

17 December 2018

Stevens Holdings Pty Limited

Final Preliminary Documentation

Iluka Residential Subdivision, Hickey Street, Iluka NSW (Lot 99 DP823635)
Environment Protection and Biodiversity Conservation Act 1999 (EPBC 2017/8003)

OCEAN PARK CONSULTING

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Overview:	Proponent:	Stevens Holdings Pty Limited
This report provides a response to the Australian Government Department of Environment and Energy request for additional documentation for the controlled action assessment by preliminary documentation for the proposed residential subdivision at Hickey Street, Iluka, NSW.	Proponent Contact:	Ben Johnson
	Proponent Reference:	Iluka Residential Subdivision


Prepared by:	Document	Report No. DEE-05
	Project	0420
 OCEAN PARK CONSULTING PTY LIMITED ABN: 12 126 508 870 Delivery Management • Approvals Engineering • Environmental Planning • Integrated Infrastructure Planning	Office Address: Suite 8, Miami Central 2098 Gold Coast Highway Miami QLD 4220 Postal Address: PO Box 99, Miami QLD 4220 Phone: 07 5554 6661 Email: rangi@oceanparkqld.com.au	

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ATTACHMENTS:

ATTACHMENT 1 – Birrigan Gargle Local Aboriginal Land Council letter

ATTACHMENT 2 – DEE Letters

ATTACHMENT 3 – Community Subdivision Drawings

ATTACHMENT 4 – Landscape Masterplan

ATTACHMENT 5 – Habitat Management Plan

ATTACHMENT 6 – Keystone Ecological Response Report

ATTACHMENT 7 – Aboriginal Cultural Heritage Management Protocol

ATTACHMENT 8 – Original EPBC Act Referral Form and Attachments – Iluka Residential Subdivision, Hickey Street, Iluka, NSW

1.0 EXECUTIVE SUMMARY – CONCLUSION

1.1 The Community Subdivision, Land Owner and the Proponent

The Birrigan Gargle Local Aboriginal Land Council (BGLALC) is the owner of the land, Lot 99 DP823635, the subject of the community subdivision development application.

The BGLALC letter dated 3 April 2018 provides the description of the importance of development of the BGLALC land at Iluka (refer Attachment 1).

The BGLALC have a specific vision for its land situated in Hickey Street, Iluka, as it will generate income to support its community vision including cultural interaction, education and training, employment, housing, improvements to Ngaru Village, support programs, crafts, transport, and playgrounds.

The community subdivision is a means to generate an income for the BGLALC. The community subdivision will facilitate the BGLALC vision and enable the BGLALC community to strengthen its future direction towards self-determination, and moving towards reaching its goals in a timely manner.

The BGLALC (the Land Owner) have entered into an agreement with Stevens Holdings Pty Limited (The Proponent) to develop the land by way of a residential subdivision.

The Community Scheme Subdivision is shown on the drawings listed in Table 1.1 – Development Drawings (Attachment 3).

TABLE 1.1 – DEVELOPMENT DRAWINGS			
Drawing No.	Title	Date	Prepared By
PO147-04	Masterplan	June 2017	onecollective URBANDESIGNSTUDIO
PO147-05	Vegetation Zones	June 2017	onecollective URBANDESIGNSTUDIO
PO147-06	Development Staging Plan	June 2017	Onecollective URBANDESIGNSTUDIO
PO147-07	Management Units – External Road Verge	March 2018	Onecollective URBANDESIGNSTUDIO
PO147-08	Management Units – New Public Road Verge	June 2018	Onecollective URBANDESIGNSTUDIO
PO147-09	Indicative Community Scheme - Staging First Development Lot	June 2017	Onecollective URBANDESIGNSTUDIO
PO147-10	Indicative Community Scheme Staging - Key Elements	June 2017	Onecollective URBANDESIGNSTUDIO

1.2 ‘Controlled Action’ – Preliminary Documentation

A Development Application has been lodged with Clarence Valley Council, NSW for a residential subdivision of Lot 99 DP823635 Hickey Street, Iluka, NSW.

On 7 August 2017, the proponent lodged with the Australian Government Department of Environment and Energy, the original EPBC Act Referral Form and Attachments – Iluka Residential Subdivision, Hickey Street, Iluka, NSW (refer Attachment 8).

On 6 October 2017, a delegate for the Minister of the Commonwealth, Department of Environment and Energy (DEE) determined that the proposed subdivision is a “Controlled Action” within the meaning of the Environment Protection and Biodiversity Conservation Act 1999 (EPBCA) and is to be assessed by way of the submission of Preliminary Documentation.

In this regard the DEE has provided Guidelines for the preparation of the Preliminary Documentation. These Guidelines require the following:

- (i) The Preliminary Documentation (PD) is to be a stand-alone document.
- (ii) The PD should fully assess the direct and indirect impacts upon all EPBCA listed threatened species and ecological communities, world heritage properties and national heritage places.
- (iii) The PD is to: -
 - (a) Describe the Action
 - (b) Describe the Existing Environment
 - (c) Address the potential impacts
 - (d) Describe the proposed Avoidance, Mitigation and Management Measures
 - (e) Describe any proposed offsets
 - (f) Outline the relevant social and economic impacts
 - (g) Provide information on the environmental record of the person proposing to take the action
 - (h) Provide relevant information to enable the delegate’s consideration of the principles of ecologically sustainable development, as defined in Part 1, section 3A of the EPBCA
 - (i) Include outcome-based Conditions
 - (j) Reach an overall conclusion as to the environmental acceptability of the proposed action, reasons justifying the action and measures proposed or required by way of offset for any residual; impacts on MNES matters and the relative degree of compensation.

In accordance with the above requirements this PD Package is a stand-alone document. Each of the relevant matters for inclusion in the document is addressed in the following Sections: -

- Section 1 – Executive Summary - Conclusion
- Section 2 – Preliminary Documentation Format and Scope
- Section 3 – Description of the Action
- Section 4 – Description of the Existing Environment
- Section 5 – Direct and Indirect Impacts upon all EPBCA listed Threatened Species and Ecological Communities
- Section 6 – Proposed Avoidance, Mitigation and Management Measures
- Section 7 – Offsets Consideration
- Section 8 – Economic and Social Matters
- Section 9 – Stevens Holdings Pty Limited Environmental Record
- Section 10 – Principles of Ecologically Sustainable Development
- Section 11 – Outcome Based Conditions
- Section 12 – Meeting the Objects of the EPBC Act
- Attachments – Supporting Information

Refer to Attachment 2 for a copy of the DEE letters relating to the “Controlled Action” dated 6 October 2017 and 25 October 2017.

Refer to Attachment 8 for a copy of the original EPBC Act Referral Form and Attachments – Iluka Residential Subdivision, Hickey Street, Iluka, NSW.

1.3 Environmental Acceptability of Proposed Action (Residential Subdivision)

1.3.1 Environmental Acceptability – Overview

The conclusion drawn from this Preliminary Documentation response demonstrates the proposed development by way of Community Subdivision of the land is environmentally acceptable.

Extensive ecological surveys have been undertaken to understand the development land and its environment. The ecological surveys are in addition to assessments undertaken for the land and environs for cultural heritage, acid sulfate soils, possible soil contamination due to former sand mining activities, traffic assessments, bushfire assessments and management, geotechnical, stormwater management and civil engineering assessments for the built form street and infrastructure provisions.

Particular emphasis was taken to place in context the development land and its proximity to the designated Gondwana Rainforests of Australia (Iluka Nature Reserve), World Heritage Property and National Heritage Place.

Also, the spatial context of the development land and the Iluka Nature Reserve in proximity to other regional national parks such as the Broadwater National Park, Bundjalung National Park, and Yuraygir National Park. These regional national parks in particular provide habitat for the proposed development potential impact threatened species, and nominated Iluka Nature Reserve OUV constituent species.

The potential impacts for the DEE identified threatened species of the Koala, Scented Acronychia, Spot tailed Quoll, Grey-headed Flying-fox were identified through the proposed development analysis and assessments as follows:

- Direct loss of foraging habitat;
- Direct loss of sheltering habitat;
- Fragmentation of habitat;
- Edge effects;
- Road strike;
- Dog attack.

The potential impacts for the DEE nominated Iluka Nature Reserve OUV constituent species – White-eared Monarch, Wonga Pigeon, Wompoo Fruit-Dove, Rose-crowned Fruit-cove, Superb Fruit-Dove, Rufous Fantail, Eastern Free-tail Bat, Little Bentwing Bat, and Eastern Long-eared Bat, were considered through the development analysis process to include:

- Habitat clearing, fragmentation, obstruction to fauna movement, increased mortality and light pollution;
- Weed invasion, increased predation by domestic pets;
- On the distribution and abundance of nominated OUV species in the Iluka Nature Reserve; and
- On the existing integrity, management and protective arrangements of the Iluka Nature Reserve.

Having regard to the potential impacts identified for the particular species, an integrated approach to various ameliorating and offsetting measures are proposed to be implemented for the development. The primary instrument for the implementation of these measures is through the urban design of the community subdivision layout and built form characteristics, and preparation of the Habitat Management Plan.

Environmental Management and Reporting

The development key biodiversity management tool is the development and implementation of the Habitat Management Plan (HMP). The HMP is to be implemented in conjunction with the other development management plans. This integrated approach incorporates the following important strategies and approaches:

➤ ***Cultural Heritage Plan***

- The proposed subdivision identifies and facilitates the vision of the BGLALC as the land owner;
- A Cultural Heritage Assessment and an Archeological Assessment has been prepared and adopted with all relevant stakeholders, and in accordance with the relevant Australian Government and NSW Government Legislation;
- The Aboriginal Cultural Heritage values are incorporated by reference through the HMP and other relevant development construction management plans.

➤ ***Urban Design***

- Design of the subdivision incorporates water sensitive urban design, wide verge areas for landscape planting, traffic control devices to slow vehicle speed, suitable grid pattern to facilitate fauna movement, control of lighting to avoid glare and potential impact on fauna, birds and bats;
- Incorporates HMP provisions and Landscape Master Plan attributes;
- The urban design facilitates the subdivision on land identified for urban development in the NSW Government Department Planning and Environment – North Coast Regional Plan 2036, as part of the Clarence Valley Urban Growth Area. The development is also situated on land zoned R2 Low Density Residential in the CVC Local Environmental Plan 2011.

➤ ***Habitat Management Plan***

- The HMP has been prepared and to be implemented for the preconstruction, construction and ongoing use post initial subdivision construction phases. The HMP incorporates inspections, actions and reporting and responsibility for actions;
- Offset planting within the park areas of preferred food trees for the nominated species;
- Parks (bushland retention) – reservation and conservation management of park areas to be under the control of the Community Association through implementation of the HMP.

➤ ***Landscape Master Plan***

- The Landscape Master Plan is to incorporate replanting offsets as described in the HMP;
- Landscape planting – within street verges to facilitate movement of fauna (in particular the Koala);
- To maintain new public road verge areas by Community Association verge areas to be protected by positive covenants.

➤ ***Nest Box Strategy***

- In accordance with the HMP, prepare and install appropriate nest boxes for the identified species;
- Provision of nest boxes prior to felling of hollow bearing trees;
- Community Association to monitor and maintain on an ongoing basis the placed nest boxes within the park areas.

➤ ***Land Title Strategy***

- The Subdivision is by way of a Community Scheme;
- Community Association is responsible for ongoing maintenance of the community property (Lot 1) parks and relevant management and reporting in the parks as described in the HMP;
- Maintenance of portions of adjacent public road reserve and new public road areas to be undertaken by the Community Association protected through positive covenants.

➤ ***Fencing Strategy***

- Fencing for parks to not restrict fauna movement;
- Fencing for future houses to contain domestic dogs in rear yard;
- Fencing for future houses to discourage Koala ingress to rear yards that may house a dog and to be provided with structures to enable safe exit if accidental entry by Koala.

➤ ***Construction Management***

- Protection of habitat areas during the construction phase, as described in the HMP;
- Provide and implement the Erosion and Sediment Control Management Plan;
- Implement where necessary the Acid Sulfate Soil management approaches.

➤ ***Water Quality Strategy***

- The subdivision includes Water Sensitive Urban Design to Clarence Valley Council principles in the proposed built form;
- Incorporates erosion and sediment control plan;
- Future dwellings to be encouraged to provide onsite rain water tanks and roof water treatment areas.

➤ ***Threatened Species Management***

- Threatened Species Management identified and provided for in the HMP;
- Specific control of weeds particularly high threat weeds and to limit potential future weed distribution;
- Prepared and to be implemented for those target threatened species known for the site and for the potential of those species not known onsite or immediate environs.

➤ ***Nominated Iluka Nature Reserve OUV Constituent Species Management***

- Ameliorating measures identified and provided for in the HMP;
- The spatial context of the Iluka Nature Reserve to the development site is known and understood. Management approaches to minimise impacts on the Iluka Nature Reserve developed accordingly;
- Specific control of weeds particularly high threat weeds and to limit potential future weed distribution.

➤ ***Ameliorating and Mitigation Approach***

- The development proposed subdivision land analysed for relevant flora and fauna and ameliorating strategies contained in the HMP;
- The development urban design incorporates mitigating strategies such as facilities for reduction in traffic speeds;
- Ability for ongoing environmental awareness to be provided to proprietors of the Community Scheme lots through the Community Association.

➤ **Offset Package**

- Offset planting of preferred food trees for the nominated species within the new public road verge;
- An integrated approach adopted for the site analysis, subdivision urban design and proposed development management plans, for construction and future residential use phases;
- Replanting schedules developed for flora species as habitat and food tree for identified fauna, including the Koala.

➤ **Connectivity Approach**

- Connectivity values analysed and accommodated for in the urban design and HMP;
- Existing higher quality habitat retained in the common property (Lot 1) parks, to be managed through the HMP, by the Community Association;
- The urban design incorporates perimeter common property (parks) to the original parent lot, and also includes perimeter streets (low speed) to the parks, with wide verges for fauna movement corridors.

➤ **Fire Management**

- Implement the appropriate Bushfire Management Strategies;
- Implement appropriate fire regime management for the park habitat areas and Asset Protection Zone provisions;
- Construct the required water supply fire hydrant connection points, to increase the capacity of the built environment to control fire outbreak.

➤ **Education and Awareness Approach**

- Construction phase briefing of contractors in relation to environmental awareness, obligations and the site HMP requirements;
- Preparation and implementation of an education package to be provided to all new allotment owners to highlight the sensitive nature of the land, its surrounds and their environmental obligations;
- Community Association ongoing role to inform the resident proprietors in the Community Scheme, including preparation and distribution of education material to encourage responsible pet ownership.

➤ **Infrastructure Services**

- Connection to be made to existing and adjoining infrastructure;
- Street lighting to be directional to avoid glare, also to be compliant with relevant Australian Standards;
- Infrastructure to be underground except for lighting and electricity boxes.

➤ **Outcomes based Conditions Approach**

- Outcomes based conditions can reasonably be applied to the development approval for the EPBC Act considerations;
- The outcomes based conditions proposed incorporates a performance based approach;
- The outcomes based conditions proposed identify the environmental management strategies included in the urban design, land titling, community subdivision staging and the HMP, and reflect a reporting regime to the Australian Government Department Environment and Energy.

1.3.2 Birrigan Gargle Local Aboriginal Land Council – Development Timing Commitment

- In 2004 Stevens Holdings were invited by the BGLALC to assist with the development of one of its land holdings being Lot 99 DP823635 (zoned R2 - Low Density Residential);
- In 2005 Stevens Holdings signed an MOU with the BGLALC for the development (by subdivision of land) of Lot 99 DP823635;
- All approvals required by the NSW Aboriginal Land Council (ALC) under the NSW Aboriginal Land Rights Act (ALC Act) were obtained in 2012.

1.3.3 Proposed Development - Community Subdivision

- An outcome of the development application process has resulted in the subdivision to be now developed under a Community Subdivision format, pursuant to the NSW Community Land Development Act 1989 and the NSW Community Land Management Act 1989.
- Under the community subdivision, all Community Property land within the parent lot boundary will be managed by the resident Community Association. The Community Association is to manage the community land (Lot 1) including the parks, and it is proposed will also maintain the public road street verges.

The new public road street pavement to be under the jurisdiction of the Council.

- The individual lot owner in the Community Scheme owns and maintains the lot and buildings on the individual lot.
- Through the Clarence Valley Council input, statutory referral agency input and having regard to the submissions by stakeholders and to avoid and reduce the impact of the proposed subdivision on the biodiversity values of its environs particularly the Iluka Nature Reserve, its form and characteristics have been modified as indicated in the following Table 1.3.3 – Proposed Amendments – To Avoid and Reduce Impacts – Key Items. Through this process it has been recognised there is no viable opportunity for further revision of the subdivision masterplan layout.

Table 1.3.3 – Proposal Amendments – To Avoid and Reduce Impacts – Key Items

Item	Original	Current Proposal	Difference Status Comparing Original to Current Proposal
Allotments Number (Residential)	162	140	22 Reduction
Development Footprint (Ha)	16.57Ha (approx.)	14.11Ha (approx.)	2.46Ha Reduction
Park Areas Approx. (Ha)	2.84Ha (approx.)	5.3Ha (approx.)	2.46Ha Increase
Length new Street or existing Road adjoining Park (retained vegetation) (m)	975m (approx.)	2,185m (approx.)	1,210m (approx.) Increase

From an ecological perspective, Keystone Ecological in the report - *Ashby, E and McTackett, A. (2018) Ecological Response for Preliminary Documentation, Hickey Street, Iluka, Clarence Valley LGA. Unpublished report, Keystone Ecological* - report dated 16 May 2018, identifies the following key subdivision attributes to reduce impacts:

- The park areas have been nominated and located to capture the highest value habitats as well as provide important corridors for local fauna movement.
- Parks located and distributed to protect important ecological features.
- Connectivity has been achieved by locating parks to retain connectivity for biota known to use the area or likely to occur in the area.
- Separation of the parks from lots achieved to prevent accidental indirect impacts (such as herbicide drift, spills of polluted material) provide a buffer to garden landscape, and to discourage garden refuse or other waste dumping.
- Fire asset protection zones (APZ) areas are contained in street reserves and not impacting on retained bushland.
- Tree planting in wide verges to provide opportunity to facilitate fauna movement, through the completed development.

1.3.4 Development Application Consultation Process

The consideration of the proposed development has incorporated various consultation processes, including input by CVC and referral agencies;

- The development application was lodged on 11 December 2015 and was processed under the provisions of the NSW Environmental Planning and Assessment Act – one of the processes included placing the development on public advertising to enable review and submissions to be made to CVC. It is noted CVC also extended the deadline for submissions to be made.
- The development application has been referred to the NSW Northern Joint Regional Planning Panel (JRPP).
- There was a JRPP public briefing meeting held in Iluka in September 2017.
- The JRPP have not made a determination in relation to the development application.
- Referral to Australian Government Department of the Environment and Energy for EPBC Act considerations – 7 August 2017 (EPBC No. 2017/8003).
- As part of the EPBC Act referral there is further opportunity for community comment on the PD process.
- The Gondwana Rainforest of Australia situated within the Iluka Nature Reserve (described as Lot 63 DP751379) is identified as a World Heritage Property and a National Heritage Place.
- The property boundary of the Iluka Nature Reserve is located to the east of the Iluka Road reserve. The Iluka Road Reserve is some 40.23m in width.
- The proposed subdivision parent lot – Lot DP823635 existing eastern boundary is separated from the Iluka Nature Reserve property boundary by Iluka Road and a parcel of land identified as “unidentified” – this appears to have been a former mining lease area.

- The future land uses situated on the eastern side of Lot 99 DP823635 and adjoining Iluka Road are retained bushland areas future community lot land being Park B, Park D, and Park E.
- The distance from the eastern property boundary of Lot 99 DP823635 to the Iluka Nature Reserve property boundary ranges from 40.23m in the south, to some 445m in the north.
- The distance from the Iluka Nature Reserve property boundary to the nearest new street reserve (Street 7) in the subdivision south-east corner is some 103m.
- There is no formal policy in the DEE guidelines to signify a setback to World Heritage properties is to be 100m from the World Heritage listed property boundary.
- The distance from the subdivision Lot 99 DP823635 eastern property boundary to the indicative line of the extent of the Littoral Rainforest situated within the Iluka Nature Reserve is some 220m.

1.3.5 Existing Environment

1.3.5.1 Proximity to Iluka Nature Reserve

The Community Subdivision is located in proximity to one of the Gondwana Rainforests of Australia, the listed World Heritage property and heritage place being within the Iluka Nature Reserve, Iluka.

The Community Subdivision is separated from the Iluka Nature Reserve by Iluka Road and an “unidentified” parcel of land forming part of the Bundjalung National Park. To the south the Community Subdivision is some 40m from the property boundary of the Iluka Nature Reserve, and to the north is some 445m from the Iluka Nature Reserve.

The closest point in the south from the Iluka Nature Reserve is some 103m to the street reserve boundary of the future subdivision.

It is noted the portion of the Gondwana Rainforest closest to the Community Subdivision parent boundary is some 220m.

1.3.5.2 Proximity to Regional National Parks

The Community Subdivision is located in proximity to Regional National Parks identified as the Broadwater National Park and the Bundjalung National Park. These Regional National Parks are under the jurisdiction and management of NSW National Parks and Wildlife Service.

The Plan of Management by NSW National Parks and Wildlife Service, dated August 1997, identifies in part the following:

“The area covered by this plan of management comprises three outstanding coastal reserves, Broadwater and Bundjalung National Parks and Iluka Nature Reserve, which are located on the far north coast of New South Wales. These areas protect most of the coastline between Iluka on the Clarence River and Ballina on the Richmond River and, together with Yuraygir National Park to the south, comprise a large conservation system which ranks in importance with only a handful of other conservation areas on the east coast of Australia. Iluka Nature Reserve is an outstanding example of littoral rainforest and is part of the World Heritage listed Central Eastern Rainforest Reserves (Australia) World Heritage area.

The coastal setting of the planning area is popular with holiday makers and is easily accessible from nearby coastal villages and towns. The main physical features of the two national parks are the beaches, headlands, estuaries and rivers and coastal sand plain and dune systems. Freshwater lakes and wetlands and as well as the estuarine lagoons are some of the hydrological features of the parks. This range of physical settings supports a diversity of habitats and wildlife including extensive heathlands and swamps.”

1.3.5.3 Ecological Survey and Results

The specialist, Keystone Ecological, has conducted substantial survey work within and adjacent to the Community Subdivision land between 2014 and 2017. The details of the survey and results are contained in the Keystone Ecological report - *Ashby, E and McTackett, A. (2018) Ecological Response for Preliminary Documentation, Hickey Street, Iluka, Clarence Valley LGA. Unpublished report, Keystone Ecological dated April 2018.*

The flora and fauna survey was conducted to best practice observing the six step process recommended in the Australian Government Department of Environment and Energy guidelines.

1.3.5.4 World Heritage Property - The Gondwana Rainforests of Australia (Iluka Nature Reserve)

The UNESCO Convention Concerning the Protection of the World Cultural and Natural Heritage, Saint Petersburg, Russian Federation, 24 June – 6 July 2012, identified for the Gondwana Rainforests of Australia in part:

“The Gondwana Rainforests of Australia is a serial property comprising the major remaining areas of rainforest in southeast Queensland and northeast New South Wales. It represents outstanding examples of major stages of the Earth’s evolutionary history, ongoing geological and biological processes, and exceptional biological diversity. A wide range of plant and animal lineages and communities with ancient origins in Gondwana, many of which are restricted largely or entirely to the Gondwana Rainforests, survive in this collection of reserves. The Gondwana Rainforests also provides the principal habitat for many threatened species of plants and animals.”

1.3.5.5 National Heritage Place - The Gondwana Rainforests of Australia (Iluka Nature Reserve)

The existing environment of the National Heritage Place – Iluka Nature Reserve is for the purposes of this Preliminary Documentation taken to be that of the World Heritage Property – the Gondwana Rainforests of Australia (Iluka Nature Reserve).

1.3.5.6 Listed Threatened Species and Communities

The DEE listed threatened species and their relationship to the development land is summarised below.

▪ Koala (*Phascolarctos cinereus*)

Listed as a Vulnerable species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and NSW *Biodiversity Conservation Act 2016*.

The presence of this species on site was confirmed in a single camera trap image.

Potential habitat for the Koala on site is recognised.

▪ Scented Acronychia (*Acronychia littoralis*)

Listed as an Endangered species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and NSW *Biodiversity Conservation Act 2016*.

Significant survey effort was undertaken in relation to this species.

The presence of this species on site was not confirmed, although potential habitat is recognised.

▪ **Spot-tailed Quoll (*Dasyurus maculatus maculatus*)**

Listed as an Endangered species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

The Spot-tailed Quoll not recorded onsite during survey.

Potential habitat for the Spot-tailed Quoll on site is recognised.

▪ **Grey-headed Flying-fox (*Pteropus poliocephalus*)**

Listed as a Vulnerable species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and NSW *Biodiversity Conservation Act 2016*.

Grey-headed Flying-fox not recorded during survey.

Potential habitat for the Grey-headed Flying-fox on site is recognised.

1.3.5.7 Gondwana Rainforest of Australia (Iluka Nature Reserve) Nominated Outstanding Universal Value (OUV) Constituent Species

The DEE listed threatened species and their relationship to the development land is summaries below.

➤ **White-eared Monarch (*Monarcha leucotis*)**

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

White-eared Monarch not recorded on or near site during survey.

Potential habitat for the White-eared Monarch on site is recognised.

➤ **Wonga Pigeon (*leucosarcia melanoleuca*)**

Not listed under Commonwealth or NSW legislation.

Survey considered adequate for this species as it was observed nearby but off site, and an image recorded on site by a camera trap in November 2014.

➤ **Wompoo Fruit-Dove (*Ptilinopus magnificus*)**

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Heard calling onsite one occasion.

Potential habitat for the Wompoo Fruit-Dove on site is recognised.

➤ **Rose-crowned Fruit-dove (*Ptilinopus regina*)**

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey undertaken using appropriate direct and indirect methods (observations in spot counts, opportunistic survey, targeted survey of offsite Littoral Rainforest, audio recording).

Survey considered adequate for this species as it was heard calling on one occasion on site and observed nearby in Iluka Nature Reserve.

➤ **Superb Fruit-Dove (*Ptilinopus superbus*)**

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey considered adequate for this species as it was heard calling on one occasion on site.

➤ **Rufous Fantail (*Rhipidura rufifrons*) – listed migratory**

Listed as a Migratory species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* but not listed under the NSW *Biodiversity Conservation Act 2016*.

Survey considered adequate for this species as it was observed foraging on a number of occasions, images caught on camera, and a pair was observed nesting in the vines in the vegetation of the western end of the site.

➤ **Eastern Free-tail Bat (*Mormopterus norfolkensis*)**

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey considered adequate for this species as calls were recorded that were identified to a “definite” level of certainty.

➤ **Little Bentwing Bat (*Miniopterus australis*)**

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey considered adequate for this species as calls were recorded that were identified to a “definite” level of certainty.

➤ **Eastern Long-eared Bat (*Nyctophilus bifax*)**

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Call recording was undertaken over several nights using two recording devices.

Survey considered adequate for this species as calls were recorded that were identified to a “possible” level of certainty.

1.3.6 Potential Relevant Impacts – Iluka Nature Reserve

1.3.6.1 World Heritage Property - The Gondwana Rainforests of Australia (Iluka Nature Reserve)

UNESCO – 24 June – 6 July 2012 identifies potential impacts on Gondwana Rainforests of Australia to be associated with impacts of climate change, high levels of visitation, fire management, and effects of invasion by pest species and pathogens.

1.3.6.2 National Heritage Place - The Gondwana Rainforests of Australia (Iluka Nature Reserve)

The potential impacts on the National Heritage Place – Iluka Nature Reserve are taken to be the same as those listed for the World Heritage Property – Iluka Nature Reserve.

1.3.6.3 Potential Impacts on listed threatened species and communities

The potential impacts on the DEE identified threatened species of Koala, Scented Acronychia, Spot-tailed Quoll, and Grey-headed Flying-fox relate primarily to the following:

- Direct loss of foraging and sheltering habitat;
- Fragmentation of habitat;
- Edge effects;
- Road strike;
- Dog attack.

1.3.6.4 Potential Impacts on Gondwana Rainforest of Australia (Iluka Nature Reserve) Nominated Outstanding Universal Value (OUV) Constituent Species

The potential impacts on the DEE identified threatened OUV constituent species of White-eared Monarch, Wonga Pigeon, Wompoo Fruit-Dove, Rose-crowned Fruit-dove, Superb Fruit-Dove, Rufous Fantail, Eastern Free-tail Bat, Little Bentwing Bat, and Eastern Long-eared Bat related primarily to the following:

- Habitat clearing, fragmentation, obstruction to fauna movement, increased mortality and light pollution;
- Weed invasion and increased predation by domestic pets;
- Distribution and abundance of nominated OUV species in the Iluka Nature Reserve;
- On the existing integrity, management and protective arrangements of the Iluka Nature Reserve.

1.3.7 Proposed Avoidance, Mitigation and Management Measures

1.3.7.1 Management of Construction and Future Land Use Activities

The proposed subdivision development will involve a number of activities, from clearing to subdivision infrastructure construction. A summary of these actions are:

- Works including clearing of vegetation are to be staged to provide an incremental loss of vegetative cover in the development footprint.
- Works guided by construction plans and the Habitat Management Plan.
- Civil contractors to be inducted by the Project Ecologist into the special ecological sensitivities of the site and potential animal welfare issues.
- Prior to clearing, the clearing area and works area will be clearly delineated to prevent accidental damage to retained vegetation or areas not yet planned for clearing.
- Safety of works personnel will be paramount, animal welfare protocols will be observed in order to minimise harm to resident fauna.
- Vegetation removal will be undertaken under ecological supervision and in accordance with the Habitat Management Plan.
- A special protocol for felling hollow-bearing trees will be detailed in the Habitat Management Plan and implemented.
- Environmental protections (such as sediment and erosion controls) will be implemented during construction activities.
- The Habitat Management Plan, weed control protocols will be observed during clearing to minimise the risk of spread of weeds.

- Earthworks will be undertaken to shape the ground for allotment and stormwater verge swales. Infrastructure will be constructed, including water supply, sewerage, electricity (above and below ground), telecommunications, stormwater drainage, streets, six (6) metre wide verges, street lighting, pathways and bicycle ways.
- Fire – Asset Protection Zones will be established and maintained incrementally around the completed assets.
- Parks established and conservation management undertaken in accordance with the Habitat Management Plan.
- Future housing by others will be constructed as each stage is available. The bushland / housing interface will be managed as an APZ.
- To prevent Koalas climbing into enclosed yards and potentially being attacked by dogs, external boundary fences will be designed to be Koala-proof. The design finishes will be of a smooth material (such as a Colourbond fence), with additional barrier material at the base.
- Overhanging branches, shrubs and trees will be removed where the property boundaries temporarily adjoin bushland during the staged construction. Intended to prevent Koala access.
- External plantings prohibited that would provide Koala access to enclosed yards.
- Community Subdivision residents will be provided with an Education Package, to highlight the special features of the site and surrounds, as well as the important obligations of the community to minimise adverse impacts on those special features. Obligations include; responsible pet ownership, responsible gardening, provision of escape ropes in pools for Koalas, traffic calming, and external lighting controls.

1.3.7.2 World Heritage Property and National Heritage Place - The Gondwana Rainforests of Australia (Iluka Nature Reserve) – Institutional Arrangements

The World Heritage Property and National Heritage Place – Iluka Nature Reserve is under the jurisdiction of the Australian Government through the key legislation of the EPBC Act and is managed by the NSW Government through the NSW Department of National Parks and Wildlife.

The proposed development does not in any way influence the existing institutional arrangements for the management of the Iluka Nature Reserve.

1.3.7.3 Listed threatened species and communities

The amelioration and offsetting measures for the DEE identified threatened species are summarised as follows for each identified species. It is considered the proposal is unlikely to pose a significant adverse impact on any of the identified species.

➤ Koala (*Phascolarctos cinereus*)

The principle response to the use of the site by the Koala is the retention of bushland in quantum and location and the habitat conservation of the management of the bushland in perpetuity by the Community Association.

There is to be new planting along the new street / road verges to facilitate movement of fauna – particularly Koala through the developed landscape.

There is to be offset planting of Koala food trees within the retained bushland areas (Parks A, B, C, D and E).

The development includes fire management by providing greater access to vegetation retained areas and includes water supply fire hydrants to augment fire management activities.

➤ **Scented Acronychia (*Acronychia littoralis*)**

The response to the ‘potential’ for the Scented Acronychia to occur on site is the retention and conservation management of the area most likely to provide potential habitat in all the bushland parks.

Soil borne pathogens and weeds have been identified as a threat to this species. Relevant management approaches have been included in the Habitat Management Plan (HMP).

Until there is a greater understanding of these reproductive ramifications, it is recommended by authorities that parent *Acronychia* species (*wilcoxiana*, *oblongifolia*, *imperfurata*) are not used in replanting or rehabilitation programs in *Acronychia littoralis* habitat (DECCW 2010a, 2010b).

Accordingly, this recommendation has been adopted in the HMP.

➤ **Spot-tailed Quoll (*Dasyurus maculatus maculatus*)**

As part of the Saving Our Species program (OEH 2018b) for the recovery of threatened species, the Spot-tailed Quoll has been classified as a “Landscape-managed species”. The key threats to the viability of landscape-managed species are loss, fragmentation and degradation of habitat, and widespread pervasive factors such as impacts of climate change and disease.

This is considered to be a rare species in the local region despite the presence of a great deal of potential habitat, most of which is in reserves. The potential habitat on site is not high quality, given the abundance of degraded vegetation, and the absence of den sites.

The small scale losses of potential habitat are unlikely to result in a significant adverse impact on the local population of this species.

➤ **Grey-headed Flying-fox (*Pteropus poliocephalus*)**

This species was not recorded on or near the site during survey. The temporary camp near the site had not been used since May 2016, but the subject site is within the nightly feeding range of the Maclean camp. Therefore the foraging resources of the site are accessible to this highly mobile species.

The recovery planning process for this species is well advanced, with a draft national conservation strategy (Commonwealth of Australia 2017), and a Management Strategy for the Maclean population (Geolink 2010).

Of the management actions detailed in the NSW Priority Action Statement, the highest priority actions for the conservation of this species relevant to the project area are:

- Increase the extent and viability of foraging habitat for Grey-headed Flying-foxes that is productive during winter and spring (generally times of food shortage), including habitat restoration/rehabilitation works; and
- Provide educational resources to improve public attitudes toward Grey-headed Flying-foxes.

The proposal is consistent with these actions in the restoration activities in the bushland Parks and the planting in the verges, plus the educational material to be supplied to new residents.

1.3.7.4 Gondwana Rainforest of Australia (Iluka Nature Reserve) Nominated Outstanding Universal Value (OUV) Constituent Species

The birds - listed below comprise the nominated Iluka Nature Reserve Outstanding Universal Values Constituent Species and are considered together.

- White-eared Monarch (*Monarcha leucotis*)
- Wonga Pigeon (*leucosarcia melanoleuca*)
- Wompoo Fruit-Dove (*Ptilinopus magnificus*)
- Rose-crowned Fruit-dove (*Ptilinopus regina*)
- Superb Fruit-Dove (*Ptilinopus superbus*)
- Rufous Fantail (*Rhipidura rufifrons*)

It is considered unlikely that the proposal will result in a significant adverse impact on the constituent bird OUVs. Importantly, the interaction of this species with the World Heritage estate is unlikely to be interrupted or diminished.

The configuration of the development footprint and the bushland Parks will retain the best of the habitats available on site.

These species are all highly mobile (some even migratory) and therefore able to exploit widely-separated resources. The additional fragmentation of habitat is unlikely to prevent or interrupt localised movements of these birds. Therefore, the connection of the habitats for these OUVs with the World Heritage property in Iluka Nature Reserve will not be severed.

Habitat enrichment (for example, by the addition of coarse woody debris) will enhance the foraging opportunities for the Rufous Fantail, Wompoo Pigeon and White-eared Monarch. Restoration and planting of fruit-bearing rainforest species will be of benefit to the Fruit-doves.

The bats - identified below that comprise part of the World Heritage Area nominated Outstanding Universal Values (OUV) Constituent Species are considered together for ameliorating and offsetting measures.

- Eastern Free-tail Bat (*Mormopterus norfolkensis*)
- Little Bentwing Bat (*Miniopterus australis*)
- Eastern Long-eared Bat (*Nyctophilus bifax*)

The small scale impacts of the proposal, coupled with the ameliorative and compensatory measures to be implemented, mean that the proposed development is unlikely to result in significant adverse impacts on the local populations of these species.

The vast majority of the remaining habitat for all species in the region is reserved in Iluka Nature Reserve and Bundjalung National Park.

The proposal will retain the best of the foraging habitats on site in the bushland Parks. The implementation of the conservation management program under the HMP will reverse further degradation, restore the habitats in the Parks, and prevent potential indirect impacts on retained foraging habitats.

All hollows to be removed that are judged suitable for microbats will be replaced by the installation of sets of robust nest boxes of an appropriate design in appropriate locations.

Further compensatory measures include offset planting of *Eucalyptus tereticornis* Forest Red Gum, *Eucalyptus propinqua* Small-fruited Grey Gum, *Corymbia intermedia* Pink Bloodwood and *Lophostemon confertus* Brush Box, supplemented by other plantings of trees with high value blossoms or fruit. As insectivores, all such plantings have the potential to improve their foraging habitat as these canopy trees will provide habitat for their insect prey.

1.3.8 Offset Considerations

The various integrated components of the proposed subdivision combine to reduce the likely load that the proposal will result in a significant adverse impact on the identified threatened species and the Iluka Nature Reserve (World Heritage Property and National Heritage Place) nominated OUV constituent species, including:

- The ecological assessments conducted to understand the subject land and its relationship with the Iluka Nature Reserve.
- Review and research to better understand the potential impacts on the identified threatened species and nominated Iluka Nature Reserve OUV constituent species.
- The configuration of the subdivision to facilitate fauna movement and better quality habitat retention.
- The configuration of the subdivision to slow vehicle speeds, adopt water sensitive urban design approaches.
- Development of a Community Subdivision Scheme title arrangement to enable all future property owners to control and maintain the community land (Lot 1 – all Parks).
- Preparation and proposed implementation of a comprehensive Habitat Management Plan – the responsibility of the proponent in the first instance, then the Community Association.
- Preparation and proposed implementation of a Landscape Master Plan for the new public roads.
- The Community Association to be responsible for areas protected by positive covenants of portions of adjoining public road verge areas and internal to parent lot new public road areas.
- Tree planting to replace fauna food tree species, to be planted in the park areas and new public road verges.

1.3.9 Economic and Social Matters

The Community Subdivision contributes favourably when considered for economic and social relationships at the Local, Regional and National level.

The Australian Bureau of Statistics (ABS) 2016 Census data for the Iluka “Urban Centres and Localities” (UCL) identifies for Iluka:

- People – 1,715;
- Aboriginal and / or Torres Strait Islander People – 2.5% of total population;
- Males – 50.8% of total demographic;
- Females – 49.2% of total demographic;
- Median Age – 62 years, compared to NSW and Australia median age of 38 years;
- Private dwellings – 1,273;

- Average people per household in Iluka – 1.9, compared to 2.6 average people per household in NSW and Australia;
- Median weekly household income for Iluka - \$722.00, compared to NSW median weekly household income \$1,486.00;
- Employment:
 - Worked full-time – 40.5% for Iluka, 59.2% for NSW;
 - Worked part-time – 44.5% for Iluka, 29.7% for NSW;
 - Away from work – 6.0% for Iluka, 4.8% for NSW;
 - Unemployed – 9.0% for Iluka, 6.3% for NSW.

