the eastern boundary, and 305m along the western boundary.

The site is undulating, generally sloping from its northern boundary, particularly at the north western corner, to the southern point of Cookson's Creek. The site's north western corner is the most elevated part of the site at approximately RL27m, while Cookson's Creek and the eastern boundary form the lowest parts of the site at approximately RL8m. The site's southern built platform is the most level portion of the site that has been filled to approximately RL11.5m. A survey plan of the site is provided at **Appendix D**.

The main characteristics of the site include:

- Existing industrial buildings (refer to **Figures 4-7**) and operations covering approximately 3 hectares of the southern part of the site including 6 buildings – administration building, two small demountables, brick factory, two smaller metal factories. The existing buildings previously housed manufacturing operations by Cookson

Plibrico that include crushing, screening, blending of raw materials to produce finished cement and aluminium products, temporary storage, distribution of raw materials and finished products. However, the existing buildings have significantly deteriorated;

- Turpentine forest covering approximately 1 hectare in the central part of the site (refer to **Figures 8-10**);
- Cookson's Creek riparian corridor running through the centre of the site in a west/east direction (refer to **Figure 10**);
- Cleared vacant land including concrete slab and building remains known as the former Dairy Farmers site on the northwest corner of the site (refer to **Figure 11**);
- Former quarry in the centre on the northern end of the site (refer to **Figure 12**); and
- Previously cleared and vacant land on the north east quarter of the site (refer to **Figure 13**).

An aerial photograph illustrating the Sandon Point Concept Plan site and the subject land affected by this application is provided at **Figure 3** and site photos are shown below.



Figure 3: Concept Plan and subject site location

Source: Nearmap and Ethos Urban



Figure 4: Existing administration building



Figure 5: Existing factory and administration building



Figure 6: Existing factory



Figure 7: Interior of an existing factory



Figure 8: Central turpentine forest



Figure 9: Central turpentine forest



Figure 10: Central Turpentine forest and the area containing Cooksons Creek



Figure 11: Former dairy farmers site



Figure 12: Former quarry portion of the site



Figure 13: North eastern portion of the site

2.3 Site Access and Connectivity

The site is currently provided with a single vehicle access point at the north western corner of the site from the intersection of Geraghty Street and Wilkies Street (refer to **Figure 14**). The access point links to an internal road that runs along the site's western boundary (refer to **Figure 15**) and circulates around the existing factory buildings (refer to **Figure 16**).

The main pedestrian access is also provided from the north western portion of the site, however an elevated pedestrian bridge links the north eastern portion of the site to a pathway leading down to McCauley's Beach (refer to **Figure 17**). There are also a number of informal pedestrian pathways through the site leading down to the beach.



Figure 14: Vehicle access road from the intersection of Geraghty Street and Wilkies Street



Figure 15: Geraghty Street looking north towards Wilkies Street



Figure 16: Internal circulation road



Figure 17: Elevated bridge leading to McCauley's beach pathway

2.4 Surrounding Development

The surrounding development is predominantly characterised by low density residential, public recreation and environmentally sensitive areas as shown at **Figure 2** and **Figure 3** above. The immediate surrounding context is detailed below.

North

To the immediate north of the site is land that formed part of the Stockland subdivision (refer to **Figure 18-19**). The subdivision has been constructed and is now known as the 'McCauley's Beach estate' which contains a number of single to two storey residential dwellings. Beyond the residential area to the north is the Thomas Gibson Park and Thirroul Rail Station on the Illawarra Rail Line.

East

To the east of the site is the Sydney Water sewage pumping station and surrounding this forms part of the designated Regional Parklands which is publicly accessible (refer to **Figure 20-21**). It is noted that this area contains areas of Aboriginal significance. Beyond this is coastland and McCauley's Beach which forms part of the Illawarra coast line.

South

To the immediate south of the site is Tramway Creek, which merges with Cookson's Creek east of the site (refer to **Figure 22**). Further to the south is a new residential estate known as 'The Point' which has views across the subject site to the north and to the east towards the coast (refer to **Figure 23**). Bulli Railway Station is situated further to the south.

West

To the immediate west of the site is the Illawarra Rail Line (refer to **Figure 24-25**). This line links to Thirroul railway station to the north and Bulli railway station to the south. Further west on the opposite side off the rail line is a residential neighbourhood which forms part of the suburb of Bulli. This area comprises low density residential development of single and two storey dwellings.



Figure 18: Adjoining residential development to the north on Wilkies Street



Figure 19: Residential development to the north on Geraghty Street



Figure 20: Designated parklands to the east



Figure 21: Existing Sydney Water pumping station to the east



Figure 22: Tramway Creek and surrounding vegetation to the south



Figure 23: Tramway Creek with a frontage to 'The Point' residences to the south



Figure 24: Illawarra Rail Line to the west



Figure 25: Illawarra Rail Line to the east

3.0 Description of Proposed Modified Development

The proponent is seeking approval under Section 75W of Part 3A of the EP&A Act to modify the approved Concept Plan (06_0094). The scope of the modification application is addressed in the following sub-sections.

3.1 Modifications to the Concept Approval

The proposed modifications to the Part 3A Concept Plan Approval (MP06_0094) arise from a review that Anglicare has undertaken of the market for seniors housing in the Bulli area. This research has revealed that there has been a constant supply of new seniors housing in the locality since 2006, therefore demand for this type of housing has decreased. Further the provision of such a large number of Independent Living Units is likely to be unsustainable in the Bulli context and as such a greater mix of housing types is now proposed.

Anglicare is therefore proposing to amend the approved built form and layout of development on the site, including:

- Relocation of the Residential Aged Care Facility (RACF) from the Hilltop Precinct to the Central Precinct and reduction in the number from 120 beds to approximately 80 beds;
- Reduction in the number of Independent Living Units from 250 to approximately 140 units;
- Replacement of three storey apartment buildings and the RACF in the Ocean View and Hilltop Precincts respectively with approximately 55 residential dwellings (including multi dwelling housing / townhouses / terraces / semi-detached dwellings). These will be occupied as either standard residential dwellings or seniors accommodation depending on market feasibility at the time of construction;
- Reduction of the development footprint in the Ocean View Precinct and protection of an Aboriginal Archaeological Site;
- Removal of the vehicular crossing over Cooksons Creek and replacement with a pedestrian board walk;
- Replacement of Asset Protection Zones with defendable zones, consistent with those approved under Mod 1 on the Stockland portion of the Approved Concept Plan;
- Introduction of an additional pedestrian crossing from the Central Precinct to the existing paths down to the beach zone;
- Realignment of a small section of Wilkies Walk to facilitate vehicular access to land zoned for residential purposes to the north-east of the site; and
- Amendments to the water management strategy to reflect the revised development and introduction of an acoustic barrier along the western boundary of the site which will also act as a flood barrier.

A summary comparison table has been provided at **Appendix E** and the proposed modifications are further discussed below. The modified Concept Plan is shown in **Figure 26**.

It is noted that the following aspects of the Concept Plan remain the same as that approved:

- Development footprint;
- Provision of the north-south link road (Geraghty Street) and the bridge over Tramway Creek;
- Protection and rehabilitation of the Turpentine Forest;
- Protection and rehabilitation of Cookson Creek;
- Siting of development in four precincts being:
 - Central Precinct;
 - Ocean View Precinct;
 - Hilltop Precinct; and
 - Forest and riparian corridor
- Provision of seniors housing in the form of a RACF and ILUs with ancillary land uses including respite care, health consulting rooms and food and drink premises;

- Provision of pedestrian connections through and around the site and a shared bike path to connect into existing links;
- Maximum height and FSR controls as prescribed in the Concept Approval;
- Site zoning as prescribed by the State Significant Precincts SEPP;
- Management of electrolysis, noise and vibration associated with the railway line;
- Management of contamination;
- Management of geotechnical constraints; and
- Management of Acid Sulfate Soils.



Figure 26: Modified Concept Plan

Source: JSA

3.1.1 Development Siting and Footprint

The approved Concept Plan includes the siting of the development into four precincts, including:

- Central Precinct;
- Hilltop Precinct;
- Ocean View Precinct; and
- Forest and riparian corridor.

The proposal seeks to retain the existing locations of the approved precincts, however includes minor boundary adjustments between the precincts as illustrated at **Figure 27**. Notwithstanding this, the development remains entirely within the development footprint as established by Condition A1 of the Approved Concept Plan as illustrated at **Figure 28**.

The Central Precinct is generally located over the same building footprint as the existing Cookson Plibrico buildings on the southern portion of the site. The Central Precinct boundary remains largely the same, however an additional local road is proposed to provide ground level and vehicular access to the ILUs located in the south-east corner of the site.

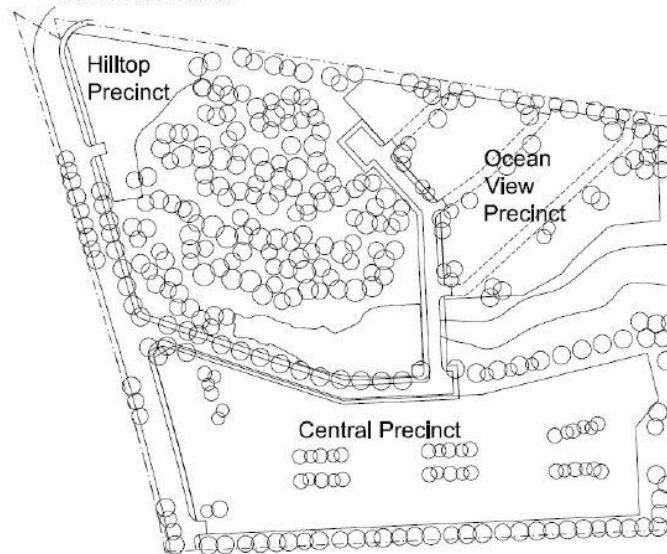
The Hilltop Precinct is located at the north-western corner of the site over the former Dairy Farmers site. It is proposed to extend the Hilltop Precinct southward parallel to the north-south link road and provide an integrated link to the Ocean View Precinct along the site's northern boundary. Again, the boundary of the precinct is contained within the development footprint as prescribed by Condition A1.

The Ocean View Precinct is located at the north-eastern corner of the site. The Ocean View Precinct boundary is proposed to be reduced in size in order to protect the identified Aboriginal archaeological site (refer to **Section 5.11.2**). No development is proposed within the archaeological area. The former road and weir connecting the Ocean View and Central Precincts has been deleted and has been replaced with a pedestrian boardwalk.

The Turpentine Forest and Cookson's Creek riparian corridor are proposed to be retained and the boundary of these areas remains the same as that approved.

The minor adjustments to the Approved Concept Plan will facilitate the revised built form and layout of development on the site as detailed at **Section 3.2.1** below.

Approved Precinct Layout
Northern Connection



Proposed Modification to the Layout



Figure 27: Approved and Proposed Precinct Layouts

Source: JSA

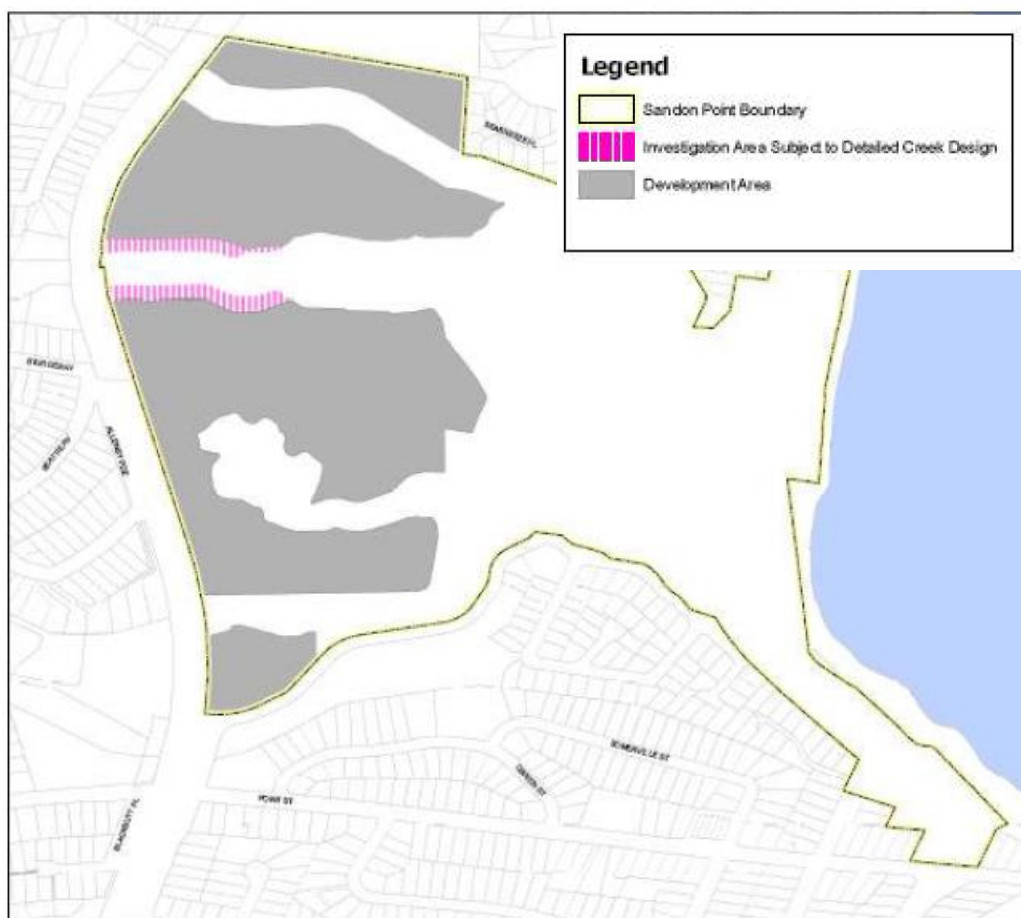


Figure 28: Development Footprint (Condition A1 of Approved Concept Plan)

Source: Department of Planning and Environment

3.1.2 Land Use and Built Form

The approved and proposed indicative built form for each precinct is illustrated at **Figure 29** and described in detail below. For absolute clarity the detailed design of the built form will be developed in subsequent Project Applications and the layouts shown at **Appendix A** are indicatively only. Similar to the approved Concept Plan, the indicative building layouts to demonstrate that the future development is capable of achieving a high quality design and will contribute to the local setting.

The Central Precinct

Within the Central Precinct, the approved Concept Plan facilitates an indicative layout of tightly structured small residential flat buildings containing ILU's and ancillary community facilities. The buildings are a maximum of three storeys (11.4m) with semi submerged basement parking.

The proposal seeks to reconfigure the layout of the Central Precinct in order to facilitate the relocation of the RACF from the Hilltop Precinct. The proposal seeks to locate the RACF in the western portion of the central precinct and retain a network of residential flat buildings within the eastern portion.

The indicative scheme envisages seven buildings comprising approximately 21,375 m² of GFA. This includes:

- Three storey Residential Aged Care Facility comprising:
 - community facilities and an ancillary café;
 - administration offices, front and back of house facilities;
 - approximately 80 aged care beds;

- health consulting rooms; and
- respite care.
- Thirteen, three storey residential flat buildings containing 140 ILUs.

JSA Studio Architects has prepared a photomontage of the indicative scheme in **Figure 30**.

Approved Indicative layout



Proposed Indicative Layout



Figure 29: Approved and Proposed Indicative layouts

Source: JSA

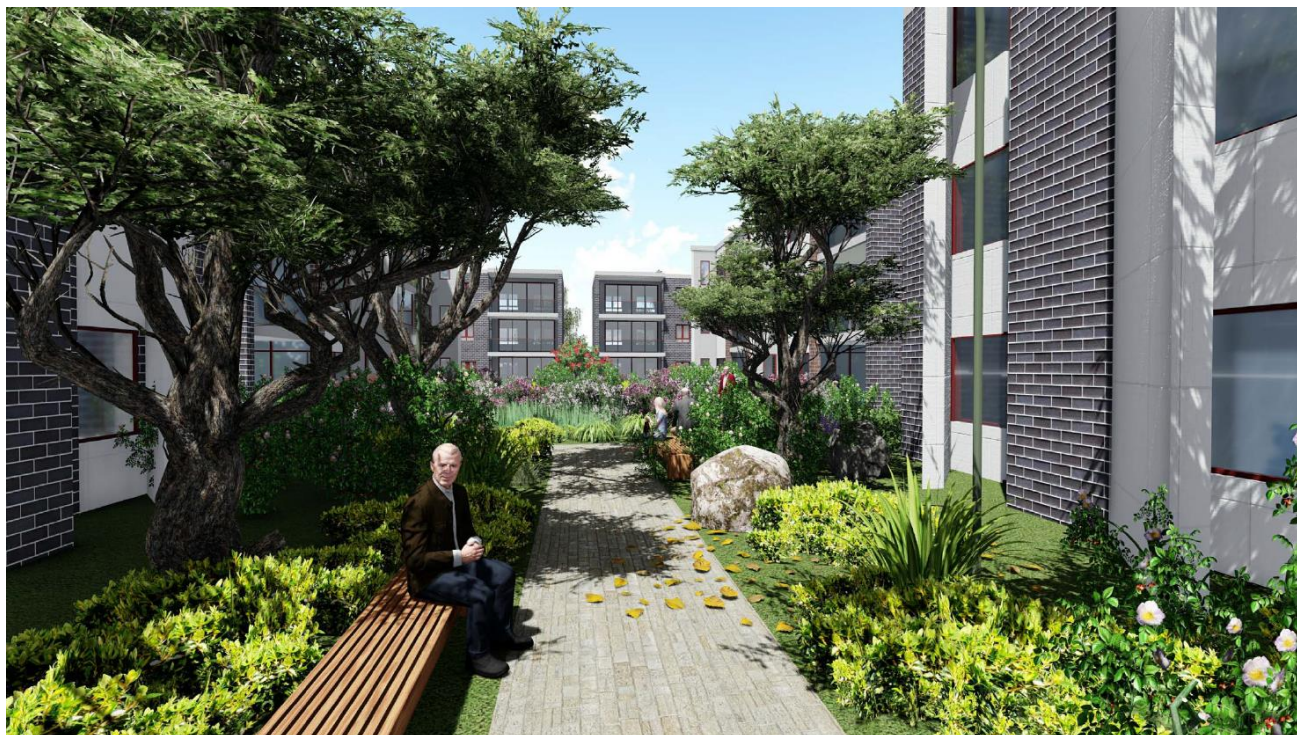


Figure 30: Photomontage of ILUs in the Central Precinct

Source JSA Studio Architects

The Hilltop Precinct

Within the Hilltop Precinct, the approved Concept Plan accommodates the largest building on site which is the RACF. The approved RACF is contained within a part three part four storey building comprising 120 beds and approximately 2,800m² of GFA.

As the proposal relocates the RACF to the Central Precinct, it is sought to replace this development with multi-dwelling housing (townhouses/terraces) and detached houses. The proposed townhouses are generally arranged into five blocks to a maximum of two storeys which are more in keeping with the scale of development on the northern side of Wilkies Street. The lot sizes range from 150m² – 265m².

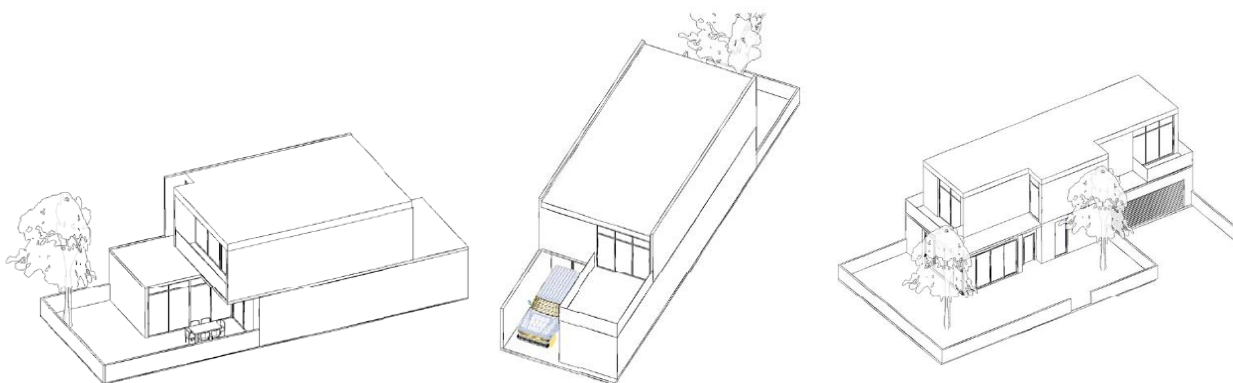


Figure 31: Indicative dwelling types located in the Hilltop Precinct

Source: JSA Studio

The Ocean View Precinct

Within the Ocean View Precinct, the approved Concept Plan facilitates approximately 4,230m² of GFA in a network of 3 storey residential flat buildings containing independent living units for seniors as well as recreation facilities for the residents of the retirement village site. The three storey apartment buildings and road pattern are both oriented and stepping in line with the contours of the land to take advantage of precinct views.

The proposal seeks to replace the three storey apartment buildings with detached and semi-detached housing. The housing will be terraced down the hill and will be accessed by local roads. The lot sizes proposed in the indicative scheme range between 200m² and 370m².

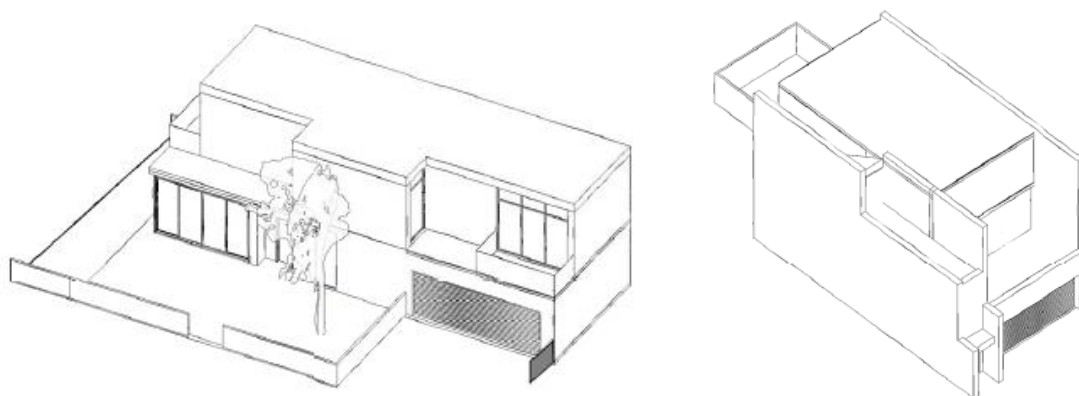


Figure 32: Indicative dwelling types located in the Oceanview Precinct

Source: JSA Studio

3.2 Numerical Comparison

A detailed comparison table is provided at **Appendix E**, however **Table 3** below provides an overview of key development information proposed in the Concept Plan for each of the precincts.

Table 3: Key Modified Concept Plan Development Information

Component	Concept Plan Approved	Modified Concept Plan
Whole Concept Plan		
Site Area	81,195m ²	79,468 m ²
Site Coverage	21.4%	17.6%
Maximum Building Height	4 storeys	3 storeys
Central Precinct		
Land Use	ILU's Community facilities for residents	Residential Aged Care Facility Community facilities for residents ILU's Retail
Maximum Building Height	11.4m or 3 storeys	11.4m or 3 storeys with semi submerged basement parking
Site Coverage	11,100m ²	8,349m ²
Hilltop Precinct		
Land Use	Residential Aged Care Facility	Residential dwellings
Maximum Building Height	12.6m or 3-4 storeys	2 storeys plus basement parking
Site Coverage	2,050m ²	2,489m ²
Oceanview Precinct		
Land Use	Independent living units Recreation facilities for residents	Residential dwellings

Component	Concept Plan Approved	Modified Concept Plan
Maximum Building Height	12.6m or 3 storeys	2 habitable storeys plus basement/parking level
Site Coverage	4,231m ²	3,175m ²

Source: JSA Studio Architects & Ethos Urban

3.3 Internal Road Network

The proposed amendments to the road layout, as shown in **Figure 33**, are the following:

- Additional local road connection in the Central Precinct;
- Removal of the north south Cookson's Creek vehicle crossing and replacement with a pedestrian boardwalk; and
- Minor reconfiguration of the Ocean View Precinct road network, however will retain three vehicle access points from Wilkies Street.

The following road connections remain the same as per the Approved Concept Plan:

- Retention of Geraghty Street north south local road, and
- Retention of vehicular access off Sandon Point Drive to the south west corner of the site including a bridge across Tramway Creek.



Figure 33: Revised Road Network

Source: JSA Studio Architects

3.4 Pedestrian and Cycle Network

The proposed pedestrian and cycle network is shown in **Figure 34**. The modified proposal maintains a shared path along Geraghty Street (2.5m wide) and provides pedestrian paths through the precinct. Pedestrian paths will also be provided through the Turpentine Forest. The exact location of these will be determined with the detailed development applications and will be designed to ensure larger mature Turpentine Trees are protected and minimal environmental impact.

In addition to the above paths, Anglicare is also considering the provision of a new crossing over Tramway Creek to provide a better connection between the proposed ILUs and the existing paths to the east of the site. Further investigation is required to be undertaken to demonstrate that the path can be provided at sufficient gradients for accessibility, without impacting on flood levels/flows and minimising biodiversity impacts. A new commitment is proposed which requires the provision of these studies with the relevant detailed development application(s).