The key elements of the economic and social relationships in particular for the Iluka (Community Subdivision) local context are identified as follows:

- **Economic self-sufficiency** - Successful completion of the development at Hickey Street, Iluka assists BGLALC achieve its vision, and facilitates BGLALC movement towards self-sufficiency and self-determination;
- **Sustainable and coordinated growth** – NSW North Coast Regional Plan 2036 identifies the Clarence Valley Local Government Area – Urban Growth Area Map – includes Lot 99 DP823635, for the urban growth area of Iluka, contained in Zone R2 – Low Density Residential, the subdivision is not out of sequence with planned urban development and infrastructure for Iluka.
- **Major infrastructure connectivity** – Proposed Community Subdivision located adjacent to Iluka Road has a connection to the Pacific Highway some 16km to the north-west of Iluka. Positive benefit – provides opportunities to reduced travel times, improved travel safety and improved transport efficiency.
- **Self-sufficiency** – The BGLALC as advised in its Vision, the Hickey Street development will assist BGLALC achieve its vision for its community: Step toward self-sufficiency, Step toward self- determination, Cultural interaction, Education and training, Employment, Housing, Improvements to Ngaru Village, and Support programs.
- **Indigenous Heritage** – Lot 99 is owned by the BGLALC, a Cultural Heritage Assessment has been conducted for the land, and an Archeological Assessment was undertaken for the land.
- **Housing supply – opportunities** – The Community Subdivision will provide fully serviced vacant land for the purpose of constructing future residential dwellings.
- **Housing choice, diversity potential and lifestyle options** – The vacant land allotments created as part of the community subdivision provides an opportunity for future housing choice, dwelling sites for future resident lifestyle options in Iluka and environs, has had regard to potential weather events and climate change through adoption of CVC development guidelines, acknowledges and manages biodiversity, and is connected with the Iluka street network for access to recreation facilities, school, shops.
- **Affordable housing** – Clarence Valley Council adopted a Clarence Valley Affordable Housing Strategy 2007. The proposed subdivision incorporates smaller sized lots as required by CVC.
- **Health and safety** – Is facilitated through open space bushland settings with perimeter roads for natural surveillance and fauna movement. Community management scheme for maintenance obligations for WSUD and retained bushland. Connects with Iluka bike path strategy. Encourages habitat awareness and management. Incorporates CPTED principles. Awareness and close proximity for lifestyle choices to the Iluka Nature Reserve (World Heritage Area), Bundjalung National Park and Iluka Village facilities.

- **Proposed project costs and Employment opportunities** – Provides stimulus for the local and regional economy through capital costs of works and wages paid to specialist designers, contractors, support personnel by wages, and other related expenditure for meals, accommodation and travel at the: Project initiation and statutory approvals phase, Design Phase, Construction Phase, Land Title Phase, and Land Marketing and Sales Phase.
- **Project Capital Investment** – Creates a land resource suitable for future housing construction on each allotment. Provides direct project capital cost items for infrastructure such as - roads, bushfire trail connections, water supply and sewer connections, electricity, telecommunications facilities and bushland areas.
- **Potential value added benefit** – Assists BGLALC move towards its vision for its community. The Community Subdivision - Community Association to be responsible for certain management actions such as – The retained bushland areas, protects and manages through the Habitat Management Plan, and Bushfire Management Plan, raises awareness for – Iluka Nature Reserve (World Heritage Area), Bundjalung National Park and Iluka Village facilities, and bushfire risk reduced.
- **Payments to Clarence Valley Council and Government Agencies** – Direct contributions will be made to agencies such as; payment of agency fees and charges to CVC for: Development application fees, Section 94 fee contributions Open space, community facilities, plan of management, Section 64 contributions – sewer and water supply headworks, CVC property rates, taxes and charges, land taxes, Stamp Duty, search fees, and GST.

1.3.10 Stevens Holdings Environmental Record

There are no proceedings pursuant to the EPBC Act against the proponent – Stevens Holdings Pty Limited.

1.3.11 Proposed Development meets ESD Principles

The EPBC Act, Part 1 – Preliminary, Section 3A Principles of Ecologically Sustainable Development, identifies certain ESD principles.

The proposed Community Subdivision meets the principles of ESD identified in the EPBC Act. Key elements identified to meet the EPBC Act ESD principles are summarised below. The proposed subdivision development has;

- had input from the land owner BGLALC;
- been prepared, lodged and following processes pursuant to the relevant NSW Government and CVC planning instruments;
- enabled third party submissions to be made in relation to the development;
- been referred to the NSW Joint Regional Planning Panel for consideration;
- been referred for consideration pursuant to the EPBC Act;
- been through a formal Aboriginal Cultural Heritage Assessment;
- a bush fire assessment with management strategies incorporated;
- a geotechnical assessment conducted and management plan identified;
- a traffic, bike and pedestrian management assessment and attributes managed accordingly;
- a civil engineering assessments – regarding water supply, sewer, stormwater drainage, streets, bicycle paths, fire trail connections earthworks and attributes managed accordingly;
- an acid sulfate soils assessments found to be no impact with management plans identified accordingly;

- a landscape management plan and found to be able to be managed with suitable plant species for future development of verge areas;
- investigated potential soil contamination from previous sand mining activities assessments conducted and found to be no impact;
- investigations into an apparent “grave site” assessed and found to be non-existent;
- provided for urban development through creation of housing allotments in the village of Iluka;
- incorporates CVC affordable housing policy allotments;
- incorporates water sensitive urban design principles for stormwater drainage;
- retained areas of bushland for ecological purposes;
- prepared and to be implemented a Habitat Management Plan;
- incorporates traffic calming facilities for human and fauna movements;
- recognised the proximity to the land to the east containing part of “The Gondwana Rainforest of Australia” World Heritage Property and National Heritage Place – Iluka Nature Reserve;
- recognised the proximity of the Bundjalung National Park – to the east of Iluka Road;
- to be developed as a Community Subdivision – with certain obligations to the residents of the subdivision in relation to implementing bushland habitat management plans, bushfire management plans, and street verge management plans.

1.3.12 Proposed Development meets the Objects of the EPBC Act

The Objects of the EPBC Act are described in Chapter 1 – Preliminary, Part 1 – Preliminary.

The proposed Community Subdivision meets the relevant Objects of the EPBC Act, as it has been:

- developed with input by the land owner BGLALC;
- prepared and lodged pursuant to the relevant NSW government and CVC planning instruments;
- through a formal Aboriginal Cultural Heritage Assessment;
- prepared with input from CVC and relevant NSW Government referral agencies;
- enabled third party submissions to be made in relation to the development;
- through a public meeting input phase;
- referred to the NSW Joint Regional Planning Panel for consideration;
- referred for consideration pursuant to the EPBC Act;
- prepared with a detailed assessment of the site and environs including the Iluka Nature Reserve (World Heritage property and National Heritage Place);
- reviewed and understand potential impacts on identified species;
- prepared and proposed to be implemented a Habitat Management Plan.

2.0 PRELIMINARY DOCUMENTATION FORMAT AND SCOPE

2.1 General Format Content of Preliminary Documentation

This preliminary documentation package (PD) has been prepared as a standalone document. This document contains information provided in the EPBC Act Referral for the Iluka Residential Subdivision, Hickey Street, Iluka, NSW.

The PD package contains relevant technical information, or investigations supporting the text of the main document included as Attachments.

- ATTACHMENT 1 – Birrigan Gargle Local Aboriginal Land Council letter
- ATTACHMENT 2 – DEE Letters
- ATTACHMENT 3 – Community Subdivision Drawings
- ATTACHMENT 4 – Landscape Masterplan
- ATTACHMENT 5 – Habitat Management Plan
- ATTACHMENT 6 – Keystone Ecological Response Report
- ATTACHMENT 7 – Aboriginal Cultural Heritage Management Protocol
- ATTACHMENT 8 – Original EPBC Act Referral Form and Attachments – Iluka Residential Subdivision, Hickey Street, Iluka, NSW

2.2 Scope of Preliminary Documentation

2.2.1 The Preliminary Documentation Scope of Information Response

The scope of the PD is formulated to respond in full to the Australian Government Department of the Environment and Energy (DEE) letters dated:

- 6 October 2017 - Decision on referral – Iluka Residential Subdivision, Hickey Street, Iluka, NSW – the proposed action is a controlled action; and
- 25 October 2017 – Additional Information required for preliminary documentation Iluka Residential Subdivision, Hickey Street, Iluka, NSW.

The DEE letters referenced above are listed in Attachment 2.

2.2.2 Matters of National Environmental Significance Pursuant to EPBC Act

The Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) identifies in Chapter 2 – Protecting the environment, Part 3 – Requirements for environmental approvals, the “Matters of National Environmental Significance” (NES), in particular Division 1 – Requirements relating to matters of national environmental significance.

The Department of Environment and Energy has identified for the response to the preliminary documentation particular subdivision and section references. These are identified in the list below of the particular NES.

The matters of National Environmental Significance (NES) as identified in the EPBC Act are summarised as follows:

- World Heritage (declared World Heritage property);
- National Heritage (National Heritage place);
- Wetlands of International Importance (declared Ramsar wetland);
- Listed threatened species and communities;
- Listed migratory species;

- Protection of the environment from nuclear actions;
- Marine environment;
- Great Barrier Reef Marine Park;
- Protection of water resources from coal seam gas development and large coal mining development.

2.2.3 Matters of National Environmental Significance Likely or Having Potential to be Significantly Impacted

The Department of the Environment and Energy has indicated that of the nine matters of NES identified in the EPBC Act, the following elements are likely or have the potential to be significantly impacted by the proposed action.

The assessment of these elements is provided in this preliminary documentation.

- **World Heritage Properties**
 - *The Gondwana Rainforests of Australia (Iluka Nature Reserve)*
- **National Heritage Places**
 - *The Gondwana Rainforests of Australia (Iluka Nature Reserve)*
- **Listed threatened species and communities**
 - *Koala (Phascolarctos cinereus)*
 - *Scented Acronychia (Acronychia littoralis)*
 - *Spot-tailed Quoll (Dasyurus maculatus)*
 - *Grey-headed Flying-fox (Pteropus poliocephalus)*
- **Gondwana Rainforest of Australia (Iluka Nature Reserve) – The following species which the DEE describe as attributes of the Outstanding Universal Value (OUV) of the property, were recorded on the subject site, and require assessment. The assessment of these elements are contained in this preliminary documentation.**
 - *White-eared Monarch (Monarcha leucotis)*
 - *Wonga Pigeon (Leucosarcia melanoleuca)*
 - *Wompoo Fruit-Dove (Ptilinopus magnificus)*
 - *Rose-crowned Fruit-dove (Ptilinopus regina)*
 - *Superb Fruit-Dove (Ptilinopus superbus)*
 - *Rufous Fantail (Rhipidura rufifrons)*
 - *Eastern Free-tail Bat (Mormopterus norfolkensis)*
 - *Little Bentwing Bat (Miniopterus australis)*
 - *Eastern Long-eared Bat (Nyctophilus bifax)*

2.2.4 Ecological Assessments and Findings

Keystone Ecological has been contracted by Stevens Holdings Pty Limited to prepare an assessment of the likely impact of a proposed development upon nationally and state listed threatened flora and fauna and their habitats.

Development Application and EPBC Act Referral Submission

The development proposal has been investigated for its ecological impact by Keystone Ecological since 2014. The Keystone Ecological findings are detailed in a number of reports. These reports formed part of the development application lodged with the Clarence Valley Council and the original EPBC Act Referral Submission. The following Keystone Ecological reports are listed in Attachment 8:

- Flora and Fauna Impact Assessment (Ashby and McTackett 2015) (FFIA);
- Additional Flora and Fauna Impact Assessment (Ashby and McTackett 2016) (AFFIA);
- Addendum Impact Assessment (Ashby and McTackett 2017) (AIA); and
- Updated Impact Assessment for Matters of National Environmental Significance (Ashby and McTackett 2017) (UIAMNES).

Ecological Response for Preliminary Documentation

A consolidation of the beforementioned reports has been prepared by Keystone Ecological. The consolidated document is listed in Attachment 6, and is cited as:

“Ashby, E and McTackett, A. (2018) Ecological Response for Preliminary Documentation, Hickey Street, Iluka, Clarence Valley LGA. Unpublished report, Keystone Ecological” - report dated 16 May 2018.

By way of further clarification, this Preliminary Documentation document contains extracts and various comments summarised from the Keystone Ecological report listed in Attachment 6.

For further details and a comprehensive context review of the biodiversity attributes of the subdivision land and its environs, refer to the Keystone Ecological Report listed in Attachment 6.

3.0 DESCRIPTION OF THE ACTION

3.1 The Land Owner

The land the subject of this consideration is Lot 99 DP823635.

The land owner of Lot 99 DP823635 is the Birrigan Gargle Local Aboriginal Land Council (BGLALC).

Refer to the BGLALC letter dated 3 April 2018 for the description of the importance of the development of their land at Iluka (Attachment 1).

3.2 The Proponent

The proponent for the proposed Community Subdivision application for Lot 99 DP823635 is Stevens Holdings Pty Limited.

3.3 Proposed Development – Overview and Consultation Input

Key elements of the proposed community subdivision development planning and application status are provided below:

- Birrigan Gargle Local Aboriginal Land Council (BGLALC) owns various land holdings in Iluka;
- The land (Lot 99 DP 823635) is owned by the Birrigan Gargle Local Aboriginal Land Council (BGLALC).
- The BGLALC when considering its dealing with the land has had regard to the members of the BGLALC. Where possible its actions will improve, protect and foster the best interest of Aboriginal persons within the BGLALC area.
- In 2004 Stevens Holdings were invited by the BGLALC to assist with the development of one of its land holdings being Lot 99 DP823635 (zoned R2 - Low Density Residential);
- In 2005 Stevens Holdings signed an MOU with the BGLALC for the development (by subdivision of land) of Lot 99 DP823635;
- All approvals required by the NSW Aboriginal Land Council (ALC) under the NSW Aboriginal Land Rights Act (ALC Act) were obtained in 2012.
- The BGLALC has entered into an agreement with Stevens Holdings Pty Limited to undertake development of the land by way of a residential subdivision. The agreement was entered into in 2012;
- The agreement has been prepared in accordance with the requirements of the NSW Aboriginal Land Council and the relevant provisions of the New South Wales Aboriginal Land Rights Act 1983.
- The agreement between the two before mentioned parties, the BGLALC and Stevens Holdings, is confidential.
- The project is one of a few in Australia where an arrangement between an Aboriginal Land Council and a third party provides an opportunity for the BGLALC to facilitate it becoming self-determining.
- Initial discussions held with Clarence Valley Council (CVC) we were advised Council had imposed a moratorium on development in Iluka until the construction of the Iluka Sewerage Scheme. (Construction of the sewer scheme commenced in 2011 and properties were able to connect in 2013);

- The subdivision proposal was initially discussed in pre-lodgment meetings with Clarence Valley Council (CVC) in September / October 2014.
- Following the pre-lodgment meeting with CVC further detailed specialist field assessments and reporting was undertaken;
- The development application was lodged on 11 December 2015 and was processed under the provisions of the NSW Environmental Planning and Assessment Act – one of the processes included placing the development on public advertising to enable review and submissions to be made to CVC. It is noted CVC also extended the deadline for submissions to be made.
- Subsequent requests for information were received from CVC and relevant State referral agencies and amendments to the initial development application including the Community Subdivision configuration were made;
- CVC advised the development application was referred to the NSW Northern Joint Regional Planning Panel (JRPP).
- The NSW Planning Panels have been established to provide independent, merit-based decision making on regionally significant development.
- A public briefing meeting held in Iluka was arranged by the JRPP. The meeting was held in September 2017.
- Referral to Australian Government Department of the Environment and Energy for EPBC Act considerations – 7 August 2017 (EPBC No. 2017/8003).
- Australian Government Department of the Environment and Energy – issue of “controlled action” notification decision – 6 October 2017.
- Australian Government Department of the Environment and Energy – issue of additional information for assessment by – “Preliminary Documentation” – 25 October 2017.

3.4 Cultural Heritage Assessment

An Aboriginal Cultural Heritage Assessment Report for Lot 99 Hickey Street, Iluka, dated August 2017, was prepared by Extent Heritage. In addition, an Archeological Assessment by Extent Heritage.

These assessments were conducted in compliance with the Australian Environment Protection and Biodiversity Conservation Act 1999, the Australian Government Aboriginal Torres Strait Islander Heritage Protection Act, the NSW National Parks and Wildlife Act 1974, the NSW Aboriginal Land Rights Act 1983, the Clarence Valley Local Environmental Plan LEP 2011.

To ensure the findings of the Aboriginal Cultural Heritage Assessment are referenced in the various phases of the subdivision development, an Aboriginal Cultural Heritage Management Protocol has been prepared by Ocean Park Consulting Pty Limited, dated 8 June 2018 (refer to Attachment 7).

It is proposed the Aboriginal Cultural Heritage Management Protocol will form part of all relevant documentation prepared for the Construction Phase activities, including the HMP works, and for the ongoing Community Association management and implementation activities.

Importantly the protocol listed in Attachment 7 refers back to the detailed Aboriginal Cultural Heritage Assessment by Extent Heritage dated August 2017.

3.5 Description of the Proposed Action – Community Subdivision

A description of the community subdivision characteristics is provided below:

- The land is within the urban area of the coastal village of Iluka, NSW;
 - Property Description - Lot 99 DP 823635 + Area of the land 19.441 Ha;
 - Located corner of Iluka Road, Hickey Street, Riverview Street, Elizabeth Street, Iluka, NSW;
 - Land Zoning – Zone R2 Low Density Residential – CVC Local Environmental Plan 2011;
 - Community Subdivision – to create vacant allotments for future residential housing;
 - 141 Allotments = 140 Residential + one (1) Community Property Lot (Lot 1);
 - Community Property Lot (Lot 1) – Comprising – a total of some 5.29 ha of community property park (Retained bushland):
 - Park A (0.86 ha approx.)
 - Park B (2.32 ha approx.)
 - Park C (0.49 ha approx.)
 - Park D (1.28 ha approx.)
 - Park E (0.18 ha approx.)
 - Park F (0.15 ha approx.)
 - Creates new public roads, with the Community Association to be responsible for maintenance of the landscaping in the verge areas;
 - The new public roads on the subdivision master plan – Drawing PO147-04 Masterplan, were intentionally provided with the term “street”. This was to signify the purpose of the street corridor was that of:
 - Streets for living;
 - Water Sensitive Urban Design Corridor;
 - Infrastructure Corridor; and
 - Fauna / Flora Corridor.
- The intention was to differentiate the function of the streets with the low traffic speed environment and access to allotments as opposed to through roads with a primary focus on vehicle movement.
- Subdivision layout reflects the grid pattern of Iluka – access, permeability, connectivity;
 - Allotments size and shape facilitate sound solar access, encourage diversity in housing;
 - Provides for lot sizes to comply with CVC affordable housing policy;
 - Incorporates – traffic calming features, water sensitive urban design (WSUD) (CVC policy);
 - The community subdivision can be constructed in different staging configuration.

3.6 Location of Works Associated with the Subdivision

The location of works to service the community subdivision with infrastructure will be situated in adjoining existing road reserves, as follows:

- Subdivision works contained within Lot 99 DP 823635;
- Connection to existing operating and maintained CVC and Utility service providers infrastructure in adjacent existing road and street reserves - Iluka Road, Hickey Street, Elizabeth Street;
- The existing CVC and utility service providers infrastructure has been sized by the various agencies to cater for the Lot 99 subdivision and the land is zoned accordingly.

3.7 Structures to be built within the Subdivision

Works and structures within the community subdivision include:

- Vegetation Removal – except for retained bushland areas – Park Areas
- Earthworks – shaping of the ground surface
- Infrastructure – streets, 6.0m wide verges, street lighting, bushland areas, bushfire trails, pathways and bicycle ways
- Infrastructure underground – water supply, sewerage, electricity (above and below ground), telecommunications, stormwater drainage.

3.8 Elements of the Proposed Subdivision that may have impact on matters of NES

There are no matters that have the likelihood of significant impact on matters of national environmental significance (MNES). Where potential impacts have been identified appropriate ameliorating and offsetting measures have been developed to be incorporated into the subdivision and ongoing Community Association implementation and management responsibilities.

3.9 Justification for Subdivision Layout and Ecological Attributes

The community subdivision is shown on the drawings listed in Table 3.9 – Development Drawings.

The development community subdivision drawings are listed in Attachment 3 – “Community Subdivision Drawings”.

The subdivision configuration has been revised from the original development application submission to have regard to input by Clarence Valley Council, relevant State agencies, and submitters to the proposed development.

TABLE 3.9 – DEVELOPMENT DRAWINGS			
Drawing No.	Title	Date	Prepared By
PO147-04	Masterplan	June 2017	onecollective URBANDESIGNSTUDIO
PO147-05	Vegetation Zones	June 2017	onecollective URBANDESIGNSTUDIO
PO147-06	Development Staging Plan	June 2017	Onecollective URBANDESIGNSTUDIO
PO147-07	Management Units – External Road Verge	March 2018	Onecollective URBANDESIGNSTUDIO
PO147-08	Management Units – New Public Road Verge	June 2018	Onecollective URBANDESIGNSTUDIO
PO147-09	Indicative Community Scheme - Staging First Development Lot	June 2017	Onecollective URBANDESIGNSTUDIO
PO147-10	Indicative Community Scheme Staging - Key Elements	June 2017	Onecollective URBANDESIGNSTUDIO

The Birrigan Gargle Local Aboriginal Land Council describes in the letter dated 3 April 2018. the vision for the BGLALC community.

The significant and positive benefit of the completion of the proposed subdivision at Hickey Street, Iluka is it will provide income from the development of the land. This derived income funding will enable the BGLALC to strengthen its future direction towards self-determination and moving towards reaching its goals in a timely manner.

The subdivision has been proposed to be developed by way of a community subdivision whereby the Community Association is responsible for the maintenance of community property and further to be defined in the Community Management Statement which forms part of the registration of the community plan of subdivision, there will be certain obligations placed on the Community Association to undertake and implement various management plans.

The benefits to the Clarence Valley Council and the broader rate payers of the Clarence Valley Council, is derived as the Community Association is responsible for maintenance of various matters which if the subdivision was to be titled in a “more conventional manner”, that is not a community subdivision, the Council would be responsible for the ongoing maintenance of the open space areas, and road verge areas.

The community subdivision has had regard to various specialist assessments, Clarence Valley Council input and other relevant agency input by way of information request through the statutory development application process. Through this process, the configuration of the subdivision has been refined, titling arrangements defined and management plans prepared including the Habitat Management Plan to demonstrate having regard to the existing environment attributes, and incorporating the principles of avoidance, mitigation and management measures to minimise any potential impacts, particularly in relation to matters of National Environmental Significance pursuant to the EPBC Act.

The economic and social context and benefits for the community subdivision in relation to national, regional and local policies and programs is described in section 8.0 Economic and Social Matters of this Preliminary Documentation.

3.9.1 Community Subdivision Layout, Management and Land Title Context

The Community Subdivision as shown on the drawings listed in Table 3.9 incorporates an integrated Master Plan, with new public roads, designated vegetation zones and areas external to the parent lot (Lot 99 DP823635) in the existing adjoining street verges to be maintained by the Community Association.

These areas are further described as follows:

➤ Drawing No. PO147-04 – Master Plan

This drawing indicates the proposed Subdivision Master Plan:

- Shows position and relationship of retained bushland parks – Community Property (Lot 1);
- Identifies residential lots and lot sizes and configuration;
- Signifies streets for lining the new public road configuration;
- Identifies connection to the existing road reserves of Hickey Street, Elizabeth Street and Micalo Street;
- Identifies proximity to Iluka Road and Riverview Street;
- Identifies Lot 7020 DP1114873. This lot has the “potential” if converted to new public road, to align Hickey Street and parts of Street 2 and adjoining lots. The potential reopening of the former portion of closed road is subject to separate considerations and designation processes;
- Identifies key existing and new bushfire connection trails;
- Demonstrates no lot or street connection, except for maintaining existing fire trail to Iluka Road.

➤ Drawing No. PO147-05 – Vegetation Zones

This drawing provides the description and spatial positioning of the various vegetation zones, being;

- Core Conservation Zone – the retained bushland – forming the Community Property (Lot 1) to be maintained by the Community Association;
- Bushfire Trail Zone – showing connection to the existing bushfire trail connection point in Iluka Road;
- Indicates emergency access point to Elizabeth Street;
- The street verges / landscape zones – these verge areas of the new public roads situated between the lot boundary and the sealed portion of the new public roads. These areas are also shown on Drawing No. PO147-08 as Management Units – New Public Road Verge;
- These areas to be landscaped to the Landscape Master Plan;
- The street verge areas to be planted and maintained to HMP;
- The street verge areas to be maintained on an ongoing basis by the Community Association;
- The Bushfire Asset Protection Zones (APZ) and associated setbacks for structures are indicated. Note the APZ are within street areas, not in Park areas.

➤ Drawing No. PO147-06 – Development Staging Plan

Refer to section 3.9.2 Community Subdivision Staging, for further description.

➤ Drawing No. PO147-07 – Management Units – External Road Verge

- This drawing indicates the commitment by the development to maintain verge areas of portions of the external public road reserve vegetated verge areas adjoining the Community Subdivision to be maintained by the Community Association formed from the parent lot, Lot 99 DP823635;
- The areas are identified for maintenance in the HMP.

➤ ***Drawing No. PO147-08 – Management Units – New Public Road Verge***

This drawing indicates the proposed new public road verge areas:

- The purpose of the drawing is to show the new public road reserve vegetated verge areas adjoining the Community Subdivision scheme allotments to be maintained by the Community Association of Parent Lot 99 DP823635;
- The verge area landscaping management to be in accordance with the Community Subdivision Landscape Master Plan;
- The verge areas to be identified in the Community Management Scheme by way of positive covenant or equivalent instrument;
- New Public Roads also described as Streets on the Master Plan;
- Verge areas to be landscaped generally in accordance with the Community Subdivision Landscape Master Plan;
- Verge areas to be maintained by the Community Association;
- Verge areas and landscape areas are identified for planting and maintenance in the HMP.

➤ ***Drawing No. PO147-09 – Indicative Community Scheme – Staging First Development Lot***

Refer to section 3.9.2 Community Subdivision Staging, for further description.

➤ ***Drawing No. PO147-10 – Indicative Community Subdivision Staging – Key Elements***

Refer to section 3.9.2 Community Subdivision Staging, for further description.

The subdivision layout and title format has been revised and modified from the original development application to have regard to the following:

- The community scheme subdivision is contained within parent lot - Lot 99 DP823635;
- The area of Lot 99 DP823635 is some 19.41 hectares;
- The configuration has regard to input by the land owner, the Birrigan Gargle Local Aboriginal Land Council;
- The previously included Lot 7020 DP1114873 has been excluded from the current subdivision configuration. It is noted that if Lot 7020 was able to be converted to road, the configuration of the proposed subdivision would not be adversely impacted. Also there would not be an impact on the DEE identified threatened species nor on the DEE nominated Iluka Nature Reserve OUV constituent species;
- The community subdivision scheme framework is further described in section 6.8 ‘Community Subdivision Framework’.
- The title arrangement for the subdivision is to be by way of a community scheme subdivision pursuant to the NSW Community Land Development Act 1989, and the NSW Community Land Management Act 1989.

The community subdivision will enable the formal subdivision land title and various instruments to be registered as part of the community scheme. Key elements, and not limited to the following:

- Creation of a community plan of subdivision;
- Incorporation of a community management statement;
- Designation of community property in the scheme;
- Formalisation of community development lots;
- Formation of a Community Association;

- Designation of easements, right of access, positive covenants and restrictions on use of land where applicable.
- The community subdivision through the associated instruments provides the obligations for the Community Association to fund and maintain the retained bushland park areas, street verge areas and portions of adjoining external road reserve vegetated verge areas;
- The community subdivision retains existing bushland within the future community property lot, being Park A, Park B, Park C, Park D, Park E and Park F, with a total area of some 5.3 hectares (approx.);
- The area of existing vegetation to be removed is some 14.11 hectares (approx.);
- The proposed subdivision provides a street frontage of some 2,185m (approx.) from new streets or existing roads to the park areas;
- Water quality has been provided for through water sensitive urban design principles in line with the Clarence Valley Council policy;
- The individual lot owner in the Community Scheme owns and maintains the lot and buildings on the individual lot.
- The subdivision residential allotments will be serviced by water supply, sewer, electricity, telecommunications and the subdivision will be provided with street lighting. These infrastructure services are currently sized for the proposed subdivision and connection points are located in the existing adjoining road reserves;
- The community subdivision has had the benefit of specialist assessment and reporting to assist and facilitate the subdivision layout, and will include the relevant provisions of various assessments and management plans prepared, including for:
 - Aboriginal Cultural Heritage Assessment and Management Plan;
 - Archeological Assessment;
 - Habitat Management Plan;
 - Various ecological assessments including Ecological Response for Preliminary Documentation;
 - Landscape Masterplan;
 - Infrastructure Management Plan;
 - Erosion and Sediment Control Management Plan;
 - Water Quality Management Plan;
 - Bushfire Management;
 - Traffic, Bikeway and Pedestrian Management.
- Through the community subdivision there is a greater potential to raise the awareness of future subdivision land owners / and occupiers of the development and its proximity to the Iluka Nature Reserve World Heritage area, and the Bundjalung National Park, and flora and fauna communities and their respective biodiversity value;
- The subdivision configuration has had regard to crime prevention through environmental design principles;
- The subdivision configuration adopts the Clarence Valley Council Affordable Housing Strategy and provides lots in compliance with the CVC policy;
- The residential allotments have been configured to facilitate future housing diversity and choice;
- The subdivision provides for greater housing supply through the delivery of well-located land for residential housing;

- The community subdivision provides land for future housing and to cater for lifestyle options available in Iluka and environs.

3.9.2 Community Subdivision Staging

The Community Scheme Subdivision has the ability and flexibility to be undertaken by way of staging.

To demonstrate the possible staging configuration, the key elements and context are indicated on the drawings listed in Table 3.9 Development Drawings, and described below:

- **Drawing No. PO147-06 - Development Staging Plan**

From a staging perspective, the overall development indicative staging arrangement is indicated on this drawing.

As noted on the drawing, the development staging arrangement shown is indicative. The development sequence may not follow the numbered sequence of the stage identification numbers.

This drawing indicates the possible staging having regard to, park dedication (Lot 1), infrastructure provision (such as, water supply connection, sewer connection, electricity connection), clearing in stages, provision for stormwater drainage in Water Sensitive Urban Design format.

- **Drawing No. PO147-09 - Indicative Community Scheme First Stage**

This drawing indicates the indicative Community Scheme first stage. The key elements being:

- Creation of the Community Lot – Lot 1 to contain all the Parks A + B + C + D + E + F. It importantly sets aside all the community land in one lot (Lot 1);
- Creation of the first Development Lot (Management Lot). For illustration purposes, the first Development Lot follows the perimeter boundary of the portion of the land indicated as Stage 1 on Drawing No. PO147-06 Development Staging Plan;
- Balance land of this phase of Community Scheme described as the residue lot.

As the creation of the first Development Lot provides a procedural management function only, it is not proposed to have this lot serviced by infrastructure or to have the land configured for the future individual lots and public road which will follow the first Development Lot in the next detailed subdivision phase.

- **Drawing No. PO147-10 - Indicative Community Subdivision Staging Key Elements**

This drawing demonstrates the key elements as the detailed subdivision progresses. Where the first development lot is subdivided to create the individual lots for residential use, the elements include:

- Maintains integrity of Community Property Lot (Lot 1) – All Parks A + B + C + D + E + F;
- The first development lot (with the same boundary as Stage 1 on PO147-06) is subdivided into individual lots for residential use. The area provides the first new public road dedication which will include positive covenants over the verge areas for Community Association management of landscaping;

- The future individual lot owners will have part ownership of the community land (Lot 1) and the maintenance obligations contained in the Community Management Statement;
- The drawing also indicates a future Development Lot (or Management Lot). The boundary of this Development Lot follows the perimeter of Stage 2a and 2b on Drawing No. PO147-06;
- The balance area is identified as the Residue Lot;
- There are proposed easements shown to indicate the need to provide protection for stormwater drainage and / or infrastructure services connections. These easements are to be released on dedication of the future public road in the future staging of the Community Subdivision.

3.9.3 Subdivision Configuration and Management – Ecological Attributes

3.9.3.1 Layout – Inclusive of retained bushland

Reserved areas of retained bushland (community lot parks) have been located to capture the highest value habitats as well as provide important corridors for the local movement of fauna.

In terms of biodiversity responses, the essential elements of the proposal are:

- the proposed Parks A to F inclusive;
- the wide street verges;
- central access spine; and
- short local streets, connecting with parks.

The development staging will be reflected in the procession of clearing across the site.

3.9.3.2 Distribution of Parks

Parks have been located to protect important ecological features on site. These features include the best Koala habitat, the area identified as the best potential habitat for *Acronychia littoralis*, the area with the least disturbed and most intact vegetation and landform, and the area of Coastal Cypress Woodland endangered ecological community.

3.9.3.3 Connectivity

The conservation areas have been located in order to retain connectivity for the biota known to use the site or likely to occur on site. Connectivity has been maintained in all directions.

3.9.3.4 Separation of Parks from Lots

No residential lots abut the conservation zones as a means of protection from accidental indirect impacts (such as herbicide drift, spills of polluted materials), a buffer for garden escapes, and to discourage dumping of garden refuse and other rubbish.

3.9.3.5 Location of Asset Protection Zones (APZ)

The fire asset protection zones (APZ) are located outside of the retained bushland areas, and take advantage of the streets and verges.

3.9.3.6 Use of wide verges for tree planting

The wide street verges provide an opportunity to plant trees to facilitate fauna movement through the site in the post-development landscape. These design features are detailed in the treatments in the Landscape Plan and the Habitat Management Plan.

Planting design is informed particularly by best practice planning guidelines prepared for the express purpose of conservation of the Koala in a residential setting (McAlpine et al. 2007). The tree species to be planted are also intended to benefit fruit-eating birds and blossom-feeding bats.

3.9.3.7 Key Management Actions

The proposed development will involve a number of activities, from clearing to subdivision construction, future construction (by others) of houses and occupation. The following is a summary of these actions.

- Works are to be staged, including clearing of vegetation, so there will be an incremental loss of vegetative cover in the development footprint.
- All works will be guided by construction plans and the Habitat Management Plan.
- All civil contractors will be inducted by the Project Ecologist into the special ecological sensitivities of the site and potential animal welfare issues.
- Prior to clearing, the clearing area and works area will be clearly delineated to prevent accidental damage to retained vegetation or areas not yet planned for clearing.
- Best practice environmental protections (such as sediment and erosion controls) will be implemented during construction activities.
- Earthworks will be undertaken to shape the ground for allotments and stormwater verge swales. Infrastructure will be constructed, including water supply, sewerage, electricity (above and below ground), telecommunications, stormwater drainage, streets, six (6) metre wide verges, street lighting, pathways and bicycle ways.
- Fire Asset Protection Zones (APZ's) will be established and maintained incrementally around the assets as they are completed.
- The housing will be constructed as each stage is available. The bushland / housing interface will be managed as an APZ.
- To prevent Koalas climbing into enclosed yards and potentially being attacked by dogs, external boundary fences will be designed to be Koala-proof. The design finishes will be of a smooth material (such as a Colourbond fence), with additional barrier material at the base.
- Overhanging branches, shrubs and trees will be removed where the property boundaries temporarily adjoin bushland during the staged construction. Intended to prevent Koala access.
- External plantings prohibited that would provide Koala access to enclosed yards.

3.9.4 Habitat Management Plan – Management Context

A Habitat Management Plan (HMP) prepared by Keystone Ecological dated 14 August 2018 has been prepared for the Community Scheme Subdivision. HMP listed in Attachment 5.

This document may be cited as:

“Ashby, E and McTackett, A. (2018) Habitat Management Plan, Hickey Street, Iluka, Clarence Valley Local Government Area. Unpublished report, Keystone Ecological.”

The community subdivision Habitat Management Plan is further described in section 6.9 ‘Habitat Management Plan’.

Legislative Context – The Habitat Management Plan management protocols address the relevant requirements of the legislation listed below. In particular, the HMP is focused on the construction phase activities and the ongoing management of the Community Property by the Community Association on an ongoing basis –

- Commonwealth *Environmental Protection Biodiversity Conservation Act 1999* – the relevant requirements of this Act relate specifically to threatened entities and the World/National Heritage listings, including Outstanding Universal Values and are embodied in the development application. The implementation of requirements is the responsibility of the Proponents Project Manager and the relevant sub-consultant, with the Council / private certifier being the ultimate authority during construction activities. Ultimately the areas will be managed by the Community Association as Association Property within a Community Scheme of Subdivision.
- NSW *Environmental Planning and Assessment Act 1979* – the requirements of this Act will be embodied in the Development Consent Conditions. Their implementation is the responsibility of the Proponents Project Manager and the relevant sub-consultant, with the Council / Private Certifier being the ultimate authority during construction activities. Ultimately the areas will be managed by the Community Association as Association Property within a Community Scheme of Subdivision; and
- NSW *National Parks and Wildlife Act 1974* – the relevant requirements of this Act are principally related to protected fauna, particularly:
 - A person shall not harm any protected fauna (Part 7 Section 98 Subsection 2a); and
 - A person shall not liberate ... any animal ... unless under and in accordance with a licence under section 127 (Part 7 Section 109 Subsection 1 and 2).

The responsibility for the observation of these conditions lies with the Proponents Project Manager and the Project Ecologist during construction activities. Ultimately the areas will be managed by the Community Association as Association Property within a Community Scheme of Subdivision; and

- NSW *Biosecurity Act 2015* – this replaced the Noxious Weeds Act 1993 and its primary objective is to provide a framework for the prevention, elimination and minimisation of biosecurity risks, including weeds. The responsibility for recognition of weed threats and management actions remains with the Local Council, but also extends that responsibility to landholders including the Community Association under the Community Scheme.

The HMP also relies on recovery plans, management plans and weed control strategies prepared by various authorities arising from that legislation.

The Habitat Management protocols are listed below:

- Although safety of works personnel will be paramount, animal welfare protocols will be observed in order to minimise harm to resident fauna during clearing. Vegetation removal will be undertaken under ecological supervision and in accordance with the Habitat Management Plan.
- A special protocol for felling hollow-bearing trees is detailed in the Habitat Management Plan and implemented, and will include:
 - Supervision by the Project Ecologist;
 - Staged removal of vegetation around hollow-bearing trees, with temporary retention of natural escape routes for resident fauna;
 - An agreed felling methodology for each hollow-bearing tree, (such as sectional dismantling) according to its characteristics, type of fauna likely to be resident, and safety requirements;
 - Seasonal considerations so that, where possible, clearing is undertaken when resources are at a maximum; and
 - A wildlife rescue plan.
- In accordance with the Habitat Management Plan, weed control protocols will be observed during clearing to minimise the risk of spread of weeds. Each protocol will depend on the characteristics of the weed species. For example, *Tradescantia fluminensis*, *Tradescantia zebrina* and *Bryophyllum delagoense* all have the potential to grow from fragments, and so careful disposal to an appropriate green waste facility is required when clearing areas that contain these weeds.
- The Parks will be established and conservation management undertaken in accordance with the Habitat Management Plan.
- All residents will be provided with an Education Package, that highlights the special features of the site and surrounds, as well as the important obligations of the community to minimise adverse impacts on those special features. Such obligations include responsible pet ownership, responsible gardening, provision of escape ropes in pools for Koalas, traffic calming, and external lighting controls.

3.9.5 Landscape Masterplan

The Community Subdivision is proposed to be integrated with the street configuration, water sensitive urban design characteristics and to facilitate native plant installations to facilitate the biodiversity attributes of the street realm and verge areas for all new public roads.

The Iluka development Landscape Masterplan has been prepared by Moir Landscape. Refer to Attachment 4 – Landscape Masterplan.