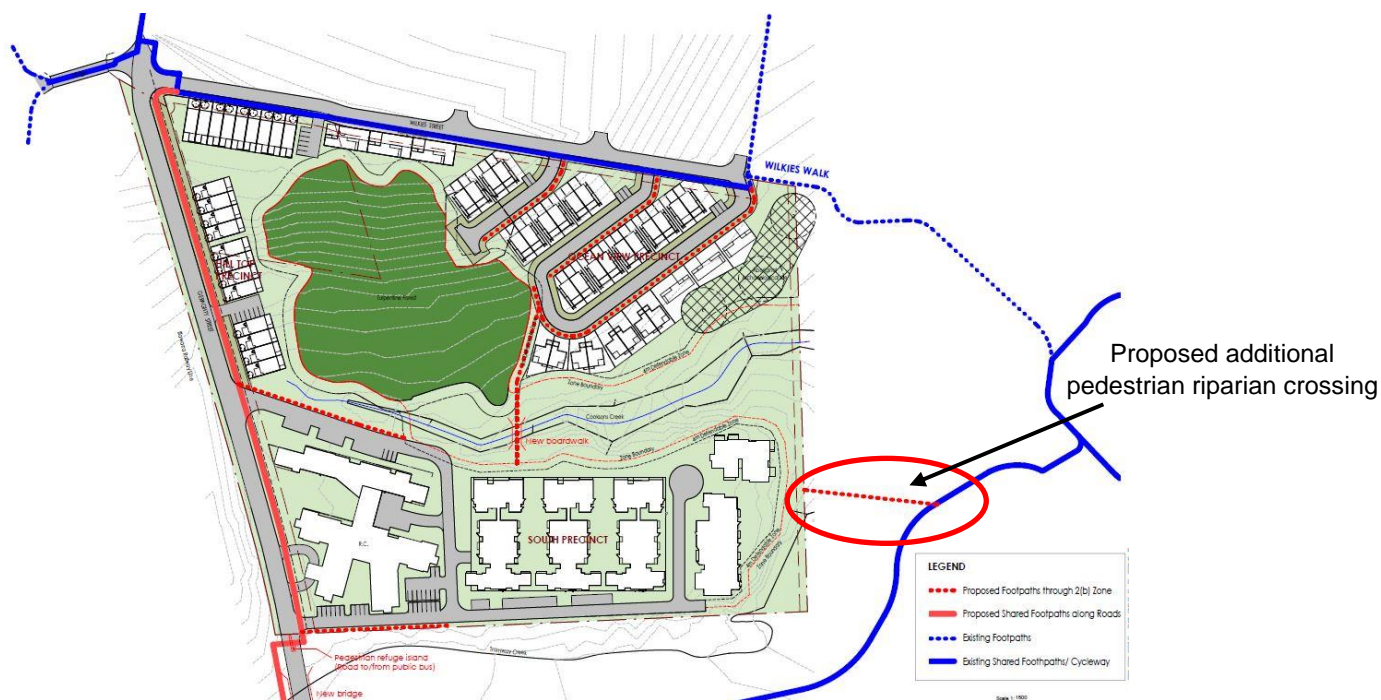


Figure 34: Proposed vehicle and pedestrian network

Source: JSA

3.5 Landscape and Public Domain

An amended landscape concept has been developed by Turf Design as illustrated on the Landscaping Drawings at **Appendix F** and in **Figure 33** below.

The approved landscape concept plan delivered a combination of conservation and passive and active recreation. It encompassed the approved Turpentine Forest and riparian corridor as well as other open space corridors integrated with precincts.

The modified landscape plan will retain key elements of the approved landscape scheme, however is modified in response to the revised built form allocation and road network. The main features of the modified landscape plan include:

- retention and rehabilitation of the Turpentine Forest;
- retention and rehabilitation of the riparian corridor and wetland;
- provision of a dementia garden within the RACF grounds for residents of the RACF;
- provision of a village square in the Central Precinct ILUs

- utilising indigenous vegetation to augment the sites flora which expands the opportunity for food forage and habitat of local fauna; and
- street and open space areas are to contain locally indigenous tree species. Understorey planting within the public domain will also incorporate indigenous plants to prevent 'garden escape' species naturalising within the environmental zones.

The proposal maintains a range of open spaces which will be publicly accessible. It is no longer proposed to provide an 'outdoor room' or amphitheatre in the Ocean View Precinct. A dementia Garden is now proposed which will be located adjacent to the RACF but will be for the resident of that facility only for security reasons.



Figure 35: Amended landscape Concept

Source: Turf Design

3.6 Project Staging

An indicative staging plan for the proposed development of the site is shown at **Appendix A**.

The proposed staging plan is indicative only and is not proposed to form part of the modified Concept Plan Approval. The proposed works in each stage are listed in **Table 4** below.

The resulting development may not necessarily be built in numerical order of each stage and will depend on the market response.

Table 4: Works associated with each stage of development

Stage	Works
Stage 1A	Central precinct (west) - Residential aged care facility, community facilities and independent living units. Connection over Tramway Creek, and construction of Geraghty Street and Turpentine Forest/Cookson Creek rehabilitation.
Stage 1B	Residential Aged Care Facility
Stage 1C	Central precinct (east central) – Independent living units
Stage 1D	Central precinct (east) – Independent living units
Stage 2A	Ocean view precinct – residential dwellings development
Stage 2B	Hill top precinct – residential dwellings development

3.7 Amendments to Conditions of Consent

In order to implement the proposed changes to the concept plan it is proposed to make the changes to the conditions of consent as outlined in the table at **Appendix G**. Deletions are shown in ~~bold strike through~~ and additions in ***bold italics***. The reason for each change is also provided in the table beside each condition.

3.8 Amendments to Statement of Commitments

A tracked changes version of the Statement of Commitments is provided at **Appendix H**. Changes proposed are made for one or some of the following reasons:

- The commitment has already been satisfied and is no longer relevant or required;
- The commitment requires updating to reflect the modified development; or
- A new commitment is required to address a new issue not previously covered.

The specific justification for each modification to the commitments is provided in the table at **Appendix H**.

4.0 Consultation

In accordance with the SEARs issued for this project, consultation was undertaken with the following stakeholders:

- Wollongong City Council;
- Office of Environment and Heritage;
- Environment Protection Authority;
- Department of Industry;
- NSW Office of Water;
- Transport for NSW;
- Roads and Maritime Services;
- Rail Corporation New South Wales;
- Rural Fire Service; and
- the relevant Local Aboriginal Land Council.

Table 5: Consultation Summary

Authority	Contacted by Whom/How/Date	Issues Raised	Response
Wollongong City Council	Meeting 30/7/2018 Attended by: • Anglicare • Ethos Urban	<ul style="list-style-type: none"> Heritage – need to ensure consultation is undertaken with relevant RAPs Cut and fill to be detailed and demonstrate constructability without impact on Turpentine Forest of Aboriginal Cultural area of significance. Contributions and potential to dedicate riparian corridor and Turpentine Forest to Council. Council unlikely to accept and applicant encouraged to contact local land council and aboriginal groups to gauge interest in ownership and ongoing management. Potential for an additional crossing over Tramway Creek from ILUs in Central Precinct to existing paths. Anglicare encouraged to pursue but will need to demonstrate suitable access can be achieved. Potential realignment of Wilkies Walk to facilitate vehicular access to landholding to north-east of Anglicare site. 	<ul style="list-style-type: none"> Mary Dallas Consulting Archaeologists has been engaged to advise and report on Aboriginal heritage. Cut and fill plans have been prepared and are submitted with this modification application for review. Anglicare to consult with relevant groups to gauge interest in long term interest of relevant parts of the site, alternatively Anglicare will retain ownership and management of these lands. Potential crossing included in concept plan. Future detailed applications to demonstrate no adverse flooding and biodiversity impacts. Anglicare to show potential Wilkies Walk realignment on Concept Plan. Detailed design and construction of Wilkies Walk to be shown in future detailed applications.
Office of Environment and Heritage	Cumberland Ecology by email dated 10 July 2018	Planted/Regrowth vegetation	Refer to email trail in Biodiversity report at Appendix K .
Office of Environment and Heritage	Historic (OEH) Dan Tuck Contacted Daniel Robson Senior Conservation Planning Officer, Planning (Illawarra) by email 17 July 2018 @ 11.47 am	Informed Daniel that in accordance with the SEARs, I was making contact with DoPE to let him know that the requested <i>heritage Impact Assessment</i> was completed and was being lodged by the client as part of the variation application. I added that if he/DoPE had any queries or questions they should contact me.	Daniel responded by email 17 July 2018 @ 12.04pm. He thanked me for the email-notification and stated that he would pass the email on to the archaeologist Rose O'Sullivan. No further comments or requests then, or to date.
Environmental Protection Authority	EPM Project Pty Ltd issued Contamination Report by email on 21 August 2018.		No comments received to date.
Department of Industry	Not consulted		No additional groundwater testing undertaken at this stage. Groundwater testing to be undertaken prior to lodgement of detailed development applications consistent with commitment 44B .
NSW Office of Water	Cardno emailed jeremy.morice@dpi.nsw.gov.au on 20/8/18	Advised of proposal and referred to changes in riparian corridors.	No comments received to date.
Transport for NSW	Cardno emailed Bruce.leishman@transport.nsw.gov.au on 21/8/18	Advised of proposal and referred to sound barrier and flood impacts in the PMF.	No comments received to date.
Roads and Maritime Services	TTPA emailed report to Ken Ho 17 August 2018.		Confirmation that email was received on 20 August and matter assigned to Chris Millet and will be

Authority	Contacted by Whom/How/Date	Issues Raised	Response
			responded to within 21 days. No further comments received.
Rail Corporation New South Wales	EPM Project Pty Ltd attempted to contact Bruce Leishman at Railcorp (Transport) on 26 th and 27 th July		No response received to date.
Rural Fire Service	Peterson Bushfire emailed report to RFS on 21 August 2018.		No response to date.
Local Aboriginal Land Council	Mary Dallas Consulting		One response received. Refer to Report at Appendix J.

Two community information sessions were also held on 11 & 14 July 2018 at the Thirroul Community Centre which were attended by approximately 40 people each. A Consultation Outcomes Report, prepared by Straight Talk and summarising the consultation activities undertaken, is submitted at **Appendix I**.

Mary Dallas Consulting Archaeologists also consulted with the Registered Aboriginal Parties as outlined in their report at **Appendix J**.

Public exhibition

This Concept Plan and Environmental Assessment will be placed on exhibition for public comment in accordance with the relevant provisions of the EP&A Act.

Future Development Applications

Future Project Applications for the detailed design and construction of the future buildings, streets and public domain will also be referred to relevant authorities and placed on exhibition for public comment in accordance with the EP&A Act.

5.0 Assessment of Environmental Impacts

This section of the report assesses and responds to the environmental impacts of the proposed modification. It addresses the matters for consideration set out in the SEARs (see **Section 1.3**). The Mitigation Measures at **Section 6.0** complement the findings of this section.

5.1 Land Use Planning

The relevant environmental planning instruments, policies and guidelines as set out in the SEARs are addressed in **Table 6** below.

Table 6: Summary of consistency with key statutory plans and policies

Plan	Comments
State Legislation	
Biodiversity Conservation Act 2016 (BC Act)	Refer to Biodiversity Assessment Report at Appendix K for an initial analysis of the proposal under the BC Act.
Environmental Planning and Assessment Act, 1979	<p>The proposed development is consistent with the objects of the EP&A Act for the following reasons:</p> <ul style="list-style-type: none"> The proposed modification reflects the proper management and delivery of new development within the Sandon Point Precinct by increasing the supply of a greater range of housing types. The proposed modifications to the Approved Concept Plan retain all principles of environmental protection and management that were integral to the original approval including preservation of riparian corridors, stormwater management, flood mitigation works, which will enable a better environment for the future community.

Plan	Comments
	<ul style="list-style-type: none"> The proposed modifications have resulted in a review of proposed local and regional infrastructure and facilities to ensure that the infrastructure demands can be met in an orderly and coordinated manner. An assessment of the proposed modifications in relation to the principles of ecologically sustainable development is provided at Sections 5.13 and 7.1 of this report. <p>The proposed development is consistent with Division 4.7 of the EP&A Act, particularly for the following reasons:</p> <ul style="list-style-type: none"> the development has been declared to have state significance; the development is not prohibited by an environmental planning instrument; and the development has been evaluated and assessed against the relevant heads of consideration under section 4.15(1).
Strategic Plans	
NSW 2021	<p>The proposal is consistent with the NSW 2021 as it:</p> <ul style="list-style-type: none"> facilitates a development that will allow seniors to age in place and actively and independently participate in the life of their communities; increases the supply of a diverse range of housing typologies to meet the varying needs of the community. creates employment opportunities during the construction and ongoing operation of the development.
NSW Wetland Management Policy 2010	Refer to Biodiversity Report at Appendix K .
NSW State Rivers and Estuaries Policy 1993	Refer to Biodiversity Report at Appendix K .
NSW Office of Water, Guidelines for Riparian Corridors on Waterfront Land	Refer to Biodiversity Report at Appendix K .
Coastal Guidelines for NSW 2003	Refer to Architectural Report at Appendix A .
Draft Future Transport Strategy 2056	Refer to Traffic Report at Appendix L .
EIS Guidelines – Roads and Related Facilities	Refer to Traffic Report at Appendix L .
Standards Australia AS2890.3 (Bicycle Parking Facilities)	Refer to Traffic Report at Appendix L .
RMS Guide to Traffic Generating Developments	Refer to Traffic Report at Appendix L .
Public Transport Service Planning Guidelines: Rural and Regional NSW (2015)	Refer to Traffic Report at Appendix L .
Austroroads Guidelines	Refer to Traffic Report at Appendix L .
NSW Planning Guidelines for Walking and Cycling	<p>The proposal will improve walkability and cycle access across the Sandon Point precinct through the provision of enhanced routes, active transport facilities, and wayfinding signage. The proposed development will improve connectivity to the surrounding street network and the wider area, consistent with the guidelines. Further discussion is provided within the Traffic Impact Statement provided at Appendix L.</p>
Cycling Aspects of Austroroads Guides	Refer to Traffic Report at Appendix L .
Apartment Design Guide, Department of Planning and Environment	Refer to Section 5.5 and the Architectural Report at Appendix A .
Crime Prevention Through Environmental Design (CPTED) Principles	Refer to Architectural Report at Appendix A .

Plan	Comments
Healthy Urban Development Checklist	<p>The proposed development encourages healthy lifestyles choices through the following:</p> <ul style="list-style-type: none"> • provision of bicycle and pedestrian paths which encourage active modes of transport; • provision of food and drink premises which encourages social interaction for the aged care facility; • provision of public spaces offering social interaction for residents; and • close proximity to supermarkets offering fresh food.
State Environmental Planning Policies	
State Environmental Planning Policy (State Significant Precincts) 2005	<p>State Environmental Planning Policy (State Significant Precincts) 2005 seeks to facilitate the development, redevelopment or protection of important urban, coastal and regional sites of economic, environmental or social significance to the State so as to facilitate the orderly use, development or conservation of those State significant precincts for the benefit of the State.</p> <p>A more detailed assessment of the relevant provisions of the SSP SEPP is provided at Table 7.</p>
State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004	Refer to Section 5.5 and Appendix A . Future detailed applications for seniors housing will also be accompanied by detailed plans and assessment of the proposal for compliance with this SEPP.
State Environmental Planning Policy No. 55 (Remediation of Land)	<p>Clause 7 specifies that a consent authority must not consent to the carrying out of any development on land unless it has considered whether land is contaminated and if the land is contaminated, it is satisfied that the land is/can be suitable for the proposed development. Extensive contamination studies were prepared throughout to gain Concept Plan approval. An update report has also been prepared by EIS and is included at Appendix M.</p> <p>In accordance with Commitment 43, future detailed applications will be submitted with further site investigations and Remediation Action Plans, if required, confirming how the site is to be remediated.</p>
State Environmental Planning Policy No. 65 - Design Quality of Residential Apartment Development	Refer to Section 5.5 and the Architectural Report at Appendix A .
State Environmental Planning Policy No. 71 - Coastal Protection	Condition C2 of the Approved Concept Plan outlines that Part 3 and Part 5 of the Coastal Protection SEPP does not apply to a development application for the project. Refer to Biodiversity Report at Appendix K .
Illawarra-Shoalhaven Regional Plan	<p>The Illawarra-Shoalhaven Regional Plan sets out the strategic vision for the region. The Plan sets out the following goals:</p> <ul style="list-style-type: none"> • a prosperous Illawarra-Shoalhaven; • a region with a variety of housing choices, with homes that meet needs and lifestyles; • a region with communities that are strong, healthy and well-connected; • a region that makes appropriate use of agricultural and resource lands; and • a region that protects and enhances the natural environment. <p>The modified proposal remains consistent with the goals of the Plan in that it:</p> <ul style="list-style-type: none"> • will contribute to a prosperous Illawarra by way of significant investment into the local economy and generation of ongoing employment on the site; • provide an increased range of housing types on the site; • will provide opportunities for social interaction and exercise; • will protect the natural environmental features of the site.
Draft State Environmental Planning Policy (Coastal Management) 2016	Refer to Biodiversity Report at Appendix K .

Plan	Comments
Local Planning Instruments and Controls	
Wollongong Local Environmental Plan 2009 and Development Control Plan	The Wollongong Local Environmental Plan and Development Control Plan not apply to the site and are not relevant to the assessment of the application.

5.1.1 State Environmental Planning Policy (State Significant Precincts) 2005

The following table provides an assessment against the relevant provisions of the State Significant Precincts SEPP.

Table 7: State Significant Precincts SEPP

Clause	Requirement	Proposal
6(2) Application of Division	Clauses 8–11, 13, 18–23 and 25 do not apply to development to the extent that it is a transitional Part 3A project.	The Sandon Point Precinct is a transitional Part 3A project. As such the listed clauses do not apply.
7 Land Use Zones	For the purposes of this Part, land within the Sandon Point site is in one of the following zones if the land is shown on the Land Zoning Map as being within that zone: (a) Zone R2 Low Density Residential, (b) Zone R3 Medium Density Residential, (c) Zone E2 Environmental Conservation.	The development footprint is zoned R2 Low Density Residential Development and the remainder of the site is zoned E2 environmental conservation.
12 Prohibited development	Development, other than development that is permitted with or without development consent on land within a zone, is prohibited on land within that zone.	<p>The proposed modification does not include the introduction of any prohibited uses. Dual occupancies, dwelling houses, multi-dwelling housing and semi-detached dwellings are all permissible with development consent in the R2 Low density zone.</p> <p>It is noted that the following prohibited uses are already approved under the Concept Plan:</p> <ul style="list-style-type: none"> • seniors housing; • health services facility; • respite day care centre; and • food and drink premises. <p>The above uses were approved by the Minister by way of Section 75O(3) under Part 3A of the EP&A Act which gave the Minister the ability to approve a partially prohibited development. Notwithstanding this it is noted that the Housing for Seniors and People with a Disability SEPP provides that the Seniors Housing is a permissible landuse where dwelling houses are permissible with development consent. Dwelling Houses are permissible with development consent in the 2(b) zone and as such Seniors Housing is now permissible.</p>
4 Height and floor space ratio restrictions	N/A by virtue of clause 14(3) as a concept plan has been approved which sets height and floor space ratio standards.	N/A
15 Development in proximity to a rail corridor	Development must not be undertaken on land to which this clause applies unless the development incorporates all practical mitigation measures for rail noise or vibration recommended by Rail Corporation New South Wales for development of that kind.	Detailed Development Applications will be accompanied by noise and vibration assessments which detail mitigation measures in respect of these issues.
16 Controls relating to miscellaneous uses	<p>(1) Bed and breakfast accommodation Development for the purposes of bed and breakfast accommodation on land within the Sandon Point site must not involve the provision of more than 3 bedrooms for accommodation for guests.</p> <p>(2) Home businesses Development for the purposes of a home business on land within the Sandon Point site must not involve the use of more than 30 square metres of floor area for the carrying on of the business.</p> <p>(3) Home industries Development for the purposes of a home industry on land within the Sandon Point site must not involve the use of more than 50 square metres of floor area for the carrying on of the light industry.</p>	Detailed Development Applications will detail compliance with the development standards contained within this clause.

Clause	Requirement	Proposal
	<p>(4) Neighbourhood shops Development for the purposes of a neighbourhood shop on land within the Sandon Point site must not have a retail floor area that exceeds 100 square metres.</p> <p>(5) Secondary dwellings Development for the purposes of a secondary dwelling on land within the Sandon Point site must not have a total floor area for the dwelling (excluding any area used for parking) that exceeds whichever of the following is the greater:</p> <p>(a) 60 square metres,</p> <p>(b) 40% of the total floor area of both the self-contained dwelling and the principal dwelling</p>	
17 Exceptions to development standards—transitional Part 3A projects	<p>(1) A development standard imposed by this or any other environmental planning instrument on development that is part of a transitional Part 3A project, and is on land within the Sandon Point site, does not apply to that development if the Director-General is satisfied, and issues a certificate to the effect, that:</p> <p>(a) compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, and</p> <p>(b) there are sufficient environmental planning grounds to justify exempting the development from that development standard.</p> <p>(2) In deciding whether to issue a certificate, the Director-General must consider:</p> <p>(a) whether contravention of the development standard raises any matter of significance for State or regional environmental planning, and</p> <p>(b) the public benefit of maintaining the development standard, and</p> <p>(c) any other matters required to be taken into consideration by the Director-General.</p>	N/A the proposed concept plan modification does not involve any variations to a development standard.
24 Infrastructure development and use of existing buildings of the Crown	<p>(1) This Part does not restrict or prohibit, or enable the restriction or prohibition of, the carrying out of any development that is permitted to be carried out with or without consent or that is exempt development under the State Environmental Planning Policy (Infrastructure) 2007.</p> <p>(2) This Part does not restrict or prohibit, or enable the restriction or prohibition of, the use of existing buildings of the Crown by the Crown.</p>	Noted. In order to deliver the bridge across Tramway Creek the provisions of the Infrastructure SEPP will need to be relied upon as the creek is owned by Wollongong Council.

5.2 Development Layout

The Architectural Report prepared by JSA Studio Architects provided at **Appendix A** contains the proposed concept plan and also an indicative subdivision layout plan for the modified concept plan. The plan, replicated in **Figure 36**, demonstrates that the proposed level of development on the site can be wholly contained within the developable footprint, without any encroachment onto the Turpentine Forest.

The indicative subdivision is similar to the approved concept plan in that the development will terrace down the Ocean View Precinct, responsive to the site topography and is setback to natural features of the site including the riparian corridors and the Turpentine Forest. Smaller semi-detached, attached and detached residential dwellings will be located on the sloping land to the north in the Ocean View and Hilltop Precincts resulting in less visual impact and creating less overshadowing than the approved three storey residential flat buildings approved in the Concept Plan. Two storey dwellings will align Wilkies Street creating a consistent height, bulk and scale with the street and the existing dwellings immediately to the north of the site

Small apartment buildings will be located on the lower flat section of the site in the Central Precinct. These buildings will be screened by the existing riparian vegetation and have been limited in height such that the Turpentine Forest will remain a dominant feature in the landscape.

The sun eye diagrams, also provided at **Appendix A** by JSA Studio Architects demonstrate that the dwellings have been orientated to maximise solar access and that the majority of dwellings will receive 2 or more hours of sun access on June 21.

The civil plans, prepared by Cardno and located at **Appendix N** demonstrate that the proposed development can be accommodated within the developable footprint without any encroachment of batters or filling within the Turpentine Forest or sensitive Aboriginal Archaeological areas. The roads have been designed to provide adequate circulation within and to and from the site and will provide the missing link to the north-south connection through the Concept Plan site.

The modified schemes retains a significant portion of open space on the site in the form of the Turpentine Forest and also the communal open space provided in the RACF and ILUs. Each dwelling will also be provided with its own private open space being either a balcony or terrace for the ILUs and gardens for the dwellings in the Hilltop and Ocean View Precincts.

In order to minimise conflict between vehicles, bicycles and pedestrians separate paths have been provided for bicycles and pedestrians to separate out these movements from vehicular movements. The proposed location of the shared path and its connection with existing paths is depicted on the linkages drawing (SK1.06) at **Appendix A** and in **Figure 34**.



Figure 36: Indicative Layout Plan

Source: JSA Studio

5.3 Built Form

No change is proposed to the key built form controls applying to the site as prescribed by condition A4 of the Concept Plan being:

- Maximum height of 3 storeys
- Maximum Floor Space Ratio of 0.5:1

The proposed modified development continues to comply with these controls with all building being 2 - 3 storeys height (excluding basement parking) and the overall FSR of 0.5:1.

The proposed setbacks to the street are dimensioned on the plan. A setback of 4m is proposed to Wilkies and Geraghty Streets. The detailed setbacks of dwellings and apartment buildings will be provided with the detailed applications where compliance with the ADG can be confirmed.

The indicative layout proposes lots ranging in size between 150m² and 370m². It is noted however, that there is no minimum or maximum lot size prescribed in either the SSP SEPP or the Approved Concept Plan.

Similarly, there is no maximum site coverage control applying to the site. Notwithstanding this, the indicative scheme and **Table 8** demonstrate that a feasible outcome on the site could be achieved is less than that of the Approved Concept Plan.

Table 8: Site Coverage Comparison

Heading	Site Coverage* (whole site)	Site Coverage (2(b) zone)
Approved Concept Plan	21.4%	29.5%
Modified Concept Plan	17.6%	24.4%

*site coverage refers to building footprints consistent with how this was measured in the original application

5.4 Public Domain

Turf Design has prepared a revised Landscape Concept Master Plan for the modified scheme (**Appendix F**). The scheme has been modified to reflect the revised configuration of the site but maintains the key principles of:

- Communal areas for residents to congregate;
- Pedestrian access over Cooksons Creek; and
- Street tree planting.

The public domain will be designed to complement that existing within the Concept Plan area and will be designed to be consistent with Council's public domain policies where possible.

5.5 Residential Amenity

JSA Studio Architects have prepared an indicative layout for the modified Concept Plan (See **Appendix A**). The indicative layout seeks to demonstrate that future detailed applications for development on the site will be able to achieve compliance with the relevant objectives, controls and guidelines contained in:

- *State Environmental Planning Policy (Design Quality of Residential Apartment Design) 65* (SEPP 65);
- *Apartment Design Guide* (ADG); and
- *State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004* (SEPP Seniors).

The proposal's consistency with these policies is set out below.

SEPP 65 – Design of Residential Flat Buildings

SEPP 65 aims to improve the design quality of residential apartment development in NSW. SEPP 65 sets out nine planning principles which are required to be considered during the preparation of the design of any proposed residential flat building. Accordingly, the residential flat buildings within the Central Precinct have been assessed against the nine design quality principles in **Table 9** below.