4.0 DESCRIPTION OF THE EXISTING ENVIRONMENT

4.1 Ecological Survey and Results

The specialist, Keystone Ecological, has conducted substantial survey work within and adjacent to the Community Subdivision land between 2014 and 2017. The details of the survey and results are contained in the Keystone Ecological report - *Ashby, E and McTackett, A. (2018) Ecological Response for Preliminary Documentation, Hickey Street, Iluka, Clarence Valley LGA. Unpublished report, Keystone Ecological* - report dated 16 May 2018 (refer Attachment 6 for details).

The flora and fauna survey was conducted to best practice observing the six step process recommended in the Australian Government Department of Environment and Energy guidelines.

Relevant databases were interrogated for records of significant species.

Characteristics and habitats of the site were determined in the field during initial site visit and follow up infield surveys to address all habitats onsite and to target entities of particular interest.

The onsite survey comprised a variety of activities including:

- camera trapping;
- spotlighting;
- stagwatching of tree hollows at dusk;
- recording and identification of calls of microbats;
- nocturnal and diurnal searches for reptiles;
- habitat searches and assessment;
- diurnal bird survey by active searches and audio recording;
- nocturnal bird survey by call playback and spotlighting;
- scat searches for predators, Emu and Koala;
- call playback of Koala and Grey Headed Flying Fox; and
- terrestrial and arboreal hair funnels for mammals.

Refer to the abovementioned Keystone Ecological report for details of the formal survey activities, survey technique and corresponding survey effort.

Additional surrounding areas were investigated to provide context for biodiversity of the Community Subdivision land and its ecological value, and to identify characteristics of the World Heritage Iluka Nature Reserve and how it may interact with the Community Subdivision land. Reference is made to the Keystone Ecological report for details.

Ecological Survey Results – General

The Keystone Ecological report referenced above identifies the following summary of flora species and fauna species observed on and near the subdivision land (Lot 99 DP823635).

A complete list of flora species observed during survey is provided in Table 3.

Vegetation types

- Coastal Cypress Pine shrubby open forest;
- Pink Bloodwood – Brush Box open forest on coastal dunes and sandplains –
 - o Dominated by *Acacia disparrima*,
 - o *Eucalyptus tereticornis* in canopy,
 - o Mixed canopy,
 - o Highly disturbed with infestations of transformer weeds,
 - o Highly disturbed with infestations of transformer weeds and regenerating Littoral Rainforest vines and trees.

Fauna species observed during survey on the site

- 5 common species of reptiles;
- 53 species of birds, including the following 7 threatened species –
 - o *Dromaius novaehollandiae* Emu
 - o *Ptilinopus regina* Rose-crowned Fruit-dove
 - o *Ptilinopus superbus* Superb Fruit-dove
 - o *Calyptorhynchus lathami* Glossy Black-Cockatoo
 - o *Merops ornatus* Rainbow Bee-eater
 - o *Rhipidura rufifrons* Rufous Fantail
 - o *Daphoenositta chrysoptera* Varied Sittella
- 21 mammal species, including the following 5 threatened species –
 - o *Phascolarctos cinereus* Koala
 - o *Nyctophilus bifax* Eastern Long-eared Bat
 - o *Saccolaimus flaviventris* Yellow-bellied Sheath-tail-bat
 - o *Mormopterus norfolkensis* Eastern Freetail-bat
 - o *Miniopterus australis* Little Bentwing-bat

4.2 World Heritage Properties

4.2.1 *The Gondwana Rainforests of Australia (Iluka Nature Reserve)*

DEE Requirements

The Department of the Environment and Energy advises “*The Gondwana Rainforests of Australia's world heritage values are considered as a surrogate for the property's national heritage values as it was inscribed to the national heritage list in May 2007 for values similar to its Outstanding Universal Values (OUV).*”

The Department of the Environment and Energy advises the OUV's that are potentially impacted by the proposed action and need to be addressed are in relation to the following criteria:

- “(ix) *To be outstanding examples representing significant on-going ecological and biological processes in the evolution and development of terrestrial, fresh water, coastal and marine ecosystems and communities of plants and animals.*
- (x) *To contain the most important and significant natural habitats for in-situ conservation of biological diversity, including those containing threatened species of outstanding universal value from the point of view of science or conservation.*”

The DEE requests further information on the following:

- a) Description of the attributes that contribute the OUV represented within Iluka Nature Reserve, such as Species, Taxa, Ecosystem, Natural Habitats, and how the above attributes interact with the proposed action site.
- b) Description of the management and protective arrangements existing for Iluka Nature Reserve.
- c) Description of the distribution and abundance of the OUV species, including estimated size, density, location of occurrence onsite, and location of occurrence in the region.
- d) Qualification and description of the extent of suitable habitat onsite and in the region.
- e) Maps displaying the above information (a) and b)) overlaid with the proposed action.

The preliminary documentation addresses the world heritage and national heritage values collectively in terms of the Gondwana Rainforests of Australia (as located in the Iluka Nature Reserve) OUV.

The Iluka Nature Reserve contains part of what is described in the Australian Department of Environment and Energy website (<https://www.environment.gov.au/heritage/places/world/gondwana>) as being part of the Gondwana Rainforests of Australia, as noted below:

“The Gondwana Rainforests of Australia (formerly known as the Central Eastern Rainforest Reserves (Australia)) include the most extensive areas of subtropical rainforest in the world, large areas of warm temperate rainforest and nearly all of the Antarctic beech cool temperate rainforest. Few places on earth contain so many plants and animals which remain relatively unchanged from their ancestors in the fossil record.

The Gondwana Rainforests of Australia was inscribed on the World Heritage List in 1986 (extended in 1994).”

“Large extensions to the area, including reserves in southeast Queensland, were listed in 1994 as Central Eastern Rainforest Reserves (Australia). Then in 2007 the name was changed to Gondwana Rainforests of Australia to better reflect the values of the property. The current listing includes approximately 40 separate reserves located between Newcastle and Brisbane.

Rainforest occurs in New South Wales and south east Queensland as discontinuous patches surrounded by fireprone eucalypt forest and agricultural lands. These patches range in size from tiny gully stands to lush forests covering large valleys and ranges. The Gondwana Rainforests include the most extensive areas of subtropical rainforest in the world, large areas of warm temperate rainforest and nearly all of the Antarctic beech cool temperate rainforest.”

“Rainforest once covered most of the ancient southern supercontinent Gondwana and remains the most ancient type of vegetation in Australia. The Gondwana Rainforests provide an interesting living link with the evolution of Australia. Few places on earth contain so many plants and animals which remain relatively unchanged from their ancestors in the fossil record. Some of the oldest elements of the world's ferns and conifers are found here and there is a concentration of primitive plant families that are direct links with the birth and spread of flowering plants over 100 million years ago. A range of geological and environmental influences in the Gondwana Rainforests determine where forest communities grow. This process has occurred over millions of years and will continue to change the forest mosaic into the future.”

4.3 National Heritage Places

4.3.1 The Gondwana Rainforests of Australia (Iluka Nature Reserve)

The Gondwana Rainforests of Australia was one of 15 World Heritage places included in the National Heritage List on 21 May 2007.

The National Heritage Place description provided in http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;place_id=105704, identifies in part the following for the Iluka Nature Reserve.

“Iluka Nature Reserve

The Iluka peninsula consists of a series of dune ridges. The sand is siliceous and, as with other sand masses on the New South Wales north coast, contains significant quantities of the heavy minerals rutile, zircon and ilmenite. Underlying the sand is a complex of Triassic/Jurassic sedimentary rocks, which outcrop to form the series of low headlands along the coast. Soils tend to be poor in nutrients and well-drained (DASET, 1992).

*The reserve contains the largest single stand in New South Wales of littoral rain forest, a distinctive coastal variant of sub-tropical rain forest, and the least extensive of all New South Wales rain forest types. The herb layer is generally sparse. East of the rain forest, on the most seaward dunes, is a characteristic East Coast dune flora with the pioneer grass *Spinifex sericeus*. As elsewhere along the coast, the introduced shrub *Chrysanthemoides monilifera* is a major component of the littoral fringe. To the west, the rain forest abuts *Lophostemon* - *Eucalyptus* open forest. The western edge of the rain forest is thought to be maintained in its present position by the incidence of fire in the woodland. A comprehensive description of the vegetation types, together with a list of plants recorded in the reserve is given in the World Heritage nomination document (DASET, 1992)."*

4.4 Listed threatened species and communities

The preliminary documentation provides a consolidated report of the previously undertaken survey information for the relevant EPBC Act listed matters or NSW Government NSW Biodiversity Conservation Act 2016 listed matters.

For each species that has been identified by the Department of the Environment and Energy that has the potential to be significantly impacted by the proposed action, this preliminary documentation contains:

- a) A description of the survey effort and methodology, demonstrating that survey work has been undertaken in accordance with the Department of the Environment and Energy survey guidelines.
- b) The results of all surveys, and a description of the distribution and abundance of the species, including, but not limited to, the estimated size, density and location of occurrences on-site and in the region, and identification of any relevant important populations of vulnerable species (particularly, Grey-headed Flying-fox).
- c) A quantification and description of the extent of suitable habitat on-site and in the region, including whether the habitat is critical to the survival of the species.
- d) Maps displaying the above information (points (a), (b) & (c)) overlaid with the proposed action.

The details are provided in the Keystone Ecological report - *Ashby, E and McTackett, A. (2018) Ecological Response for Preliminary Documentation, Hickey Street, Iluka, Clarence Valley LGA. Unpublished report, Keystone Ecological – report dated 16 May 2018.*

A summary from the Keystone Ecological report is provided below, for the nominated species:

- Koala;
- *Acronychia littoralis*;
- Spot-tailed Quoll;
- Grey-headed Flying-fox.

4.5 Koala (*Phascolarctos cinereus*)

Listed as a Vulnerable species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and NSW *Biodiversity Conservation Act 2016*.

Survey results:

- Survey undertaken using a variety of direct and indirect methods of survey (spotlight, call broadcast, camera trap, predator scats, scratches, and Spot Assessment Technique surveys).
- Survey considered adequate for this species.
- The presence of this species on site was confirmed in a single camera trap image.
- Potential habitat for the Koala on site is recognised.

4.6 Scented Acronychia (*Acronychia littoralis*)

Listed as an Endangered species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and NSW *Biodiversity Conservation Act 2016*.

Survey results:

- Significant survey effort was undertaken in relation to this species – refer to the Keystone Ecological report.
- Targeted survey undertaken during the required months, with total targeted survey on site being at least 110 person hours.
- It is considered that this species has been addressed satisfactorily, using best practice techniques and sufficient effort.
- The presence of this species on site was not confirmed, although potential habitat is recognised.

4.7 Spot-tailed Quoll (*Dasyurus maculatus maculatus*)

Listed as an Endangered species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey results:

- The Spot-tailed Quoll not recorded on site during survey.
- Survey undertaken using a variety of direct and indirect methods of survey (stagwatch, spotlight, community survey, camera trap, predator scats, hair funnels).
- Survey considered adequate for this species.
- Potential habitat for the Spot-tailed Quoll on site is recognised.

4.8 Grey-headed Flying-fox (*Pteropus poliocephalus*)

Listed as a Vulnerable species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* and NSW *Biodiversity Conservation Act 2016*.

Survey results:

- Grey-headed Flying-fox not recorded during surveys.
- Survey undertaken using appropriate direct and indirect methods (monitoring of local camps, spotlighting, audio recording).
- Survey considered adequate for this species.
- Potential habitat for the Grey-headed Flying-fox on site is recognised.

4.9 Gondwana Rainforest of Australia (Iluka Nature Reserve) Nominated Outstanding Universal Value (OUV) Constituent Species

A summary from the Keystone Ecological report is provided below for each of the nominated species for a full description refer to the Keystone Ecological Report – Attachment 6;

4.9.1 White-eared Monarch (*Monarcha leucotis*)

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey results:

- White-eared Monarch not recorded on or near site during survey.
- Survey undertaken using appropriate direct and indirect methods (observations in spot counts, opportunistic survey, targeted survey of offsite Littoral Rainforest, audio recording).
- Survey considered adequate for this species.
- Potential habitat for the White-eared Monarch on site is recognised.

4.9.2 Wonga Pigeon (*leucosarcia melanoleuca*)

Not listed under Commonwealth or NSW legislation.

Survey results:

- Survey undertaken using appropriate direct and indirect methods (observations in spot counts, opportunistic survey, targeted survey of offsite Littoral Rainforest, audio recording).
- Survey considered adequate for this species as it was observed nearby but off site, and an image recorded on site by a camera trap in November 2014.

4.9.3 Wompoo Fruit-Dove (*Ptilinopus magnificus*)

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey results:

- Wompoo Fruit-Dove not recorded on site during survey.
- Survey undertaken using appropriate direct and indirect methods (observations in spot counts, opportunistic survey, targeted survey of offsite Littoral Rainforest, audio recording).
- Survey considered adequate for this species.
- Potential habitat for the Wompoo Fruit-Dove on site is recognised.

4.9.4 Rose-crowned Fruit-dove (*Ptilinopus regina*)

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey results:

- Survey undertaken using appropriate direct and indirect methods (observations in spot counts, opportunistic survey, targeted survey of offsite Littoral Rainforest, audio recording).
- Survey considered adequate for this species as it was heard calling on one occasion on site and observed nearby in Iluka Nature Reserve.

4.9.5 Superb Fruit-Dove (*Ptilinopus superbus*)

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey results:

- Survey undertaken using appropriate direct and indirect methods (observations in spot counts, opportunistic survey, targeted survey of offsite Littoral Rainforest, audio recording).
- Survey considered adequate for this species as it was heard calling on one occasion on site.

4.9.6 Rufous Fantail (*Rhipidura rufifrons*)

Listed as a Migratory species under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* but not listed under the NSW *Biodiversity Conservation Act 2016*.

Survey results:

- Survey undertaken using appropriate direct and indirect methods (observations in spot counts, opportunistic survey, targeted survey of offsite Littoral Rainforest, audio recording).
- Survey considered adequate for this species as it was observed foraging on a number of occasions, images caught on camera, and a pair was observed nesting in the vines in the vegetation of the western end of the site.

4.9.7 Eastern Free-tail Bat (*Mormopterus norfolkensis*)

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey results:

- Survey undertaken used appropriate methods (stagwatching, call recording) in an appropriate season (spring).
- Harp trapping was not undertaken as it provides poor returns for effort and is very stressful for the bats.
- Survey considered adequate for this species as calls were recorded that were identified to a “definite” level of certainty.

4.9.8 Little Bentwing Bat (*Miniopterus australis*)

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey results:

- Survey undertaken used appropriate methods (stagwatching, call recording) in an appropriate season (spring).
- Specific habitat searching was not undertaken due to the absence of suitable features.
- Harp trapping was not undertaken as it provides poor returns for effort and is very stressful for the bats.
- Call recording was undertaken over several nights using two recording devices.
- Survey considered adequate for this species as calls were recorded that were identified to a “definite” level of certainty.

4.9.9 Eastern Long-eared Bat (*Nyctophilus bifax*)

Not listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*, but listed as a Vulnerable species under the NSW *Biodiversity Conservation Act 2016*.

Survey results:

- Harp trapping was not undertaken as it provides poor returns for effort and is very stressful for the bats.
- Call recording was undertaken over several nights using two recording devices.
- Survey considered adequate for this species as calls were recorded that were identified to a “possible” level of certainty.

4.10 Spatial Relationship Proposed Action Site to Iluka Nature Reserve

4.10.1 Land Characteristics – Iluka Nature Reserve

A property search of NSW Land Registry Services was undertaken to identify the description and location of the Iluka Nature Reserve. Key elements of the search are described in the following Table 4.10.1 “Land Characteristics – Iluka Nature Reserve”.

TABLE 4.10.1 - LAND CHARACTERISTICS – Iluka Nature Reserve	
Element	Details
Entity Name	Iluka Nature Reserve Land reserved under the National Parks and Wildlife Act 1974 as published in the Government Gazette of State of New South Wales 9 July 1976 Description – being portion 63, exclusive of the land contained in ML6
Certificate of Title	Has not been issued
Folio	63 / 751379
Proprietors of the Land	The State of New South Wales (First Schedule in Title Search)
Land Description	Lot 63 in Deposited Plan 751379 – formerly known as portion 63 title diagram Crown Plan 3998.1577
Easements	TBA
Area of Land	139.7 Ha (as shown on CP 3998-1577)
Locality	Iluka, New South Wales
Parish	Nanegai
County	Clarence
Local Authority	Clarence Valley Council
Land Zoning	Zone E1 – National Parks and Nature Reserve as shown on Clarence Valley Local Environmental Plan 2011 – Land Zoning Map – Sheet LZN-001M

4.10.2 Land Characteristics – Bundjalung National Park

A property search of NSW Land Registry Services was undertaken to identify the description and location of the Bundjalung National Park. Key elements of the search are described in the following Table 4.10.2. “Land Characteristics – Bundjalung National Park”.

TABLE 4.10.2. - LAND CHARACTERISTICS – Bundjalung National Park	
Element	Details
Entity Name	Bundjalung National Park Land reserved under the National Parks and Wildlife Act 1974 as published in the Government Gazette of State of New South Wales 25 January 1980 Description – All that piece or parcel of land containing about 12,800 hectares, situate in the Counties of Clarence and Richmond, Parishes of Woombah, Nanegai, Tabbimobile, Doubleduke, Esk, Evans and Riley, and being the area shown by red edge on plan catalogued Ms. 4989 Gfn. in the Crown Lands Office exclusive of public roads, the area resumed on 17 th December, 1976, in connection with the Iluka Water Supply and lands below high water mark. NPWS M.4022.
Certificate of Title	Various and Title has not issued
Folio (Part Only - for example only)	Various allotments make up the Bundjalung National Park. An example of two allotment descriptions is provided below: Example Lot 22 DP751379 – Folio 22/751379 Example Lot 19 DP751379 – Folio 19/751379
Proprietors of the Land (Part Only)	The State of New South Wales (First Schedule in Title Search) – for Lot 19 and Lot 22 sample lots only
Land Description (Part Only - for example only)	Lot 19 in Deposited Plan 751379 – formerly known as portion 19 title diagram Crown Plan 1795.1577 Lot 22 in Deposited Plan 751379 – formerly known as portion 22 title diagram Crown Plan 1795.1577 It is noted that the land identified as “Unidentified” and situated between Iluka Road, Iluka and Lot 63 in Deposited Plan 751379 is identified on the Department of Environment & Energy website as being contained within the Bundjalung National Park area.
Easements	TBA – not searched – not listed
Area of Land	12,800 Ha (as shown described in Government Gazette NSW 25 January 1980)
Locality	Varies depending on specific location of particular allotment
Parish	Varies depending on specific location of particular allotment
County	Varies depending on specific location of particular allotment
Local Authority	Clarence Valley Council
Land Zoning	Various and Zone E1 – National Parks and Nature Reserve as shown on Clarence Valley Local Environmental Plan 2011 – Land Zoning Map – Sheet LZN-001M

4.10.3 Spatial position of the community subdivision land to Iluka Nature Reserve

DEE reference to spatial position of Iluka Nature Reserve - The Department of Environment and Energy (DEE), in its letter dated 25 October 2017, provided “Guidelines for request for additional documentation for Preliminary Documentation” (DEE Guidelines).

Referenced in the beforementioned DEE Guidelines is a comment:

“World heritage properties (sections 12 & 15A) and national heritage places (sections 15B & 15C)

Based on available spatial data, the Department notes that the subject site boundary is approximately 60m from the Iluka Nature Reserve boundary at its closest point, separated by Iluka Road and Bundjalung National Park.”

This section of the Preliminary Documentation is provided to place in context the spatial position of Lot 99 DP823635 with the Iluka Nature Reserve.

A search of DEE website Guidelines does not provide a document reference with a clear policy position in relation to setbacks from the Iluka Nature Reserve.

It is understood the DEE has used the distance of approximately 60m to provide a trigger for a level of assessment against the Iluka Nature Reserve. In this instance the reference by the DEE for the significant impact determination has been taken to mean by DEE as it relates to the heritage values, not direct impacts to the property (that is the land property identified by its property boundaries).

The DEE considerations use the potential for impact for species that are part of the World Heritage Outstanding Value (OUV) use connected areas within the site of the proposed subdivision and the “region”. These aspects are further examined in other sections of this Preliminary Documentation submission.

Iluka Nature Reserve property description - The Iluka Nature Reserve is identified as being formerly described as “Portion 63 at Iluka – Parish of Nanegai, Land District Grafton, County of Clarence”, refer Figure 4.10.3.1.

Portion 63 is currently described as Lot 63 DP751379, as identified in the Land Characteristics – Iluka Nature Reserve table above, and as shown on the NSW Land Registry Service drawing – refer Figure 4.10.3.2.

“Unidentified land” location - The location of the community subdivision (Lot 99 DP823635) with respect to the Iluka Nature Reserve is shown on the Figure 4.10.3.2. The location of Iluka Nature Reserve is generally separated from the community subdivision by Iluka Road and by land that is identified as “Unidentified” land.

Based on the mapping searched on the Department of Environment and Heritage website, the ‘Unidentified land’ forms part of the Bundjalung National Park.

The “Unidentified” land is described on the Plan of Portion 63 as part of ML6. The ‘ML’ description appears to be a reference to ‘Mining Lease’. Refer to Figure 4.10.3.1.

NSW National Parks and Wildlife reference - A further reference diagram to identify the position of the Iluka Nature Reserve is provided in Figure 4.10.3.3. This figure is an extract from the Broadwater National Park, Bundjalung National Park and Iluka Nature Reserve – Plan of Management by the NSW National Parks and Wildlife Service dated August 1997. This map identifies the Reserve boundary as “N” and the Park boundary as “P”, it also identifies by shade the Littoral rainforest – which on this map appears to be centrally located in a north-south direction within the Iluka Nature Reserve. This map also indicates the gravel road between Iluka Road and Iluka Bluff, and further provides a note and location of “walking track”. The walking track is shown on the map to run generally north-south through the littoral rainforest.

Spatial context community subdivision and Iluka Nature Reserve - To place in further context, the community subdivision with respect to adjoining lands and lands within its proximity, refer to the spatial position of the image of an aerial photographic representation of Iluka, with an overlay of property boundaries for context - refer Figure 4.10.3.4.

To describe the distance from the community subdivision land to the property boundary of the Iluka Nature Reserve, refer to Figure 4.10.3.5.

Figure 4.10.3.5 identifies the following spatial position of the western boundary of the Iluka Nature Reserve, to the boundary and future elements of the proposed community subdivision (Lot 99 DP823635). These are summarised below:

- North-east corner Lot 99 DP823635 as an extension to Hickey Street east to Iluka Nature Reserve – 445m;
- Iluka Road is 40.235m wide;
- South-east corner western boundary Iluka Nature Reserve (adjoining Iluka Road) to western boundary of proposed Park E – 103m;
- South-east corner western boundary Iluka Nature Reserve (adjoining Iluka Road) to eastern boundary of proposed lots – 128m.

The spatial context of the Iluka Nature Reserve property boundaries to the Lot 99 DP823635 property boundaries is described above.

The proposed future use designation for the south eastern corner of the community subdivision, that is, the closest point of the subdivision to the Iluka Nature Reserve, is Park E.

The intent for Park E is, Park E will generally remain as it currently exists, retaining part existing bushland and retaining the existing bushfire trail, to connect to Iluka Road at this location.

It is noted, the existing bushfire trail currently enhances the access by emergency bushfire vehicles for the benefit of the property to the south of Lot 99 and to the benefit of existing residential areas of this part of the village of Iluka.

The existing bushfire trail is constructed partly within the private property of Lot 99 DP823635. This bushfire trail was constructed and located by others, not the BGLALC, the current owners of Lot 99 DP823635. The new community subdivision makes allowance to connect with the existing bushfire trail at the existing points where the bushfire trail crosses on the boundary of Lot 99 DP823635.

As noted in Figure 4.10.3.5, this would place any new works in the community subdivision some 103m from the Iluka Nature Reserve, that is to the western boundary of Park E, with any future allotments some 128m from the property boundary of the Iluka Nature Reserve, at its closest point. Noting all other Iluka Nature Reserve property boundary positions extend a greater distance away from the closest point for Lot 99 DP823635 at the convergent point of its south-eastern property boundary point.

Spatial context village of Iluka to Iluka Nature Reserve - For context and spatial positioning there are existing urban forms within the village of Iluka situated closer to the Iluka Nature Reserve property than the Lot 99 DP823635 property boundary corner. These existing urban areas include Iluka Road, land to the south of Lot 99 DP823635, dwelling lots to the west of Iluka Road, to the immediate adjoining southern boundary of the Iluka Nature Reserve are existing uses and zoned land for environmental conservation, public recreation, low and medium density residential, tourist uses, water storage facilities, and rural landscape.

The Iluka Nature Reserve adjoins the urban built form of the village of Iluka. It is also in proximity to the land zoned and used for working waterfront – the main fishing industry for Iluka.

Iluka Nature Reserve Bushfire Management – Part of the Iluka Nature Reserve Bushfire Management Strategies are identified on the “Clarence Valley Bush Fire Management Committee – Village Protection Strategy – Iluka (18 Sept 2014)”, wherein bushfire management is to be in accordance with the Land Management Zone (LMZ) with suppression to be “As per the land management and fire protection objectives of the responsible land management agency / owner. To reduce the likelihood of spread of fires. To undertake mosaic burning”.

A further built form facility is shown as a fire trail located along part of the south western boundary of the Iluka Nature Reserve and also the road from Iluka Road through the INR to Iluka Bluff is a fire trail.

The proposed community subdivision does not add a risk to bushfire to the Iluka Nature Reserve. Part of the vegetation is replaced with urban facilities including water supply and fire hydrant connection which will add to the potential fire fighting capacity of this area of parent Lot 99 DP823635.

Iluka Nature Reserve perimeter and entry points – As part of this Preliminary Documentation submission there has not been a detailed and comprehensive assessment of the Iluka Nature Reserve perimeter property boundary to establish details of any restrictions or controls in relation to access for pedestrians, vehicles or fauna that may wish to enter the Iluka Nature Reserve. It is noted that in portions of the Iluka Nature Reserve where it adjoins Iluka Road and other public and private lands in the village of Iluka, there are not specific fauna limiting or domestic animal limiting fencing or structures on the property boundary of the Iluka Nature Reserve.

There is existing signage providing information advice in brochure form, on “bill board” type signage, and street and directional signage, for example on the gravel road that leads from Iluka Road to the Iluka Bluff. The signage indicates positions of pedestrian walkways and road access through the Iluka Nature Reserve that may connect to picnic and parking areas on the eastern side of the reserve.

The Iluka Nature Reserve and Bundjalung National Park advertising brochures have been prepared by the various agencies having jurisdiction over the various properties. The nature and extent of the information would have been provided to assist the local Iluka residents and / or visitors to the area to locate points of access, points of interest and points of amenities. The purpose would be for various reasons including attempting to manage and confine access points in the reserves to minimise any potential impact on the biodiversity of the reserves, and to also provide directional assistance within the reserves for safety and recreational pursuits.

The proposed community subdivision does not add a risk to, or detract from, any of the access points to the Iluka Nature Reserve as the community subdivision is remote from the Iluka Nature Reserve.

Spatial relationship to Regional National Parks – The position of the proposed Community Subdivision which is located to the west of the Iluka Nature Reserve (refer Figure 4.10.3.4), is also in a regional context in proximity to a broad network of National Parks. Refer to Figure 4.10.3.6: Extract from the Broadwater National Park Bundjalung National Park and Iluka Nature Reserve – Plan of Management by NSW National Parks and Wildlife Service dated August 1997.

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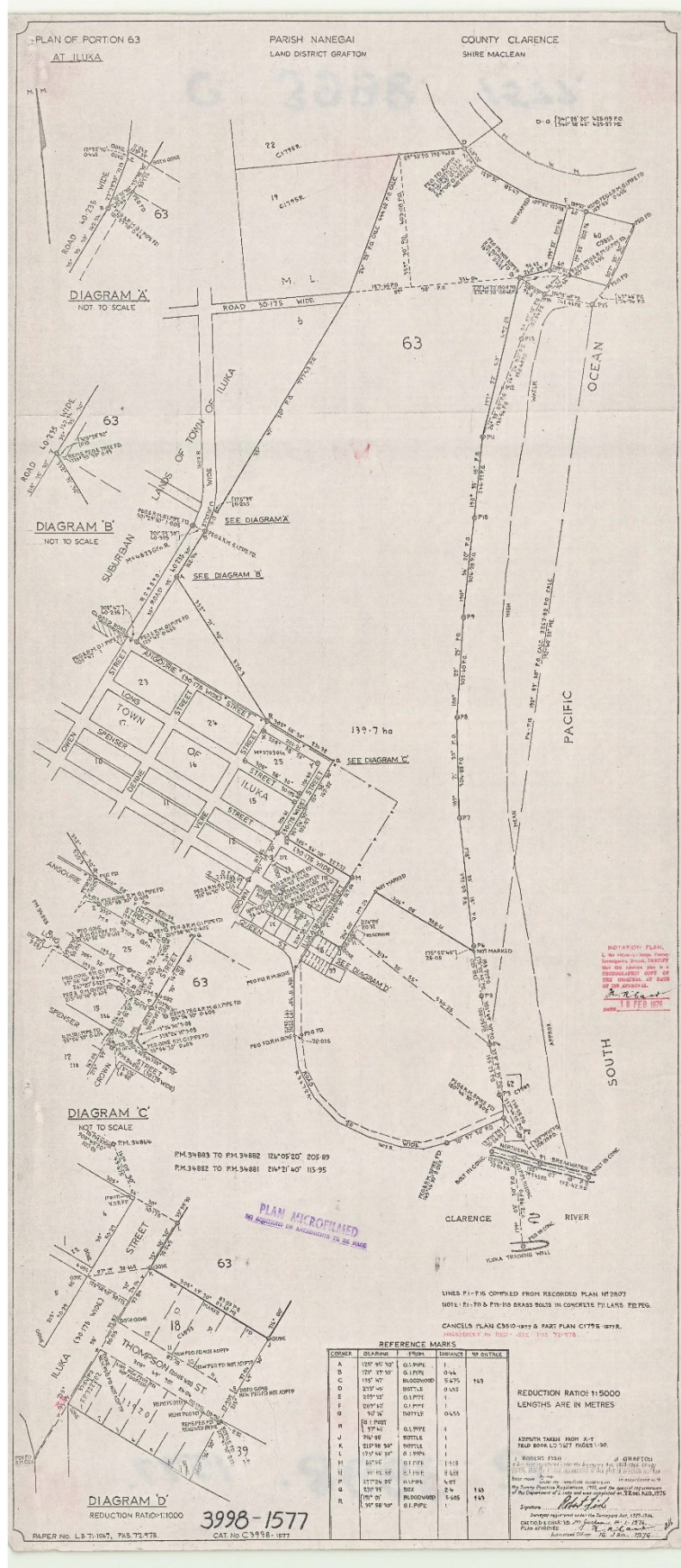


Figure 4.10.3.1: Copy of Plan of Portion 63 sourced from NSW Land Registry Services

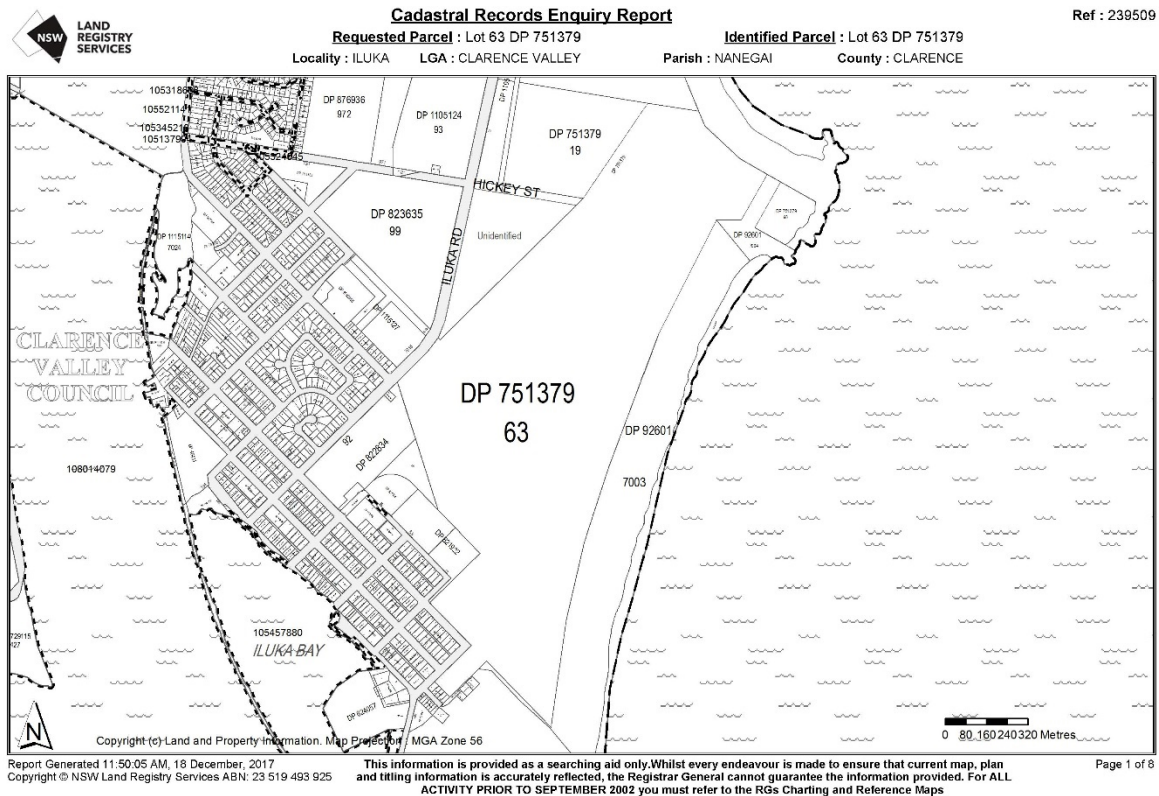


Figure 4.10.3.2: Copy of Plan of Lot 63 DP751379 sourced from NSW Land Registry Services – Note, qualifications identified on the NSW Land Registry Services image

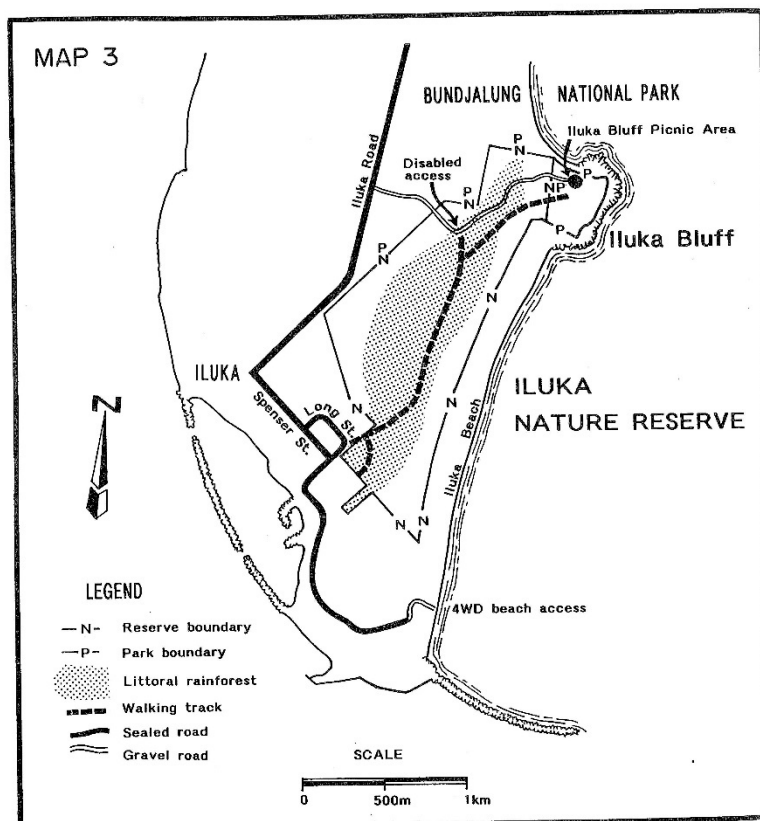


Figure 4.10.3.3: Extract from the Broadwater National Park Bundjalung National Park and Iluka Nature Reserve – Plan of Management by NSW National Parks and Wildlife Service dated August 1997



Figure 4.10.3.4: Iluka Nature Reserve position in relation to proposed community subdivision

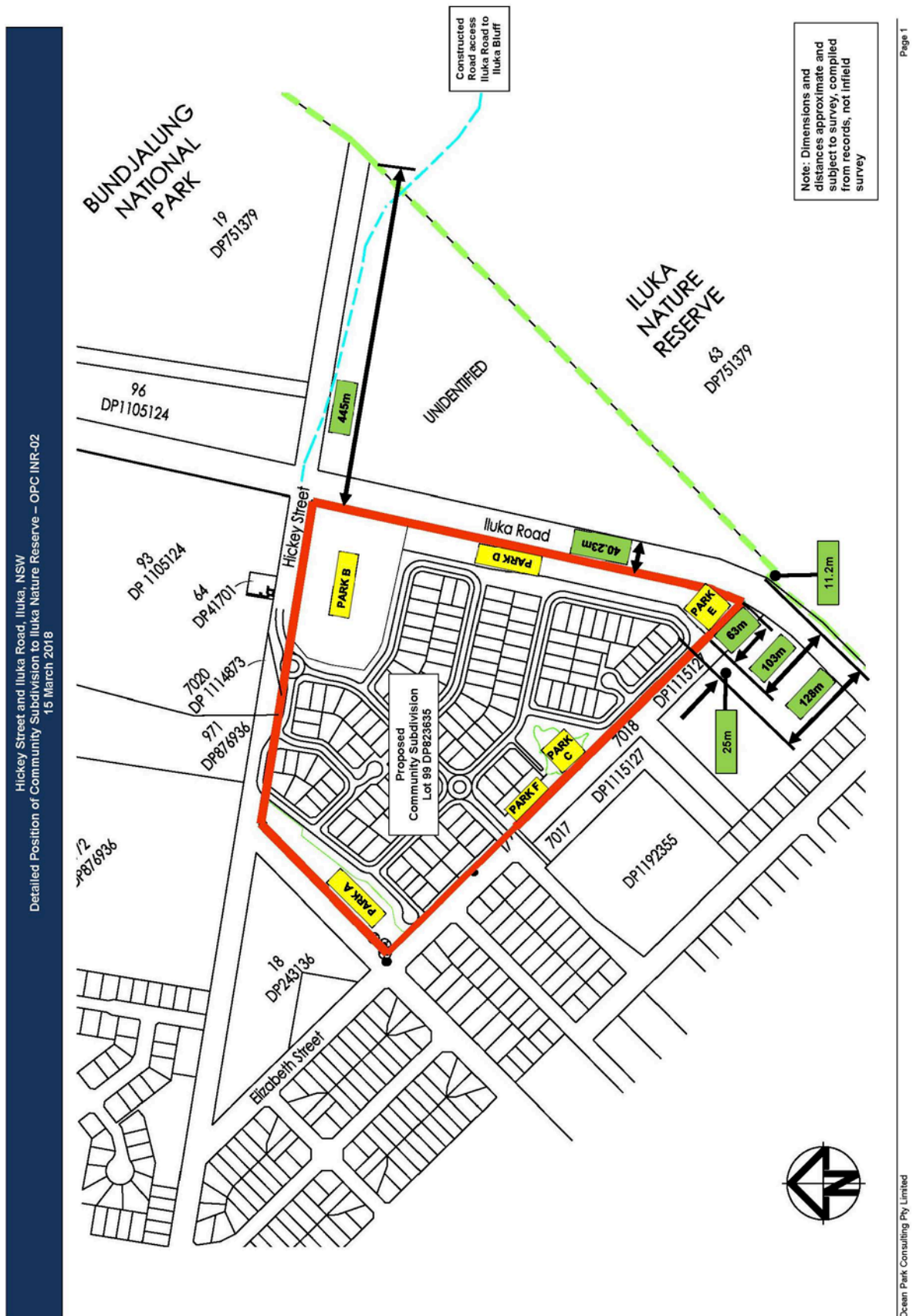


Figure 4.10.3.5: Detailed Position of Community Subdivision to Iluka Nature Reserve

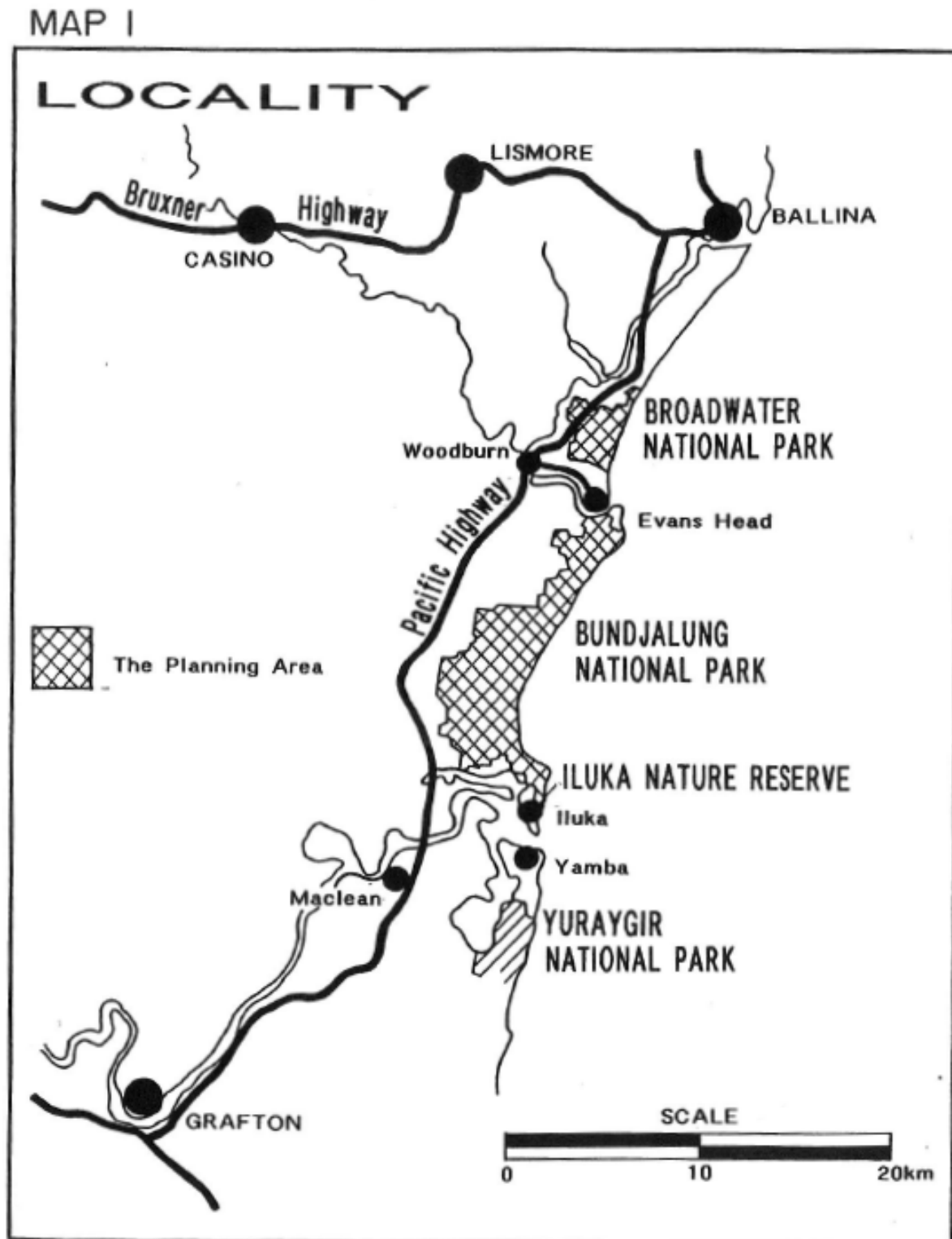


Figure 4.10.3.6: Extract from the Broadwater National Park Bundjalung National Park and Iluka Nature Reserve – Plan of Management by NSW National Parks and Wildlife Service dated August 1997

5.0 DIRECT AND INDIRECT IMPACTS UPON ALL EPBC ACT LISTED THREATENED SPECIES AND ECOLOGICAL COMMUNITIES

5.1 World Heritage Properties

5.1.1 The Gondwana Rainforests of Australia (Iluka Nature Reserve)

To ensure all of the properties world heritage and natural heritage values under the criteria (ix) and (x) are assessed, the Department of Environment and Energy (DEE) required further analysis to determine the direct and indirect impacts to the properties attributes of Outstanding Universal Values (OUV).

The DEE required detailing the impacts on the species and population associated with the Iluka Nature Reserve that may be intermediately, or more frequently, use habitat on the proposed action site within their range.

For each species identified as an attribute of the Iluka Nature Reserve nominated OUV constituent species within potential or known habitat occurrence within the proposed action site, this preliminary documentation contains the following:

- a) A description of the direct and indirect impacts that the action will have, or is likely to have, on species and their habitats within the subject site and on adjacent land. This should include:
 - i. Impacts that occur outside Iluka Nature Reserve such as habitat clearing, fragmentation, obstruction to fauna movement, increased mortality risks, light pollution.
 - ii. Impacts that may be experienced within Iluka Nature Reserve, such as weed invasion, increased risk of predation by domestic pets (cats and dogs).
- b) A discussion of the extent to which the above impacts may impact on the distribution and abundance of these species within Iluka Nature Reserve, and in turn how the likely extent to which the OUV may be degraded, damaged, altered, modified, obscured or diminished.
- c) A discussion of the extent to which the proposed action is likely to affect the existing integrity, management and protective arrangements of Iluka Nature Reserve.

Identified in the document “World Heritage 36 COM – WHC-12/36.COM/19 – United Nations Educational, Scientific and Cultural Organisation, Convention Concerning the Protection of The World Cultural and Natural Heritage, World Heritage Committee, Saint Petersburg, Russian Federation, 24 June – 6 July 2012” for the Gondwana Rainforests of Australia, various protection and management requirements including a comment on impacts as follows:

“The impacts of climate change and high levels of visitation, undertaking effective fire management, and mitigating the effects of invasion by pest species and pathogens present the greatest challenges for the protection and management of Gondwana Rainforests. Climate change will impact particularly on those relict species in restricted habitats at higher altitudes, where particular microclimatic conditions have enabled these species to survive. Management responses include improving the resilience of the property by addressing other threats such as inappropriate fire regimes and invasion by pest species, and trying to increase habitat connectivity across the landscape.”

It is noted this above reference replies to the combined Gondwana Rainforests of Australia and is not a specific reference to the Iluka Nature Reserve component, however the impacts identified are reviewed and appropriate management practices proposed for the proposed development to ensure there is no impact on the Iluka Nature Reserve OUV.

A summary of the impacts are provided for each subject threatened species and each nominated OUV constituent species - for details refer to the Keystone Ecological Report - Attachment 6 (Chapter 6 and Chapter 7 in particular).

5.2 National Heritage Places

5.2.1 The Gondwana Rainforests of Australia (Iluka Nature Reserve)

The relevant and potential impacts for the National Heritage Place designation for the purposes of the Preliminary Documentation Submission will be treated the same as the World Heritage Property – The Gondwana Rainforests of Australia (Iluka Nature Reserve).

5.3 Koala (*Phascolarctos cinereus*)

The Koala population of the region has been well studied by researchers from NSW National Parks and Wildlife Service (e.g. Lunney et al. 2002, Moon 1990), and consultants for Council (e.g. BioLink 2012). These studies reported that Iluka supported a very large population of Koalas in the 1970s, and documented its inexorable decline since.

Population Viability Analysis (Lunney et al. 2002) established that:

- the assumed and observed levels of mortality and fertility were unable to support the population; and
- substantial improvements in mortality and fertility alone were unlikely to prevent the population declining towards extinction.

Therefore, this population has been declared functionally extinct (Lunney et al. 2002, DECC 2008). Immigration was identified as considerably more important in maintaining an ongoing Koala population than had previously been understood (Lunney et al. 2002). Repeated hot fires in its source population to the north in Bundjalung National Park have interrupted that immigration (BioLink 2012).

The continued presence of a low number of individuals in the Iluka locality is evidenced by occasional resident sightings, the results from the current study, and occasional calls to WIRES of animals in distress from road trauma or dog attack. The most recent, standardised and extensive survey undertaken by BioLink for the CKPoM did not find any animals during the formal survey, but opportunistically found scats beneath trees at the northern end of the golf course (920m north of the development area) and near the Old Ferry Crossing Picnic Area (1.7km north west of the development area).

BioLink (2012) has estimated for the Iluka locality a population of between 5 and 10 individuals that are highly dispersed, and inferred the presence of at least one breeding female. However, the CKPoM has determined that the Iluka area no longer contains a breeding population.

Although the handful of records in the Iluka area is encouraging, this does not indicate that the population has recovered, particularly given the continuation of landscape-scale processes (principally repeated hot fires) that prevents the restocking of the population from the north (BioLink 2012).

As a folivore, the Koala relies on a narrow set of tree species, and is also very selective about individual trees within a stand. The site supports only 4 species recognised as Koala preferred food trees (as detailed in the regional list in the CKPoM). *Eucalyptus tereticornis* Forest Red Gum and *Eucalyptus propinqua* Small-fruited Grey Gum are primary food tree species, *Corymbia intermedia* Pink Bloodwood is a secondary food tree species, and *Lophostemon confertus* Brush Box is a supplementary food tree species. Supplementary food tree species are only used by Koalas when they occur in association with primary and secondary species.

Therefore, the Koala habitat on site can be better defined on site by the distribution of these 4 tree species. Primary trees are concentrated in the north eastern corner, and the secondary and supplementary tree species concentrated in 5 bands, with most occurring along the eastern and western boundaries. This patchy distribution of food trees means that the preferred Koala habitat occurs across only 4.1 hectares of the site. This area represents 0.2% of the habitat available in the region.

In summary:

- the region is overwhelmingly dominated by vegetated lands;
- an overwhelming majority of that vegetation is reserved;
- an overwhelming majority of the areas identified as potential Koala habitat are in reserves;
- the subject site is small in this context, contributing less than 0.7% of the vegetation in the region;
- the area of potential Koala habitat on the subject site is small in this context. Of the Koala habitat available across the region, the site contains 0.8% of habitat defined in a broad sense, or 0.2% of habitat defined more finely by the extent of preferred food trees.

The proposal has the potential to impose both direct and indirect impacts on this species as a result of loss of habitat, fragmentation of habitat, degradation of habitat, and introduction of additional known threats such as dogs, cars and swimming pools. These potential impacts are detailed below.

- **Direct loss of foraging habitat.** The proposed footprint will permanently remove potential foraging habitat for the Koala in the 216 trees identified within the footprint that are preferred food tree species. These comprise 13 Primary food trees (11 *Eucalyptus tereticornis* Forest Red Gum and 2 *Eucalyptus propinqua* Small-fruited Grey Gum), 164 Secondary food trees (*Corymbia intermedia* Pink Bloodwood), and 39 Supplementary food trees (*Lophostemon confertus* Brush Box). These trees to be removed occupy approximately 1.5 hectares of the site.
- **Direct loss of sheltering habitat.** Trees that occur in conjunction with food trees are considered to provide sheltering habitat for the Koala. The proposed footprint will permanently remove approximately 9.98 hectares of such habitat.

Therefore, a total of 11.48 hectares of sheltering and foraging habitat that occurs within the footprint will be permanently removed. This represents 0.6% of the 2,067 hectares of potential suitable habitat estimated to occur in the region.

The project is a staged development. Therefore clearing will occur primarily during construction, with some temporal overlap with the occupation phase of those parts of the site completed in the project's initial stages.

- **Fragmentation.** The currently uninterrupted patch of vegetation will have the central part removed. This loss of vegetation for the footprint will result in additional fragmentation of habitat and partial interruption of the existing corridor of vegetation. However, such fragmentation will not be permanent, as the footprint will be planted out with rows of appropriate trees to facilitate movement through the estate.

- **Edge effects.** There is the potential for indirect impacts to occur to bushland adjacent to developed areas. Such impacts may be long term and ongoing, primarily manifesting as increased weediness with concomitant degradation of habitat for Koalas. Such impacts may arise as a result of the following:
 - mobilisation of soil during clearing;
 - alteration of hydrological processes due to additional hardstand
 - delivery of nutrients in stormwater runoff from gardens;
 - delivery of pollutants (such as oils from roads) in stormwater;
 - additional exposure to vegetation that was previously protected in intact forest;
 - accidental / natural spread of weed propagules from adjacent gardens through the action of wind, water and animal vectors;
 - spread of weeds through the dumping of garden refuse; and
 - degradation of habitat through the dumping of rubbish (e.g. contaminated building waste).
- **Road strike.** Death and injury from vehicle collision is a recognised major factor of mortality of Koalas in this area. As the proposal will result in additional residents, it follows that the local traffic will also increase, and thus increase the risk of car strike.
- **Dog attack.** Death and injury of Koalas from attacks by domestic pets is also a recognised important mortality factor in this area. An increase in new residents has the potential to increase the population of domestic Dogs. This will probably be a permanent (although unquantified) increase in the potential for predatory behaviour.
- **Mortality in swimming pools.** Koalas are known to drown in backyard pools and presumably the increase in new residents will increase the number of backyard pools. This will be a permanent (although unquantified) increase in drowning risk.

5.4 Scented *Acronychia* (*Acronychia littoralis*)

There is no publicly-available recovery plan for this species, although the SPRAT profile refers to a Species Recovery Plan (Hunter et al. 1992, quoted in Department of Environment 2018).

There are no reliable, verified records of this species from the site or its immediate surrounds. However, within the region as defined for this study, it is now confirmed to occur at two locations.

The proposal has the potential to impose both direct and indirect impacts on the “potential” habitat of this species as a result of loss, fragmentation, and degradation. These impacts are detailed below.

- **Loss of potential habitat.** The development will permanently remove 10.51 hectares of potential habitat within the footprint, which represents 1.4% of the estimated potential habitat within the region.
- **Fragmentation of potential habitat.** The currently uninterrupted patch of vegetation will have the central part removed, some of which is potential habitat for *Acronychia littoralis*. This loss of vegetation for the footprint will result in additional fragmentation of habitat and partial interruption of the existing corridor of vegetation. The population dynamics of this species is poorly understood, but it is possible that seeds are dispersed by frugivorous birds and / or Grey-headed Flying-foxes.

➤ **Degradation of potential habitat.** There is the potential for indirect impacts to occur to bushland adjacent to developed areas. Such impacts may be long term and ongoing, primarily manifesting as increased weediness with concomitant degradation of habitat for *Acronychia littoralis*. Such impacts may arise as a result of the following:

- mobilisation of soil during clearing;
- alteration of hydrological processes due to additional hardstand
- delivery of nutrients in stormwater runoff from gardens;
- delivery of pollutants (such as oils from roads) in stormwater;
- additional exposure to vegetation that was previously protected in intact forest;
- accidental / natural spread of weed propagules from adjacent gardens through the action of wind, water and animal vectors;
- spread of weeds through the dumping of garden refuse; and
- degradation of habitat through the dumping of rubbish (e.g. contaminated building waste).

5.5 Spot-tailed Quoll (*Dasyurus maculatus*)

The principal recovery planning mechanism is restricted to the Saving Our Species program administered by the NSW Office of Environment and Heritage. As part of that process, the Spot-tailed Quoll is classified as being within the ‘landscape species’ management stream. Such species are distributed across relatively large areas and subject to threatening processes that generally act at the landscape scale (e.g. habitat loss or degradation) rather than at distinct locations.

This species was not detected on or near the site during survey. Publicly-available databases indicate that it is known in the region from only a small number of records (11), with all but 2 arising from a community survey. Therefore, the locations and time of observations may be unreliable and may include multiple records of the same animal. The 2 other records are of an animal trapped in 1992 (in the Iluka township), and another identified from hair during a survey of Bundjalung National Park in 1994.

This species requires large areas of relatively intact vegetation for foraging (NSW NPWS 1999) and is an opportunistic hunter and scavenger.

Of the species habitat features, the subject site supports some hollow-bearing trees.

Females are territorial and have a home range of up to 750 hectares with their home ranges generally along densely vegetated creek lines (OEH 2018a). Males are not territorial and their large overlapping home ranges of between 2,000 and 5,000 hectares encompass many females (Belcher et al. 2008).

Prey items are varied and include gliders, possums, small wallabies, rats, birds, bandicoots, rabbits and insects as well as carrion and domestic fowl (OEH 2018a).

Records indicate that this species is very rare in the region. The site is considered to provide sub-optimal habitat only due to the absence of den sites and the poor quality habitat for many potential prey species. However, the site may be within the home range of individuals using better habitat elsewhere and nearby (such as in the National Park estate), and therefore may at least contribute to corridor habitat.

The entire site has the potential to provide such corridor habitat, and the 19.41 hectares on site represents approximately 1.1% of the estimated potential habitat in the region.

The total estimated area of vegetation that is likely to contain suitable potential habitat for the Spot-tailed Quoll across the region is 1,742 hectares, most of which occurs in the reserves.

The proposal has the potential to impose both direct and indirect impacts on the potential habitat of this species as a result of loss, fragmentation, and degradation. These impacts are detailed below.

- **Loss of potential habitat.** The development will permanently remove 14.11 hectares of potential habitat within the footprint, which represents 0.8% of the estimated potential habitat within the region.
- **Fragmentation of potential habitat.** The currently uninterrupted patch of vegetation will have the central part removed. This loss of vegetation for the footprint will result in additional fragmentation of habitat and partial interruption of the existing corridor of vegetation.
- **Degradation of potential habitat.** There is the potential for indirect impacts to occur to bushland adjacent to developed areas. Such impacts may be long term and ongoing, primarily manifesting as increased weediness with concomitant degradation of habitat for the Spot-tailed Quoll. Such impacts may arise as a result of the following:
 - mobilisation of soil during clearing;
 - alteration of hydrological processes due to additional hardstand
 - delivery of nutrients in stormwater runoff from gardens;
 - delivery of pollutants (such as oils from roads) in stormwater;
 - additional exposure to vegetation that was previously protected in intact forest;
 - accidental / natural spread of weed propagules from adjacent gardens through the action of wind, water and animal vectors;
 - spread of weeds through the dumping of garden refuse; and
 - degradation of habitat through the dumping of rubbish (e.g. contaminated building waste).

5.6 Grey-headed Flying-fox (*Pteropus poliocephalus*)

Although this species has a *transmissible* population across its east coast range, for the purposes of this assessment, the local population is considered to comprise those animals within 20 kilometres (the assumed average foraging distance of this species) of the nationally important camp at Maclean.

This species relies on the availability of its favoured native blossom throughout the year and permanent camps are never far from reliable food resources. The coastal habitats of the north coast are particularly important in that they provide winter forage, principally in *Banksia integrifolia* Coast Banksia, *Melaleuca quinquenervia* Broad-leaved Paperbark, and *Eucalyptus tereticornis* Forest Red Gum, and *Eucalyptus robusta* Swamp Mahogany. All but the last of these are common across the local reserve system and occur also on site.

Suitable potential foraging habitat occurs on site within 5.5 hectares of vegetation. This represents 0.2% of the habitat available across the region.

The proposal has the potential to impose both direct and indirect impacts on the potential habitat of this species as a result of loss, fragmentation, and degradation. These impacts are detailed below.

- **Loss of potential habitat.** The development will permanently remove 3.09 hectares of potential habitat within the footprint, which represents 0.14% of the estimated potential habitat within the region.
- **Fragmentation of potential habitat.** The currently uninterrupted patch of vegetation will have the central part removed, some of which is potential habitat for the Grey-headed Flying-fox. This loss of vegetation for the footprint will result in additional fragmentation of habitat and partial interruption of the existing corridor of vegetation.

- **Degradation of potential habitat.** The potential habitat to remain within the Bushland Parks will not be further degraded. It is intended the Bushland Parks will be enhanced by bush regeneration efforts. Bush regeneration activities will include revegetation works with plantings of locally native species within the bushland parks. Plantings will include suitable winter-flowering species known to be favoured by the Grey-headed Flying-fox, including:

1. *Banksia integrifolia* Coast Banksia;
2. *Eucalyptus tereticornis* Forest Red Gum; and
3. *Melaleuca quinquenervia* Broad-leaved Paperbark.

5.7 Gondwana Rainforest of Australia (Iluka Nature Reserve) Nominated Outstanding Universal Value (OUV) Constituent Species

5.7.1 White-eared Monarch (*Monarcha leucotis*)

The White-eared Monarch was not recorded on or near the subject site during surveys. Potential habitat for this species in the local region is shown in Section 4 and records close to the development site. It has previously been recorded 66 times within the local region. The latest record dates from the 24th November 2017 when 4 individuals were recorded in Iluka Nature Reserve. The closest record of this species dates from the 14th November 2017 when an individual was observed and two others heard along the Bluff Road walking track.

The potential habitat on site represents approximately 1.3% of the estimated potential habitat in the region.

The area of potential habitat for the White-eared Monarch that is to be cleared within the subject site totals 11.48 hectares, which is 1% of the area of habitat estimated as available within the region. This habitat occurs within the central core of the site.

The area of potential habitat to be retained for this species within the subject site is 4.43 hectares. This habitat occurs in Park A (western boundary), Park B (north eastern corner), Park D (eastern boundary), and Park E (south eastern corner).

5.7.2 Wonga Pigeon (*leucosarcia melanoleuca*)

The Wonga Pigeon was recorded on the subject site in a remote camera image and nearby during surveys. It is known from 102 records within the local region.

The potential habitat on site represents approximately 1.3% of the estimated potential habitat in the region.

The area of potential habitat for the Wonga Pigeon species that is to be cleared within the subject site totals 5.3 hectares, which is 0.4% of the area of habitat estimated as available within the region. This habitat occurs within the central core of the site.

The area of potential habitat to be retained for this species within the subject site is 14.11 hectares. This habitat occurs in Park A (western boundary), Park B (north eastern corner), Park C (southern boundary), Park D (eastern boundary), and Park E (south eastern corner).

5.7.3 Wompoo Fruit-Dove (*Ptilinopus magnificus*)

The Wompoo Fruit-dove was not recorded on the subject site or nearby during survey. It is known from only 3 records within the local area.

The potential habitat on site represents approximately 0.2% of the estimated potential habitat in the region.

The area of potential habitat for the Wompoo Fruit-Dove that is to be cleared within the subject site totals 0.03 hectares, which is 0.004% of the area of habitat estimated as available within the region. This habitat occurs within the western edge and north eastern corner of the site.

The area of potential habitat to be retained for this species within the subject site is 1.18 hectares. This habitat occurs in Park A (western boundary) and Park B (north eastern corner).

5.7.4 Rose-crowned Fruit-dove (*Ptilinopus regina*)

The Rose-crowned Fruit-dove was recorded during survey. An individual of this species was heard calling on the subject site and an individual was also observed nearby within Iluka Nature Reserve.

It is known from 72 records within the local region.

The potential habitat on site represents approximately 0.2% of the estimated potential habitat in the region.

The area of potential habitat for the Rose-crowned Fruit-dove that is to be cleared within the subject site totals 0.03 hectares, which is 0.004% of the area of habitat estimated as available within the region. This habitat occurs within the western edge and north eastern corner of the site.

The area of potential habitat to be retained for this species within the subject site is 1.18 hectares. This habitat occurs in Park A (western boundary) and Park B (north eastern corner).

5.7.5 Superb Fruit-Dove (*Ptilinopus superbus*)

The Superb Fruit-Dove was recorded on the subject site during survey, with an individual heard calling. It is known from only one record within the local area dating from 1998.

The potential habitat on site represents approximately 0.2% of the estimated potential habitat in the region.

The area of potential habitat for the Superb Fruit-dove that is to be cleared within the subject site totals 0.03 hectares, which is 0.004% of the area of habitat estimated as available within the region. This habitat occurs within the western edge and north eastern corner of the site.

The area of potential habitat to be retained for this species within the subject site is 1.18 hectares. This habitat occurs in Park A (western boundary) and Park B (north eastern corner).

5.7.6 Rufous Fantail (*Rhipidura rufifrons*)

The Rufous Fantail was recorded on the subject site during survey. This species was regularly observed foraging across the subject site during surveys and a nest was observed within vegetation along the western boundary. It is known from 109 records within the local region.

The potential habitat on site represents approximately 0.9% of the estimated potential habitat in the region.

The area of potential habitat for the Rufous Fantail that is to be cleared within the subject site totals 14.11 hectares, which is 0.6% of the area of habitat estimated as available within the region. This habitat occurs within the central core of the site.

The area of potential habitat to be retained for this species within the subject site is 5.3 hectares. This habitat occurs in Park A (western boundary), Park B (north eastern corner), Park C (southern boundary), Park D (eastern boundary), and Park E (south eastern corner).

5.7.7 Eastern Free-tail Bat (*Mormopterus norfolkensis*)

A definite call of the Eastern Freetail-bat was recorded on the subject site during survey in November 2014. It is known from only 2 records within the broader study area – no previous records occur within the local region. The closest and most recent record of this species dates from 2002 and occurs approximately 3 kilometres west of the subject site.

The potential habitat on site represents approximately 0.9% of the estimated potential habitat in the region.

The area of potential habitat for the Eastern Free-tail Bat that is to be cleared within the subject site totals 14.11 hectares, which is 0.6% of the area of habitat estimated as available within the region. This habitat occurs within the central core of the site.

The area of potential habitat to be retained for this species within the subject site is 5.3 hectares. This habitat occurs in Park A (western boundary), Park B (north eastern corner), Park C (southern boundary), Park D (eastern boundary), and Park E (south eastern corner).

5.7.8 Little Bentwing Bat (*Miniopterus australis*)

A definite call of Little Bentwing-bat was recorded on the subject site during surveys. It is known from 39 records within the broader study area and only 4 records within the local region. The most recent record in the local region dates from 2008 when a call of this species was recorded using an ultrasonic recording device.

The potential habitat on site represents approximately 1% of the estimated potential habitat in the region.

The area of potential habitat for the Little Bentwing Bat that is to be cleared within the subject site totals 11.48 hectares, which is 0.7% of the area of habitat estimated as available within the region. This habitat occurs principally around the central core of the site.

The area of potential habitat to be retained for this species within the subject site is 4.43 hectares. This habitat occurs in Park A (western boundary), Park B (north eastern corner), Park D (eastern boundary), and Park E (south eastern corner).

5.7.9 Eastern Long-eared Bat (*Nyctophilus bifax*)

A possible call of Eastern Long-eared Bat was recorded on the subject site during surveys. It is known from 39 records within the local region.

In NSW they are probably confined to the coastal plain and nearby coastal ranges, extending south to the Clarence River area, with a few records further south around Coffs Harbour (OEH 2018a). It is known from lowland subtropical rainforest, wet sclerophyll forest and swamp sclerophyll forest, but Littoral Rainforest and patches of coastal scrub are particularly favoured (OEH 2018a).

The potential habitat on site represents approximately 0.4% of the estimated potential habitat in the region.

The area of potential habitat for the Eastern Long-eared Bat that is to be cleared within the subject site totals 0.18 hectares, which is 0.03% of the area of habitat estimated as available within the region. This habitat occurs along the western boundary and in the north eastern corner of the site.

The area of potential habitat to be retained for this species within the subject site is 2.17 hectares. This habitat occurs in Park A (western boundary), and Park B (north eastern corner).

5.7.10 Grey-headed Flying-fox (*Pteropus poliocephalus*)

The Grey-headed Flying-fox was not recorded during surveys. It is known from only 4 records within the local region. There is a permanent (and nationally recognised) camp at nearby Maclean, and other satellite camps have been on occasion when dispersal attempts have been undertaken at this permanent camp.

The closest temporary camp (used in 2012) was near the subject site in Swamp Oak Forest in the Clarence River estuary, and important winter forage is provided for this species in coastal heath and scrub, but most particularly in the blossom of *Banksia integrifolia* subsp. *integrifolia* Coast Banksia, and, to a lesser extent on this sand plain, by *Eucalyptus robusta* Swamp Mahogany and *Eucalyptus tereticornis* Forest Red Gum.

The potential foraging habitat on site for this species represents approximately 0.2% of the estimated potential habitat in the region.

The area of potential habitat for the Grey-headed Flying-fox that is to be cleared within the subject site totals 3.09 hectares, which is 0.1% of the area of habitat estimated as available within the region. This habitat occurs principally in the south western part of the site.

The area of potential habitat to be retained for this species within the subject site is 2.41 hectares. This habitat occurs in Park A (western boundary) and Park B (north eastern corner).

5.7.11 Spot-tailed Quoll (*Dasyurus maculatus*)

The Spot-tailed Quoll was not recorded on the subject site during survey. It is known from 6 records within the local region. The most recent record dates from 2004, reportedly from within Iluka Nature Reserve approximately 200 metres south east of the subject site. However, this and all but two of the other records arise from a survey of the local community, and therefore the locations and time of observation may be unreliable and may include multiple records of the same animal. The other records are of an animal trapped in 1992 (in the Iluka township), and a hair sample collected during a survey of Bundjalung National Park in 1994.

It is known to use a broad range of habitat types, including rainforest, open forest, woodland, coastal heath, and inland riparian forest, from the sub-alpine zone to the coastline (OEH 2018a). As den sites, it is known to use hollow-bearing trees, fallen logs, small caves, rock outcrops and rocky-cliff faces. It is a generalist predator and will prey on any species of a suitable size but prefers medium-sized mammals (500 grams to 5 kilograms) (OEH 2018a).

This species is considered to be very rare locally and that the site provides sub-optimal habitat only. However, the site may be within the home range of individuals using better habitat elsewhere and nearby, and therefore may at least contribute to corridor habitat.

The potential habitat on site represents approximately 1.1% of the estimated potential habitat in the region.

The area of potential habitat for the Spot-tailed Quoll that is to be cleared within the subject site totals 14.11 hectares, which is 0.8% of the area of habitat estimated as available within the region. This habitat occurs within the central core of the site.

The area of potential habitat to be retained for this species within the subject site is 5.30 hectares. This habitat occurs in Park A (western boundary), Park B (north eastern corner), Park C (southern boundary), Park D (eastern boundary), and Park E (south eastern corner).

5.8 Potential Impacts – habitat clearing, fragmentation, obstruction to fauna movement, increased mortality, light pollution

Within the footprint, the proposal includes the conservation management of the Parks, and establishment of a series of treed verges. The conservation management of the Parks will directly benefit these species on site by the improved condition of habitat, and indirectly in off-site habitats by the removal of weed propagules. Treed verges will facilitate movements through the site and through the landscape, as well as provide direct foraging habitat.

While the local fragmentation of their habitat will increase to some degree as a result of the removal of vegetation within the footprint, connectivity through the landscape will be sufficiently maintained for these highly mobile species. In particular:

- The configuration of parks around the perimeter of the development maintain maximum edge to off-site habitats for all species and not interrupt existing connectivity;
- The preferred “edge” habitat of White-eared Monarch will be retained and maintained around the perimeter of the development site, and around the edges of the retained parks; and
- Fruit-dove habitat occurs in Parks A and B, and these areas provide the greatest connectivity in all directions;

The proposal will have the potential to increase traffic volume to some small degree, and therefore the potential to increase the risk of car strike. However, this is not a recognised threat to the survival of the OUV species other than for the Spot-tailed Quoll (OEH 2018a). Similarly, traffic control is not identified as a management action for their conservation (OEH 2018b). For the recovery of the Spot-tailed Quoll, one of the recovery actions recognised is for authorities to, at the site scale, “incorporate methods to reduce the numbers of spotted-tailed quolls killed at sections of roads where road kills are frequently reported. Assess the effectiveness of different mitigation methods” (OEH 2018b).

There is no evidence of this area being a hotspot for road kill of the Spot-tailed Quoll. However, traffic calming measures within the development itself and provision of education material to residents will both contribute to amelioration of this potential impact. The most effective strategy to combat roadkill is, however, speed restrictions on main thoroughfares such as Iluka Road. Such powers lie with the NSW State agencies, and not private landholders.

The proposed action will result in the removal of some hollow-bearing trees, which may provide roost sites for the microchiropteran bats *Mormopterus norfolkensis* Eastern Freetail-bat and *Nyctophilus bifax* Eastern Long-eared Bat. The potential for direct harm to resident fauna will be ameliorated by the ecological supervision of tree felling, which will be detailed within the Approved HMP. The loss of habitat will be directly offset by the installation of appropriate nest boxes. The specifications of these artificial roost sites, and their installation, maintenance and monitoring will also be detailed in the Approved HMP.

A study of microchiropteran bat activity found that dark parks were more important for bat diversity and activity (six species groups in the darkest park) than were artificially lit parkland areas (three species groups in the flood-lit park) (Scanlon 2006, Scanlon and Petit 2008). *Chalinolobus gouldii* Gould’s wattled bat and *Mormopterus* species 4 (94% of calls) were advantaged in urban parklands, being the only species recorded when lights were on at sports parks, whereas five species groups occurred when the lights were off.

Street lighting is also known to interrupt natural foraging behaviour of the threatened species *Miniopterus orianae oceanensis* Eastern Bentwing-bat (Hoye and Hall 2008). Other species may also be disadvantaged by the presence of artificial lighting.

Therefore, lighting of the development will be minimised in time and space, limited to the areas where and when lighting is required for amenity or security, and of a type that reduces spill and glare.

Suitable sections of felled trees (particularly large, hollow sections) will be repurposed as terrestrial habitat. This will be of benefit to a number of species, but particularly for the Spot-tailed Quoll, a constituent OUV species.

Potential impacts during construction will be ameliorated and managed under a Construction Environmental Management Plan (CEMP or similar), and in the long term by implementation of an Approved Habitat Management Plan (HMP).

5.9 Potential Impacts – weed invasion, increased predation by domestic pets

The subject lot and the development footprint are located respectively approximately 60 and 123 metres away from Iluka Nature Reserve at their closest points. The proposed actions will require the removal of some native vegetation within the confines of the development site, but distant from Iluka Nature Reserve.

Currently the development site supports large areas of significant weeds, including transformer weeds such as Lantana. Therefore, there is the potential for the site to contribute now to weed invasion into Iluka Nature Reserve by the spreading of propagules by wind, water, and agents such as birds.

The proposed development is concentrated in the areas of least habitat value – where weeds are dominant – and so the clearing for the footprint itself will result in the removal of such material from the local environment.

Clearing will be conducted under an Approved HMP, which will rely on low-risk protocols for removal of weeds to minimise spread during removal (e.g. clearing when not weeds not in fruit), and their ultimate disposal.

The retained bushland on site will be managed under an Approved HMP. This will reduce the chance of the spread of weeds to Iluka Nature Reserve through the reduction of weed load. One of the main objectives of this HMP is to establish self-sustaining healthy bushland with few weeds, using low impact methods such as bush regeneration.

Although the site itself does not support Littoral Rainforest, the management actions will be informed by the Draft Recovery Plan for Littoral Rainforest (DEE 2017), as well as the Plan of Management currently in place for Iluka Nature Reserve (NPWS 1997). These restoration activities will therefore support the management objectives and actions already in place for Iluka Nature Reserve.

Standard erosion and sedimentation controls during construction will be implemented in order to minimise the potential for erosion and sediment impacts.

In order to minimise the potential for dumping of garden refuse into the retained bushland areas (and thus further degrade that bushland and contribute to relevant flow-on effects), the proposal is designed so that all bushland edges are bordered by a verge and internal roadway. This will have an open aesthetic appeal and help to foster a sense of ownership among the residents for the bushland parks.

Community education is an important strategy identified in the Draft Recovery Plan for Littoral Rainforest (DEE 2017) and is otherwise recognised for ameliorating potential impacts on other important biota on and around the site. To that end, an education package will be prepared for distribution to all new residents to explain the significance of the surrounding bushland, and include a checklist of appropriate strategies to protect those important features. This will include actions that will be of benefit or prevent further harm to this species and its habitat, as well as the features of nearby Iluka Nature Reserve.

5.10 Potential Impacts – on distribution and abundance of nominated OUV species in the Iluka Nature Reserve

Even if not so observed in both the subject site and Iluka Nature Reserve, all of the constituent OUV species have the capacity to exploit suitable habitats in both areas. Therefore, impacts to individuals on the subject site have the potential to influence the individuals that use Iluka Nature Reserve.

The direct loss of habitat suitable for all of the constituent OUV species from the subject site is small in scale, representing between 0.004 and 1% of potential habitat in the region. The scale of such direct loss is unlikely to be sufficient to significantly influence the size or viability of any of the local populations, particularly given that the vast majority of such habitats are secure in reserves.

The best wildlife corridor for all of the constituent OUV species is the uninterrupted band of reserved vegetation on the eastern side of Iluka Road, connecting habitats from north to south. However, the subject site could also contribute to connectivity from east to west, although it is interrupted by Iluka Road and cleared areas outside of the subject site. Nevertheless, the pattern of retained habitats within the proposed parks is likely to be sufficient to continue to enable the movements of these highly mobile species across the landscape from east to west.

Therefore, it is considered that the development proposal is unlikely to interfere with the movement of these species through the landscape.

While the proposal will remove potential habitat, it will also result in the improvement of retained habitat. The proposed weed removal and weed control works as part of the conservation management of the retained habitats are likely to be of benefit to the constituent OUV species on site. These actions will also provide indirect off-site benefits to the habitat within Iluka Nature Reserve.

5.11 Potential Impact – on the existing integrity, management and protective arrangements of Iluka Nature Reserves

According to the Operational Guidelines for the Implementation of the World Heritage Convention (UNESCO 2012), integrity requires consideration of the extent to which the property:

- Includes all elements necessary to express its Outstanding Universal Value;
- Is of adequate size to ensure the complete representation of the features and processes which convey the properties significance; and
- Suffers from adverse effects of development and/or neglect.

The proposed development of the subject site is unlikely to significantly impact any of the constituent OUV species that it shares with Iluka Nature Reserve. Therefore, it will not diminish the elements “necessary to express its Outstanding Universal Value”.

The proposed action is distant from Iluka Nature Reserve and separated by retained vegetation in Park D, vegetated road reserve, and Bundjalung National Park. This intervening vegetation will act as a visual buffer, noise buffer, and a buffer to other indirect impacts such as dust, mobilised soil, or weed propagules.

The area prescribed for Iluka Nature Reserve will not be reduced as a result of the development.

The areas to be cleared from the site are not relied upon by the processes in Iluka Nature Reserve that comprise its World Heritage Values.

Iluka Nature Reserve is protected under the National Parks and Wildlife Act (1974), and managed in accordance with the Broadwater National Park, Bundjalung National Park and Iluka Nature Reserve Plan of Management (NPWS 1997). The reserve is not pristine, in that it contains some modified areas that reflect past land uses (for example, weed infestations along the old industrial tramway line from The Bluff to the Clarence River mouth). However, its dedication and conservation management arrangements are not impacted by the proposed action at the development site.

6.0 PROPOSED AVOIDANCE, MITIGATION AND MANAGEMENT MEASURES

6.1 World Heritage Properties

6.1.1 *The Gondwana Rainforests of Australia (Iluka Nature Reserve)*

Preliminary Documentation Response

In relation to World and National Heritage Values this preliminary documentation considers appropriate ameliorating and offsetting measures that reflect the OUV, integrity, and management and protective arrangements of the Iluka Nature Reserve.

- Methods to promote sufficient ongoing protection and management of the property's biological and ecological values;
 - a) A consolidated list of avoidance and mitigation measures that will be undertaken to prevent or minimise potential impacts for each protected matter, including specific and general avoidance and mitigation measures.
 - b) A description of the proposed avoidance and mitigation measure including for each measure; the environmental objective, performance criteria, monitoring, reporting (by whom, to whom, how often), corrective actions (including thresholds for actions), responsibility and timing for proposed mitigation measures.
 - c) An assessment of the expected or predicted effectiveness of the mitigation measure in reducing impacts on each particular NES.