Table 9: Assessment of SEPP 65 Design quality principles

Design Principle	Proposal
Principle 1: Context and neighbourhood character	<ul style="list-style-type: none"> The surrounding context is predominantly characterised by low scale residential development set around existing environmentally sensitive areas. The proposed development responds to the unique characteristics of the site acknowledging the strong connection to the natural landscape, landform and waterways. The protection and rehabilitation of the central turpentine forest and Cookson Creek will maintain the site's natural setting, and the development will create a network of residences to integrate with the established surrounding community.
Principle 2: Built form and scale	<ul style="list-style-type: none"> The proposed built form is appropriate for the future context of the precinct and achieves the essence of the approved development concept, albeit with an overall decrease in built form and scale. The proposed residential flat building envelopes are low in scale - built to a maximum of three storeys and will be heavily articulated to break up the building massing. The network of residential flat buildings are typically oriented to the street or the open spaces to create a strong street address and define the ground level landscaped areas.
Principle 3: Density	<ul style="list-style-type: none"> The proposal decreases the intensity of development on the site, as such achieving a higher level of amenity for residents and each apartment. The residents within the ILU's will have access to the community facilities, therefore reducing the reliance on services outside of the development. The proposal includes compact footprints, demonstrating that a denser and more compact urban form is the natural complement to the retention significant natural features.
Principle 4: Sustainability	<ul style="list-style-type: none"> The detailed design will make efficient use of natural resources, energy and water throughout its full life-cycle in accordance with the BASIX requirements. An energy efficient passive building response is developed through the building configurations. The residential flat building networks is typically extended along a north south axis, therefore opportunities for solar and ventilation have been optimised. A clear and legible waste-management strategy will be developed refined at future detailed design stages.
Principle 5: Landscape	<ul style="list-style-type: none"> The riparian corridor and the existing remnant vegetation within the turpentine forest are linked and provide a continuous ecological corridor through the site linking to the riparian land and coastal edge to the east. The location of the built form is maintained within the three distinct habitable precincts that have been previously subject to major disturbance and modification. These precincts will be embellished with a comprehensive landscape scheme primarily consisting of native indigenous species.
Principle 6: Amenity	<ul style="list-style-type: none"> The proposal decreases the intensity of development on the site, as such achieving a higher level of amenity for residents and each apartment. The proposal will provide reasonable access to daylight and solar access, given that buildings are to be suitably orientated and separated; The proposed layout ensures a variety of apartment aspects are provided, including out to the ocean.
Principle 7: Safety	<ul style="list-style-type: none"> The design of the development optimises safety and security, both internal to the development and to the public domain. Safety and security has also been considered in accordance with CPTED principles of surveillance, access, territorial reinforcement and space management.

Design Principle	Proposal
	<ul style="list-style-type: none"> Buildings have been located and oriented to the street alignment to maximise surveillance and overlooking to the landscaped open space and surrounding street network. CPTED measures will continue to be developed at the detailed design stage.
Principle 8: Housing diversity and social interaction	<ul style="list-style-type: none"> The proposal incorporates a mix of one, two and three bedroom ILU's that will add the diversity of housing typologies within the precinct. Community facilities are provided to encourage opportunities for social interaction outside of the private residential areas. Ample landscaped courtyards and open spaces are provided allowing for gathering among residents and visitors.
Principle 9: Aesthetics	<ul style="list-style-type: none"> The architectural design and fine grain elements will be developed in the detailed design stages. The proposal will create visual interest and relate to a human scale, creating distinct characteristics that reflect the landscape character and will incorporate a variety of materials, colours and finishes.

Apartment Design Guide

The underlying purpose of the ADG is to provide guidance for the development of new apartment buildings, specifically in relation to achieving the design principles set out in SEPP 65. Of particular relevance is Part 3 and Part 4 of the ADG.

JSA Studio's report confirms that the development is capable of achieving compliance with the ADG key Design Criteria set out under Part 3 and Part 4, in that:

- 3 or more hours of solar access is provided to more than 70% of the proposed apartments;
- Separation distances generally comply with the 12m recommended in the ADG for 3 storey buildings – minimum separation of 10.8m is proposed in some instances however this is address by screens and offsetting of openings/blank walls;
- 70% of the proposed apartments are dual aspect, corner or cross through apartments;
- 28% of the central precinct will comprise communal open space;
- 32% of the central precinct will comprise deep soil planting; and
- All of the proposed apartments will meet or exceed the minimum apartment sizes.

It is noted that the detailed design of the apartment buildings will be the subject of separate development applications and that these will provide detailed layouts of the apartment buildings and will be accompanied by a detailed assessment against the design criteria contained within the ADG.

SEPP Seniors

In respect of Housing for Seniors SEPP, JSA Studio have confirmed that the building design and apartment layouts can comply with the relevant design provisions of this SEPP. The proposals compliance with the design principles is provided in **Table 10**.

Table 10 : Assessment of Seniors SEPP Design principles

Design Principle	Proposal
Neighbourhood amenity and streetscape	<ul style="list-style-type: none"> The proposal recognises the desirable elements of the site's current character including the turpentine forest, waterways and ocean views. The revised modification decreases the scale and intensity of development on the site such that it is more consistent with the residential development within the Sandon Point to the north. Building footprints are maintained within the approved developable area, as such no building footprints encroach into the turpentine forest or riparian zones.

Design Principle	Proposal
	<ul style="list-style-type: none"> The proposal provides clear evidence that more compact urban form is the natural complement to the retention of indigenous ecosystems. The site will be heavily landscaped, primarily consisting of native indigenous species to embellish the existing native vegetation.
Visual and acoustic privacy	<ul style="list-style-type: none"> Privacy will be maintained by providing adequate building separation and screening or offsetting windows where necessary. Boundary landscaping and large physical separations will mitigate view impacts to adjoining properties. Bedrooms and habitable areas will be designed to meet the relevant acoustic provisions contained in the Australian Standards.
Solar access and design for climate	<ul style="list-style-type: none"> The proposal will provide reasonable access to daylight and solar access, given that buildings are to be suitably orientated and separated. Heavy building articulation will also present further opportunities for daylight access. An energy efficient passive building response is developed through the building configurations. The detailed design will make efficient use of natural resources, energy and water throughout its full life-cycle in accordance with the BASIX requirements.
Stormwater	<ul style="list-style-type: none"> A comprehensive stormwater management strategy has been developed and will be further refined during the detailed design process. The stormwater management system will draw on Water Sensitive Urban Design (WSUD) best practice and will include stormwater treatment facilities such as vegetated systems, infiltration system and structural facilities, such as gross-pollution traps, pit inserts and a wetland; retention swales and a wetland.
Crime prevention	<ul style="list-style-type: none"> The design of the development optimises safety and security, both internal to the development and to the public domain. Safety and security have also been considered in accordance with CPTED principles of surveillance, access, territorial reinforcement and space management. CPTED measures will continue to be developed at the detailed DA stage.
Accessibility	<ul style="list-style-type: none"> Detailed design of the development will ensure the buildings and accessways are capable of achieving compliance with the requirements of the Building Code of Australia (BCA) and other relevant codes and standards.
Waste management	<ul style="list-style-type: none"> A clear and legible waste-management strategy will be developed refined at future detailed design stages. Waste facilities will maximise recycling by the provision of appropriate facilities.

5.6 Visual Impacts

JSA Studio Architects have prepared photomontages of the proposed development from the same view points that were reviewed during the assessment of the Approved Concept Plan (See **Appendix O**). As can be seen in the images, the proposed development, by virtue of the decreased height of the buildings in the Ocean View and Hilltop precincts will have a lesser visual impact than that of the Approved Concept Plan.

Commitment 33 addresses the issue of visual amenity and requires the following:

33. In finalising the design for the development, the following must be considered with the three precincts and all buildings are respect to visual amenity:

- The proposed development is to ensure that Regional Parkland will remain the visual dominant element of the vegetated valley and greenbelt next to the foreshore, separating the suburbs of Thirroul to the north and Bulli to the south;*
- Visual green links from the foreshore to the escarpment are to be maintained by tree planting along the east-west corridors through and next to the site comprising the ridge along the northern boundary of the site, Cookson's Creek through the centre of the site, and Tramway Creek along the southern boundary of the site;*
- Ensure that building heights are below canopy of the Turpentine Forest, below the level of the suburbs at the foot of the escarpment;*

- *Ensure that building heights step down to fit in with the topography slope of the land and are of a magnitude that is consistent with the existing factory buildings.*

The proposed development remains consistent with the above in that:

- The Turpentine Forest is retained and will be the visual dominant element of the vegetated valley;
- A landscape plan is proposed (**Appendix F**) which proposes significant tree planting within the precinct;
- The proposed dwellings located in the Hilltop and Ocean View Precincts will reduce in height from 3 to 2 storeys and will be at a height below the canopy of the Turpentine Forest; and
- The dwellings will step down to fit in with the topography of the slope of the land.

In light of the above no further mitigation measures are required in respect of Visual Impacts beyond that of Commitment 33.

5.7 Flora and Fauna

Cumberland Ecology prepared a Flora and Fauna Assessment to support the original Concept Application which concluded that:

‘The concept masterplan has a low impact upon native flora and fauna and will not significantly impact upon threatened biota. Under the concept masterplan, the major native flora and fauna habitats of the subject site will be maintained and conserved, including the Turpentine Forest and a riparian corridor along Cooksons Creek. No Species Impact Statement would be required to assess the proposal under the TSC Act and no Referral is warranted to comply with the requirements of the EPBC Act’.

While the EPBC Act assessment remains valid, it is noted that since the Concept Plan was approved the *Biodiversity Conservation Act 2016* (BC Act) has come into force, replacing the now repealed TSC Act. Cumberland Ecology has prepared a Biodiversity Development Assessment Report (BDAR) for the modification application (**Appendix K**). The BDAR focuses on the changes proposed in the modification application and also the change in condition of the vegetation to be impacted within the development footprint. The report provides a worst case scenario assessment and estimate of the credits that are likely to be required under the *Biodiversity Conservation Act 2016* (BC Act). Any future development application lodged will be subject to the assessment provisions of the BC Act and will further refine assessments based on detailed design and confirm the amount of vegetation to be removed and the exact number of credits that will be required to be obtained to offset the impact.

The areas of impact, likely to require an offset are summarised in **Table 11** and shown in **Figure 37**. It is noted that further discussions with the Office of Environment and Heritage (OEH) are still required in respect to the assessment of the Acacia/Exotic regrowth given that it is largely dominated by *Acacia longifolia ssp sphorae*, a species that is not diagnostic of the historic endemic native community and is a known coloniser of historically cleared areas. If the presence of *Acacia longifolia ssp sphorae* as a native species is excluded, only 5 credits would be required, instead of 31 as reported in **Table 11**.

Due to the time constraints for submission, targeted surveys could not be undertaken to discount the presence of protected species on the site. In light of this, Cumberland Ecology have taken a conservative approach and have assumed that species that cannot be justifiably be excluded do exist on site and that credits will be required due to the loss of habitat (see **Table 12**). Cumberland Ecology note that the majority of the site is highly disturbed and forms mostly degraded and unsuitable habitat for many native fauna species. The majority of the fauna habitat within the site occurs within the Turpentine Forest (E2 zone) which will be retained and managed under the Vegetation Management Plan (VMP) (**Appendix P**) prepared for the site, thus improving habitat values for fauna.

Similarly, to the assessment of Ecosystem credits, the credits estimated for potential species existing on the site will be refined at the detailed application stage, once further detailed studies are undertaken on site. It is therefore possible that fewer credits will be required at the DA stage.

Table11: Assessment of Ecosystem Credits

Plant Community Type	Area (ha)	Integrity Score	Ecosystem Credits
Turpentine Regrowth	0.37	28	5
Acacia/Exotic Regrowth	1.82	32.1	26
Total			31

Table12: Estimated Species Credits

Heading	Common Name	Credits
<i>Cercartetus nanus</i>	Eastern Pygmy-possum	5
<i>Lophoictinia isura</i>	Square-tailed Kite	4
<i>Hieraaetus morphnoides</i>	Little Eagle	4
<i>Miniopterus australis</i>	Little Bentwing-bat	8
<i>Miniopterus schreibersii oceanensis</i>	Eastern Bentwing-bat	8
<i>Myotis macropus</i>	Southern Myotis	5
<i>Petaurus norfolcensis</i>	Squirrel Glider	5
<i>Petroica rodinogaster</i>	Pink Robin	5
<i>Pseudophryne australis</i>	Red-crowned Toadlet	4
<i>Solanum celatum</i>	Solanum celatum	5
<i>Zieria granulata</i>	Illawarra Zieria	2
Total		55


Figure 37: Areas of impact potentially requiring a biodiversity offset

Source Cumberland Ecology

In respect of the riparian zones, Cumberland Ecology notes that the original concept plan included a single vehicular crossing (in the form of a weir). The current proposal, which now only seeks to implement a boardwalk crossing for pedestrians over Cooksons Creek and a bioretention basin, represents a reduced impact footprint compared to the approved Concept Plan and therefore is not considered to be an 'additional' impact compared to the previous approved development.

Cumberland Ecology has also prepared a VMP (**Appendix P**) for the ongoing management of the Turpentine Forest and riparian corridors. The VMP outlines management measures to be implemented during Construction, provides details on weed management and outlines a revegetation plan. The VMP also proposes ongoing monitoring and management of the VMP outcomes.

5.7.1 Mitigation

In order to address management of flora and fauna onsite, the following additional commitments are proposed:

- Commitment 24 has been amended to require future Development Applications to be accompanied by BDARs confirming the impacts of the development and the credits required to be obtained.

5.8 Tree Removal

An Arboricultural Development Assessment Report (**Appendix Q**) has been prepared by Moore Trees for the proposed modification. Whilst tree removal will be required to accommodate the proposed development, the report confirms that the proposed development will be able to retain the trees located in the E2 zone and tree protection measures are recommended. Moore Trees notes that there appears to be an adequate set back to the larger more mature specimens scattered throughout the E2 area. This will ensure that there is no sudden exposure of mature canopy edges and that a good transition of canopy height can be maintained. They recommend that a Project Arborist should be appointed to oversee the Arboricultural related works for the project. The Project Arborist should be used for Arboricultural certification services and also used as a point of contact should any questions arise during the project.

5.9 Bushfire

A Bushfire Impact Assessment (BIA) has been prepared by Peterson Bushfire and is provided at **Appendix R**. The BIA includes a review of the approved bushfire management strategies to determine if the existing strategies are still valid for the proposal.

The original bushfire assessment determined that the Turpentine Forest, riparian vegetation along the Cookson's Creek and adjoining Tramway Creek posed a low bushfire threat to the proposed development, however large Asset Protection Zones (APZ's) were imposed across the Anglicare and Stockland lands.

Pursuant to Mod 1 of the Concept Plan, Stockland engaged with the Rural Fire Service (RFS) to establish an alternate bushfire protection strategy given the site is not mapped as containing bushfire prone land. Accordingly, the modified Concept Plan established 'defendable space' zones within the Stockland Land in lieu of specific APZ dimensions. Defendable space is essentially a space or workable area reserved between a structure and a hazard where property protection operations can be based, such as thoroughfare and manoeuvring of vehicles, fire fighter access, running of hoses, and access to hydrants.

Specifically, the modified Condition A3 notes:

The Concept Plan is modified as follows:

- On Anglicare Land, to ensure consistency with the Planning for Brushfire Protection Guidelines, all APZ's shall be located within the residential zone;*
- On Stockland Land, a corridor of defendable space is to be provided.*

As part of the withdrawn Project Application for the Anglicare land, Anglicare engaged the RFS to develop a consistent strategy of defendable zones across the entire Concept Plan site, which received in principle support as

detailed at **Appendix R**. Based on this, the proposal seeks to apply a consistent strategy of 'defendable spaces' substituted for APZ's. In relation to this, Peterson Bushfire conclude:

- the change in use reduces the bushfire risk further as it significantly decreases the amount of Special Fire Protection Purpose (SFPP) development on site, hence limiting bushfire vulnerable uses;
- although the 'Planning for Bushfire Protection' document has been updated since (from 2001 to 2006 version) the defendable space strategy as approved remains valid. The process and methodology of assessing defendable space has not changed between the two versions of the guidelines; and
- the proposal is capable of complying with Planning for Bushfire Protection 2006, and future applications will also be assessed against these provisions.

5.9.1 Mitigation

- Commitments 25 & 26 have been updated to reflect the proposed defendable zones in lieu of APZs.

5.10 Flooding, Stormwater and Soils

Cardno has prepared a Flood Impact Assessment which is provided at **Appendix S**. In undertaking the assessment, Cardno has reviewed the Hewitt Creek Flood Study which was prepared for Wollongong City Council and is relevant to the application as it covers the Tramway Creek catchment. Cardno has used this study as a basis for delineating catchments in their study.

Cardno also reviewed the Flood Study Report GHD prepared for the site in May 2006, however this was not considered suitable for comparison to the model results of Cardno's assessment for the following reasons:

- The GHD report does not cover the Cookson's Creek, and
- It does not account for the hydraulic constraints imposed by the railway culvert on Tramway Creek.

Cardno has modelled the pre and post development scenarios for the 100 year ARI design event and the PMF. The pre-development scenario revealed that:

- The existing culverts under the Illawarra Railway and Geraghty Street do not have sufficient capacity to convey the 100 year ARI design event. Therefore, it is predicted that the Illawarra Railway and Geraghty Street will be overtopped by the 100 year ARI design event from Cookson's Creek catchment. The flow conveyed by the culverts is predicted to discharge into Cookson's Creek. The flows overtopping the railway embankment are predicted to flow south along Geraghty Street and then flood the site in a 100 year ARI design event. A more severe flooding of the site from Cookson's creek catchment is anticipated in PMF.
- The flood behaviour in Tramway Creek represents a more complex situation. Significant flows from Slacky Creek are predicted to be diverted into the Tramway catchment in a 100 year ARI design event and greater events up to and including PMF. This is a result of the controls imposed by the culverts under Hobart Street and the disused Bulli Colliery railway. The flows diverted from Slacky Creek and the flows from the Tramway Creek are directed into a single 2.1m RCP pipe culvert under the Illawarra Railway just upstream of the proposed development site. Significant headwater is predicted upstream of this culvert in a 100 year ARI design event. However, no overtopping of the rail at the location of this culvert is predicted in the flows up to and including 100 year ARI design event. Significant overtopping of the Illawarra Railway is expected at this location in PMF. Tramway Creek is predicted to overtop the rail embankment in PMF and then flood the proposed development site.

The pre-development scenario is shown in **Figure 38**.

In order to ensure that the proposed development remains flood free during the PMF event, the following mitigation measures are proposed:

- The ground level of the residential development is set at the PMF level;
- A sound barrier wall is proposed along the western boundary of the site which will act as a flood barrier as well as an acoustic barrier;

- A new culvert is proposed replacing an existing pipe under Geraghty Street which will discharge into Cookson Creek.

The flood results for the post-development scenario are shown in **Figure 39**. Cardno identify the following impacts arising from the proposed flood mitigation measures:

- The proposed development is expected to result in increases in Maximum Water Surface Elevation of generally less than 100mm and up to 250mm in limited spots along the Cookson Creek (within the site) in a 100 year ARI design events.
- No impacts are predicted within the rail corridor as a result of the proposed development in a 100 year ARI design event.
- Increases in Maximum Water Surface Elevation of up to 100mm are predicted within Cookson's Creek within the site as a result of the proposed development in PMF.
- Increase in Maximum Water Surface Elevation of generally less than 100mm (and up to 350mm in localised areas) is anticipated within Tramway Creek as a result of the proposed development (to the south of the proposed site) in PMF.
- Increases in Maximum Water Surface Elevation of up to 1000mm are expected against the proposed sound barrier wall within the rail corridor. However, these impacts are limited to the drains within the rail corridor with no impacts on the rail formation level in PMF.



Figure 38: Pre-development flood extent 1%AEP & PMF

Source: Cardno



Figure 39: Post-development flood extent 1%AEP & PMF

Source: Cardno

The stormwater management concept is shown in **Figure 40** and comprises:

- Pit and piped drainage for Geraghty Street
- Internal road pit and pipework for the retirement village area
- Vegetated swale drainage for the southern end of the retirement village
- Vegetated swale drainage for the western properties adjacent to the turpentine forest
- Water quality treatment using raingardens/bio-retention for individual properties and isolated parking areas
- Two on site detention and water quality basins at the eastern end of the property adjacent to Cookson's Creek outside the 100 year flood extents
- Internal road pit and pipework for the RACF /independent living area (as referred to in the layout plans provided by architects) including raingardens for water quality treatment
- Gross pollutant traps at the south east and south west corners of the development

The key difference between the proposed modified concept and the approved GHD concept are identified as the following by Cardno:

- Only one water quality basin nominated centrally near Cookson's Creek (in the flood plain).
- The previous proposal does not take into account the natural contours of the site or adjacent roads.
- The architectural and road layout has changed
- A bridge no longer connects the two sides of the development
- Overland flow directions have been confirmed by ground survey
- Water quality requirements are still the same as per the GHD report but rainwater tanks overflow to a raingarden where possible before connecting into the piped system

In conclusion GHD consider that the drainage concept is consistent with the concept proposed by GHD and has been updated to reflect the latest updates to the proposed development layout.

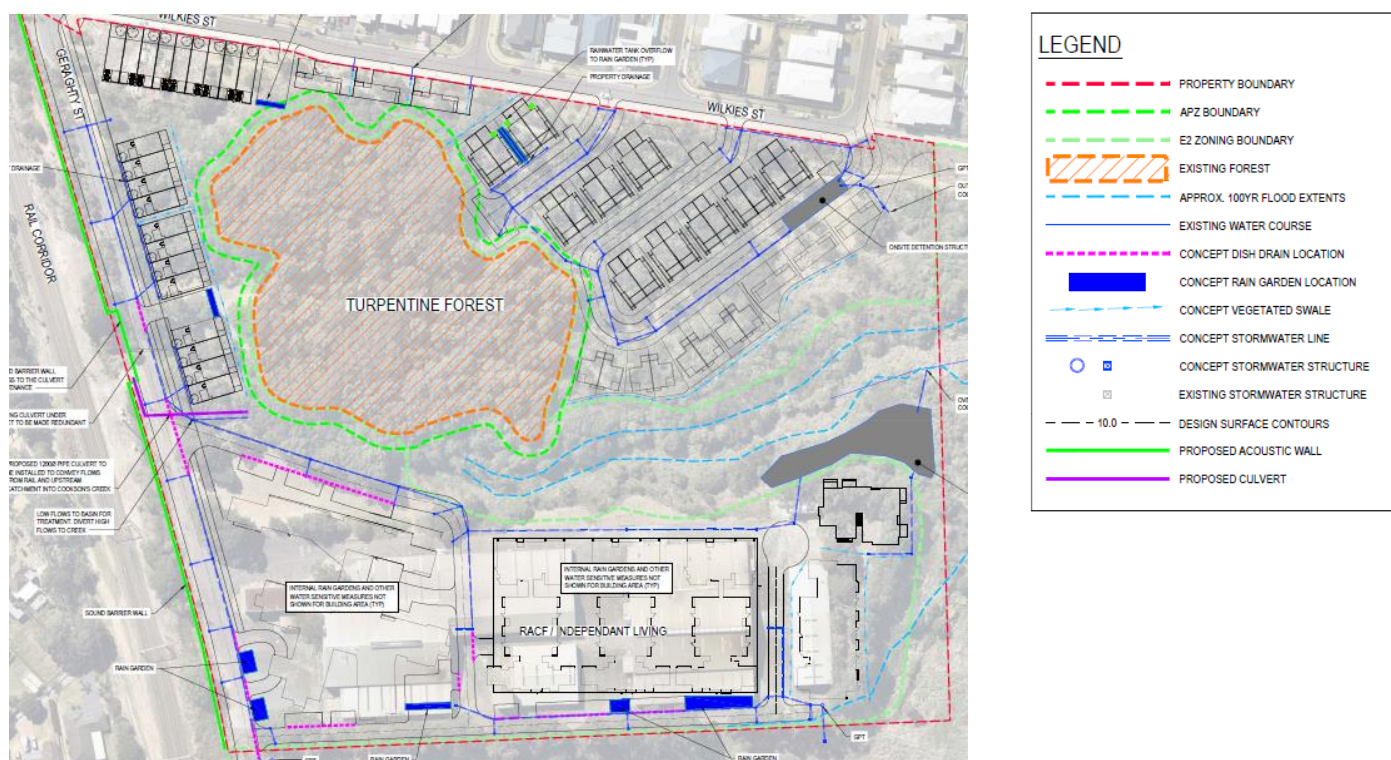


Figure 40: Stormwater Management Concept Plan

Source: Cardno

5.10.1 Mitigation Measures:

- Amendments to the stormwater management strategy are proposed to reflect the revised development layout. The Statement of Commitments have been updated to reflect the revised strategy.
- An acoustic barrier will be provided along the western boundary of the site which will also act as a flood barrier.

5.11 Contamination

Several assessments have been previously prepared to address the issue and impacts of contamination over the site. The findings of Concept Plan contamination investigations submitted with the original application indicated that there was evidence of contamination over the site as a consequence of past uses, particularly within the southern portion of the site. These included:

- elevated concentrations of total petroleum hydrocarbons (TPH), benzo a pyrene (BaP) and volatile halogenated compounds (VHCs) contained in this fill material along the eastern side of the factory; and
- concentrations of heavy materials in the soil material which exceed the phytotoxicity criteria at a number of locations over the site.

Whilst the soils around certain parts of the site, and in particular around the previous and existing industrial operations, are contaminated, previous reports concluded:

- A further environmental assessment of soil contamination and remediation action plan be prepared as part of the future Development Application in accordance with EPA guidelines; and
- The site could be made suitable for residential development upon remediation.