The potential impacts of the proposed subdivision on the species of interest are summarised as:

- The loss of habitat through direct clearing;
- The fragmentation of habitat and interruption of movement corridors; and
- The degradation of retained habitat arising from indirect effects.

Avoidance and mitigation measures to ameliorate the potential impacts are;

- delivered by the layout of the proposal,
- by the retention of the best habitats on the site,
- by the ongoing conservation management of those retained areas, and
- by direct actions during the clearing and construction phases.
- These actions are further supplemented by the implementation of a number of offsets on site that involve replanting of trees and replacement of specific habitat features.

Importantly, these activities are included in a Habitat Management Plan (HMP) that details objectives, actions, targets, and reporting regime.

Reference is made to the Keystone Report (Attachment 6), in particular the summary of ameliorative and offset measures and the interaction with each species is provided in Section 8.0.

6.2 National Heritage Places

6.2.1 *The Gondwana Rainforests of Australia (Iluka Nature Reserve)*

The relevant ameliorating and offsetting measures for the National Heritage Place designation for the purposes of the Preliminary Documentation Submission will be treated the same as the World Heritage Property – The Gondwana Rainforests of Australia (Iluka Nature Reserve).

6.3 Koala (*Phascolarctos cinereus*)

The principal response to the use of the site by the Koala is the proposed retention of bushland (both quantum and location), and the conservation management of that bushland in perpetuity.

The Parks are located so as to capture the areas of best habitat in general, the areas of best habitat in particular for the Koala, and in a configuration that continues to serve movements of this species across the landscape.

At a local level, recovery strategies for this species are detailed in the CKPoM. Its three main management objectives for the Iluka area are:

1. Undertake monitoring to ascertain further evidence of resident Koala population;
2. Ensure fire management activities aim to conserve individual Koalas, habitat and corridors; and
3. Protect Koala habitat.

The survey and assessment process for this development application has collected and collated further data regarding the presence of Koalas in the Iluka area. It is also recommended that Koala activity be monitored as part of the Habitat Management Plan (HMP). Therefore it has contributed to the achievement of the first objective.

During consultation with local authorities, a hazard reduction burn for the site planned by the Rural Fire Service was abandoned due to the detection of the Koala during survey. Therefore, activities as part of the survey and assessment process have contributed to the achievement of the second objective.

The survey and assessment process has identified the Koala habitat attributes of the site and surrounds, thus aiding Council and others in their deliberations regarding the protection of habitat.

The proposal therefore achieves these ameliorative objectives.

The CKPoM further recognises that there is no longer a breeding population within the area and that:

“Given the limited areas left in Iluka with development potential however, it is considered appropriate that efforts in this area are concentrated to management activities rather than development controls.”

The internal road design is such that straight sections of road are short, which is intended to discourage speeding. Additionally, speed limits will be low (maximum 50 kmh), which is in line with that recommended by the CKPoM for high value Koala habitat. Further, it is recommended that speed limits be variable so that lower speed limits are in force when Koalas are likely to be on the move during breeding season. Road signs will also alert drivers to the potential presence of Koalas.

It is noted that the high speed, high volume traffic on Iluka Road is a far greater threat to this species than low speed local traffic, irrespective of the presence of the proposed development. The responsibility for setting the speed limit on this public road is beyond the control of the proponent.

The intention is not to prohibit the keeping of domestic Dogs from the development, but it is recognised that attacks by Dogs are a particular threat to the Koala. As a community title subdivision, rules regarding the keeping of Dogs will be incorporated into the Community Management Statement.

Fencing is also an important component of the Community response to potential Koala-Dog conflicts. Fences are to be of a type and size (e.g. Colorbond) that prevent Koalas climbing over and entering the yards. Overhanging vegetation or vegetation close enough to the fences to allow access are also prohibited and must be regularly controlled.

During the clearing and construction process there is the potential for harm to individual animals resident in the vegetation to be cleared. Therefore, pre-clearing surveys will occur immediately prior to clearing, and all clearing will be closely supervised by an experienced Ecologist.

The offsetting of loss and fragmentation of habitat will be delivered by the following:

- **Parks.** Reservation and conservation management of 5.15 hectares of bushland in Parks A, B, C, D and E will offset the loss of 1.5 hectares of foraging habitat.
- **Landscape plantings.** The planting of trees along the wide verges will facilitate movement of fauna – but particularly Koala – through the developed landscape.
- **Offset planting of preferred Koala food trees.** In accordance with the CKPoM, the removal of the trees in the development area that are preferred Koala food trees will be offset by plantings of the same species to be removed. These plantings will be of local provenance material.

The areas occupied by weed infestations and where reduction of *Acacia disparrima* canopy is to occur, provide the most ready locations for planting. Applying the observed density of Koala food trees on site (1 tree per 74 square metres), these areas alone allow for the planting of 140 trees.

The CKPoM requires that trees to be removed are replaced, but it is recommended here that the offset plantings replace the primary food trees at a greater than 1:1 ratio in order to enhance as well as restore the habitats for Koala.

Thus, it is proposed that the 11 *Eucalyptus tereticornis* Forest Red Gum trees to be removed be offset by the planting of 50 trees (offset ratio of 4.5:1), and the 2 *Eucalyptus propinqua* Small-fruited Grey Gum trees to be removed be offset by the planting of 30 trees (offset ratio of 15:1). The secondary and supplementary food trees will be offset at 1:1, giving an overall offset ratio of 1.3:1.

In summary:

- The losses of Koala habitat on site are small in the regional context. The 1.5 hectares of foraging habitat to be removed is only 0.07% of the habitat available across the region, and will be replaced by offset plantings.
- The total area of habitat on site to be removed (including both sheltering and foraging habitat), represents only 0.6% of the habitat available across the region.
- The scale of such losses are unlikely to threaten the continued existence of this species across the region.
- The amelioration and offsets are considered sufficient, particularly given that the offsetting models underpinning the NSW Biodiversity Offset Scheme have classified the Koala as having a moderate sensitivity to loss but a high sensitivity to potential gain.
- Fragmentation of habitat is ameliorated by the conservation management of the Parks and plantings in the Parks and through the developed landscape. Other known threats (dogs and cars) are also addressed and ameliorated.
- The ameliorative and compensatory actions are designed to address recognised threats to the Koala and importantly, are drawn from the suite of recovery strategies from approved local, NSW and National plans.
- The potential interactions with and contributions to World Heritage Values will be maintained.

It is considered that the proposal is unlikely to pose a significant adverse impact on this species.

6.4 Scented Acronychia (*Acronychia littoralis*)

The principal response to the potential for this species to occur on site is the retention and conservation management of the area most likely to provide potential habitat, together with the proposed retention of other areas of potential habitat in all of the bushland Parks.

The Parks are located to capture the areas of best habitat in general, and the areas of best potential habitat in particular for *Acronychia littoralis*.

Ten strategies have been listed by the Office of Environment and Heritage (OEH 2018a) appropriate to the recovery of this species:

1. **Protect areas of known habitat from disturbance.** The area considered most likely to contain this species has been retained in Park D;
2. **Protect remaining areas of habitat from clearing and development.** The site is considered to provide potential habitat only, and the best areas will be retained in the proposed Parks and managed for conservation purposes;
3. **Control weeds in areas of known habitat.** The site is considered to provide potential habitat only. The potential habitat within the proposed Parks will be managed for conservation purposes, including weed control with an emphasis on high threat weeds, using low impact bush regeneration techniques;
4. **Always stay on designated four-wheel drive tracks.** Not relevant to the study area;
5. **Regenerate areas of known habitat, including planting of local rainforest species to protect Scented Acronychia from exposure to salt-laden winds.** The site is considered to provide potential habitat only. The potential habitat within the proposed Parks will be managed for conservation purposes, including planting of local rainforest species;
6. **Monitor population dynamics and threats of known populations.** Not relevant to the study area or development project;
7. **Exclude domestic stock from known habitat.** Not relevant to the study area or development project;
8. **Implement appropriate fire regime for habitat in which the species occurs.** Not relevant to the study area or development project;
9. **Provide advice to consent and planning authorities about the location and ecological requirements of the species.** Not relevant to the study area or development project other than to provide locational data to OEH; and
10. **Maintain viable ex-situ collection.** Not relevant to the study area or development project.

Soil-borne pathogens are recognised as a threat to this species (DECCW 2010a), with the fungus *Phellinus noxius* causes root identified as responsible for the death of an individual *Acronychia littoralis* tree at Cape Byron State Conservation Area. It has a widespread distribution (from Cape York to northern NSW) and can also affect other tree species (including eucalypts). It generally spreads through root-to-root contact but can also spread via fallen branches of infected trees (DECCW 2010a).

Therefore, the following appropriate responses to the potential pathogen as identified in the Border Ranges Biodiversity Management Plan (DECCW 2010a) will be implemented as part of the HMP:

- Incorporate an awareness in relevant personnel of this pathogen by highlighting it in the HMP;
- Implement hygiene protocols for equipment and clothing after accessing infected locations; and
- Implement hygiene protocols when removing infected plant material.

As *Acronychia littoralis* is a species of recent hybrid origin, it is thought there is the potential for parent species to “swamp” the genetic make-up of offspring (Rossetto 2005) and if the balance in numbers between the taxa involved is changed, the effect may be enhanced which could lead to the loss of *Acronychia littoralis* at a site over time (DECCW 2010a).

Therefore, until there is a greater understanding of these reproductive ramifications, it is recommended by authorities that parent *Acronychia* species (*wilcoxiana*, *oblongifolia*, *imperforata*) are not used in replanting or rehabilitation programs in *Acronychia littoralis* habitat (DECCW 2010a, 2010b).

Accordingly, this recommendation has been adopted in the HMP.

The HMP includes control strategies for high threat weeds.

During construction, potential habitat will be protected by the use of exclusion fencing, and education / training of site personnel.

Hydrological processes and further degradation of retained habitat will be ameliorated by the implementation of water sensitive urban design principles. The stormwater management of the site will drain runoff away from the parklands into swales.

Erosion and sedimentation controls will be implemented as part of the construction process.

Other indirect modifications to the potential habitat will be controlled by the configuration of the layout: the bushland Parks have been separated from the roads and development by a vegetated buffer. This will act as a barrier to accidental incursions by people and vehicles, rubbish, and nutrients. The separation of the bushland from the yards will also limit the opportunities for surreptitious dumping, especially of garden refuse.

It is considered the proposal is unlikely to pose a significant adverse impact on this species.

6.5 Spot-tailed Quoll (*Dasyurus maculatus maculatus*)

As part of the Saving Our Species program (OEH 2018b) for the recovery of threatened species, the Spot-tailed Quoll has been classified as a “Landscape-managed species”. The key threats to the viability of landscape-managed species are loss, fragmentation and degradation of habitat, and widespread pervasive factors such as impacts of climate change and disease.

“The following 8 recovery strategies have been identified for this species as part of the Saving Our Species program:

1. **Conserve old-growth forest stands and other areas of known habitat under perpetual, funded conservation agreements such as BioBanking agreements, conservation property vegetation plans or inclusion in the conservation reserve system.** Although this species is not known from the site, the proposal will retain the best and least disturbed parts of the site and manage these bushland Parks in perpetuity for conservation purposes. As a Community Title subdivision, the funding of the conservation actions are secure;

2. **Identify and target restoration and revegetation projects at areas where connectivity between large areas of known habitat is compromised, with the aim of increasing the width, condition and security of critical landscape links.** Although the potential habitat of the subject site is unlikely to provide a critical link for the movement of this species, it is probably contributing to the local wildlife corridor. This connectivity function will be maintained by the configuration of the retained bushland Parks. The ongoing conservation management of these Parks in accordance with the HMP also satisfies this strategy;
3. **Implement (or augment coordinated), cross-tenure, landscape scale predator control programs in areas where significant populations of spotted-tailed quoll are known to occur, and monitor populations of the target introduced predator.** Not relevant to the study area or development project;
4. **Monitor significant spotted-tailed quoll populations to investigate the impact of fox and wild dog baiting.** Not relevant to the study area and beyond the scope of the development project;
5. **Design and distribute an educational brochure for designing 'quoll-proof' poultry runs and aviaries and distribute.** Educational material will be provided for new residents to explain the special features of the site, including the potential habitat for this species;
6. **Modify poultry runs and aviaries based on best-practice guidelines.** Not relevant to the study area;
7. **Incorporate methods to reduce the numbers of spotted-tailed quolls killed at sections of roads where road kills are frequently reported. Assess the effectiveness of different mitigation methods.** Internal traffic calming measures will protect wandering animals on site. Control of threatening processes on Iluka Road is beyond the scope of this development project; and
8. **Monitor survival of spotted-tailed quoll populations in habitat newly colonised by cane toads.** Not relevant to the study area.”

This is considered to be a rare species in the local region despite the presence of a great deal of potential habitat, most of which is in reserves. The potential habitat on site is not high quality, given the abundance of degraded vegetation, and the absence of den sites.

The small scale losses of potential habitat are unlikely to result in a significant adverse impact on the local population of this species.

6.6 Grey-headed Flying-fox (*Pteropus poliocephalus*)

This species was not recorded on or near the site during survey. The temporary camp near the site had not been used since May 2016, but the subject site is within the nightly feeding range of the Maclean camp. Therefore the foraging resources of the site are accessible to this highly mobile species.

The recovery planning process for this species is well advanced, with a draft national conservation strategy (Commonwealth of Australia 2017), and a Management Strategy for the Maclean population (Geolink 2010).

Of the management actions detailed in the NSW Priority Action Statement, the highest priority actions for the conservation of this species relevant to the project area are:

- Increase the extent and viability of foraging habitat for Grey-headed Flying-foxes that is productive during winter and spring (generally times of food shortage), including habitat restoration/rehabilitation works; and
- Provide educational resources to improve public attitudes toward Grey-headed Flying-foxes.

The proposal is consistent with these actions in the restoration activities in the bushland Parks and the planting in the verges, plus the educational material to be supplied to new residents.

In the Draft National Recovery Plan (Commonwealth of Australia 2017), of the highest priority actions for species recovery, only one is relevant to the subject development:

- Increase the extent and viability of foraging habitat for the Grey-headed Flying-fox that is productive during winter and spring.

This is addressed in the proposed development by the conservation management, restoration and planting of forage species in the bushland Parks and verges.

The Maclean management Strategy highlights the need for a mixture of landscape-scale actions in the short, medium and long term. Pertinent to the development area are:

- Revegetate cleared land; and
- Educate residents of the benefits and ecological services provided by flying-foxes.

These management strategies are fulfilled by the proposal.

As part of the Saving Our Species program (OEH 2018b) for the recovery of threatened species, the Grey-headed Flying-fox has been classified as a “Landscape-managed species”. This species is distributed across relatively large areas and is subject to threatening processes that generally act at the landscape scale (e.g. habitat loss or degradation) rather than at distinct, definable locations.

The key threats to the viability of landscape-managed species are loss, fragmentation and degradation of habitat, and widespread pervasive factors such as impacts of climate change and disease.

In a study ranking foraging habitat in north eastern NSW, Eby and Law (2008) determined that, although patchy, the feeding habitat on the coast from Iluka north to Evans Head (within Bundjalung National Park) is ranked highly (Rank 1).

Of the key forage species identified in that study (highly productive species and reliable in their flowering), 4 occur on site:

- *Corymbia intermedia* Pink Bloodwood. Flowers December to March;
- *Banksia integrifolia* subsp. *integrifolia* Coast Banksia. Flowers April to August;
- *Eucalyptus tereticornis* Forest Red Gum. Flowers August to November on the coastal lowlands; and
- *Melaleuca quinquenervia* Broad-leaved Paperbark. Flowers February to July.

The proposal will retain almost all of the *Eucalyptus tereticornis* Forest Red Gum on site in Park B.

Banksia integrifolia subsp. *integrifolia* Coast Banksia is recognised as an important winter forage species and is highlighted for planting as a street tree and also is recommended as part of the restoration of the bushland Parks.

Corymbia intermedia Pink Bloodwood is recommended for planting and many individuals of this species occur in the retained bushland Parks.

Melaleuca quinquenervia Broad-leaved Paperbark on site is virtually restricted to Park A. All of the habitat supporting this species is to be retained and managed for conservation purposes.

Thus, the best areas of habitat will be retained or offset with compensatory plantings and restoration works in retained bushland.

General habitat protections during construction will also benefit the foraging habitat for this species on site. The site provides no potential roosting habitat.

This is a highly mobile species that will feed even in the most disturbed urban areas. Its ability to interact with the World Heritage areas is unlikely to be interrupted by the relatively small-scale clearing and construction works.

Further degradation of retained habitat will be halted, ameliorated and reversed by the implementation of the restoration works detailed in the HMP.

The offsetting of loss and fragmentation of habitat across 3.09 hectares (0.1% of regional habitat) will be delivered by the following:

- **Parks.** Reservation and conservation management of 4.43 hectares of bushland in Parks A, B, C, D and E will offset the loss of 3 foraging habitat.
- **Offset planting of key food species.** The removal of key trees in the development area will be offset by plantings of the same species to be removed. These plantings will be of local provenance material.

The verges provide opportunities for the dual objective of planting up to 220 trees for landscape aesthetics, as well as for fauna habitat for the Grey-headed Flying-fox.

The areas occupied by weed infestations and where reduction of *Acacia disparrima* canopy is to occur, provide the most ready locations for planting.

The offset plantings to replace *Eucalyptus tereticornis* Forest Red Gum at a greater than 1:1 ratio. This is principally driven by the needs of the Koala, but will benefit the Grey-headed Flying-fox as well.

The 11 *Eucalyptus tereticornis* Forest Red Gum trees to be removed be offset by the planting of 50 trees (offset ratio of 4.5:1), and the 2 *Eucalyptus propinqua* Small-fruited Grey Gum trees to be removed be offset by the planting of 30 trees (offset ratio of 15:1).

It is considered unlikely the proposal will result in a significant adverse impact on the Grey-headed Flying-fox. Importantly, the interaction of this species with the World Heritage estate is unlikely to be interrupted or diminished.

6.7 Gondwana Rainforest of Australia (Iluka Nature Reserve) Nominated Outstanding Universal Value (OUV) Constituent Species

6.7.1 Bird Species of OUV

The birds identified below that comprise the nominated Iluka Nature Reserve Outstanding Universal Value (OUV) Constituent Species are considered together for ameliorating and offsetting measures.

- ***White-eared Monarch (Monarcha leucotis)***
- ***Wonga Pigeon (Leucosarcia melanoleuca)***
- ***Wompoo Fruit-Dove (Ptilinopus magnificus)***
- ***Rose-crowned Fruit-dove (Ptilinopus regina)***
- ***Superb Fruit-Dove (Ptilinopus superbus)***
- ***Rufous Fantail (Rhipidura rufifrons)* – listed migratory**

The configuration of the development footprint and the bushland Parks will retain the best of the habitats available on site.

The areas of habitat to be removed are all of a small scale for these species, with all losses being less than 1% (between 0.004% and 0.97%) of the extent of regional habitat available.

These species are all highly mobile (some even migratory) and therefore able to exploit widely-separated resources. The additional fragmentation of habitat is unlikely to prevent or interrupt localised movements of these birds. Therefore, the connection of the habitats for these OUVs with the World Heritage property in Iluka Nature Reserve will not be severed.

The conservation management of habitat within the bushland Parks will reverse current degradation and prevent degradation arising from potential indirect impacts of the proposed development.

The immediate pre-clearing surveys and ecological supervision of clearing will aid in the amelioration of potential disturbance to nesting during works. Other protections of habitat during works detailed elsewhere are also of benefit to these species and their habitats.

Habitat enrichment (e.g. by the addition of coarse woody debris) will enhance the foraging opportunities for the Rufous Fantail, Wompoo Pigeon and White-eared Monarch. Restoration and planting of fruit-bearing rainforest species will be of benefit to the Fruit-doves.

It is considered unlikely that the proposal will result in a significant adverse impact on the constituent bird OUVs. Importantly, the interaction of this species with the World Heritage estate is unlikely to be interrupted or diminished.

6.7.2 Bat Species of OUV

The bats identified below that comprise part of the World Heritage Area nominated Outstanding Universal Values (OUV) Constituent Species are considered together for ameliorating and offsetting measures.

- ***Eastern Free-tail Bat (Mormopterus norfolkensis)***
- ***Little Bentwing Bat (Miniopterus australis)***
- ***Eastern Long-eared Bat (Nyctophilus bifax)***

Mormopterus norfolkensis Eastern Freetail-bat has a broad ecological niche, while *Nyctophilus bifax* Eastern Long-eared Bat is more confined to cluttered forest with vines and shrubs. The losses of foraging habitat for these species represents 0.6% and 0.03% respectively of what is available in the region.

They both rely on hollow-bearing trees as roost sites.

Miniopterus australis Small Bentwing-bat roosts and breeds in caves so the subject site provides potential foraging habitat only. The area of loss of such habitat represents only 0.7% of what is available in the region.

The vast majority of the remaining habitat for all species in the region is reserved in Iluka Nature Reserve and Bundjalung National Park.

The proposal will retain the best of the foraging habitats on site in the bushland Parks. The implementation of the conservation management program under the HMP will reverse further degradation, restore the habitats in the Parks, and prevent potential indirect impacts on retained foraging habitats.

All hollows to be removed that are judged suitable for microbats will be replaced by the installation of sets of robust nest boxes of an appropriate design in appropriate locations.

Further compensatory measures include offset planting of *Eucalyptus tereticornis* Forest Red Gum, *Eucalyptus propinqua* Small-fruited Grey Gum, *Corymbia intermedia* Pink Bloodwood and *Lophostemon confertus* Brush Box, supplemented by other plantings of trees with high value blossoms or fruit. As insectivores, all such plantings have the potential to improve their foraging habitat as these canopy trees will provide habitat for their insect prey.

Light pollution has the potential to interfere with foraging patterns of microchiropteran bats. Therefore, all lights to be installed will be of a type that minimises spill and glare, and only placed where needed for safety or amenity.

These species are all highly mobile and able to overcome any additional short distance fragmentation of habitat introduced by the development. Importantly, the ability to interact with the habitats of the World Heritage property will not be compromised or prevented.

The small scale impacts of the proposal, coupled with the ameliorative and compensatory measures to be implemented, mean that the proposed development is unlikely to result in significant adverse impacts on the local populations of these species.

6.8 Community Subdivision Framework

6.8.1 Community Subdivision – Key attributes

The Community Scheme Subdivision enables the subdivision of land with shared property. In the case of the subject subdivision at Hickey Street, Iluka, it enables all registered lot owners to share in the ownership and management of the park areas.

If the subdivision was not under the Community Scheme framework, the park areas would be transferred as State land and would be maintained by the Clarence Valley Council.

It is proposed the land development will be by way of a Community Subdivision Scheme.

A community scheme of subdivision is managed under the NSW Community Land Development Act 1989 (CLDA), and the NSW Community Land Management Act 1989 (CLMA).

The NSW Community Land Development Act 1989 provides the instrument to subdivide and develop land with shared property. It establishes the documentation requirements, plans, registration, ability to deal with the allotments, and any changes to the subdivision.

The NSW Community Land Management Act 1989 establishes the various required management protocols such as the management for the community, precinct and neighbourhood schemes (three slightly different forms of Community Scheme). It also provides for the compliance with the Community Management Statement, insurances, community property maintenance and Community Association functioning.

The NSW Community Land Management Act 1989 defines community scheme as follows:

“Community scheme means:

- (a) the manner of subdivision of **land** by a **community plan**, and
- (b) if **land** in the **community plan** is subdivided by a precinct plan—the manner of subdivision of the **land** by the precinct plan, and
- (c) the manner of subdivision of **land** in the **community plan**, or of **land** in such a precinct plan, by a neighbourhood plan or a strata plan, and Community Land Management Act 1989 No 202 [NSW] Current version for 14 January 2018 to date (accessed 12 March 2018 at 16:30).
- (d) the proposals in any related development contract, and

- (e) *the rights conferred, and the obligations imposed, by or under this Act, the **Community Land Development Act 1989** and the **Strata Schemes Development Act 2015** in relation to the **community** association, its **community** property, the subsidiary schemes and persons having interests in, or occupying, development lots and lots in the subsidiary schemes.”*

The definition of Community Association is provided in the NSW Community Land Development Act 1989, as follows:

“community association means the corporation that:

- (a) *is constituted by section 25 on the registration of a **community** plan, and*
- (b) *is established as a **community** association by section 5 of the **Community Land Management Act 1989**.”*

Community Schemes may consist of a single Neighbourhood Scheme or a Community Scheme that may be further subdivided into: -

- Neighbourhood Schemes
- Precinct Schemes and/or Strata Schemes

The Schemes are created by registration of a Community, Neighbourhood or Precinct Plan and allow for various levels of management and stages of development.

As is the case with Strata legislation, common areas within a Community, Neighbourhood or Precinct Scheme are owned and managed by a “Body Corporate” comprising all lot owners within the Scheme. The Body Corporate is known as the Community Association. The Community Associations for Neighbourhood and Precinct Schemes and the Owners’ Corporation for Strata Schemes, within a staged Community Scheme are members of the Community Association.

The common areas within a Community Scheme are known as the community property and are comprised in Lot 1 of the Scheme. Unit entitlement is based on site values and determines the lot owners voting rights and contributions to maintenance levies.

The proposed Park (Green Spaces) within the Community Scheme at Iluka will be comprised in Lot 1 of the subdivision and as noted elsewhere in this document will be managed by the developer for the initial two year period and by the Community Association in perpetuity.

Whilst it is intended to dedicate all roads within the subdivision as public roads, public positive covenants will be created over the verge areas of the roads and will burden the Community Association for maintenance of the landscape components within the public road reserves.

It is mandatory for a Community, Precinct and Neighbourhood Scheme to contain a Community Management Statement. The Statement includes the particular rules associated with the participation in the Scheme and the Bylaws attached to the Association property. The Management Statement is lodged and registered with the Community, Neighbourhood or Precinct Plan.

6.8.2 Community Management Statement

As part of the Community Subdivision, a Community Management Statement will be prepared in accordance with the provisions of the Community Land Development Act 1989 (NSW) and the Community Land Management Act 1989 (NSW). The Community Management Statement will include the following key elements:

- Bylaws to ensure development proceeds in accordance with its intended charter;
- Community property obligations;

- Mandatory matters – including for executive committee proceedings, insurances, access ways and the like;
- Bylaws required by Statutory Authorities;
- Definitions and certifications.

The purposes of the Community Management Statement and the Community Subdivision will enable the members of the Community Subdivision to be responsible for the maintenance and management of the park areas, internal street verge areas and vegetation areas adjacent to Lot 99 DP823635 including those areas immediately adjacent to Lot 99, and adjoining Hickey Street, Iluka Road, and Elizabeth Street. Such an arrangement takes the responsibility for maintenance and management away from the Clarence Valley Council and leaves the responsibility and costs with the land owners of the Community Subdivision.

The Community Land Development Act 1989 identifies those matters to be included in the community management statement, as follows:

“2 Matters to be included

A community management statement must include by-laws, plans and other particulars relating to:

- (a) the location, control, management, use and maintenance of any part of the community property that is an open access way or a private access way, and*
- (b) the control, management, use and maintenance of any other part of the community property, including any special facilities provided on the community property, and*
- (c) matters affecting the provision of, and payment for, internal fencing on the community parcel including any obligations of the community association or the subsidiary bodies, and*
- (d) the storage and collection of garbage on and from the community parcel and any related obligations of the community association or the subsidiary bodies, and*
- (e) the maintenance of water, sewerage, drainage, gas, electricity, telephone and other services, and*
- (f) insurance of the community property, and*
- (g) the executive committee of the community association, the office-bearers of the committee and the functions of the office-bearers, and*
- (h) meetings of the executive committee, and*
- (i) voting on a motion submitted to the executive committee otherwise than at a meeting of the committee, and*
- (j) the keeping of records of proceedings of the executive committee.”*

6.8.3 Instruments for Easements, Right of Access, Positive Covenants and Restrictions on Use of Land

It is proposed the suite of documents to be compiled to create the community subdivision where relevant will include required instruments to set out the terms and conditions of:

- (i) Easements (where required for services such as water supply, sewerage, stormwater drainage, electricity, telecommunications);
- (ii) Positive Covenants where incorporated - in relation to obligations for maintenance of vegetation for example adjoining parts of Iluka Road and Elizabeth Street;

- (iii) Restrictions on Use of Land, for example in relation to the activities that may be undertaken within the park areas;
- (iv) Define the requirements in relation to Bushfire Management – including reference to the bushfire trail, its function and restriction on the use of the land;
- (v) Provide the management strategies contained in the Habitat Management Plan (including Landscape Master Plan).

6.8.4 Management Plans

The community management statement that will be registered with the community plan comprises a statement of the relevant bylaws and other details that govern participation in the community scheme.

As referenced herein, the proposed community management statement will include the obligation of the Community Association to undertake various management strategies identified in the following management plans:

- Habitat Management Plan;
- Landscape Master Plan;
- Bushfire Management Plan;
- Infrastructure Management Plan – where infrastructure is under the Community Association jurisdiction.

6.8.5 Funding Arrangement

Details of funding obligations of the Community Association are identified under the elements to be contained within the community management statement. Refer to item 6.8.2 Community Management Statement.

6.9 Habitat Management Plan

The community subdivision – Habitat Management Plan is listed in Attachment 5.

The Habitat Management Plan (HMP) purpose is to outline the management strategies for the various retained bushland areas and greenspaces within the proposed community subdivision.

The HMP contains the following two components:

- HMP Context and Principles;
- HMP Management.

6.10 Subdivision Masterplan Amendments to Avoid, and Reduce Impacts

Through the Clarence Valley Council officer input, statutory referral agency input and having regard to the submissions by stakeholders and to avoid and reduce the impact of the proposed subdivision, its form and characteristics have been modified as indicated in the following Table 6.10 – Proposed Amendments – To Avoid and Reduce Impacts – Key Items.

Table 6.10 – Proposal Amendments – To Avoid and Reduce Impacts – Key Items			
Item	Original	Current Proposal	Difference Status Comparing Original to Current Proposal
Allotments Number (Residential)	162	140	22 Reduction
Development Footprint (Ha)	16.57Ha (approx.)	14.11Ha (approx.)	2.46Ha Reduction
Park Areas Approx. (Ha)	2.84Ha (approx.)	5.3Ha (approx.)	2.46Ha Increase
Length new Street or existing Road adjoining Park (retained vegetation) (m)	975m (approx.)	2,185m (approx.)	1,210m (approx.) Increase

The subdivision masterplan has been refined to achieve the key items to avoid and reduce impacts by:

- Reducing the total number of allotments;
- Reducing the development footprint;
- Increasing the vegetation retention;
- Increasing the length of new Street or existing Road adjoining new park areas;
- Reducing the allotments sizes;
- Increases the number of required smaller lots to comply with the Clarence Valley Council “Affordable Housing” policy;
- Increase in retaining vegetation in adjoining road reserves;
- Increasing influence of the maintenance to be undertaken by the Community Association to areas external to Lot 99 DP823635 to include adjacent vegetated road verge areas of Iluka Road, Hickey Street and Elizabeth Street;
- Maintain wide verges (6m) width for replanting vegetation and fauna movement;
- Incorporating part of the existing bushfire trail zone – provides linkage and fauna movement;
- Remove reliance on Lot 7020 to be transferred from Crown Land to Hickey Street road reserve;
- Increase street cul-de-sacs diameter and removed access ways to satisfy CVC officers;
- Maintained corridors for fauna movement;
- Maintained protection to BGLALC land owner identified scar trees;
- Maintained street configuration for water quality treatment (WSUD), landscaping and to reduce vehicle speeds. Less impact for fauna movement;
- Maintained bushfire management APZ zones;

- Maintained Community Subdivision format. Where by the future Community Association will be trusted with the ongoing implementation of the following plans for the future allotment owners in the subdivision:
 - ❖ Habitat Management Plan;
 - ❖ Landscape Master Plan;
 - ❖ Bushfire Management Plan;
 - ❖ Infrastructure Management Plan – where infrastructure is under the body corporate jurisdiction.
- The community subdivision is situated within the area identified as “Urban Growth Area” – on Figure 20 in the NSW Government – Department of Planning & Environment – North Coast Regional Plan 2036, March 2017;
- The subject land is zoned for the proposed use. It is contained within the Clarence Valley Council Local Environmental Plan 2011 – R2 – Low Density Residential Zone.
- The proposed subdivision is not in conflict with the relevant provisions of the Clarence Valley Council Residential Zones Development Control Plan 2011 (DCP).
- The proposed subdivision is not out of sequence for development to appropriately zoned land in Iluka.
- The proposed subdivision is serviced by existing infrastructure including roads, water supply, sewerage, telecommunication and electricity.

7.0 OFFSETS CONSIDERATION

7.1 Overview of offsets consideration

7.1.1 DEE Considerations

The Environmental Protection and Biodiversity Conservation Regulations 2000 – Schedule 2 – Referral Information, subsection 6 Measures to avoid or reduce impacts – identifies:

“6.01 A description of measures that will be implemented to avoid, reduce, manage or offset any relevant impacts of the action including, if appropriate, evidence in the form of reports or technical advice on the feasibility and effectiveness of the proposed measures.”

The Department of Environment and Energy identifies that if an offset package is to be provided, the preliminary documentation must contain:

“V. Details of the proposed offset package that will be provided, and evidence that demonstrates how the proposed offset package meets the requirements of the EPBC Act Environmental Offsets Policy 2012.

Alternatively, offsets for threatened species may be provided in accordance with the rules established under section 127B of the Threatened Species Conservation Act 1995 (BioBanking Assessment Methodology).”

7.1.2 Proponent Response to Offsets

The preliminary documentation Section 6 – “Proposed Avoidance, Mitigation and Management Measures” includes a summary of key elements from the Keystone Report (Attachment 6). The Keystone Report Section 8 – “Ameliorating and Offsetting Impacts” incorporates for completeness the offsetting elements for the development. Reference is made to the Keystone Report (Attachment 6).

The proposed subdivision incorporates an integrated approach to ameliorating and offsetting impacts to the extent the combination of environmental attributes, management plans and management responsibilities in combination result in the subdivision being unlikely to pose a significant adverse impact on the listed threatened species and the Iluka Nature Reserve nominated OUV constituent species.

This is achieved by:

- Understanding the site, its environment and fauna and flora habitat;
- Understanding the potential impacts on each identified species;
- Preparing a subdivision layout to facilitate retention of higher quality habitat in retained bushland (park areas);
- Providing a subdivision configuration to slow traffic speed, provide corridors for fauna movement, utilise water sensitive urban design approach, and connects to existing utility infrastructure such as water supply, sewer and electricity;
- Is contained in land zoned for residential use and in compliance with Regional Planning Strategy by the NSW Government;
- Incorporates a Community Subdivision Scheme which enables and provides the instruments for the final subdivision proprietors to co-own the Community Land (Lot 1 – all park areas), and provides obligations for management of these areas once the initial developer proponent obligations finish;

- Enable the creation of easements and / or positive covenants for the Community Association to maintain portions of adjoining public road reserve verge areas and new public road verge areas. This is a saving to the Clarence Valley Council and assists with weed management, fire management, vegetation growth, and fauna movements;
- There are nominated tree planting for various species within the Park areas that will have a positive influence for a variety of identified threatened species known on site or near site, and where species have not been recorded, the potential to improve the habitat is recognised and provided for.
- Preparation and proposed implementation of the Habitat Management Plan for all retained bushland and identified adjoining public road verge areas. With the responsibility for implementation and funding to transfer from the original proponent to the residents Community Association.
- Preparation and proposed implementation of the Landscape Master Plan for all new public road / street areas, including fire trails connections.

The amelioration and offsetting is described for each of the nominated threatened species – Koala, *Acronychia littoralis*, Spotted-tailed Quoll, and Grey-headed Flying-fox, and also for the Iluka Nature Reserve nominated OUV constituent species.

For details, refer to the Keystone Report Table 20: Measures to ameliorate and offset impacts, and the species advantaged by those measures.

These measures include, and not limited to, the following, noting measure is tailored for each specific species and combination of species:

- Preparation and implementation of a comprehensive Habitat Management Plan to incorporate all practical measures to ameliorate impacts, and enrich and improve habitats.
- Protection and rehabilitation of habitats in Parks A, B, C, D, and E, and appropriate planting in Park F.
- Implement staged incremental replacement strategy of *Acacia dispartima* in retained bushland with diverse canopy species, including Koala food trees.
- Weed control to target high threat weeds in retained bushland parks.
- Planting of trees in Parks and verges to replace Identified Threatened Species food trees removed for the development footprint.
- Tree species selection and numbers to be planted in accordance with CKPoM.
- Tree planting spacing on the verges in accordance with best practice design guidelines for Koala.
- Retained bushland to be protected from damage during construction by temporary fencing.
- Tag hollow-bearing trees prior to clearing.
- Stage clearing and Identify escape route for resident fauna to retained bushland.
- No plantings of any *Acronychia* species.
- Immediate pre-clearing survey for resident fauna (such as presence of Koalas, presence of breeding birds).
- Induction of works staff regarding the important features of the site.
- Implementation of agreed protocols for felling of hollow-bearing trees.
- Installation of nest boxes prior to felling of hollow-bearing trees.
- Nest boxes to be installed at a ratio of at least 2:1 for the hollows to be removed.
- Nest boxes monitored and maintained as part of the reporting protocols for the HMP.
- Koala activity to be monitored as part of the HMP.
- An education package to be provided to all new residents that highlights the sensitive nature of the site and surrounds and their environmental obligations.
- Large sections of felled trees to be salvaged and relocated to enrich the coarse woody debris and thus terrestrial habitat in retained bushland.
- Hollow sections of felled trees are to be salvaged when possible and re-used as arboreal or terrestrial habitat in retained vegetation.
- Trees identified for retention and vulnerable to construction to be protected according to recommendations of an arborist.

- All lighting to be kept to a minimum and of a type that reduces spill and glare.
- Garbage bins to be of a design that cannot be accessed by animals.
- Install educational signage within the Parks that provides information regarding the high ecological values of the vegetation and habitats that the site contains.
- No barbed wire is to be used for any permanent or temporary fencing.
- Sediment controls to be strictly observed.
- Traffic calming delivered by design and implemented of internal streets.
- Fences around yards to be of a design that will prevent Koalas climbing over and into the yards.
- Swimming pools to have design features that allow for escape of the Koala.
- Dogs to be on leads and under control at all times when outside of the premises.
- Domestic pets are to be kept within fenced premises, and especially at night.
- Dumping of garden refuse in bushland areas is to be prohibited.
- Planted verge to provide a buffer zone between retained bushland and the footprint.
- Residents are to be encouraged to plant locally native species in their gardens.

7.1.3 Offset Food Tree Replacement

The Keystone Ecological report (Table 19) identifies the proposed minimum tree planting offsets to be planted within the Community Subdivision park areas – refer to the extract below (refer to Keystone Ecological report for further details).

“**Table 19:** Minimum tree planting offsets. Koala food trees are denoted by superscripts: ‘KF 1’ = primary food trees, ‘KF 2’ = secondary food trees, ‘KF Sup’ = supplementary food trees.”

Species	Number to be		Proposed Locations			
	removed	planted	Park A	Park B	Park D	Verges
<i>Eucalyptus tereticornis</i> Forest Red Gum ^{KF 1}	11	50	0	30	20	0
<i>Eucalyptus propinqua</i> Small-fruited Grey Gum ^{KF 1}	2	30	0	15	15	0
<i>Corymbia intermedia</i> Pink Bloodwood ^{KF 2}	164	165	5	5	5	150
<i>Lophostemon confertus</i> Brush Box ^{KF Sup}	39	39	20	15	10	0
<i>Banksia integrifolia</i> Coast Banksia	Unknown	23	-	-	-	23
<i>Cupaniopsis anacardioides</i> Tuckeroo	Unknown	23	-	-	-	23
<i>Syzygium hemilampra</i> Broad-leaved Lilly Pilly	Unknown	23	-	-	-	24
TOTAL	216	284 (1.3:1)	25	65	50	150 (KF trees) 70 (other)

8.0 ECONOMIC AND SOCIAL MATTERS

Purpose – the purpose of this section is to provide general discussion on the proposed community subdivision and the economic and social relationships at the Local, Regional and National level.