EIS has prepared a report which provides a summary of the additional investigations that they undertook on the site in 2015, the previous investigations undertaken in 2005 and a site visit that they undertook in June 2018. Their report is provided at **Appendix M**. EIS also concluded that further site investigations would be required to determine how the site should best be remediated for the future residential use. Their specific recommendations are the following:

- A Hazardous Building Material assessment should be undertaken of all structures on site prior to demolition. Potential friable asbestos may be associated with the old pipe lagging in the south section of the site. If the presence of this material is confirmed it should be removed as soon as possible;
- A comprehensive Stage 2 investigation should be undertaken to characterise the contamination conditions in the south section of the site. The investigation should include the following:
 - Ground penetrating radar (GPR) scan in the south section of the site in the approximate location of the suspected USTs;
 - Soil sampling across the south section of the site; and
 - Assessment of groundwater contamination conditions in the south section of the site.
- Further inspection, sampling and analysis of the areas where potential tipping may have occurred since 2015 should be undertaken;
- The groundwater in the north section of the site should be sampled and analysed. The analysis should include VHCs;
- The additional investigation should also include some sampling for ASS on the east boundary of the site to confirm the absence of acid sulfate soil; and
- Following demolition of the buildings (and preferably prior to removal of the hardstand), an asbestos clearance certificate should be provided.

In accordance with Commitment 43, future detailed applications will be submitted with detailed investigations and Remediation Action Plans, if required, confirming how the site is to be remediated to be suitable for future residential use. Commitment 44 also requires further assessment of acid sulfate soils and as such no further action is required in respect of these two issues.

Two new commitments are proposed which require the preparation of a HAZMAT assessment of all existing structures on site (Commitment 44A) and that groundwater in the north section of the site is sampled and analysed (Commitment 44B).

5.12 Heritage

The following sections summarise the conclusions of Mary Dallas Consulting (MDC) in respect of European and Aboriginal Cultural Heritage. The respective consultant reports can be found at **Appendix T** and **J**.

5.12.1 European Heritage

As part of the Commission of Inquiry for the site Graham Brooks undertook an assessment of the broader Concept Plan site for European Heritage. The study concluded that there were the two items of heritage value within the greater locale located on land to the north of the Anglicare site: Woodlands Cottage and the Thirroul Brickworks Site. No items were identified on the Anglicare site.

MDC has undertaken a revised Heritage Impact Assessment prepared in accordance with the NSW Heritage Manual which addresses the significance, and provides an assessment of, impacts on the heritage significance of heritage items, landscape features and vegetation on the site and items in the vicinity.

The assessment has found that the site has been previously used for dairying and industry (refractory complex) but that neither of these uses or the remains of the building on the site exhibit any heritage significance. MDC also concluded that the site has no archaeological sensitivity.

MDC found that the Turpentine Forest, which is mapped as a heritage item under the SSP SEPP, does exhibit local significance. As this item is to be preserved and rehabilitated as part of the proposed development, MDC concluded that the proposal will not modify or otherwise impact the historic heritage values of the place directly.

With regard to nearby listed items:

- The WLEP-listed former Railway Route (Item 6527), Methodist Manse & Church (Item 6355) & Rail Bridge (Item 5988) are variously between 200 and 350 metres west & south of the study area & separated from it by the raised Illawarra Railway Line easement & associated embankments & other rail & road infrastructure (including the Princess Highway). Establishment of the proposed development is therefore unlikely to have any material effect on these items, or on views to or from them.
- The WLEP-listed Sandon Boat Sheds (6487); Norfolk Island Pine (6191) & Site of Westmacott's Sandon Cottage (6358) are all over 700 metres south & east of the western corner of the study area. They are downslope of the study area and views to these localities (and indeed Sandon Point itself) will be a feature of some of the premier locations within the development area. Views from these items to development area will alter with the infilling of this near-vacant space, but significant views - along Sandon Beach, to the Turpentine Forrest & beyond to the Bulli escarpment - will not be significantly affected by the development proposal.

In order to acknowledge the history and heritage of the site, MDC has recommended the following:

- The study area overlooks Bulli (Sandon) Point; is part of an early Illawarra land grant; features a unique Turpentine forest; and has Aboriginal significance and an industrial history. In association with the development, the history of the locale should be interpreted to new residents and visitors alike via low-key information plaques/interpretive signage.
- Consideration should be given to the naming of any intra-site access roads or landscape features in a manner that reflects the past history and/or heritage of the site. Examples may include Turpentine Lane; Refractory Place; Westmacott Lookout; Tramway Gardens; Cooksons Street.

5.12.2 Aboriginal Cultural Heritage

Mary Dallas Consulting Archaeologists (MDCA) has prepared an Aboriginal Cultural Heritage Assessment Report for the proposed modification (see **Appendix J**).

Initial assessment of the site undertaken by MDCA in 2004 identified an area of Aboriginal archaeological sensitivity located in Lot 2 in DP224431. Archaeological investigations of the area of sensitivity were carried out in 2015 under Development Consent No. 2011/1383 granted by the Land and Environment Court on 27 September 2013, and in accordance with the Office of Environment & Heritage (OEH) 2010 Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales. As per the Code of Practice, the investigations were preceded by Aboriginal community consultation in accordance with the requirements outlined in subclause 80C(1) - 80C(6) of the National Parks and Wildlife Regulation 2009. The investigations were also undertaken in satisfaction of Item 13 of the Statement of Commitments forming part of Concept Plan Approval MP06-0094.

Prior to the undertaking of the above investigations, a report was prepared by Dr Janelle White of ACHM (Refer **Appendix Y**) to satisfy the requirements of Condition B1(2) and as such it is now proposed to delete part of that condition.

MDCa report that the investigations involved the manual excavation of nineteen 0.5m x 0.5m pits located across the area of Aboriginal archaeological sensitivity. This resulted in the retrieval of 37 stone pieces, representing at least eight discrete stone artefacts. The majority of the stone pieces (27/37 or 70%) were retrieved from just four pits along the eastern and southern boundary of the site. Most pits contained zero or one stone pieces. On the basis of these investigations, part of the area of Aboriginal Archaeological Sensitivity was defined as an open campsite (stone artefact scatter) and was labelled Sturdee Avenue OC1 and registered with the OEH (AHIMS # 52-2-4239)

On archaeological grounds the Sturdee Avenue OC1 site contains evidence that is neither rare nor unusual in a local context, and is a less diverse and lower density artefact assemblage than other investigated Aboriginal sites in the local area. Nonetheless, it is evidence of a facet of the local Aboriginal past that complements the more substantial evidence derived from these other sites in the broader Sandon Point area. For this reason, MDCA recommends that the most intact and densest portion of the site should be preserved, and the artefacts retrieved from the test excavations should be reburied within the footprint of one of the pits excavated within this area. In order to reflect this recommendation, the Concept Plan has been modified to exclude the sensitive archaeological area from the development footprint such that it can be preserved. This is reflected in **Figure 41** which shows the Aboriginal archaeological area hatched in black hatching with a red boundary.



Figure 41: Location of Aboriginal Archaeological Area to be protected

Source: JSA Studio Architects and Ethos Urban

The remainder of Sturdee Avenue OC1 is very sparse and discontinuous and in the opinion of MDCA does not warrant preservation on archaeological grounds. When development proceeds MDCA note that a National Parks & Wildlife Act (1974) s90 Aboriginal Heritage Impact Permit (AHIP) may be required to allow partial impact to this portion of Sturdee Avenue OC1 (AHIMS # 52-2-4239), while preserving the remainder of the site.

In recognition that the Turpentine Forest is of significance to local RAPs, MDCA have also recommended that the draft Vegetation Management Plan (VMP) is also provided to the RAPs for consultation and comment before it is finalised.

Consultation with the local Aboriginal community was undertaken in order to document the Aboriginal cultural significance of the subject land in relation to the current proposal. One submission was received which Mary Dallas Consulting has responded to in their report at Appendix J.

MDCA concludes that if the above mitigation and management measures are in place there are considered to be no further archaeological requirements in relation to the current development proposal within the subject land. Specifically, no further archaeological investigations are considered warranted in any other portions of the subject land outside of the Sturdee Avenue OC1 site.

5.12.3 Mitigation

- New commitments (16A and 16B) are proposed which require the Proponent to implement the MDC recommendations of interpretive signage and consideration of street names which reflect the heritage values of the site.
- Development Footprint amended to ensure no development occurs within the Aboriginal Sensitive area of the site.
- VMP to be referred to RAPs for consultation and comment prior to finalisation – Refer to commitment 22 which has been updated.
- Commitments 12-14 amended to reflect the recommendations of the MDCA report and also to reflect the further archaeological investigations that have been undertaken since the approval of the Concept Plan.

5.13 Transport and Accessibility

Transport and Traffic Planning Associates (TTPA) has prepared a Traffic Impact Assessment for the proposed modification (refer **Appendix L**).

5.13.1 Traffic Generation

TTPA undertook traffic surveys on Brickworks Avenue at Hewitts Creek crossing during a weekday morning and afternoon peak periods in order to establish the traffic generation of dwellings on the Stocklands subdivision (McCauleys Estate). The vehicle movements per hour recorded are provided in **Table 13**.

Table 13: Surveyed Vehicular Movements

Direction	AM	PM
Northbound	82	24
Southbound	19	81
Total	101	105

Source: TTPA

The above traffic generation was used to estimate the likely traffic generation of the proposed dwellings in the Hilltop and Ocean View Precincts (0.76 vehicular trips per hour VTPH).

In respect of the proposed ILUs TTPA notes that the RMS development guidelines do not provide an indication of traffic generation characteristics of seniors housing Independent Living Units, although criteria is provided for 'aged persons housing' (subsidised) of 0.1 to 0.2 vph (evening peak). ILU dwellings typically involve retired persons and surveys of a number ILU complexes indicate a range of traffic generation rates as: Apartments 0.20 vph per dwelling and Separate/attached dwellings 0.25 vph per dwelling.

Similarly, the RMS Guidelines do not provide an indication of traffic generation characteristics of Residential Aged Care Facilities. However, TTPA has undertaken a number of surveys of RACF's and the TTPA surveyed rates equate to the ITE2 Guidelines for "Nursing Homes" as follows (although dementia beds inevitably exhibit lower rates): AM 0.17 vph / bed and PM 0.22 vph / bed.

Using the above rates, TTPA has undertaken a comparison of the approved and proposed schemes. As can be seen in **Table 14**, the modified development has the potential to generate an addition 13VTPH in the AM peak and an additional 7VTPH in the PM peak (assuming that the dwellings in the Hilltop and Ocean View Precincts are occupied as standard residential accommodation and not seniors accommodation (worst case scenario). TTPA are of the opinion that this very minor increase in generated traffic would be quite imperceptible when it is distributed in 2 directions along Geraghty Street and that the proposed development could be accommodated without adverse impact.

If the dwellings were to be occupied as seniors accommodation then the trip generation rates would reduce down by 15 trips in the AM peak and 17 trips in the PM peak thus reducing the impact of the approved development on the road network.

Table 14: Traffic Generation Comparison

		Approved		Proposed (Standard dwellings)			Proposed (Seniors dwellings)		
		AM vph	PM vph		AM vph	PM vph		AM vph	PM vph
RACF	120 beds	21	27	80 beds	14	18	80 beds	14	18
ILUs	250	50	50	140	28	28	140	28	28
Dwellings				55	42	42	55	13.75	13.75
Total		71	77		84	88		55.75	59.75
Difference					+13	+11		-15.25	-17.25

Source: TTPA & Ethos Urban

5.13.2 Parking

Parking provision on site will be in accordance with either the Seniors SEPP or Council's DCP, whichever is the relevant control in each instance. Several on street parking spaces are also proposed throughout the precinct for visitors to the development.

5.13.3 Internal road access and servicing

TTPA has reviewed the proposed road layout and has concluded that all of the vehicle access will be capable of complying with the design requirements of AS2890.1 and 2.

5.14 Ecologically Sustainable Development

An Ecologically Sustainable Development (ESD) Strategy has been prepared by Cundall and is provided at **Appendix U**. This report outlines how ESD principles will be incorporated into the design, construction and ongoing operation of the proposal.

Proposed ESD measures include:

- Reduced energy consumption by adopting the following recommended energy initiatives:
 - Minimising the use of mechanical ventilation to reduce energy consumption.

- Efficient lighting systems including LED lighting with efficiency controls. This includes internal as well as external and public domain lighting.
- Low carbon domestic hot water (DHW) systems such as solar thermal hot water or heat pumps.
- On-site renewable energy generation such as rooftop photovoltaics.
- Undertaking best practice commissioning and tuning for all building systems.
- Passive design measures, including: orientating buildings to achieve good passive solar heating in winter and cooling in summer, insulating, careful consideration of glazing and considering the thermal mass of construction materials.
- Preparation of Waste Management Plan for application during the design, construction and operation of the project to divert waste from landfill.
- Indoor Environmental Quality (IEQ) will be improved through consideration of indoor air quality, acoustic, thermal and visual comfort, as well as daylight and views.
- Use of sustainable materials and construction methods.
- Improvement of Biodiversity Values through maintaining and enhancing existing vegetation with local indigenous species.

Each detailed application will be submitted with a BASIX assessment, detailing the ESD measures to be incorporated in each building, consistent with condition C7.

The project will be designed according to best practice principles of ESD, as such will satisfy the needs of the current generation without compromising the ability of future generations to meet their own needs. The ESD report demonstrates that the proposal will achieve the environmental targets set out by the relevant legislation and, in this regard, will achieve an appropriate level of sustainability.

5.14.1 Mitigation Measures

- A new commitment (Commitment 47) is proposed which requires future applications to detail how the recommended ESD measures outlined in Cundall's report have been incorporated into the proposals.