This section makes reference to key agency policy for the proposed community subdivision.

- **National Level** - At the national level, this is taken to be at the Australian Government and broader Australian context.
- **Regional / State Level** - The regional level is taken to be at the NSW Government or NSW spatial context. Also taken to be at the regional level to include the NSW North Coast regional level which extends generally from strategic centres of Port Macquarie in the south, to Tweed Heads in the north.

With respect to the NSW North Coast region, specific reference is made to the *NSW Government – Department of Planning & Environment - NORTH COAST REGIONAL PLAN 2036*, March 2017.

The North Coast Regional Plan identifies its vision as “*The best region in Australia to live, work and play thanks to its spectacular environment and vibrant communities*”.

To achieve the vision, the North Coast Regional Plan identifies four (4) goals, described below. For each stated goal there are related “directions” for implementation and action plans. The four (4) goals are:

- Goal 1: The most stunning environment in NSW
- Goal 2: A thriving, interconnected economy
- Goal 3: Vibrant and engaged communities
- Goal 4: Great housing choice and lifestyle options

To provide an overview of house affordability from the national level, reference is made to the document by the Australian Government – “Australian Institute of Health and Welfare 2017, Australia’s welfare 2017, Australia’s welfare series no. 13, AUS 214, Canberra, AIHW”, published by the Australian Institute of Health and Welfare.

- **Local Level** - For the local perspective, this includes the geographic area coastal village of Iluka. Reference will also be made in the context of the Australian Bureau of Statistics – Statistical Area Level 2 – being Iluka, village of Yamba, and the township of Maclean.

References in this section focus on the Local, Regional and National policy settings for each of the economic and social matters listed. The intention is to place in context and identify the various frameworks that guide each of the three hierarchy levels of Local, Regional and National agencies decision making and program delivery mechanisms. This link is described at the site level for the proposed development.

There is comment provided in each economic and social matter the manner in which the proposed development has addressed potential positive or negative impact on the economic or social matter. The comments also identify the design, management and / or mitigation approach to be adopted in the development.

A summary of the various economic and social relationships at the National, Regional, and Local level is provided in the following Table 8.0. These attributes are further discussed and referenced in the following sections.

Table 8.0 – Economic and Social Relationships – National, Regional and Local Level – Key Element Summary

Key Element	National Context	Regional Context	Local Context
Economic self-sufficiency	<p>Australian Government – Aboriginal and Torres Strait Islander Act 2005 – Objects (part):</p> <ul style="list-style-type: none"> Maximum participation of Aboriginal persons and Torres Strait Islanders; Promote development of self-management & self-sufficiency; Further economic, social, and cultural development; <p>Of Aboriginal persons and Torres Strait Islanders.</p>	<ul style="list-style-type: none"> NSW Aboriginal Land Rights Act 1983 provides land rights for Aboriginal persons. NSW North Coast Regional Plan 2036, Direction 17 Increase the Economic Self-determination of Aboriginal Communities. 	<ul style="list-style-type: none"> Vision for BGLALC Community described in its letter 3 April 2018. Successful completion of the development at Hickey Street, Iluka assists BGLALC achieve its vision. Facilitates BGLALC movement towards self-sufficiency and self-determination
Sustainable and coordinated growth	<p>Aust Government Dept Prime Minister & Cabinet document Smart Cities Plan – Three Pillars:</p> <ul style="list-style-type: none"> Smart Investment; Smart Policy; Smart Technology. 	<ul style="list-style-type: none"> NSW North Coast Regional Plan 2036 identifies the Clarence Valley Local Government Area – Urban Growth Area Map – includes Lot 99 DP823635, for the urban growth area of Iluka. 	<ul style="list-style-type: none"> Contained in Zone R2 – Low Density Residential; Subdivision not out of sequence with planned urban development and infrastructure for Iluka.
Major infrastructure connectivity	<ul style="list-style-type: none"> Infrastructure Australia prepared the Australian Infrastructure Plan Priorities and Reforms for our Nations Future Feb 2016 – part of the recommendation includes State and Territory Governments should deliver long term Regional Infrastructure Plans. 	<ul style="list-style-type: none"> NSW North Coast Regional Plan 2036 makes reference to NSW Government investment on the North Coast – share of \$1.5 Billion towards upgrade of Pacific Highway, including \$954M towards the Woolgoolga to Ballina Project. 	<ul style="list-style-type: none"> Proposed Community Subdivision located adjacent to Iluka Road has a connection to the Pacific Highway some 16km to the north-west of Iluka; Positive benefit – provide opportunities to reduced travel times, improved travel safety and improved transport efficiency.
Self-sufficiency	<p>Australian Government through Dept Prime Minister & Cabinet implementing various initiatives for Indigenous Affairs – summary in part:</p> <ul style="list-style-type: none"> Closing the Gap; Community safety; Culture and capability; Economic development; Education; Employment; Empowered communities; Health and wellbeing. 	<ul style="list-style-type: none"> NSW North Coast Regional Plan 2036, Direction 16 – Collaborate and Partner with Aboriginal Communities. 	<p>The BGLALC as advised in its Vision, the Hickey Street development will assist BGLALC achieve its vision for its community:</p> <ul style="list-style-type: none"> Step toward self-sufficiency Step toward self-determination Cultural interaction; Education and training; Employment; Housing; Improvements to Ngaru Village; and Support programs.

Table 8.0 – Economic and Social Relationships – National, Regional and Local Level – Key Element Summary

Key Element	National Context	Regional Context	Local Context
Indigenous Heritage	<p>Australian Government Legislation:</p> <ul style="list-style-type: none"> ▪ The Environment Protection and Biodiversity Act 1999; ▪ Aboriginal and Torres Strait Islander Heritage Protection Act 1984; ▪ Native Title Act 1993; ▪ Aboriginal Land Rights (Northern Territory) Act 1976; ▪ Protection of Moveable Cultural Heritage Act 1986. 	<ul style="list-style-type: none"> ▪ NSW North Coast Regional Plan 2036 – Direction 18 Respect and Protect the North Coast's Aboriginal Heritage. 	<ul style="list-style-type: none"> ▪ Lot 99 is owned by the BGLALC; ▪ A Cultural Heritage Assessment has been conducted for the land; ▪ An Archeological Assessment was undertaken for the land.
Housing supply – opportunities	<ul style="list-style-type: none"> ▪ Australian Government Treasury Mid Year Economic and Fiscal Outlook 2017-18 December 2017 identifies legislation to support a new National Housing and Homelessness Agreement with States and Territories; ▪ Assist first home buyers to build a deposit inside superannuation through the First Home Super Saver Scheme ▪ Provide older Australians wishing to downsize with greater flexibility to contribute the sale proceeds of their home into superannuation; and ▪ Strengthen the rules that apply to foreign persons owning Australian property. 	<ul style="list-style-type: none"> ▪ NSW North Coast Regional Plan 2036 – Direction 22 Deliver Greater Housing Supply. 	<ul style="list-style-type: none"> ▪ The Community Subdivision will provide fully serviced vacant land for the purpose of constructing future residential dwellings.
Housing choice, diversity potential and lifestyle options	<ul style="list-style-type: none"> ▪ Infrastructure Australia Creating Places for People and urban design protocol for Australian Cities 2011 identifies; ▪ Its aim to create productive, sustainable, liveable places for people ▪ Productivity and sustainability creates the context for people to engage with the place ▪ Enhances local economy and environment 	<ul style="list-style-type: none"> ▪ NSW North Coast Regional Plan 2036 – Direction 23 – Increase housing diversity and choice. 	<p>The vacant land allotments created as part of the community subdivision provide opportunity and facilitate through;</p> <ul style="list-style-type: none"> ▪ Proactive urban configuration ▪ Future housing choice ▪ Dwelling sites for future resident lifestyle options in Iluka and environs ▪ Has had regard to potential weather events and climate change through adoption of CVC development guidelines ▪ Acknowledges and manages biodiversity

Table 8.0 – Economic and Social Relationships – National, Regional and Local Level – Key Element Summary

Key Element	National Context	Regional Context	Local Context
	<ul style="list-style-type: none"> Connects physically and socially Diversity of options and experiences Sustainable, enduring and resilient. 		<ul style="list-style-type: none"> Is connected with the Iluka street network for access to recreation facilities, school, shops
Affordable housing	<ul style="list-style-type: none"> Aust Institute of Health and Welfare 2017, Australia's welfare 2017; notes determinates for housing affordability in Australia amongst other matters demand influenced by; <ul style="list-style-type: none"> Population growth Changes in household composition Economic circumstances Interest rates and access to affordable finance Tax settings Supply influenced by; <ul style="list-style-type: none"> Land availability Land release Cost of construction government taxes and subsidies Availability of skilled labour 	<ul style="list-style-type: none"> The Northern Rivers Regional Affordable Housing Strategy 2012 identifies guiding principles; <ul style="list-style-type: none"> Commitment to providing access to housing Partnership and collaboration Inclusiveness of decision making Fairness and equality Efficiency and effectiveness Simplicity and ease of administration Sustainability 	<ul style="list-style-type: none"> Clarence Valley Council adopted a Clarence Valley Affordable Housing Strategy 2007; The proposed subdivision incorporates smaller sized lots as required by CVC.
Health and safety	<ul style="list-style-type: none"> Infrastructure Australia Creating Places for People and urban design protocol for Australian Cities 2011 identifies; <ul style="list-style-type: none"> For Livability – creates the context for people to engage with each other. Comfortable Vibrant Safe Walkable 	<ul style="list-style-type: none"> NSW North Coast Regional Plan 2036 – makes reference Goal 3 – Vibrant and engaged communities; <ul style="list-style-type: none"> Well design communities Support local character Active lifestyles provide residents with greater sense of wellbeing and belonging Direction 15 Develop healthy, safe, socially engaged and well-connected communities. 	<ul style="list-style-type: none"> Open space bushland setting with perimeter roads for natural surveillance and fauna movement Community management scheme for maintenance obligations for WSUD and retained bushland Connects with Iluka bike path strategy Encourages habitat awareness and management Incorporates CPTED principles Awareness and close proximity for lifestyle choices – Iluka Nature Reserve (World Heritage Area), Bundjalung National Park and Iluka facilities

Table 8.0 – Economic and Social Relationships – National, Regional and Local Level – Key Element Summary

Key Element	National Context	Regional Context	Local Context
Proposed project costs	<ul style="list-style-type: none"> Australian Government Agency fees and Charges 	<ul style="list-style-type: none"> NSW Government agency search fees 	<p>Provides stimulus for the local and regional economy at the:</p> <ul style="list-style-type: none"> Project initiation and statutory approvals phase Design Phase Construction Phase Land Title Phase Land Marketing and Sales Phase
Employment opportunities	<ul style="list-style-type: none"> Provides opportunities for employment in the Project initiation and statutory approvals phase Design Phase Construction Phase Land Title Phase Land Marketing and Sales Phase 	<ul style="list-style-type: none"> Provides opportunities for employment in the Project initiation and statutory approvals phase Design Phase Construction Phase Land Title Phase Land Marketing and Sales Phase 	<p>Provides opportunities for employment in the:</p> <ul style="list-style-type: none"> Project initiation and statutory approvals phase Design Phase Construction Phase Land Title Phase Land Marketing and Sales Phase
Project Capital Investment	<ul style="list-style-type: none"> Contributes to potential NBN distribution 	<ul style="list-style-type: none"> Provides funds for capital investment in the potential supply of goods, machinery and materials and personnel from the broader region outside the local Iluka village 	<ul style="list-style-type: none"> Creates a land resource suitable for future housing construction on each allotment Provides infrastructure roads, bushfire trail connections, water supply and sewer connections, electricity, telecommunications facilities and bushland areas
Potential value added benefit	<ul style="list-style-type: none"> Assists BGLALC move towards its vision for its community reinforces and approach for other Aboriginal and Torres Strait Islander communities to work towards self sufficiency 	<ul style="list-style-type: none"> Assists BGLALC move towards its vision for its community reinforces and approach for other Aboriginal and Torres Strait Islander communities to work towards self sufficiency 	<ul style="list-style-type: none"> Assists BGLALC move towards its vision for its community The Community Subdivision - Community Association to be responsible for certain management actions such as – The retained bushland areas Protects and manages through the Habitat Management Plan, and Bushfire Management Plan Raises awareness for – Iluka Nature Reserve (World Heritage Area), Bundjalung National Park and Iluka facilities Bushfire risk reduced

Table 8.0 – Economic and Social Relationships – National, Regional and Local Level – Key Element Summary			
Key Element	National Context	Regional Context	Local Context
Payments to Clarence Valley Council	<ul style="list-style-type: none"> NA 	<ul style="list-style-type: none"> NA Refer to Clarence Valley Council fees and charges listed under Local context 	Payment of agency fees and charges to CVC for: <ul style="list-style-type: none"> Development application fees Section 94 fee contributions Open space, community facilities, plan of management Section 64 contributions – sewer and water supply headworks CVC property rates
Fees and charges to Government Agencies	<ul style="list-style-type: none"> Taxes GST Payments for Statutory Applications – for example EPBC Act 	<ul style="list-style-type: none"> Taxes and charges Land taxes Stamp Duty Search Fees GST 	<ul style="list-style-type: none"> Payment to agencies fees and charges, refer to payment to CVC for application fees, Section 94 Contributions, and Section 64 Contributions

8.1 Existing Population and Employment Profile – ABS 2016 Census

The Australian Bureau of Statistics (ABS) provides census data on various Australian social and economic attributes.

The existing situation context is listed with the use of ABS Census data. Table 8.1A indicates information for Iluka based on “Urban Centres and Localities” (UCL) category for the 2016 Census. The demographic profile and other socio-economic indicators are provided in Table 8.1A to Table 8.1I inclusive.

The following tables (Table 8.1A to Table 8.1I inclusive) have been compiled from the ABS website (http://www.censusdata.abs.gov.au/census_services/getproduct/census/2016/quickstat/ucl115080?opendocument).

Table 8.1A – Iluka Code UCL115080 (UCL)	
People	1,715
Male	50.8%
Female	49.2%
Median age	62
Families	499
Average children per family:	
for families with children	1.7
for all families	0.3
All private dwellings	1,273
Average people per household	1.9
Median weekly household income	\$722
Median monthly mortgage repayments	\$1,203
Median weekly rent	\$245
Average motor vehicles per dwelling	1.5

The comparison of Iluka to New South Wales and the Australian context are indicated in the following ABS census data for 2016. These tables are based on the ABS data as of 23 October 2017, for the “Urban Centres and Localities” (UCL) category:

Table 8.1B – People – Demographics & Education						
People	Iluka	%	NSW	%	Australia	%
Male	874	50.8	3,686,014	49.3	11,546,638	49.3
Female	845	49.2	3,794,217	50.7	11,855,248	50.7
Aboriginal and/or Torres Strait Islander People	43	2.5	216,176	2.9	649,171	2.8
Age						
Median age	62	--	38	--	38	--
0-4 years	51	3.0	465,135	6.2	1,464,779	6.3
5-9 years	79	4.6	478,184	6.4	1,502,646	6.4
10-14 years	54	3.2	443,009	5.9	1,397,183	6.0
15-19 years	53	3.1	448,425	6.0	1,421,595	6.1
20-24 years	30	1.8	489,673	6.5	1,566,793	6.7
25-29 years	32	1.9	527,161	7.0	1,664,602	7.1
30-34 years	37	2.2	540,360	7.2	1,703,847	7.3
35-39 years	36	2.1	499,724	6.7	1,561,679	6.7
40-44 years	70	4.1	503,169	6.7	1,583,257	6.8
45-49 years	77	4.5	492,440	6.6	1,581,455	6.8
50-54 years	95	5.6	485,546	6.5	1,523,551	6.5
55-59 years	146	8.6	469,726	6.3	1,454,332	6.2
60-64 years	207	12.2	420,044	5.6	1,299,397	5.6
65-69 years	227	13.3	384,470	5.1	1,188,999	5.1
70-74 years	201	11.8	292,556	3.9	887,716	3.8
75-79 years	131	7.7	217,308	2.9	652,657	2.8
80-84 years	108	6.3	155,806	2.1	460,549	2.0
85 years and over	67	3.9	167,506	2.2	486,842	2.1
Education						
Preschool	28	7.8	132,047	5.7	347,621	4.8
Primary - Government	91	25.3	417,465	18.0	1,314,787	18.2
Primary - Catholic	0	0.0	122,099	5.3	380,604	5.3
Primary - other non Government	4	1.1	67,611	2.9	231,490	3.2
Secondary - Government	57	15.9	269,249	11.6	827,505	11.5
Secondary - Catholic	3	0.8	117,689	5.1	338,384	4.7
Secondary - other non Government	0	0.0	79,915	3.4	280,618	3.9
Technical or further education institution	26	7.2	144,103	6.2	424,869	5.9
University or tertiary institution	11	3.1	376,133	16.2	1,160,626	16.1
Other	4	1.1	63,673	2.7	198,383	2.8
Not stated	135	37.6	535,266	23.0	1,707,023	23.7
Level of highest educational attainment						
Bachelor Degree level and above	100	6.5	1,424,716	23.4	4,181,406	22.0
Advanced Diploma and Diploma level	113	7.4	543,142	8.9	1,687,893	8.9
Certificate level IV	34	2.2	167,947	2.8	551,767	2.9
Certificate level III	272	17.7	730,498	12.0	2,442,203	12.8
Year 12	125	8.2	930,654	15.3	2,994,097	15.7
Year 11	42	2.7	203,574	3.3	941,531	4.9

Table 8.1B – People – Demographics & Education						
Year 10	324	21.1	702,178	11.5	2,054,331	10.8
Certificate level II	0	0.0	4,849	0.1	13,454	0.1
Certificate level I	0	0.0	625	0.0	2,176	0.0
Year 9 or below	214	14.0	513,209	8.4	1,529,897	8.0
No educational attainment	6	0.4	54,870	0.9	145,844	0.8
Not stated	239	15.6	627,465	10.3	1,974,794	10.4

Table 8.1C – People – Cultural & Language Diversity						
Ancestry, top responses	Iluka	%	NSW	%	Australia	%
English	773	33.1	2,302,481	23.3	7,852,224	25.0
Australian	699	29.9	2,261,062	22.9	7,298,243	23.3
Irish	227	9.7	741,671	7.5	2,388,058	7.6
Scottish	220	9.4	587,052	5.9	2,023,470	6.4
German	91	3.9	236,146	2.4	982,226	3.1
Country of birth						
Australia	1,413	83.6	4,899,090	65.5	15,614,835	66.7
England	55	3.3	226,564	3.0	907,570	3.9
New Zealand	31	1.8	117,136	1.6	518,466	2.2
United States of America	10	0.6	30,081	0.4	86,125	0.4
Netherlands	6	0.4	16,900	0.2	70,172	0.3
Wales	5	0.3	7,256	0.1	28,046	0.1

Table 8.1D – People - Employment						
Employment	Iluka	%	NSW	%	Australia	%
Worked full-time	170	40.5	2,134,521	59.2	6,623,065	57.7
Worked part-time	187	44.5	1,071,151	29.7	3,491,503	30.4
Away from work	25	6.0	174,654	4.8	569,276	5.0
Unemployed	38	9.0	225,546	6.3	787,452	6.9
Employment – Hours Worked						
1-15 hours per week	67	17.8	364,637	10.8	1,218,823	11.4
16-24 hours per week	64	17.0	352,817	10.4	1,079,236	10.1
25-34 hours per week	59	15.7	353,702	10.5	1,193,445	11.2
35-39 hours per week	52	13.8	645,428	19.1	2,031,263	19.0
40 hours or more per week	113	30.1	1,489,099	44.1	4,591,801	43.0
Occupation						
Labourers	76	19.5	297,887	8.8	1,011,520	9.5
Technicians and Trades Workers	60	15.4	429,239	12.7	1,447,414	13.5
Sales Workers	55	14.1	311,414	9.2	1,000,955	9.4
Community and Personal Service Workers	49	12.6	350,261	10.4	1,157,003	10.8
Managers	43	11.1	456,084	13.5	1,390,047	13.0
Professionals	41	10.5	798,126	23.6	2,370,966	22.2
Clerical and Administrative Workers	27	6.9	467,977	13.8	1,449,681	13.6
Machinery Operators and Drivers	21	5.4	206,839	6.1	670,106	6.3
Industry of employment, top responses						
Building and Other Industrial Cleaning Services	19	6.5	41,390	1.2	131,908	1.2

Table 8.1D – People - Employment						
Supermarket and Grocery Stores	18	6.1	74,487	2.2	254,275	2.4
Clubs (Hospitality)	15	5.1	25,773	0.8	46,915	0.4
Aged Care Residential Services	15	5.1	67,209	2.0	211,621	2.0
Accommodation	12	4.1	34,450	1.0	113,377	1.1
Median Weekly Incomes						
Personal	427	-	664	-	662	-
Family	852	-	1,780	-	1,734	-
Household	722	-	1,486	-	1,438	-

Table 8.1E – Families – Family Composition						
Family Composition	Iluka	%	NSW	%	Australia	%
Couple family without children	329	65.7	709,524	36.6	2,291,987	37.8
Couple family with children	78	15.6	887,358	45.7	2,716,224	44.7
One parent family	85	17.0	310,906	16.0	959,543	15.8
Other family	9	1.8	32,438	1.7	102,559	1.7
Single (or lone) parents						
Male	-	31.4	-	17.8	-	18.2
Female	-	68.6	-	82.2	-	81.8

Table 8.1F – Dwellings – Dwelling Structure						
Dwelling Count	Iluka	%	NSW	%	Australia	%
Occupied private dwellings	797	74.9	2,604,320	90.1	8,286,073	88.8
Unoccupied private dwellings	267	25.1	284,741	9.9	1,039,874	11.2
Dwelling structure						
Separate house	616	77.3	1,729,820	66.4	6,041,788	72.9
Semi-detached, row or terrace house, townhouse etc	47	5.9	317,453	12.2	1,055,016	12.7
Flat or apartment	68	8.5	519,390	19.9	1,087,434	13.1
Other dwelling	60	7.5	23,580	0.9	64,425	0.8
Number of Bedrooms						
None (includes bedsitters)	0	0.0	17,157	0.7	39,769	0.5
1 bedroom	62	7.8	157,194	6.0	411,252	5.0
2 bedrooms	238	29.8	577,675	22.2	1,562,759	18.9
3 bedrooms	353	44.2	970,001	37.2	3,403,190	41.1
4 or more bedrooms	125	15.6	816,405	31.3	2,670,758	32.2
Number of bedrooms not stated	21	2.6	65,888	2.5	198,351	2.4
Average number of bedrooms per dwelling	2.7	-	3	-	3.1	-
Average number of people per household	1.9	-	2.6	-	2.6	-
Tenure						
Owned outright	431	54.0	839,665	32.2	2,565,695	31.0
Owned with a mortgage	94	11.8	840,004	32.3	2,855,222	34.5
Rented	249	31.2	826,922	31.8	2,561,302	30.9
Other tenure type	4	0.5	23,968	0.9	78,994	1.0
Tenure type not stated	20	2.5	73,763	2.8	224,869	2.7

Table 8.1G – Dwellings – Household Composition						
Household composition	Iluka	%	NSW	%	Australia	%
Family households	489	61.4	1,874,524	72.0	5,907,625	71.3
Single (or lone) person households	290	36.4	620,778	23.8	2,023,542	24.4
Group households	18	2.3	109,004	4.2	354,917	4.3

Table 8.1H – Dwellings – Mortgage and Rent						
Rent Weekly payments	Iluka	%	NSW	%	Australia	%
Median Rent	245	-	380	-	335	-
Households where rent payments are less than 30% of household income	-	83.3	-	87.1	-	88.5
Households with rent payments greater than or equal to 30% of household income	-	16.7	-	12.9	-	11.5
Mortgage monthly repayments						
Median mortgage repayments	1,203	-	1,986	-	1,755	-
Households where mortgage repayments are less than 30% of household income	-	97.4	-	92.6	-	92.8
Households with mortgage repayments greater than or equal to 30% of household income	-	2.6	-	7.4	-	7.2

The ABS provides data on a higher level of geographical influence to Iluka. The next level is described in context as Maclean – Yamba – Iluka (SA2) (104011082), with update in Table 8.1I to 21 September 2017. The ABS data in Table 8.1I is based on the Statistical Area Level 2 (SA2).

Table 8.1I – Australian Bureau of Statistics – Maclean – Yamba – Iluka (SA2)(104011082)				
		Year	Maclean-Yamba-Iluka	Australia
Population & People	Persons (no.)	2016	16,440	24,206,201
	Median Age – Persons (years)	2016	54.3	37.2
Economy & Industry	Total number of businesses (no.)	2016	1,313	2,171,544
	Main employing industry: Retail trade (%)	2011	13.6	
Income	Median equivalized total household income (weekly)(\$)	2016	587	877
	Median total income (excl. Government pensions and allowance)(\$)	2015	31,689	46,854
Education & Employment	Completed Year 12 or equivalent (%)	2016	31.7	51.9
	Unemployment rate (%)	2011	8.6	5.6
Health & Disability	Persons who have need for assistance with core activities (%)	2016	8.7	5.1
Family & Community	Average household size (no. of persons)	2016	2.2	2.6
	Average monthly household rental payment (\$)	2016	1,293	1,524
	Average monthly household mortgage payment (\$)	2016	1,551	1,958
Land & Environment	Land area (ha)	2016	71,104.9	768,812,631.9
	Small-scale solar panel system installations 2001-2015 (no.)	2015	1,649	1,508,334

8.2 Development Economic Costs and Benefits at the Local, Regional and National Level

a) Economic self-sufficiency – Birrigan Gargle Local Aboriginal Land Council

(i) National Context

Key principles and aims of self-management and self-sufficiency for Aboriginal persons and Torres Strait Islanders are identified in the Australian Government “Aboriginal and Torres Strait Islander Act 2005”.

Part 1 – Preliminary section 3 Objects of the Aboriginal and Torres Strait Islander Act 2005 provides:

“3 Objects

The objects of this Act are, in recognition of the past dispossession and dispersal of the Aboriginal and Torres Strait Islander peoples and their present disadvantaged position in Australian society:

- (a) to ensure maximum participation of Aboriginal persons and Torres Strait Islanders in the formulation and implementation of government policies that affect them;*
- (b) to promote the development of self-management and self-sufficiency among Aboriginal persons and Torres Strait Islanders;*
- (c) to further the economic, social and cultural development of Aboriginal persons and Torres Strait Islanders; and*
- (d) to ensure co-ordination in the formulation and implementation of policies affecting Aboriginal persons and Torres Strait Islanders by the Commonwealth, State, Territory and local governments, without detracting from the responsibilities of State, Territory and local governments to provide services to their Aboriginal and Torres Strait Islander residents.”*

The BGLALC are pursuing aims for self-sufficiency, through the “facility” of development of the community subdivision at Hickey Street, Iluka.

This is considered to be a positive action by the BGLALC. The action has been sanctioned by the relevant agencies and organisations.

(ii) Regional Context

The NSW Aboriginal Land Rights Act 1983 amongst other matters provides land rights for Aboriginal persons; provides for the acquisition of land, and the management of land and other assets; provides for community benefit schemes by Aboriginal Land Councils in New South Wales.

NSW Government – Department of Planning & Environment - NORTH COAST REGIONAL PLAN 2036, March 2017, makes reference to collaboration and partnership with Aboriginal communities, as follows:

“Direction 17: Increase the economic self-determination of Aboriginal communities

There are significant opportunities to build wealth and strengthen economic independence in Aboriginal communities. Economic strength will assist in community empowerment and participation in, and the protection of, cultural heritage. Economic opportunities stem from a range of sources, including land held by Aboriginal communities, promotion of language and culture and from the enterprise and innovation already empowering many Aboriginal communities.

OCHRE (Opportunity, Choice, Healing, Responsibility and Empowerment) is the NSW Government's plan for Aboriginal communities. It focuses on revitalising and promoting Aboriginal languages and culture, creating opportunities and capacity, providing choice, and empowering Aboriginal people to exercise that choice, as well as giving them the tools to take responsibility for their own future.”

The BGLALC has entered into an agreement with the Stevens Group to enable the BGLALC to deal with its land in a meaningful manner. A positive purpose of such an arrangement to provide the opportunity for the BGLALC to realise a financial return on the land dealings.

(iii) Local Context

The Birrigan Gargle Local Aboriginal Land Council describes in the letter dated 3 April 2018 the vision for the BGLALC community. A step towards its vision will be the successful completion of the development at Hickey Street, Iluka.

The key attributes for the BGLALC include:

- The land (Lot 99 DP 823635) is owned by the Birrigan Gargle Local Aboriginal Land Council (BGLALC).
- The BGLALC when considering its dealing with the land has had regard to the members of the BGLALC. Where possible its actions will improve, protect and foster the best interest of Aboriginal persons within the BGLALC area.
- The BGLALC has entered into an agreement with Stevens Holdings Pty Limited to undertake development of the land by way of a residential subdivision.
- The agreement has been prepared in accordance with the requirements of the NSW Aboriginal Land Council and the relevant provisions of the New South Wales Aboriginal Land Rights Act 1983.
- The agreement between the two parties is confidential.
- Details relating to such items as relationship between the parties, financial matters, processes between the parties, commitments of each party are and remain confidential and are not to be disclosed.

The significant and positive benefit of the completion of the proposed subdivision is it will provide the potential income from the development of the land. This derived income funding will enable the BGLALC to strengthen its future direction towards self-determination, and moving towards reaching its goals in a timely manner.

b) Sustainable and Coordinated Growth

(i) National Context

The Australian Government – Department of the Prime Minister and Cabinet document – “Smart Cities Plan” (29 April 2016) (<http://cities.dpmc.gov.au>). The overview for the Smart Cities Plan identifies:

“The Australian Government is committed to working with governments, business and the community to position our cities, regional and metropolitan, to reach their full potential.

The Smart Cities Plan will position our cities to succeed in the 21st Century economy. It is a plan for supporting productive, accessible, liveable cities that attract talent, encourage innovation and create jobs and growth.

The Smart Cities Plan represents a new framework for cities policy at the federal level - and it is a framework that will guide action across various portfolios, to deliver better outcomes for our cities, the people who live in them and all Australians.

Our cities - the CBDs, the suburbs and our regional centres - are where most of us live and work.

As our economy continues to transition and our knowledge-based industries grow, so too do our cities.

To respond to this growth, and take advantage of tomorrow's economic opportunities, we need to rethink the way our cities are planned, built and managed today.

Our economic transition and growth is important, but it can present challenges. It is placing pressure on housing affordability, access to local jobs and our natural environment, as well as increasing congestion and traffic.

The Smart Cities Plan sets out the Australian Government's vision for our cities, and our plan for maximising their potential.

It includes three pillars: Smart Investment, Smart Policy and Smart Technology.”

It is recognised Iluka is not a city or regional city. The reference to the Smart Cities Plan is made to relate the principles for the proposed community subdivision to the national context and national level focus of the Australian Government.

In this regard, the proposed community subdivision reflects in a positive manner the Australian Government Smart Cities “three pillars” as follows:

➤ Smart Investment

- Through the joint arrangement by the BGLALC and the private sector Stevens Group.
- Acknowledges the Clarence Valley Council investment in the sewer system for Iluka.
- Has undertaken a rigorous planning and assessment of referral agency and submitter inputs phase.
- It is an investment within the local coastal village of Iluka by the private sector and private land owner BGLALC.
- It will provide the catalyst for housing supply to be constructed on each of the lots created.

➤ Smart Policy

- Complies with the Clarence Valley Council Affordable Housing Policy by providing suitably designed and configured residential allotments.
- Will deliver environmental outcomes by managed and funded systems for retained bushland for environmental values and the development community subdivision land owner lifestyle and broader community benefits.

➤ Smart Technology

- Through designing and constructing the community management subdivision to incorporate “Water Sensitive Urbane Design” approach as recognised by Clarence Valley Council, and configuring the allotments for future sustainable dwelling design by solar access, and safety in design principles.
- Connects to the smart technology sewer system provided for Iluka by the Clarence Valley Council.

(ii) Regional Context

NSW Government – Department of Planning & Environment - NORTH COAST REGIONAL PLAN 2036, March 2017, makes reference to the Clarence Valley Urban Growth area, as follows.

In particular, reference is made to the Figure 20 - “Urban Growth Area Map for Clarence Valley Local Government Area” which identifies parts of the village of Iluka as “Urban Growth Area”.

The extract following shows the “urban growth area” for Iluka. This includes the land being Lot 99 DP823635 which is situated within the “Urban Growth Area”.

Clarence Valley

Population

2036 (Projected) 57,450

Dwellings

2036 (Projected) 29,450

The Clarence Valley Local Government Area takes in an array of coastal and hinterland communities. Grafton is a strategic centre that provides a range of high-level specialist services to local residents and the wider regional community, and was one of the first major commercial centres on the North Coast. Yamba and Maclean fulfil the local service needs of residents north of Grafton and on the coast.

The Clarence Valley has abundant environmental assets, including the Bundjalung and Yuraygir national parks and the Clarence River which underpins a significant aquaculture sector. Managing these assets will be important to delivering a healthy environment and a strong economy.

Major infrastructure investment in projects like the Pacific Highway upgrade and the second Clarence River Crossing project will significantly enhance regional connectivity and provide new economic opportunities. The Clarence Valley’s strong tourism and agricultural base will also be supplemented by the continued development and delivery of regional government services including justice and health facilities.

Regional priorities

- Foster stronger strategic relationships with Coffs Harbour in relation to employment land delivery.
- Develop Grafton’s role as a transport hub by leveraging opportunities associated with regional road and rail freight corridors and infrastructure investment.
- Support the growth and diversification of the shire’s agricultural base by leveraging the strength of sugar cane and cattle production to encourage new opportunities for agribusiness and associated manufacturing and transport.
- Identify opportunities to expand nature-based, adventure and cultural tourism by leveraging Clarence Valley’s natural and heritage assets.

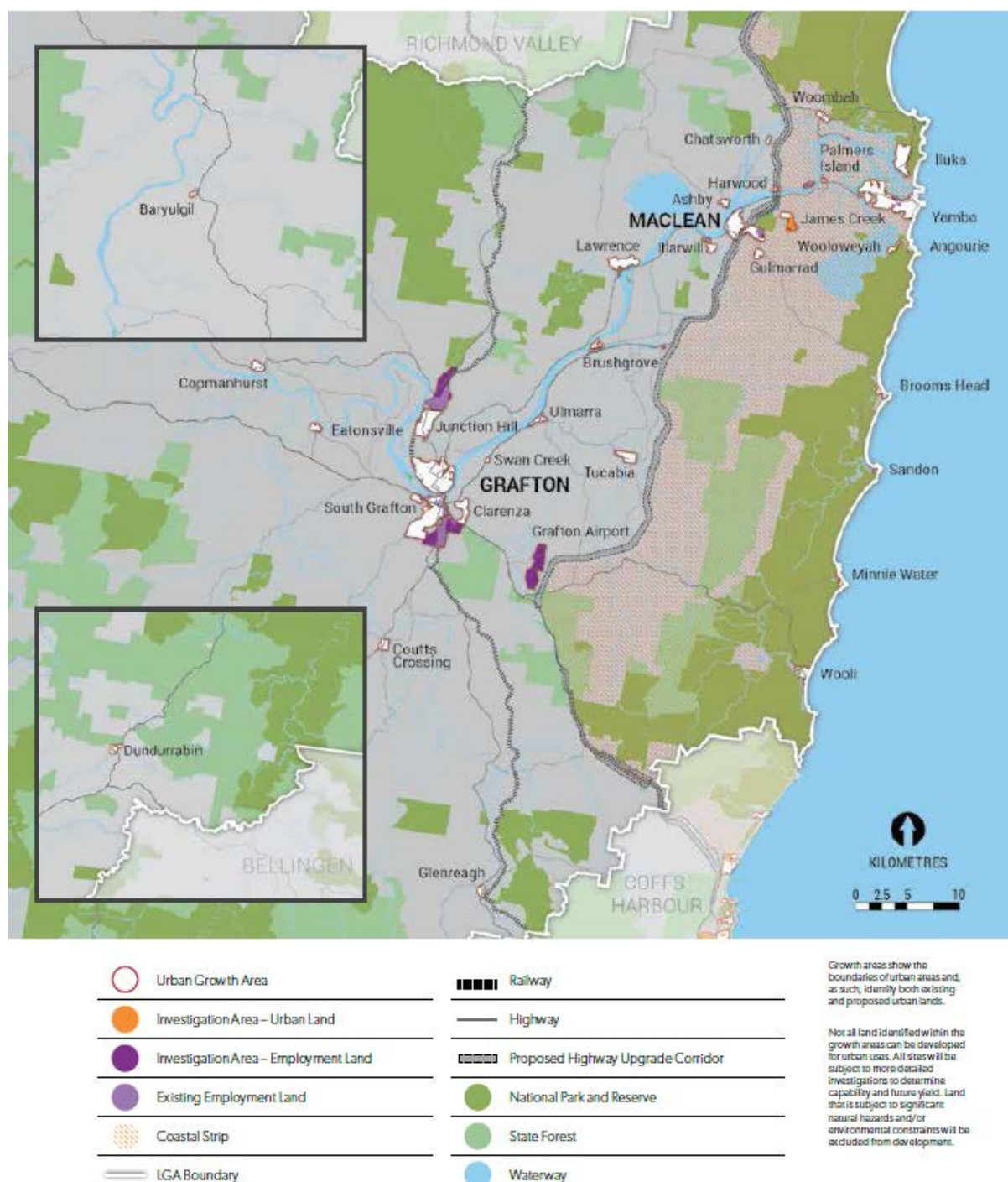
Economy and employment

- Build on the access provided by the Pacific and Gwydir highways, the Summerland Way and the North Coast Railway Line, and explore opportunities for aviation-related clusters to be fostered at Clarence Valley Regional Airport.
- Maximise opportunities associated with regional health and justice infrastructure, including Grafton Base Hospital, Grafton District Court, and existing and proposed correctional facilities near Grafton.
- Support employment land at Junction Hill, Clarenza, Glenugie and South Grafton, and explore opportunities to complement employment land delivery in Coffs Harbour.
- Protect natural assets like the Clarence River and regionally important farmland in the Clarence, Nymboida and Orara Valleys that support local aquaculture and agriculture ventures, and cultural, recreation and tourism activities.

Housing

- Deliver housing in Grafton, Clarenza, James Creek, Junction Hill and West Yamba to support population growth.
- Enhance the variety of housing options in Grafton, Maclean and Yamba, and support the unique character of the valleys, towns and villages.

Figure 20: Urban growth area map for Clarence Valley Local Government Area



(iii) Local Context

The land containing the proposed community subdivision (Lot 99 DP823635) is contained within the Clarence Valley Local Environmental Plan 2011 – Zone R2 – Low Density Residential.

As a result the NSW Government and CVC planning instruments recognise the land use and future development potential for this part of the “urban growth area” in the village of Iluka.

The subdivision is in compliance with these relevant existing statutory provisions and strategic objectives of the regional and local planning frameworks.

The development will provide individual lots for future construction of dwellings in a low density residential format. The NSW Government and CVC through the planning instruments have had regard to the Iluka context future development economic costs and benefits at the Local, Regional and National Level and zoned the land accordingly, for residential purposes.

The CVC and utility services providers have considered the relevant urban planning in the village of Iluka and have designed, provided and planned for the relevant land zonings. As a result, the proposed subdivision is able to connect to existing infrastructure that has the capacity for the particular relevant service. The existing infrastructure is situated in adjoining road and street reserves to Lot 99 DP 823635.

The subdivision is not out of sequence to the planned urban development of the village of Iluka.

The proposed development had the potential to have a negative effect on CVC infrastructure. The CVC placed a virtual “moratorium” on development in Iluka until such time as the Iluka Village could be serviced by a sewer network and treatment facility.

The CVC has completed the Iluka sewer treatment facility and associated pressure sewer network system. It has also removed the “moratorium” on development to the extent the proposed development has been allowed for in the sewer system. The development may proceed it is not out of sequence with available infrastructure.

c) Major Infrastructure Connectivity - Proximity to Pacific Highway

(i) National Context

Infrastructure Australia has prepared the “Australian Infrastructure Plan – Priorities and reforms for our nations future – February 2016”.

As recognised in the Infrastructure Australia Statement of Intent (<http://infrastructureaustralia.gov.au/about/files/IA-Statement-of-Intent-2017-19.pdf>):

“Infrastructure Australia provides independent research and high quality advice to all levels of government, as well as investors and owners of infrastructure, on Australia’s requirements for nationally significant infrastructure.

Infrastructure Australia advocates for reforms on key issues including funding and financing, delivering and operating infrastructure and how to better plan and utilise Australia’s infrastructure networks.

The strategy and operational functions of Infrastructure Australia are guided by the Infrastructure Australia Act 2008 and other Commonwealth legislation.

Infrastructure Australia is responsible to the Minister for Urban Infrastructure.”

A recommendation of the “Australian Infrastructure Plan” provides:

“Recommendation 4.1:

State and territory governments should deliver long-term regional infrastructure plans.

These plans should:

- *Identify gaps in infrastructure networks and identify priorities to support productive regional industries;*
- *Be developed with involvement from all levels of government to help coordinate investments and remove duplication;*
- *Provide transparency for the private sector to allow for government funding to be leveraged and private investment to be maximised; and*
- *Assess the potential for regions to ease pressure on our largest cities.”*

The proposed community subdivision is well placed to take advantage of the benefits afforded by the upgrading (currently under construction) of the Pacific Highway within Northern NSW.

(ii) Regional Context

NSW Government – Department of Planning & Environment - NORTH COAST REGIONAL PLAN 2036, March 2017, makes reference to the investment in the North Coast by the NSW Government, as follows.

“NSW Government investments on the North Coast include:

- *a share of \$1.5 billion in funding towards the upgrade of the Pacific Highway in 2016-2017, including more than \$954 million towards the Woolgoolga to Ballina project.”*

(iii) Local Context

The proposed community subdivision is situated within the urban growth area of the village of Iluka. Iluka has a road connection with the Pacific Highway. The Pacific Highway intersection with the connective road to Iluka is located some 16kms to the north-west of Iluka.

The connection to the Pacific Highway will enable access by vehicle for future occupiers of the proposed community subdivision to gain access to the Pacific Highway upgrading that will connect through the North Coast from the NSW Queensland border, to Newcastle. This will be of positive benefit and provide opportunities with reduced travel times, improve travel safety, and improve transport efficiency.

d) Business Context

The Australian Bureau of Statistics (ABS) provides statistics on Australian population, social, economic, and environmental attributes.

To place in context the business influences in the Iluka area, reference is made to the ABS census data for Maclean – Yamba – Iluka. Refer to the following tables – Tables 8.2A to Table 8.2D inclusive. These tables provide an indication of each available attribute from 2011 to 2016.

Table 8.2A – Australian Bureau of Statistics – Maclean – Yamba – Iluka						
	2011	2012	2013	2014	2015	2016
Number of Businesses – As at 30 June						
Number of non-employing businesses (no.)	-	850	847	829	830	810
Number of employing businesses: 1-4 employees (no.)	-	369	340	343	327	324
Number of employing businesses: 5-19 employees (no.)	-	158	135	139	138	151
Number of employing businesses: 20 or more employees (no.)	-	21	22	31	26	27
Total number of businesses (no.)	-	1397	1348	1338	1323	1313
Business Entries – Year ended 30 June						
Number of non employing business entries (no.)	-	-	78	77	81	93
Number of employing business entries: 1-4 employees (no.)	-	-	34	42	38	45
Number of employing business entries: 5-19 employees (no.)	-	-	7	4	3	8
Number of employing business entries: 20 or more employees	-	-	-	3	-	-
Total number of business entries (no.)	-	-	118	122	120	150

Table 8.2B – Australian Bureau of Statistics – Maclean – Yamba – Iluka Building Approvals – Year Ended 30 June for the year nominated						
	2011	2012	2013	2014	2015	2016
Private sector houses (no.)	54	47	50	46	52	68
Private sector dwellings excluding houses (no.)	16	5	21	-	-	10
Total private sector dwelling units (no.)	70	52	71	46	52	78
Total dwelling units (no.)	70	52	71	46	52	78

Table 8.2C – Australian Bureau of Statistics – Maclean – Yamba – Iluka Number of Businesses by Industry – As at 30 June						
	2011	2012	2013	2014	2015	2016
Agriculture, Forestry and Fishing (no.)	-	239	247	248	234	221
Mining (no.)	-	3	3	3	3	3
Manufacturing (no.)	-	44	46	42	49	45
Electricity, Gas, Water & Waste Services (no.)	-	3	-	3	3	3
Construction (no.)	-	266	240	227	229	210
Wholesale trade (no.)	-	27	21	24	25	26
Retail trade (no.)	-	149	138	135	131	126
Accommodation and food services (no.)	-	89	87	85	87	81
Transport, Postal and Warehousing (no.)	-	64	60	63	70	65
Information media and telecommunications (no.)	-	5	5	8	4	5
Financial and insurance services (no.)	-	77	89	88	98	113
Rental, Hiring & Real Estate Services (no.)	-	151	146	147	135	134
Professional Scientific & Technical Services (no.)	-	91	92	88	93	86
Administrative and support services (no.)	-	30	25	24	24	24
Public administration and safety (no.)	-	-	-	-	3	3
Education and training (no.)	-	14	9	8	11	11
Health care and social assistance (no.)	-	44	47	55	56	66
Arts and recreation services (no.)	-	21	16	19	16	20
Other services (no.)	-	63	62	65	55	52
Currently unknown (no.)	-	15	11	8	7	9
Number of Businesses by Industry – Total (no.)	-	1397	1348	1338	1323	1313

Table 8.2D – Australian Bureau of Statistics – Maclean – Yamba – Iluka Industry of Employment – Count of employed persons 15 years and over 2016 – Census (ABS Reference 104011082)	
	2016
Agriculture, Forestry and Fishing (no.)	201
Mining (no.)	7
Manufacturing (no.)	293
Electricity, Gas, Water & Waste Services (no.)	38
Construction (no.)	378
Wholesale trade (no.)	97
Retail trade (no.)	673
Accommodation and food services (no.)	622
Transport, Postal and Warehousing (no.)	158
Information media and telecommunications (no.)	29
Financial and insurance services (no.)	55
Rental, Hiring & Real Estate Services (no.)	115
Professional Scientific & Technical Services (no.)	197
Administrative and support services (no.)	156
Public administration and safety (no.)	201
Education and training (no.)	406
Health care and social assistance (no.)	746
Arts and recreation services (no.)	52
Other services (no.)	204
Inadequately described (no.)	115
Industry of Employment not stated (no.)	66
Total persons employed (no.)	4,842

8.3 Development Social Considerations at the Local, Regional and National Level

a) Self-sufficiency - Birrigan Gargle Local Aboriginal Land Council

(i) National Context

The Australian Government through the Department of the Prime Minister and Cabinet (<https://www.pmc.gov.au>) is implementing various initiatives for Indigenous Affairs. These include those listed in Table 8.3.

Table 8.3 – Australian Government Department of the Prime Minister and Cabinet Indigenous Affairs	
Initiative	Description of Initiative (taken from website: https://www.pmc.gov.au/indigenous-affairs)
Closing the Gap	Closing the Gap aims to reduce Indigenous disadvantage. All Australian governments have committed to achieve Indigenous health equality within a generation.
Community Safety	Ensuring that Indigenous Australians grow up and live their lives in a safe home and community.
Constitutional Recognition	https://www.referendumcouncil.org.au/ Recognition means acknowledging our shared history and the value we place on Aboriginal and Torres Strait Islander heritage.
Culture and Capability	Culture is vitally important to Australia's Indigenous peoples. Pride in culture shapes the hopes and choices of Aboriginal and Torres Strait Islander people.
Economic Development	Aboriginal and Torres Strait Islander people should have the same opportunities for economic participation as other Australians. Economic Development policies and programs are about creating the right enabling environment.
Education	We work to improve educational outcomes for Aboriginal and Torres Strait Islander people from early childhood and schooling, to higher education.
Employment	Being employed improves the health, living standards and the social and emotional well-being of individuals, families and communities.
Empowered Communities	The Australian Government is moving to a new way of working with Indigenous leaders and communities – one that supports Indigenous ownership, enables true partnerships with Government, and recognises the diversity of cultures and circumstances of Indigenous Australians. This aligns with the Prime Minister's commitment to 'work with Aboriginal and Torres Strait Islander people'.
Environment	Over 170 Indigenous land and sea management projects are supported across Australia to provide employment and environmental outcomes.
Evidence	Providing information and advice to ministers, government departments, organisations and communities to inform policy development and monitoring in Indigenous Affairs.
Grants and Funding	Grants and funding in the Indigenous Affairs area.
Health and Wellbeing	Improving the health and wellbeing of Aboriginal and Torres Strait Islander people is one of our most important priorities.
Housing	Housing plays an important role in the health and wellbeing of Australians.

Table 8.3 – Australian Government Department of the Prime Minister and Cabinet Indigenous Affairs	
Initiative	Description of Initiative (taken from website: https://www.pmc.gov.au/indigenous-affairs)
Indigenous Advancement Strategy	A new Indigenous Advancement Strategy began on 1 July 2014 and replaced more than 150 individual programmes and activities with five flexible, broad-based programmes.
Land	Aboriginal and Torres Strait Islander peoples' rights and interests in land are formally recognised for around 40 per cent of Australia's land mass.
Prime Minister's Indigenous Advisory Council	Prime Minister the Hon Malcolm Turnbull MP and the Minister for Indigenous Affairs Senator the Hon Nigel Scullion announced on 8 February 2017 the first six members appointed for the second term of the Prime Minister's Indigenous Advisory Council.
Remote Australia Strategies Programme	We are working to fix the disproportionate disadvantage in remote Australia.

It is important to recognise the strong strategic connection identified for Aboriginal Affairs described at the Australian Government, as noted in Table 8.3, NSW Government, and CVC levels, and with the initiative by the BGLALC for the development of its land in Hickey Street.

(ii) Regional Context

NSW Government – Department of Planning & Environment - NORTH COAST REGIONAL PLAN 2036, March 2017, makes reference to collaboration and partnership with Aboriginal communities, as follows:

“Direction 16: Collaborate and partner with Aboriginal communities

The connection of Aboriginal communities to their ancestral country is a result of passing down histories and ‘place awareness’ through generations. Consultation processes on future land use planning should ensure that Aboriginal people have their interests and responsibilities acknowledged, respected and considered through the planning process.

Local growth management strategies and local environmental plans should be prepared in consultation with Aboriginal communities to build a relationship based on trust and integrity, and to tap into their unique knowledge. Involving Aboriginal people in planning empowers their communities to identify their own issues, strategic directions and solutions. It requires appropriate mechanisms that acknowledge the diversity of Aboriginal communities and the resources they need to participate.”

(iii) Local Context

The proposed development is important for BGLALC, as described in the BGLALC letter dated 3 April 2018, as it will generate income to support its community including: cultural interaction, education and training, employment, housing, improvements to Ngaru Village, support programs, crafts, transport, and playgrounds.

b) Indigenous Heritage

(i) National Context

The Australian Government is responsible for protecting Indigenous Heritage places found to be of national or international significance, or are located on Australian Government land.

The relevant legislation includes:

- The Environment Protection and Biodiversity Conservation Act 1999;
- Aboriginal and Torres Strait Islander Heritage Protection Act 1984;
- Native Title Act 1993;
- Aboriginal Land Rights (Northern Territory) Act 1976;
- Protection of Moveable Cultural Heritage Act 1986.

This legislation establishes the framework at the national level.

The development has and will have regard to this legislative framework.

(ii) Regional Context

NSW Government – Department of Planning & Environment - NORTH COAST REGIONAL PLAN 2036, March 2017, makes reference to North Coast Aboriginal Heritage, as follows:

“Direction 18: Respect and protect the North Coast’s Aboriginal heritage

Aboriginal heritage includes places and objects that are of significance to Aboriginal people because of their traditions, observances, lore, customs, beliefs and history, such as pre-contact, habitation and usage sites, burial sites, battle sites and camping, hunting or fishing sites. Aboriginal cultural heritage also relates to the connection and sense of belonging that people have with the landscape and with each other.”

(iii) Local Context

As part of the preparation of the proposed community subdivision, the views of the BGLALC as the land owner were and will be taken into account through the development phases.

In addition, a Cultural Heritage Assessment conducted pursuant to the “Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH2011)”, “Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW2010)”, and “Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW2010)”.

There are recommendations made in the Cultural Heritage Assessment, particularly relating to potential finds that may come to light during the construction phase. These recommendations will form part of future construction activity management plans.

c) Housing supply – opportunities

(i) National Context

The Australian Government – Department of Treasury in the Mid - Year Economic and Fiscal Outlook (MYEFO) 2017-18 December 2017 printed by CanPrint Communications Pty Ltd (referenced from www.budget.gov.au) identifies on page 5 of the document;

“Guaranteeing the essentials

The Government is taking action to guarantee the essential services on which Australians rely. The Government is protecting and boosting housing affordability, essential healthcare, disability and education services.

Improving housing affordability

The Government is continuing to implement the comprehensive housing affordability plan, announced at the 2017-18 Budget, designed to improve outcomes across the housing spectrum.

Part 1: Overview 6

The Government has initiated negotiations with the States and Territories on a new National Housing and Homelessness Agreement to improve transparency and accountability for the Commonwealth’s expenditure on housing and homelessness. The Government has introduced legislation to support the new Agreement and funding arrangements.

The Government has passed legislation to:

- assist first home buyers to build a deposit inside superannuation through the First Home Super Saver Scheme;*
- provide older Australians wishing to downsize with greater flexibility to contribute the sale proceeds of their home into superannuation; and*
- strengthen the rules that apply to foreign persons owning Australian property.”*

(ii) Regional Context

NSW Government – Department of Planning & Environment - NORTH COAST REGIONAL PLAN 2036, March 2017, makes reference to housing supply - opportunities, as follows:

“Direction 22: Deliver greater housing supply

Having a ready supply of well-located land for residential development will create downward pressure on house prices, maximise the use of existing infrastructure and ensure that environmentally sensitive areas are avoided. Mapped urban growth areas have identified land in sustainable locations to cater for overall housing needs.”

(ii) Local Context

The community subdivision will provide fully serviced vacant land for the purpose of constructing residential dwellings. There will be 140 allotments created. The development is well located within the Iluka Village and close to existing infrastructure services. It is proposed the land will be released in stages to accommodate the demand at the time of release.

d) Housing Choice, Diversity Potential and Lifestyle Options

(i) National Context

The Australian Government – Infrastructure Australia prepared an “Urban Design Protocol” in the publication titled “Creating Places for People – an urban design protocol for Australian cities”, published 2011 (reference link – <http://infrastructureaustralia.gov.au/policy-publications/publications/Creating-Places-for-People-an-urban-design-protocol-for-Australian-cities-2011.aspx>).

Its aim to create productive, sustainable, liveable places for people through leadership and the integration of design excellence.

Of the founding pillars the document identifies for - Productivity and sustainability creates the context for people to engage with the place;

- Enhances local economy and environment and community
- Connects physically and socially
- Diversity of options and experiences
- Sustainable enduring and resilient

(ii) Regional Context

NSW Government – Department of Planning & Environment - NORTH COAST REGIONAL PLAN 2036, March 2017, makes reference to housing diversity and choice, as follows:

“Direction 23: Increase housing diversity and choice

Providing housing diversity and choice will improve affordability, help meet the needs of an ageing population and support the reduction of household size.”

(ii) Local Context

The community subdivision does not include the design and construction of houses. The subdivision creates allotments upon which future houses can be constructed.

The design and configuration of the proposed allotments vary to facilitate variations in the final build form of the future dwellings. This is a positive and proactive design intent for the subdivision allotments.

It is anticipated the allotments can adequately cater for a range of future housing choice and diversity, and cater for lifestyle options available in Iluka and environs.

The proposed subdivision provides allotments for future dwellings in a location, close to the golf course (immediately to the north of the subdivision land), within the coastal and fishing village of Iluka, within 1km of ocean beaches, within 1km of the Clarence River, adjoins the common road, Iluka Road, to the Bundjalung National Park and the Iluka Nature Reserve (World Heritage Listed – Gondwana Rainforest), proximity to the national park and nature reserve walking trails, picnic areas and camping grounds, connectivity to Yamba by passenger ferry, Village of Iluka facilities, fishing, bowls club, library and road connectivity to Pacific Highway upgrading connecting to Yamba, Maclean, and Grafton and beyond, with additional services such as hospital, ambulance, commercial areas and industry facilities, and high schools.

e) Affordable housing

(i) National Context

To provide an overview of house affordability from the national level, reference is made to the document by the Australian Government – “Australian Institute of Health and Welfare 2017, Australia’s welfare 2017, Australia’s welfare series no. 13, AUS 214, Canberra: AIHW”, published by the Australian Institute of Health and Welfare.

The following extract is taken from Chapter 6 – Housing and homelessness, page 204 to page 205:

“Housing affordability: trends and distribution

Given current population projections, demand for housing will continue to grow. This increased demand will put pressure on dwelling prices, with a particularly adverse effect for low-income households.

A number of factors influence house prices, and therefore housing affordability (Box 6.3.1).

Box 6.3.1: Determinants of housing affordability in Australia

Demand for housing is influenced by factors such as:

- population growth
- changes in household composition
- economic circumstances, such as household income and the number of income earners in the household
- interest rates and access to affordable finance
- tax settings
- attractiveness to investors (profitability and percentage returns) compared with the asset classes
- rental prices and availability
- consumer preferences, such as the size, location, tenure and quality of housing; the balance between housing costs and the costs of transport; and demand for second/ holiday homes.

The supply of housing is influenced by a range of factors, such as:

- land availability, such as zoning and restrictions on land tenure that do not readily permit land to be developed, sold, or individually owned
- land release and development processes, including fees and regulation
- the costs of construction and providing essential infrastructure, such as water, power, and sewerage
- the availability of skilled labour in the construction industry
- the level of services (such as public transport) and employment required to attract households into locations
- government taxes and subsidies
- interest rates and access to affordable sources of development finance.

Sources: Adapted from PM&C 2014; Kirchner 2014; NHSC 2009; The Senate Select Committee on Housing Affordability in Australia 2008; URC 2008.

The gap between household income and dwelling prices in Australia has widened over the past 3 decades, creating a barrier to home ownership for many (Burke et al. 2014) (Figure 6.3.8). This gap has been fuelled by rapid house price growth, after the financial system was deregulated, with the total value of Australian housing estimated to be \$6.5 trillion (CoreLogic RP Data 2016a).

House prices in Australia have increased substantially in recent decades. The OECD noted in its biennial survey that they have reached unprecedented highs in Australia, increasing by 250% in real terms since the 1990s (OECD 2017a). The impact of higher house prices has been partially offset by lower mortgage interest rates, increased credit availability and changes in financial agency practices. These favourable lending conditions and low interest rates have encouraged buyers into the market, despite the growth in house prices themselves.”

(ii) Regional Context

The regional context for affordable housing is identified through the “Northern Rivers Regional Affordable Housing Strategy, November 2012” (NRRRAHS).

The NRRRAHS Guiding Principles:

“5. Guiding Principles

The following key principles have been adopted to underpin the Northern Rivers Regional Affordable Housing Strategy:

- *Commitment to providing access to housing that is appropriate and affordable - All residents of the region to be able to access appropriate and affordable housing.*
- *Partnership and Collaboration – Seek to achieve a collaborative approach between the community, private sector and all levels of government to address housing needs across the region.*
- *Inclusiveness of Decision Making – Engaging with interest groups in defining housing problems, issues to be addressed and prioritised, solutions to be considered and implemented and recommendations to be made.*
- *Fairness and equity – Any costs and benefits of policy outcomes are to be fairly distributed among interest groups, with an emphasis on ensuring that the least well off or those most disadvantaged receive appropriate priority.*
- *Efficiency and effectiveness – Public resources are applied in such a way as to maximise beneficial outcomes per dollar expenditure.*
- *Simplicity and ease of administration – Policy recommendations to be simple to implement and the costs of administration kept to a minimum.*
- *Sustainability – Consideration of social, economic or environmental outcomes by providing housing in a way that contributes to the development of inclusive and sustainable communities.”*

(iii) Local Context

The Clarence Valley Council has adopted a “Clarence Valley Affordable Housing Strategy” 2007 (CVAHS). This CVAHS identified a Statement of Issues in part as follows:

“The overall picture for Clarence Valley residents is that the low income of the area and the increased cost of housing over the last five years place many residents at a disadvantage when trying to meet their most basic needs of shelter. Housing affordability and lack of access threatens community cohesion and can impact on residents’ wellbeing, standard of living and their ability to participate in meaningful community life.

The housing market boom has pushed up housing prices out of the reach of low to moderate income earners, therefore forcing people to rent for longer and placing stress on the private rental market. Long public housing waiting lists and the recent public housing reform and change to policy for the eligibility criteria will also continue to place stress on the private rental market. 2001 Census data and Clarence Valley Economic Development Strategic Plan identify the population characteristic of Clarence Valley as being;

- Older population
- Higher dependency ratio
- Low labour force participation
- Higher rates of part-time employment
- Significantly higher unemployment
- Significantly higher youth unemployment
- Significantly lower household income

Other contributing factors supported by the 2006 ABS Census include;

- High proportion of one parent families 10.6% compared to 8.6% NSW
- Higher proportion of Aboriginal or Torres Strait Islanders, 4.1% compared 1.9% NSW, MNC 3.8% and Northern Rivers 3.1%
- Aging population - higher portion of older people in the age group 60 -84 years 22.3% compared to 15.9% NSW
- Trend in smaller household sizes
- The need for more housing types

The 2006 ABS Census continues to identify a significantly lower median household income for Clarence Valley compared to NSW with many households in the lowest and medium lowest income quartiles. This places the great Australian dream of owning your own home out of reach of many, and reduces their ability to create wealth. Many of these households are struggling to negotiate the private rental market as they are competing with moderate income earners in accessing the reduced amount of affordable housing stock. More pressure is placed on the private rental market due to the increased cost of housing.”

The CVAHS Housing Goal and Guiding Principles, as follows:

“Housing Goal

Increase access to affordable housing in the Clarence Valley by: collaboratively expanding social housing; reviewing Clarence Valley Council’s planning controls; changing the perceptions of landlords and investors; and promoting the advantages of the relative cost of developments in Clarence Valley in comparison to other local government areas.

Guiding Principles

Principles underlying the Clarence Valley Affordable Housing Strategy

1. *Commitment to providing access to housing that is appropriate and affordable – all residents of an area should be able to access appropriate and affordable housing*
2. *Openness and transparency – all interest groups should be engaged in open debate about how housing problems are to be defined, what issues are to be addressed and prioritised, what solutions are to be considered, what recommendations are to be made and what solutions are to be implemented*

3. *Fairness and equity – any costs and benefits of policy outcomes are to be fairly distributed among all residents or all interest groups, with an emphasis on ensuring that the least well-off or those most disadvantaged receive appropriate priority*
4. *Efficiency and effectiveness – public resources are applied in such a way as to maximise beneficial outputs and outcomes per dollar expenditure*
5. *Simplicity and ease of administration – policy recommendations should be simple to implement and administer and the costs of administration held in check*
6. *Sustainability – social, economic or environmental. To provide housing in a way that contributes to the development of inclusive and sustainable communities and is compatible with the goal of environmental sustainability*
7. *Partnership – a collaborative approach by the community, private sector and all levels of government to addressing the housing needs across Clarence Valley”*

The community subdivision complies with the intent of the Clarence Valley Affordable Housing Strategy through the incorporation of smaller sized allotments in a proportion identified by Clarence Valley Council, which it advises encourages 10% of lots to be smaller in area, thereby providing a level of affordability.

f) Healthy and Safety

(i) National Context

The Australian Government – Infrastructure Australia prepared an “Urban Design Protocol” in the publication titled “Creating Places for People – an urban design protocol for Australian cities”, published 2011 (reference link – <http://infrastructureaustralia.gov.au/policy-publications/publications/Creating-Places-for-People-an-urban-design-protocol-for-Australian-cities-2011.aspx>).

The web page reference identifies:

“This report sets out an Urban Design Protocol, which is the result of two years of collaboration between peak community and industry organisations and governments at all levels. It represents a commitment to best practice urban design and quality living spaces in Australia.

The Urban Design Protocol is founded on five pillars: productivity, sustainability, liveability, leadership and design excellence. The report describes these five pillars then outlines the 12 basic principles that underpin the protocol. Each principle relates specifically to one of the five pillars.

The aim of the Urban Design Protocol is to create productive, sustainable and liveable places for people through leadership and the integration of design excellence.”

The following extract is taken from the above mentioned Urban Design Protocol – People: Liveability:

CREATING PLACES FOR PEOPLE
 10

PEOPLE: LIVEABILITY

Creates the context for people to engage with each other

Principles	Outcomes	Attributes – How it helps to achieve world-class urban design
Comfortable	Comfortable + welcoming	<ul style="list-style-type: none"> It feels comfortable to walk through, sit, stand, play, talk, read, or just relax and contemplate It is not too exposed to unpleasant noise, wind, heat, rain, traffic or pollution You can freely use the place, or at least part of it, without having to pay You can be yourself and feel included as part of the community It caters for people with various physical capabilities, the old and the young
Vibrant	Vibrant, with people around	<ul style="list-style-type: none"> You can see that there are other people around People are enjoying themselves and each other's company There are places to meet and interact, play, explore, recreate and unwind It is a place you want to visit, experience, or live in
Safe	Feels safe	<ul style="list-style-type: none"> It feels safe and secure, even at night or on your own There aren't signs of decay such as graffiti, rubbish, weeds or derelict buildings and places Roads and paths are safe for adults and children to walk or ride their bikes
Walkable	Enjoyable + easy to walk + bicycle around	<ul style="list-style-type: none"> It prioritises people walking or riding before vehicles It is easy to get around on foot, bike, wheelchair, pushing a pram or wheeling luggage Buildings and streets feel like they're the right size and type for that place It encourages physical activity and social interaction, and promotes a healthy lifestyle

At the national level, urban design is described in terms of “cities”. Iluka is not a city. The aims and principles of sound urban design can reasonably be translated where relevant to the local village and site development level context.

(ii) Regional Context

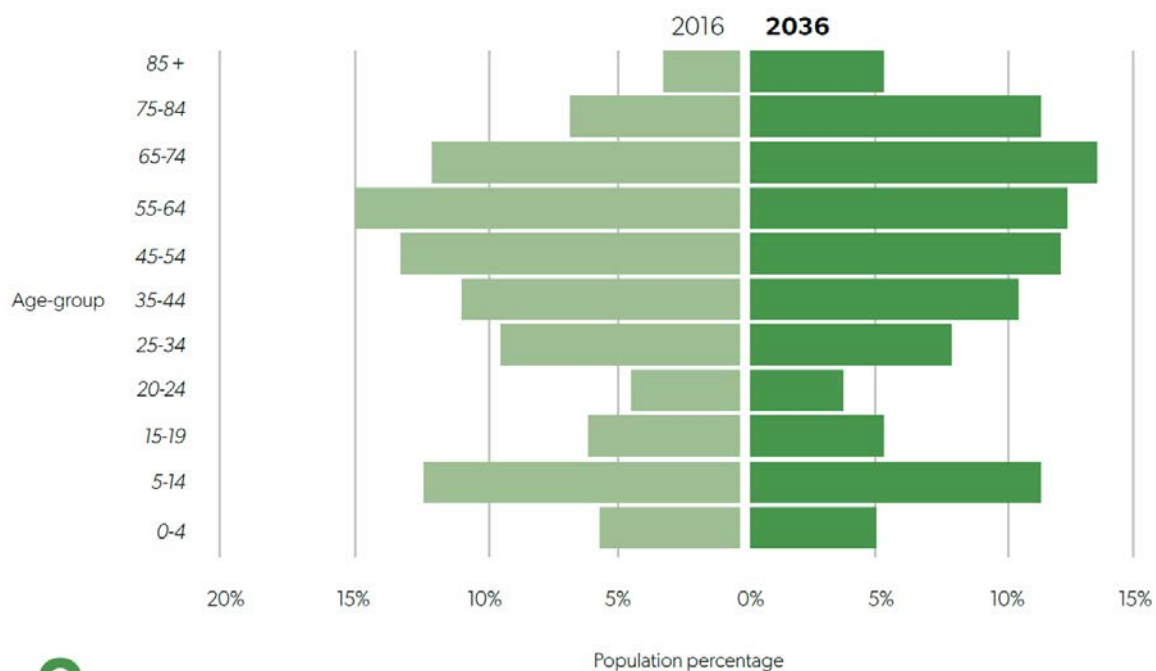
NSW Government – Department of Planning & Environment - NORTH COAST REGIONAL PLAN 2036, March 2017, makes reference to safety and healthy lifestyle, as follows:

“GOAL 3

Vibrant and engaged communities

The North Coast's tapestry of coastal and hinterland communities are central to the region's identity. As the region grows over the next twenty years, well designed communities will support local character, active lifestyles and provide residents with a greater sense of wellbeing and belonging.”

2016-2036 Population Pyramid



“Direction 15: Develop healthy, safe, socially engaged and well-connected communities

North Coast communities enjoy the great outdoors and being active. It is critical that urban environments continue to enable this lifestyle. The design of the urban environment, including streetscapes, and recreation and community facilities, can help build community health, social wellbeing and cohesion.”

The development has had regard to these principles as noted in local context following.

(iii) Local Context

The community subdivision adopts and implements principles of Crime Prevention Through Environmental Design (CPTED), as well as sustainable design principles. The development subdivision;

- incorporates “speed slow” zones to reduce vehicle speed;
- is of a grid pattern with lines of sight for casual surveillance;
- there is natural surveillance by the placing of perimeter streets to the retained bushland areas;
- the community management scheme provides for the projects community to maintain street verges, bushland and to create a sense of pride in the development and ownership – this has the benefit to deter potential crimes;
- has solar access for future dwellings;
- incorporates bike path to connect to the broader Iluka bike path;
- is located adjacent to the golf course – recreation facility;
- is in close proximity, approximately 1km, to beaches and the Clarence River;
- incorporates fauna movement corridors in street verges;
- has wide street verges for landscape amenity;
- retains bushland for flora and fauna;
- internal and part external bushland to be integrated incorporating raised community awareness through implementation of a site Habitat Management Plan;

- close proximity to childcare and library facilities;
- close proximity to Iluka coastal fishing village facilities;
- close proximity to access the Iluka Nature Reserve (World Heritage area);
- close proximity to the Bundjalung National Park and associated facilities.

8.4 Development Costs, Capital Investment and Estimated Ongoing Value

a) *Proposed Subdivision Costs*

Project initiation and statutory approvals cost - Costs attributed to the proposed community subdivision include costs associated with the preparation of the agreement between the Birrigan Gargle Local Aboriginal Land Council and the Stevens Group, costs for specialists, legal costs, and individual party payments to employee costs associated with the preparation and lodgement of the development application.

Statutory approval costs relate to services and expenses to specialists for onsite and offsite assessments and analysis. Costs associated with travel and accommodation from areas outside of Iluka to visit Iluka. With the specialist services onsite at Iluka, revenue was and will be generated into the local economy for items such as meals, vehicle expenses and accommodation, and other travel needs expenses.

Design Phase - Once approved, the community subdivision will focus on the detail design phase. This will mean services provided by specialists for the detailed design of the community subdivision works. The benefits to the local economy will be similar to that identified for the project initiation and statutory approvals phase.

Construction Phase – At the time of project construction there will be costs associated with the various civil engineering works including for the provision of earthworks, infrastructure construction, roadworks, drainage, utility services provision and management of the bushland areas.

The potential positive impact to the Iluka businesses and businesses of nearby areas such as Yamba, Maclean, and Grafton, will be the revenue expended by the construction work force for accommodation, meals, and travel needs.

Land Title Creation – At the completion of the construction phase, the various land title survey works will be undertaken to create the allotments and the community management scheme. This will involve the commissioning of specialists such as surveyors and legal advisors for the preparation of the relevant plans of survey and community subdivision scheme documents for registration and issue of land title and associated documents.

Land Marketing and Sales – The land will be sold as part of the community subdivision. Specialists involved with this component of the project will include specialist marketing organisations, real estate agents and legal advisors for both the proponent and the perspective purchasers of the land.

BGLALC Field Monitors – During the various phases of the development, members of the BGLALC will provide onsite infield monitoring particularly for Aboriginal Cultural Heritage matters. The BGLALC members will receive payment for their onsite works. This has positive financial and employment benefits to BGLALC members.

b) *Project Capital Investment*

The proposed community subdivision creates land upon which future residential dwellings can be constructed. The capital investment in the subdivision includes the land formation, construction of infrastructure – roads, bushfire trails, sewer network, water supply network, connection to existing infrastructure within the village of Iluka such as the road network system, water supply and sewerage services, and bike network system.

In addition, there will be connection for future dwellings for electricity, telecommunications and street lighting.

There are areas of retained bushland that are to be managed and maintained in the first instance and ongoing by weed control and removal.

c) *Employment Opportunities*

The proposed subdivision costs identify monetary payments that are made to statutory authorities and various specialists in respective fields of expertise. Associated with the costs and project needs for certain personnel involvement, there is an equivalent employment opportunity provided for the identified specialist during the project initiation phase, project design phase, project construction phase, land title creation phase, and land marketing and sales phase. The employment will be generated to individuals and / or through the specialist organisation or firm providing the service.

As identified for the BGLALC there is an opportunity for employment of its members for field monitors during portions of the design phase, and the construction phase.

There is also a potential that members of the BGLALC could provide services to the owners of the future allotments through the community subdivision “body corporate”, to provide services to implement various strategies in the finally approved landscape and habitat management plan.

d) *Potential value added benefits*

Community Subdivision - The proposed community subdivision creates certain components within the subdivision that will be maintained by the owners of the community subdivision and managed through the community management statement by the Community Association. For example, the various bushland (parks) which remain in private ownership and will be maintained by the owners of the allotments within the community subdivision. This has a benefit to the broader community and the Clarence Valley Council as these bushlands provide for habitat and fauna movement and will be maintained by the owners of the community subdivision. As a result, Clarence Valley Council will not need to expend rate payer funds to maintain these areas.

External road verge areas - In addition to the community lot park lands, the Community Association will manage and maintain the verge areas to the streets, and in some areas, will maintain areas external to the subdivision land and located in the adjoining road reserve of Elizabeth Street, Iluka Road and Hickey Street. Such a commitment by the community subdivision owners means the CVC will not need to expend rate payer funds on these areas.

Bushfire risk reduced - The subdivision of the land (Lot 99 DP823635) will significantly reduce its rating as “Bush Fire Prone” designation as shown on the Clarence Valley Bushfire Management Committee – Village Protection Strategy – Iluka” (18 September 2014). The current designation of “Bush Fire Prone” extends for the total area of Lot 99 DP823635.

The current vegetation cover has the potential from a bushfire perspective, to adversely impact the existing urban built form and vacant lands to the south of the adjoining Elizabeth Street.

The subdivision retains certain bushlands and creates vacant land allotments. These lots allow for residential dwelling construction. In addition, the subdivision provides perimeter streets, for fire vehicle access, fire trails connections and water supply hydrants for bushfire fighting and urban fire fighting.

Future community awareness – With the management of community bushland and street verge areas, there is a greater potential to raise the awareness of future owners / and occupiers of the development to the proximity to the Iluka Nature Reserve World Heritage area and National Park, as well as fauna and flora communities and their biodiversity value.

e) Payments to Clarence Valley Council

The Clarence Valley Council is yet to consider and formally approve the proposed subdivision. As part of the CVC planning instruments, Council has the ability to levy and recoup from the proponent contributions for certain items.

CVC has placed an application fee charge on the development application to date and with future various statutory development applications and certificates to be lodged with Council for assessment and processing.

The contributions the Clarence Valley Council may identify for payment by the development of the subdivision include items identified in the NSW Local Government Act, Section 94 Contributions. These will be based on a per allotment contribution (\$) basis.

- Clarence Valley Contributions Plan 2011 Open Space / Recreational Facilities;
- Clarence Valley Contributions Plan 2011 Community Facilities;
- Clarence Valley Contributions Plan 2011 Plan of Management.

CVC may levy contributions pursuant to Section 64 of the NSW Local Government Act. These would include for:

- Sewer Headworks;
- Water Supply Headworks.

Contribution charges normally levied on a per allotment basis.

Council rates - The creation of the allotments within the community subdivision once the land tenure is formalised, will enable the Clarence Valley Council to commence levying Council rates against each allotment in vacant land form and also in the future when the land is developed with dwellings on each allotment. This rates levy will enable Council the opportunity cost of additional rates for services to be provided within the village of Iluka.

f) Fees and Charges to Government agencies

The development of the proposed subdivision will enable the Australian Government and the NSW Government to gain various contributions, levies and taxes through instruments such as stamp duty on land transfer, taxes paid by organisations associated with construction activities and professional services associated with the subdivision of land and future construction of dwellings on each allotment.

9.0 STEVENS HOLDINGS PTY LIMITED ENVIRONMENTAL RECORD

9.1 EPBC Regulation 2000 – Requiring Details of any proceedings

The Environmental Protection and Biodiversity Conservation Regulations 2000 – Schedule 2 – Referral Information, subsection 7 Environmental record of person proposing to take the action – identifies:

“7.01 Details of any proceedings under a Commonwealth, State or Territory law for the protection of the environment or the conservation and sustainable use of natural resources against:

- (a) the person proposing to take the action; and*
- (b) for an action for which a person has applied for a permit—the person making the application.*

7.02 If the person proposing to take the action is a corporation, details of the corporation's environmental policy and planning framework.”

9.2 Proponent Status

There are no proceedings pursuant to the EPBC Act against Stevens Holdings Pty Limited.

The proposed action is being undertaken by (herein also referred to as the proponent):

Stevens Holdings Pty Limited
PO Box 3171
Erina, NSW 2250

Development Manager

Ben Johnson

10.0 PRINCIPLES OF ECOLOGICALLY SUSTAINABLE DEVELOPMENT

10.1 EPBC Act Principles of Ecologically Sustainable Development (ESD)

The EPBC Act, Part 1 – Preliminary, section 3A Principles of ecologically sustainable development, identifies:

“The following principles are principles of ecologically sustainable development:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;*
- (b) 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;*
- (c) the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;*
- (d) the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;*
- (e) improved valuation, pricing and incentive mechanisms should be promoted.”*

10.2 Development meets ESD Principles

The proposed subdivision meets the principles of ecologically sustainable development.

For each of the EPBC Act ecologically sustainable development principles, the comment on compliance of the proposed Community Subdivision is provided.

“The following principles are principles of ecologically sustainable development:

- (a) decision-making processes should effectively integrate both long-term and short-term economic, environmental, social and equitable considerations;***

The proposed subdivision meets this principle, as it has;

- had input with the land owner BGLALC through a formal confidential agreement;
- been prepared, lodged and following processes pursuant to the relevant NSW Government and CVC planning instruments;
- enabled third party submissions to be made in relation to the development;
- been referred to the NSW Joint Regional Planning Panel for consideration;
- been referred for consideration pursuant to the EPBC Act;
- been through a formal Aboriginal Cultural Heritage Assessment;
- been through an Archeological Assessment;
- been subjected to thorough ecological assessments;
- been subjected to water quality assessments.