5.15 Contributions

Volume Four (4) of the original Concept Plan EAR contains a submission to the Minister for Planning on a Planning Agreement for Infrastructure to support the redevelopment for Infrastructure. In respect of infrastructure and contributions to be made by Anglicare the following was proposed:

- Sandon Point Drive connection and Tramway Creek road bridge;
- Cooksons Creek road bridge;
- Internal road works and carparking within the Anglicare site;
- Regional parkland and riparian corridor rehabilitation on Cooksons Creek;
- Turpentine Forest rehabilitation and embellishment;
- Regional parkland and riparian corridor rehabilitation on Tramway Creek; and
- Stormwater management works

The report outlined that Anglicare (Anglicare) would retain ownership and management responsibility for the Turpentine Forest, Cookson Creek riparian corridor, and internal roads (other than the link road). Public access will be available through these areas on the Anglicare site.

The link road running through the Anglicare site parallel to the Illawarra Rail line will be dedicated to Council after it is constructed. The link road will be maintained by Anglicare for 6 months after it is dedicated, after which time it would be maintained by Council.

The document also sought an exemption from payment of Section 94A contributions.

The Minister, in assessing the application, determined that the planning agreements be excluded from the Concept Plan approval as the matters proposed in the contributions document related to local matters. The Minister considered it inappropriate to approve the terms of any planning agreements as part of the Concept Plan given that it may either pre-empt the outcomes of negotiations or not reflect the current state of negotiations between the parties.

In respect of the modification application, Anglicare is proposing the following contributions:

- Sandon Point Drive connection and Tramway Creek road bridge;
- Cooksons Creek pedestrian boardwalk;
- Internal road works and carparking within the Anglicare site;
- Regional parkland and riparian corridor rehabilitation on Cooksons Creek;
- Turpentine Forest rehabilitation and embellishment;
- Regional parkland and riparian corridor rehabilitation on Tramway Creek along the northern bank adjacent to the site; and
- Stormwater management works.

A letter of offer reflecting the above will be provided to Council prior to the lodgement of the first detailed development application.

In respect of Section 94A contributions, it is proposed that any development undertaken by Anglicare would be exempt from paying the contributions, consistent with the Direction issued by the Minister for Planning under Section 94E of the Environmental Planning and Assessment Act 1979 dated 14 September 2007 – being that seniors housing provided by a social housing provider is exempt.

If the dwellings in the Ocean View and Hilltop Precinct are developed by a private developer and delivered as standard residential accommodation, then that development would be subject to the Section 94A Plan and would be required to pay contributions.

5.16 Geotechnical

Douglas Partners has prepared a preliminary geotechnical assessment for the proposed development (**Appendix V**). The report provides commentary on subsurface conditions and construction methods. Whilst further investigation will be required at the detailed design stage, Douglas Partners are of the opinion that the proposed development is feasible from the geotechnical perspective.

Commitment 42 states that a further geotechnical assessment is to be undertaken at a later stage prior to works commencing to manage land stability. This has been amended to require that a detailed geotechnical investigation is to be submitted with each detailed development application.

5.17 Structural

A Structural Statement has been prepared by Partridge and is provided at **Appendix W**. The statement includes a review of the original Concept Plan, and the modified proposal and provides recommendations and guidance as to any new structural considerations that need to be factored into the detailed design phases.

6.0 Mitigation Measures

The collective measures required to mitigate the impacts associated with the proposed modifications are detailed in **Table 15** below. These measures have been derived from the previous assessment in **Section 5** and those detailed in appended consultants' reports.

Table 15: Mitigation Measures

Mitigation Measures
Biodiversity <ul style="list-style-type: none"> Commitment 24 has been amended to require future Development Applications to be accompanied by BDARs confirming the impacts of the development and the credits required to be obtained
Flooding & Stormwater <ul style="list-style-type: none"> Amendments to the stormwater management strategy are proposed to reflect the revised development layout. The Statement of Commitments have been updated to reflect the revised strategy (Commitment 4). An acoustic barrier will be provided along the western boundary of the site which will also act as a flood barrier.
European Heritage <ul style="list-style-type: none"> New commitments proposed (16A and 16B) which require the Proponent to implement the MDC recommendations of interpretive signage and consideration of street names which reflect the heritage values of the site.
Aboriginal Heritage <ul style="list-style-type: none"> Development Footprint amended to ensure no development occurs within the Aboriginal Sensitive area of the site. VMP to be referred to RAPs for consultation and comment prior to finalisation – Refer to commitment 22 which has been updated. Commitments 12-14 amended to reflect the recommendations of the MDCA report and also to reflect the further archaeological investigations that have been undertaken since the approval of the Concept Plan.
Ecological Sustainable Development <ul style="list-style-type: none"> A new commitment (Commitment 47) is proposed which requires future applications to detail how the recommended ESD measures outlined in Cundall's report have been incorporated into the proposals.
Contributions <ul style="list-style-type: none"> A letter of offer proposing public benefits as outlined in Section 5.14 of the EAR will be provided to Council prior to the lodgement of the first detailed development application.
Geotechnical <ul style="list-style-type: none"> Commitment 42 to be updated to require detailed Geotechnical reports to be submitted with each detailed development application.
Pedestrian Paths <ul style="list-style-type: none"> Future detailed applications will provide information demonstrating that the proposed crossing will not generate any unacceptable environmental impacts by way of flooding or riparian impacts. The applications will also demonstrate that the proposed paths will be constructed at suitable gradients for equitable access.

7.0 Justification

The proposed modification to the Approved Sandon Point Concept Plan is justified in that it will deliver a greater range of housing choice on the site. The proposal seeks to replace apartment buildings and the RACF in the Hilltop and Ocean View Precincts with two storey dwellings representing a decrease in density and development that is more in keeping with that existing to the north in the Stockland development (McCauley's beach estate).

The proposal maintains the core elements of the Approved Concept Plan proposing residential accommodation within three precincts on the site and retention and rehabilitation of the Turpentine Forest and Cooksons Creek riparian corridor. The proposal will also provide the missing link to the main north-south route through the Sandon Point Precinct.

The proposed development will have reduced visual impact due to the decreased density and height of the dwellings in the Ocean View and Hilltop Precincts. It will also have reduced impacts on the riparian corridor due to the removal of the weir and vehicular bridge across Cooksons Creek. The proposal will result in a minor increase in traffic generation if the dwellings in the Hilltop and Oceanview precincts are occupied as standard residential development as opposed to seniors housing. Notwithstanding, Transport and Traffic Planning Associates have reviewed this impact and are of the opinion that the road network can accommodate the additional traffic movements without any unacceptable environmental impacts.

7.1 Environmental Impacts

Section 5.0 of this EAR provides a detailed assessment of potential environmental impacts of the proposed modification to the Approved Concept Plan. This section provides that the environmental impacts of the proposed modifications are acceptable, subject to the implementation of the mitigation measures set out at **Section 6.0**.

Additionally, the four principles of ecologically sustainable development have been considered in this project, namely:

- The precautionary principle;
- Intergenerational equity;
- Conservation of biological diversity and ecological integrity; and
- Improved valuation and pricing of environmental resources.

An analysis of these principles follows.

Precautionary Principle

The precautionary principle is utilised when uncertainty exists about potential environmental impacts. It provides that if there are threats of serious or irreversible environmental damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation. The precautionary principle requires careful evaluation of potential environmental impacts in order to avoid, wherever practicable, serious or irreversible damage to the environment.

Section 5.0 above sets out the evaluation of environmental impacts of the proposal, providing an assessment based on scientific data and accepted standards and assessment criteria. This EAR has not identified any serious threat of irreversible damage to the environment due to a lack of scientific certainty and therefore the precautionary principle is not relevant to the proposal.

Further to the above, additional environmental studies and assessments will be undertaken as required for the detailed design and construction of development in future Project Applications.

Intergenerational Equity

Inter-generational equity is concerned with ensuring that the health, diversity and productivity of the environment are maintained or enhanced for the benefit of future generations. The proposal has been designed to benefit both the existing and future generations by:

- Increasing housing supply and the diversity of housing supply in order to meet the housing needs of both the current population but also to allow for flexible housing options to enable aging in place and maintaining a sense of community whilst residents age and their needs change.
- Environmental features of the site are preserved and enhanced for enjoyment by future generations.

Conservation of biological diversity and ecological integrity

The principle of biological diversity upholds that the conservation of biological diversity and ecological integrity should be a fundamental consideration. As demonstrated in **Section 5.7** above and **Appendix K** the proposed modifications will ensure the conservation of flora and fauna communities. The preservation of the Cookson Creek riparian corridor and Turpentine Forest assists in the protection and long term viability of biological diversity within the site.

Improved valuation, pricing and incentive mechanisms

The principles of improved valuation and pricing of environmental resources requires consideration of all environmental resources which may be affected by a proposal, including air, water, land and living things. Mitigation measures for avoiding, reusing, recycling and managing waste during construction and operation would be implemented to ensure resources are used responsibly in the first instance. Ecologically sustainable design will also be implemented in the detailed design of the proposed buildings.

Additional measures will be implemented to ensure no environmental resources in the locality are adversely impacted during the construction or operational phases.

7.2 Suitability of the Site

The original assessment and determination of MP06_0094 found that the site was suitable for the development envisaged under the Concept Plan. The site continues to be suitable for the development as modified as it:

- is located in an urban area with compatible surrounding land uses;
- is located in an area that requires diverse house stock including seniors housing and private residential dwellings;
- has a high level of residential amenity particularly with district and ocean views and natural landscape features; and
- has existing utility and infrastructure that can be augmented to effectively service the development and the future residents.

Conversely, the proposed modified development is suitable for the site in that:

- the reduced scale and intensity of the development is more compatible with the surrounding low density residential uses;
- it diversifies the housing stock on the site, therefore can better address housing supply issues in the Illawarra region
- it does not extend outside of the approved developable area, therefore the forest and riparian corridor on parts of the site which have value for recreational and biodiversity conservation purposes will still be conserved and rehabilitated;
- it maintains community facilities and ancillary uses to support future residents;
- it maintains appropriate infrastructure provision to ensure that the current and future needs of the local and regional community can be met; and
- it effectively manages environmental impacts both short and long term to minimise risk to the community and ensure the protection of the site sensitives.

7.3 The Public Interest

The original assessment and determination of MP06_0094 found that the Concept Plan was in the public interest.

The proposed modification to the Approved Concept Plan is considered to be in the public interest as it will:

- facilitate a viable development scheme that will rejuvenate a site that currently comprises hazardous and derelict industrial buildings;
- diversify the available housing stock in the Illawarra region;
- preserve additional areas of Aboriginal archaeological sensitivity;
- maintain a compact built form to minimise sprawl and the costs of inefficient growth;
- contribute to the on-going development of a diverse and vibrant residential community;
- directly respond to the market demand for new private residential dwellings within the area;
- ensure that infrastructure will be delivered to ensure that the requirements of the new population can be met;

- create a more vibrant and activated precinct that provides a range of day to day services and offerings for the local community; and
- ensure that all environmental impacts can be adequately managed and/or mitigated.

8.0 Conclusion

The modification application seeks approval for the following changes to the Sandon Point Concept Plan as it applies to the Anglicare site:

- Relocation of the Residential Aged Care Facility (RACF) from the Hilltop Precinct to the Central Precinct and reduction in the number from 120 beds to approximately 80 beds;
- Reduction in the number of Independent Living Units from 250 to approximately 140 units;
- Replacement of three storey apartment buildings and the RACF in the Ocean View and Hilltop Precincts respectively with approximately 55 residential dwellings (including multi dwelling housing / townhouses / terraces / semi-detached dwellings). These will be occupied as either standard residential dwellings or seniors accommodation depending on market feasibility at the time of construction;
- Reduction of the development footprint in the Ocean View Precinct and protection of an Aboriginal Archaeological Site;
- Removal of the vehicular crossing over Cooksons Creek and replacement with a pedestrian board walk;
- Replacement of Asset Protection Zones with defendable zones, consistent with those approved under Mod 1 on the Stockland portion of the Approved Concept Plan;
- Introduction of an additional pedestrian crossing from the Central Precinct to the existing paths down to the beach zone;
- Realignment of a small section of Wilkies Walk to facilitate vehicular access to land zoned for residential purposes to the north-east of the site; and
- Amendments to the water management strategy to reflect the revised development and introduction of an acoustic barrier along the western boundary of the site which will also act as a flood barrier.

This EAR provides an assessment of the environmental impacts of the project in accordance with the SEARs and sets out the undertakings made by Anglicare to manage and minimise potential impacts arising from the development. Overall, it is considered that the proposed modifications of the Concept Plan have limited environmental consequences beyond those which have been the subject of assessment under the Approved Concept Plan and in many cases are reduced due to the decreased density of development now proposed. Importantly, any limited environmental consequences or impacts associated with the proposed modifications can be appropriately managed and mitigated. The environmental assessment of the proposed modifications is set out at **Section 5.0** of this EAR and a consolidated set of mitigation measures is provided at **Section 6.0**.

The application is recommended for approval given the following reasons:

- The proposed development will provide a greater variety of accommodation choice on the site;
- Supporting technical studies which accompany this modification confirm that the environmental impacts associate with the proposal are generally positive and will not give rise to any adverse impacts; and
- The proposed development is suitable for the site and is in the public interest.