(b) *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 proposed subdivision meets this principle, as it has had an integrated approach to;

- had input with the land owner BGLALC through a formal confidential agreement;
- been prepared, lodged and following processes pursuant to the relevant NSW Government and CVC planning instruments;
- referred for consideration pursuant to the EPBC Act;
- been through a formal Aboriginal Cultural Heritage Assessment;
- an ecological assessment conducted and Habitat Management Plan formulated;
- bush fire assessment with management strategies incorporated;
- geotechnical assessment conducted and management plan identified;
- traffic, bike and pedestrian management assessment and attributes managed accordingly;
- civil engineering assessments – regarding water supply, sewer, stormwater drainage, streets, bicycle paths, fire trail connections earthworks and attributes managed accordingly;
- acid sulfate soils assessments found to be no impact with management plans identified accordingly;
- landscape management investigated and found to be able to be managed with suitable plant species for future development of verge areas;
- soil potential contamination from previous sand mining activities assessments conducted and found to be no impact;
- investigations into an apparent “grave site” assessed and found to be non-existent;

(c) *the principle of inter-generational equity—that the present generation should ensure that the health, diversity and productivity of the environment is maintained or enhanced for the benefit of future generations;*

The proposed subdivision meets this principle, as it has;

- had input with the land owner BGLALC through a formal confidential agreement;
- been referred for consideration pursuant to the EPBC Act;
- been through a formal Aboriginal Cultural Heritage Assessment;
- provides for urban development through creation of housing allotments in the village of Iluka;
- incorporates CVC affordable housing policy allotments;
- incorporates water sensitive urban design principles for stormwater drainage;
- retains areas of bushland for ecological purposes;
- incorporates traffic calming facilities for human and fauna movements;
- recognises the proximity to the land to the east containing part of “The Gondwana Rainforest of Australia” World Heritage Property and National Heritage Place – Iluka Nature Reserve;
- recognises the proximity of the Bungjalung National Park – to the east of Iluka Road;
- to be developed as a Community Subdivision – with certain obligations to the residents of the subdivision in relation to implementing bushland management plans, bushfire management plans, and street verge management plans;
- Habitat Management Plan formulated for implementation.

(d) *the conservation of biological diversity and ecological integrity should be a fundamental consideration in decision-making;*

The proposed subdivision meets this principle, as it has;

- had input with the land owner BGLALC through a formal confidential agreement;
- been prepared, lodged and following processes pursuant to the relevant NSW Government and CVC planning instruments;
- been referred to the NSW Joint Regional Planning Panel for consideration;
- been referred for consideration pursuant to the EPBC Act;
- been through a formal Aboriginal Cultural Heritage Assessment;
- various management plans are to be prepared for implementation through the Community Subdivision – these include;
 - Conservation Zone Management Plan
 - Bushfire Management Plan
 - Street Verges and Landscape Management Plan
 - Infrastructure Management Plan for infrastructure under body corporate jurisdiction
- Habitat Management Plan formulated with input from ecological assessments. The HMP to be implemented during Construction Phase and ongoing through and by the Community Association.

(e) *improved valuation, pricing and incentive mechanisms should be promoted.”*

The proposed subdivision meets this principle, as it has;

- had input with the land owner BGLALC through a formal confidential agreement;
- been prepared, lodged and following processes pursuant to the relevant NSW Government and CVC planning instruments;
- been referred for consideration pursuant to the EPBC Act.

11.0 OUTCOMES BASED CONDITIONS

11.1 DEE Outcomes-based Conditions Policy – Overview

The Australian Department of Environment and Energy has adopted an “Outcomes-based Conditions Policy, March 2016” (The Policy), pursuant to the conditions of approval for controlled actions in the EPBC Act (see <https://environment.gov.au/epbc/publications/outcomes-based-conditions-policy-guidance>).

The abovementioned Outcomes-based Conditions Policy identifies “The Australian Government recognises that there are different ways to achieve good environmental outcomes”.

The Policy identifies four (4) approaches to potential environmental conditions, as summarised below:

- (i) **“Prescriptive conditions** (technology or standards based) in which the process or procedural requirements are defined within the condition and the approval holder has little choice about how to comply.”
- (ii) **“Systems-based conditions** (management based) which require the approval holder to develop management plans¹. It is often appropriate to take an outcomes-based approach to management plans.”
- (iii) **“Outcomes-based conditions** (performance based) in which the required outcome or specific level of performance (the ‘what’) is written into the condition and the method to achieve the outcome (the ‘how’) is chosen by the approval holder. Performance indicators (criteria, measures or tests) are used to determine compliance and effectiveness both over the term of an approval and at the conclusion of the action.”
- (iv) **“Surrogate conditions** (performance based) specify an outcome (or a level of performance to be achieved) for something which directly supports the protected matter. In circumstances where the impacts of an action on a protected matter, or changes in the protected matter, are difficult to measure directly it may be appropriate for a condition to specify an outcome for something which directly supports conservation outcomes for the protected matter and is capable of specific measurement.”

There is a further guide provided in the Department of Environment and Energy “Outcomes-based Conditions Guidance, March 2016” (The Guidance).

“This guidance outlines the issues that must be considered and the processes that may be used to develop outcomes-based conditions of approval” under the EPBC Act.

The Guidance identifies there is flexibility in the application of conditions. Conditions for a project may include more than “one type of conditions (a hybrid condition set) depending on the particular risks that need to be managed.”

The Guidance identifies “outcomes-based conditions include six key elements:

1. Outcomes
2. Milestones
3. Performance indicators
4. Monitoring requirements
5. Adaptive management and continual improvement
6. Record keeping, publication and reporting.”

¹ For the purposes of the EPBC Act, these are generally Action Management Plans.

11.2 Proponents response to achieve good environmental outcomes

The status of approvals for the proposed subdivision is currently pending the consideration by DEE of the EPBC Act controlled action matter. As a result, there are no current approval conditions issued for the proposed subdivision.

The Australian Government Department of Environment and Energy (DEE) and the Clarence Valley Council interests are protected by the ability to impose conditions and for administration of compliance with the conditions where placed on a development consent by the statutory instruments contained within the NSW Government Environment and Planning processes.

The NSW Environmental Planning and Assessment Act 1979 (EPA Act)(Section 4 clause 4.16 Determination) has provision for the Consent Authority (for the Iluka Hickey Street Subdivision the Clarence Valley Council and the NSW Joint Regional Planning Panel), to assess a development application and to determine the development application by “(a) granting consent to the application, either conditionally or subject to conditions, or (b) refusing consent to the application”.

Where a development application is approved conditionally or subject to conditions, the development consent conditions imposed by the Council run with the land. The Community Association through the Community Management Scheme may have obligations defined in the development consent conditions imposed by Council – these conditions would then be enforceable. Any non compliance or breach of the conditions of development consent approval is enforceable under the EPA Act.

Staging of the subdivision is dependent on market demand for allotment sales. The subdivision may be staged over some seven (7) years. Each stage in the subdivision requires a similar sequence of approvals phases to be completed.

The sequence of phases following the initial subdivision development consent (with conditions), including constructing the subdivision, gaining registration and issue of titles for the land through the Community Subdivision Scheme are all dependent on each phase satisfying the particular and relevant precedent conditions and obtaining the relevant certificates of compliance.

The general sequence of key precedent approval phases for the subdivision, is summarised below:

- Assessment and issue of a consent by DEE, pursuant to the Australian Government Environmental Protection and Biodiversity Conservation Act 1999.
- The subdivision development consent to be issued pursuant to the NSW Environmental Planning and Assessment Act 1979 and Environmental Planning and Assessment Regulation 2000.
- A Subdivision Works Certificate - is required to be issued to ensure compliance with the conditions of development consent, compliance with relevant regulations and payment of long service levy where applicable, for the subdivision and prior to works commencement.
- A Subdivision Certificate - is issued at the satisfactory completion of the subdivision works and compliance with the relevant development consent conditions.
- A plan of subdivision, including all relevant Community Scheme Subdivision requirements such as the Community Management Statement and Community Lot (Lot 1) - can not be registered in New South Wales unless it has a Subdivision Certificate issued pursuant to the Environmental Planning and Assessment Act 1979.

Other compliance mechanisms available to the Clarence Valley Council include the consideration of the Community Management Statement (CMS) before its registration. If there are development consent conditions to be incorporated into the CMS these can be assessed and consented to by Council prior to release of the Subdivision Certificate. If there are easements to be granted in favour of the Council either burdening or benefitting the Council such obligations can not be released, varied or modified without the consent of the Council.

Outside the scope of the subdivision development works there will be future considerations after completion of the subdivision and registration of title for the Community Subdivision lots will require application by individual lot owners for buildings.

- A building Construction Certificate – for future building works (by others) is to ensure compliance with the Building Code of Australia will require the issue of a Construction Certificate relating to buildings.
- A building Occupation Certificate – a future requirement (by others) is required to be issued prior to commencement of occupation of the building.

To achieve good environmental outcomes for the controlled action it is proposed by the proponent the Conditions identified in Table 11.2, including the Statement of Commitments, form part of the approval to be issued pursuant to the EPBC Act.

Table 11.2 – Proponents response to Conditions of Approval

Condition			
Approval Terms			
1.	The proponent shall implement reasonable and feasible measures to prevent and / or minimise harm to the environment, including the Outstanding Universal Values (OUV) represented within the Iluka Nature Reserve, that may result from the proposed subdivision development.		
2.	The proponent shall undertake the proposed subdivision development generally in accordance with the;		
	(a) Statement of Commitments (refer Appendix 1), and		
	(b) Conditions of this approval.		
3.	If there is any inconsistency between the Statement of Commitments and the conditions of approval, the conditions of this approval shall prevail to the extent of any inconsistency.		
Approved Drawings			
4.	Undertake the subdivision development generally in accordance with the approved drawings, referred to in Table 1, except as varied by any of these conditions of approval.		
TABLE 1 - DEVELOPMENT DRAWINGS			
Drawing No.	Title	Date	Prepared By
PO147-04	Masterplan	June 2017	onecollective URBANDESIGNSTUDIO
PO147-05	Vegetation Zones	June 2017	onecollective URBANDESIGNSTUDIO
PO147-06	Development Staging Plan	June 2017	Onecollective URBANDESIGNSTUDIO
PO147-07	Management Units – External Road Verge	March 2018	Onecollective URBANDESIGNSTUDIO
PO147-08	Management Units – New Public Road Verge	June 2018	Onecollective URBANDESIGNSTUDIO
PO147-09	Indicative Community Scheme - Staging First Development Lot	June 2017	Onecollective URBANDESIGNSTUDIO
PO147-10	Indicative Community Scheme Staging - Key Elements	June 2017	Onecollective URBANDESIGNSTUDIO

Table 11.2 – Proponents response to Conditions of Approval

Condition

Community Subdivision Format

5. Undertake the subdivision in a Community Subdivision Scheme format pursuant to the NSW Community Land Development Act 1989, and the NSW Community Land Management Act 1989.
6. Include in the Community Management Statement to be registered with the community plan, reference to the obligation of the Community Association to undertake the various implementation and management strategies identified in the Habitat Management Plan prepared by Keystone Ecological, dated 14 August 2018, and as identified in the Statement of Commitments.

Staging of the Development

7. The subdivision development may be undertaken by staging.
8. The subdivision staging may include Development Lots (or Management Lots) as shown on the Drawing PO147-09 and Drawing PO147-10. The boundaries of the Development Lots to generally follow the staging boundaries as shown on the Drawing PO147-06 Development Staging Plan.

The Development Lots are to be subdivided further to include individual future single lots and / or public roads and other relevant instruments, such as easements for infrastructure services where required.

9. The Community Subdivision Scheme is to include the relevant community land being Lot 1 to be managed by the Community Association. Staging of the subdivision to include where relevant to the particular stage:
 - (a) development lots (management lots) to enable further subdivision into individual allotments;
 - (b) relevant easements;
 - (c) right of access;
 - (d) positive covenants;
 - (e) restrictions on use of land;
 - (f) any relevant infrastructure or improvements to service the individual allotments in each stage and new public road designation.

Where required, the infrastructure is to be progressively transferred on a staged basis to the Clarence Valley Council or relevant government agency or utility service provider.

Where staging of the Community Subdivision is proposed, the conditions of approval are to be complied with to the extent they are relevant to the specific stage.

All relevant works and installation of infrastructure to service the relevant stage are to be completed prior to the issue of a Subdivision Certificate issued under the provisions of the Local Government Act 1919 or the Environmental Planning and Assessment Act 1979.

Table 11.2 – Proponents response to Conditions of Approval

Condition
<p>Community Property (Lot 1)</p> <p>10. Prior to the creation of the Community Property (Lot 1);</p> <ul style="list-style-type: none"> (a) the Community Property Lot (Lot 1) boundary is to be verified by survey and infield ecological review of vegetation spatial positioning. (b) Subject to the findings of (a) above, where and if necessary, minor alterations to the perimeter or common ‘park’ boundaries to occur to maintain the integrity of the habitat management units identified in the Habitat Management Plan. (c) The existing fire trail is to retain its existing position and the existing connection point to Iluka Road, and is to be located wholly within Park E.
<p>Lot 7020 DP1114873 Designation</p> <p>11. Subject to the approval of all relevant statutory agencies having jurisdiction over Lot 7020 DP1114873, where Lot 7020 DP1114873 may be converted to a public road designation and incorporated adjacent with the Community Subdivision the finally constructed verges are to be treated and managed in a similar manner as described in the Habitat Management Plan to that of the referenced area HS2, as indicated on the drawing PO147-07 Management Units External Road Verge.</p>
<p>Habitat Management</p> <p>12. Prior to the commencement of construction of the relevant stage of the subdivision (other than to create a Development Lot (Management Lot)), where native vegetation is to be disturbed:</p> <ul style="list-style-type: none"> (a) Implement and undertake the habitat management measures, monitoring, and reporting as identified in the Habitat Management Plan by Keystone Ecological, dated 14 August 2018. (b) Provide relevant nest boxes to replace hollow trees for displaced fauna. The nest boxes to be provided in accordance with the management and installation measures identified in the Habitat Management Plan. (c) Clearing of vegetation for those areas to contain the urban form community subdivision development, as shown on the drawings listed in Condition 4, to be conducted subject to the habitat management measures identified in the Habitat Management Plan by Keystone Ecological, dated 14 August 2018.
<p>Habitat Management Reporting</p> <p>13. The proponent is to provide a report prepared by a suitably qualified person on the implementation of the management measures on both habitat and fauna identified in the Habitat Management Plan, to the Australian Government Department of Environment and Energy, in the timelines listed below:</p> <ul style="list-style-type: none"> (a) A report to be provided at the time of presenting the plan of survey and associated documents for registration and issue of land title for the first stage of individual residential allotments in the subdivision; (b) A report to be provided six (6) months after the completion of the first report, as referenced in item (a) above; (c) A report is to be provided twelve (12) months following the first report, and then a report is to be undertaken on an annual basis until the completion of the last stage of the subdivision;

Table 11.2 – Proponents response to Conditions of Approval

Condition
(d) A final report is to be prepared and provided to the Australian Government Department of Environment and Energy twelve (12) months following the completion of the last stage of the subdivision.
Fauna Management 14. Implement and undertake the fauna management measures, monitoring, and reporting as identified in the Habitat Management Plan by Keystone Ecological, dated 14 August 2018. 15. The proponent is to provide a report on the implementation management measures for fauna management as identified in the Habitat Management Plan. The report on fauna management is to be included in the reports to be undertaken and as described in the Habitat Management Plan.
Landscape Works 16. Landscape the subdivision, particularly the street works generally in accordance with the Iluka Community Subdivision - Landscape Masterplan by Moir Landscape Architecture, Drawing LA01 to LA14 inclusive, dated 6 April 2018, and where relevant as identified in the Habitat Management Plan. 17. Prior to the earlier of the issue of a Subdivision Certificate or completion of the plan of survey for land title registration of individual Community Scheme allotments within each stage of the subdivision, the landscape works are to be completed for the particular stage.
Environmental Awareness 18. Prior to undertaking work associated with this approval the proponent shall advise employees, contractors and subcontractors of the environmental attributes of the subdivision and the requirements to comply with the conditions of this approval.

APPENDIX 1 – SCHEDULE 1 STATEMENT OF COMMITMENTS – GENERAL

Matter	Commitment
Construction Management Plans	<p>The Management Plans prepared to date would be refined where necessary and new plans prepared and implemented to integrate the various management plans and conditions of statutory approvals for the subdivision development to guide environmental management, construction sequencing and reporting activities during the construction phase of the subdivision.</p> <p>The proponent is committed to environmental management for the subdivision works activities.</p> <p>The proponent will inform the contractor of the requirements to incorporate, integrate and implement the Construction Management Plans to be prepared by the contractor in all construction phase activities, for each stage of the subdivision;</p> <ul style="list-style-type: none"> ▪ Aboriginal Cultural Heritage Management plan – This plan will incorporate the Aboriginal Cultural Heritage Management Protocol, and be guided by the Lot 99 DP823635 Hickey Street, Clarence Valley Local Government Area: Aboriginal Cultural Heritage Assessment Report by Extent Heritage Pty Ltd, and the Baseline Historical Archeological Assessment by Extent Heritage Pty Ltd. ▪ Habitat Management Plan – This plan will reference the Habitat Management Plan by Keystone Ecological dated 14 August 2018. ▪ Landscape Master Plan – This plan will reference the Landscape Master Plan by Moir Landscape, and the finally approved detailed landscape design drawings and specification approved by Clarence Valley Council. ▪ Environmental Awareness Plan – This plan will incorporate the environmental awareness attributes identified in the Habitat Management Plan, to inform all designers and contractors personnel of the environmental significance of the subdivision, its surrounds and the individuals responsibilities. ▪ Bushfire Management Plan – This plan will implement the bushfire Asset Protection Zones, and guide the detailed design and construction installation for water supply, fire hydrants, access streets and roads. ▪ Geotechnical and Geochemical Plan – This plan will utilise existing onsite geotechnical and geochemical information, and be expanded for the earthworks, roadworks and infrastructure works for the subdivision to minimise impact on the habitat areas to be retained. ▪ Civil Engineering Management Plan – This plan will use the “Civil Engineering Report” by Burchill Engineering Solutions to guide the detailed design and construction of all infrastructure services for the subdivision, particularly in relation to habitat protection of the retained bushland. ▪ Erosion and Sediment Control Management Plan – This plan will adopt the Erosion and Sediment Control Management Plan by Burchill Engineering Solutions, and be amended where necessary to reflect the provisions of the Habitat Management Plan.

APPENDIX 1 – SCHEDULE 1 STATEMENT OF COMMITMENTS – GENERAL

Matter	Commitment
	<ul style="list-style-type: none"> ▪ Stormwater Management Plan – This plan by Burchill Engineering Solutions will form the basis of the detailed design for stormwater facilities. It will also inform the guidelines for future individual onsite water quality requirements, as required by the Clarence Valley Council. ▪ Traffic and Pedestrian Movement Plan – This plan will incorporate in the detailed design and construction phase, the required access controls, speed limits, street traffic calming, signage, pedestrian and bicycle facilities, including temporary traffic control facilities for the construction phase. ▪ Work Health and Safety Plan – This plan to be in accordance with the relevant provisions of the NSW Work Health and Safety Act 2011, and the NSW Work Health and Safety Regulations 2017 for the construction phase activities. ▪ Construction Sequencing Management Plan – This plan will be developed by integration of the various management plans to identify particular timing and ‘sequence’ or ‘order’ of activities, and to highlight ‘prerequisite’ or priority activities to various pre construction phase, construction phase and post construction phase elements.
Aboriginal Cultural Heritage Management	<p>An Aboriginal Cultural Heritage management element has been prepared to form part of the protocols for the subdivision development. The protocols are to be used for both the construction phase and the operational phase of the community subdivision. The proponent is committed to;</p> <ul style="list-style-type: none"> ▪ Manage Aboriginal Cultural Heritage of the subdivision in accordance with the Aboriginal Cultural Heritage Management Protocol.
Habitat Management Plan	<p>The Habitat Management Plan by Keystone Ecological dated 14 August 2018 has been prepared to provide a working document to deliver conservation management objectives for the retained bushland parks, including known and potential habitats for species of conservation significance, and species identified by the Australian Government Department of Environment and Energy as providing Outstanding Universal Values (OUV's) that help define the Iluka Nature Reserve World Heritage status.</p> <p>This conservation objective will be delivered in the long term by:</p> <ul style="list-style-type: none"> ▪ Ecological supervision of works; ▪ Weed control; ▪ Bushland rehabilitation; ▪ Natural regeneration; ▪ Strategic planting; ▪ Habitat enrichment; and ▪ Control of recognised threatening processes. <p>The proponent commits to implementing the provisions of the Habitat Management Plan for the subdivision development by:</p> <ul style="list-style-type: none"> ▪ Undertaking the works, actions and procedures identified in the Habitat Management Plan; ▪ Access and egress controls for all stages of the subdivision to be strictly observed and incorporated into the detailed construction phase civil works plans to be prepared by the contractor;

APPENDIX 1 – SCHEDULE 1 STATEMENT OF COMMITMENTS – GENERAL

Matter	Commitment
	<ul style="list-style-type: none"> ▪ Lighting in public areas to be provided for safety in accordance with relevant Australian Standards and amenity. No lighting to be directed towards the retained or adjacent bushland; ▪ Traffic calming devices to be installed in new streets and public roads; ▪ Fencing to be fauna friendly; ▪ Signage to be directional, specific for biodiversity management, educational and informative to raise environmental awareness; ▪ Integrating key avoidance and mitigation measures identified in the Habitat Management Plan with the other project management plans including construction sequencing plans to ameliorate potential and direct impacts on the biodiversity values during the vegetation clearing and construction phases; ▪ Offset planting of preferred fauna food trees in the retained bushland areas and new street / public road verge areas; ▪ Until there is greater understanding of the reproductive ramifications of <i>Acronychia littoralis</i>, that the parent <i>Acronychia</i> species (<i>Wilcoxiana</i>, <i>oblongifolia</i>, <i>imperforata</i>) are not used in replanting; ▪ Salvaging and reuse of large logs in strategic areas to enrich the available habitat for species, such as, the Spot-tailed Quoll. All care to be taken with the use of machinery to minimise any adverse impact on the existing habitat, and if woody debris is utilised in new urban areas, there is minimal influence on landscape planting.
Landscape Master Plan	<p>The specific landscape intent for the subdivision is shown in the Landscape Master Plan by Moir Landscape. The Landscape Master Plan identifies – street hierarchy and street treatment, a planting scheme, pedestrian and cycle network, fence and entry statements, habitat corridors and street links.</p> <p>The proponent commits to the following in relation to the Landscape Master Plan:</p> <ul style="list-style-type: none"> ▪ The Landscape Master Plan will directly inform the detailed landscape design and installation of landscape works; ▪ The Landscape Master Plan is to be read in conjunction with the Habitat Management Plan; ▪ If there are any inconsistencies between the Habitat Master Plan and the Landscape Master Plan, the Habitat Management Plan takes precedence; ▪ The relevant planting schedules and species selection to be installed through the Landscape Master Plan shall be in accordance with the specific requirements of the Habitat Management Plan; ▪ All built form elements including fauna friendly structures are to be in accordance with the recommendations in the Habitat Management Plan;

APPENDIX 1 – SCHEDULE 1 STATEMENT OF COMMITMENTS – GENERAL	
Matter	Commitment
	<ul style="list-style-type: none"> Prior to finalising the plan of survey and associated documents for registration and issue of title for the individual community title allotments for each stage of the community subdivision, the relevant retained bushland areas, and landscape works, including planting of trees, is to be completed in accordance with the finally approved Landscape Master Plan and Habitat Management Plan.
Environmental Awareness Plan	The proponent commits to briefing the specialist designers and contractor personnel involved with the construction phase activities in relation to the environmental significance and obligations of the subdivision development, in particular the necessity to protect the retained bushland park areas (Community Lot (Lot 1)), as identified in the Habitat Management Plan.
Bushfire Management Plan	<p>The proponent commits to the following in relation to undertaking appropriate bushfire management for the subdivision:</p> <ul style="list-style-type: none"> Provision for the required Asset Protection Zones (APZ) generally as shown on the Iluka Project Vegetation Zones Drawing No. PO147-05; Implementing temporary APZ areas to protect each stage of the subdivision; Installation to the satisfaction of Clarence Valley Council of the required water supply and fire hydrant infrastructure to service the subdivision.
Geotechnical and Geochemical Plan	<p>The proponent commits to the following in relation to geotechnical and geochemical management for the subdivision:</p> <ul style="list-style-type: none"> Undertake appropriate further geotechnical assessment to determine the required capacity of the existing land form and to recommend earthworks specifications for the future residential allotments and street / public road reserve formation. Establish protocols for potential acid sulfate soil identification and management and implement the required acid sulfate soil management provisions where found necessary.
Civil Engineering – Infrastructure Plan	<p>The proponent commits to implementing the requirements of the civil engineering infrastructure plan, in particular relating to:</p> <ul style="list-style-type: none"> Location of infrastructure extensions in the existing public road reserve areas to service the subdivision to minimise impact on existing vegetation in the areas of the public road verge adjacent to the subdivision that are proposed to be managed by the subdivision Community Association. Locate stormwater drainage facilities so as to minimise impact on the habitat of retained bushland park areas. During the construction phase protect the habitat of the retained bushland park areas as described in the Habitat Management Plan.
Erosion and Sediment Control Management Plan	The proponent commits to implementing the requirements of the Erosion and Sediment Control Management Plan during the construction phase of the subdivision.
Stormwater Management Plan	The proponent commits to the following in relation to stormwater drainage for the subdivision:

APPENDIX 1 – SCHEDULE 1 STATEMENT OF COMMITMENTS – GENERAL	
Matter	Commitment
	<ul style="list-style-type: none"> Refining the design and implementing stormwater drainage to incorporate the principles of water sensitive urban design to the satisfaction of the Clarence Valley Council. Provide a mechanism that identifies for each future residential allotment requirement for onsite treatment of water quality in accordance with the Clarence Valley Council guidelines.
Traffic and Pedestrian Movement Plan	<p>The proponent commits to the following actions to manage traffic and pedestrian movements in the subdivision development:</p> <ul style="list-style-type: none"> Design and install traffic calming devices to limit vehicle speed limits to a maximum of 50kmh. This is in line with the Clarence Koala Plan of Management for high value Koala habitat; Position pedestrian access and bicycle pathways in the new subdivision built form environment and to control and limit access to the proposed retained bushland parks (Community Lot (Lot 1)); Utilise existing bushfire tracks and internal property tracks to access the retained bushland. No access to be provided via new tracks to Iluka Road or through the retained bushland areas (Lot 1).
Work Health and Safety Plan	<p>The proponent commits to the following in relation to Work Health and Safety protocols for the subdivision construction phase:</p> <ul style="list-style-type: none"> Implement the recommendations of the report - “Field Radiation Survey for Residential Subdivision, Iluka, NSW” by Earth Systems, including: <ul style="list-style-type: none"> ➤ The construction phase environmental plan and Occupational Health and Safety Risk Assessment, including radiation hygiene and visual identification of any deposits of black mineral sand materials unearthed during excavations; ➤ Dust minimisation practices are employed at the site during construction. The contractors to implement appropriate hazard and risk assessment for the proposed subdivision works activities, and to implement the required occupational health and safety procedures, and emergency management procedures.
Construction Sequencing Management Plan	<p>The proponent commits to:</p> <ul style="list-style-type: none"> Informing specialist designers and the contractor in relation to construction sequencing of key elements; Preparing and implementing construction sequencing plans to integrate key plans to focus on management of biodiversity values in the following three (3) phases: <ul style="list-style-type: none"> ➤ Pre Construction Phase; ➤ Construction Phase; and ➤ Post Construction Phase transition to issue of registration of titles for the community subdivision.

APPENDIX 1 – SCHEDULE 1 STATEMENT OF COMMITMENTS – GENERAL	
Matter	Commitment
	<ul style="list-style-type: none"> Note the subdivision may be developed in stages generally as shown in the indicative stage arrangement on the Iluka Project Development Staging Plan – Drawing No. PO147-06. Recognise and implement the attributes identified for the Pre-Construction Phase, Construction Phase and Post Construction Phase and apply to each separate stage of the subdivision development.
Construction Sequencing Management Plan (continued)	<p>Pre Construction Phase with a focus on Management of Biodiversity Values</p> <p>The proponent makes the following commitment for maintenance and protection of the biodiversity values of the subdivision land;</p> <ul style="list-style-type: none"> To complete the detailed design of the subdivision to incorporate the conditions of all statutory approvals, permits and the elements contained in the Statement of Commitments; To substantially avoid clearing of areas of higher ecological significance; To minimise impact on fauna species; To maintain habitat connectivity and habitat values. <p>By the following:</p> <ul style="list-style-type: none"> Retention of the best habitat on site to be incorporated into the retained bushland parks as contained within the Community Lot (Lot 1) as shown on Iluka Project Masterplan drawing no. PO147-04; The design and layout of the subdivision as shown on the Iluka Project Drawings PO147-04 to PO147-10 inclusive; To survey and mark the perimeter of the retained bushland parks indicated as Lot 1 on the Iluka Project Masterplan Drawing No. PO147-04; Erection of fauna friendly barriers, bollards and signage to demarcate the retained bushland park areas as “vegetation protection” – “no go” areas; Undertake the required ecological inspections identified in the Habitat Management Plan relating to: <ul style="list-style-type: none"> ➤ Base data assessment for vegetation condition; ➤ Location of suitable position for nest boxes; ➤ Locate specific “potential fauna” crossings for the construction phase activities; ➤ Establish reference points within each Management Unit in each Management area; ➤ Undertake pre-clearing surveys to identify potential disturbance to bird nesting and manage appropriately. Conduct induction of construction site personnel in both cultural heritage management and environmental awareness;

APPENDIX 1 – SCHEDULE 1 STATEMENT OF COMMITMENTS – GENERAL

Matter	Commitment
	<ul style="list-style-type: none"> ▪ Inspection of areas to be cleared of vegetation to determine hollow tree configuration and “nest box” requirements for each particular stage; ▪ Identification of staged bushfire Asset Protection Zones (APZ) for each subdivision stage; ▪ Input to the construction program to reflect the Habitat Management Plan phased fauna location, relocation and potential impact on fauna breeding seasons, and vegetation clearing activities; ▪ Identify potential construction compound areas (in future areas to be cleared) and develop fauna movement strategies accordingly.
Construction Sequencing Management Plan (continued)	<p>Construction Phase with a focus on Management of Biodiversity Values</p> <p>The proponent commits to the following Construction Phase actions, with a particular focus on management of biodiversity values;</p> <ul style="list-style-type: none"> ▪ Finalise construction management plans to ensure provision for habitat and fauna impacts are minimised; ▪ Installation of specific construction safety signage, “no go” access signage, general community awareness signage relating to the environmental attributes of the land; ▪ Implement the bushfire management strategies; ▪ Facilities to reduce construction vehicle speeds and to define correct access locations; ▪ Further ongoing inductions to raise awareness of site personnel in relation to Aboriginal Cultural Heritage, and environmental awareness; ▪ Install nest boxes as required by and to the procedures identified in the Habitat Management Plan; ▪ Commence vegetation management, “log” / “woody course” debris management”, fauna, tree planting and weed management, in accordance with the Habitat Management Plan for all areas within the Community Lot (Lot 1); ▪ Undertake vegetation clearing in a phased removal process as described in the Habitat Management Plan; ▪ Vegetation clearing to be undertaken with the onsite presence of an experienced fauna spotter-catcher as identified in the Habitat Management Plan; ▪ Tree removal and hollow-bearing tree removal in accordance with the protocol identified in the Habitat Management Plan; ▪ Installation of required suitable sediment and erosion control devices, including provision for appropriately positioned temporary stormwater diversion systems where necessary; ▪ Implementation of required waste management facilities as identified in the Habitat Management Plan;

APPENDIX 1 – SCHEDULE 1 STATEMENT OF COMMITMENTS – GENERAL	
Matter	Commitment
	<ul style="list-style-type: none"> Implementation of required weed control strategy usually undertaken in three (3) phases; primary weed control, secondary weed control, and maintenance weeding as identified in the Habitat Management Plan; Incorporate the appropriate hygiene protocols to prevent transfer of plant diseases.
Construction Sequencing Management Plan (continued)	<p>Post Construction Phase Transition to Issue of Registration of Titles</p> <p>The proponent commits to the following in relation to post construction phase activities with the transition to issue of registration of titles for the community subdivision:</p> <ul style="list-style-type: none"> For each stage of the subdivision completion of the works in the new public road areas including the works identified in the Landscape Master Plan to the satisfaction of Clarence Valley Council. Completion of all infrastructure to service each stage of the subdivision to the satisfaction of Clarence Valley Council. Completion of works identified in the Habitat Management Plan for retained bushland parks for those areas adjoining each stage of the residential subdivision. Completion of the ecological report identified in the Habitat Management Plan to be forwarded to the Department of Environment and Energy. Commence and complete the first Koala monitoring survey as identified in the Habitat Management Plan to be undertaken as part of the completion of works for the first stage of the subdivision. Complete installation of signage to raise environmental awareness and promote habitat protection. At the completion of each stage of the subdivision, the ‘as constructed’ details relating to the retained bushland (Lot 1) – Community Property, and street / road areas as indicated on the Landscape Master Plan is to be provided to the Community Association. The purpose of this information is to assist the Community Association with its understanding of the spatial location of key built form features, infrastructure services, and landscape elements.

APPENDIX 1 – SCHEDULE 2 STATEMENT OF COMMITMENTS – COMMUNITY MANAGEMENT STATEMENT	
Matter	Commitment
Community Management Statement (CMS)	<p>The proponent makes the following commitment in relation to the Community Management Statement:</p> <ul style="list-style-type: none"> ▪ Prepare the relevant survey plans, Community Management Statement and associated documents for a community scheme subdivision in accordance with the provisions of the; <ul style="list-style-type: none"> ➤ NSW Community Land Development Act 1989, ➤ NSW Community Land Development Regulation 2007, ➤ NSW Community Land Management Act 1989, ➤ NSW Community Land Management Regulation 2000, as maybe amended from time to time. ▪ To establish formal responsibilities, implementation measures and management strategies for ongoing management by the Community Association; ▪ The Community Management Statement will include provisions to clearly identify that any future contractors are to comply with the relevant provisions of the finally approved Habitat Management Plan and Landscape Master Plan; ▪ The Community Management Statement will include provisions relating to the following plans: <ul style="list-style-type: none"> ➤ Aboriginal Cultural Heritage Management; ➤ Habitat Management Plan; ➤ Landscape Master Plan; ➤ Environmental Awareness Plan; ➤ Bushfire Management Plan; ➤ Stormwater Quality Improvement Device (SQID) Maintenance Management Plan; ➤ Traffic and Pedestrian Movement Plan.
Aboriginal Cultural Heritage Management	<p>The proponent commits to include the Aboriginal Cultural Heritage protocol to be incorporated into the provisions of the Community Management Statement.</p>
Habitat Management Plan	<p>The proponent makes the following commitments to provide for appropriate strategies for management of habitat values to the future individual lot owners within the subdivision:</p> <ul style="list-style-type: none"> ▪ To incorporate the Habitat Management Plan into the Community Management Statement with appropriate obligations for the Community Association, and where necessary any future “contractors” to implement the identified strategies including: <ul style="list-style-type: none"> ➤ The retained bushland parks will be incorporated into the Community Property (Lot 1) for future individual lot owners to have part ownership and the maintenance and management obligations contained in the Community Management Statement to be administered by the Community Association; ➤ General control provisions to include access controls, lighting management, waste management, traffic calming, street / road verge management and maintenance.

APPENDIX 1 – SCHEDULE 2 STATEMENT OF COMMITMENTS – COMMUNITY MANAGEMENT STATEMENT	
Matter	Commitment
	<ul style="list-style-type: none"> ➤ Fencing and signage – design, purpose, positioning, and maintenance provisions; ➤ Weeding – including a weed control strategy, maintenance weeding, and hygiene processes and practices; ➤ Plantings to incorporate identified species not to plant, and encouragement for residents to plant locally native species in private gardens; ➤ Protection of sensitive habitat areas to include “no go zones”, sediment and erosion control, waste management, and vegetation management hygiene controls; ➤ Tree removal and tree protection protocols, including for hollow bearing trees management – for any future works in the bushland areas or public road reserves under the management of the Community Association; ➤ Nest boxes – including for maintenance monitoring and possible replacement protocols; ➤ Domestic pets – identification of prohibited areas in bushland parks, fencing protocols, encouragement for responsible pet ownership and promoting the subdivision is a “small pet” estate; ➤ Erosion and sediment controls to be maintained, monitored and replaced where necessary including protection if needed for any future works; ➤ Monitoring and compliance reporting – to be undertaken in accordance with the Habitat Management Plan including an annual Koala management survey.
Landscape Master Plan	<p>The proposed subdivision development Landscape Master Plan by Moir Landscape has been developed to demonstrate the community subdivision integration of the street configuration, water sensitive urban design and to facilitate native plant installation to facilitate biodiversity attributes of the street realm and verge areas for all new public roads.</p> <p>The proponent makes the following commitments to incorporate the Landscape Master Plan into the Community Management Statement and / or to provide information to the Community Association:</p> <ul style="list-style-type: none"> ▪ The relevant tree planting schedules listed in the Habitat Management Plan will be incorporated into the Landscape Master Plan; ▪ The relevant maintenance and management processes identified in the Habitat Management Plan are to be incorporated for all new public road verges and existing public road verges for those verge areas shown on the Iluka Project Drawing No. PO147-07 and Drawing No. PO147-08;
Environmental Awareness Plan	<p>The proponent commits to providing an education package for the new residents of the subdivision to highlight the sensitive nature of the site and surrounds, and their environmental obligations.</p>

APPENDIX 1 – SCHEDULE 2 STATEMENT OF COMMITMENTS – COMMUNITY MANAGEMENT STATEMENT	
Matter	Commitment
Bushfire Management Plan	The proponent commits to providing to the Community Association the finally constructed bushfire management facilities and APZ designations.
Stormwater Quality Improvement Device (SQID) Maintenance Management Plan	The proponent commits to providing the Community Association with the finally installed stormwater quality improvement devices maintenance management plan. This information to be provided on a per subdivision stage basis.
Traffic and Pedestrian Movement Plan	The proponent commits to providing the Community Association with the finally constructed traffic and pedestrian movements facilities including particular requirements in relation to controlled access for maintenance only in the retained bushland park areas (Community Lot (Lot 1)).

12.0 MEETING THE “OBJECTS OF THE EPBC ACT”

The objects of the EPBC Act are described in Chapter 1 – Preliminary, Part 1 – Preliminary.

Described below are the “Objects” of the EPBC Act. For each relevant object there is a corresponding comment for the proposed Community Subdivision meeting the particular EPBC Act “Object”.

“3 *Objects of Act*”

(1) *The objects of this Act are:*

- (a) *to provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance;”*

Response for the development

The proposed development has achieved this objective, as it has;

- investigated the existing environment for the site and its environs by way of substantial survey work by Keystone Ecological;
- the flora and fauna survey was conducted to best practice, observing the six step process recommended in the DEE Guidelines;
- analysed the potential impacts on the identified threatened species and the Iluka Nature Reserve Nominated OUV Constituent Species;
- formulated ameliorating and offsetting measures that reflect the OUV integrity and management and protective arrangements of the Iluka Nature Reserve.

- “(b) *to promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources;”*

Response for the development

The proposed development has achieved this objective, as it has;

- provided and integrated subdivision layout that incorporates the retention of bushland to be under the control of the Community Association, and incorporates a street pattern to facilitate fauna movement and to slow traffic speed;
- utilises land that has been previously used as a sand mining site;
- utilises land that is identified for urban use in the NSW State Regional Planning Policy, and Clarence Valley Council land zoned for residential use;
- developed a Habitat Management Plan with amelioration and offsetting measures;
- adopted a community subdivision format where the Community Management Statement will incorporate relevant management plans to protect the environment.

“(c) to promote the conservation of biodiversity;”

Response for the development

The proposed development has achieved this objective, as it has;

- developed a Habitat Management Plan that includes measures to ameliorate and offset impacts and identifies the species advantaged by those measures. These species include the identified threatened species, Koala, Spot tailed Quoll, Grey-headed Flying-fox, and Scented Acronychia, and the Iluka Nature Reserve Nominated Outstanding Universal Value Constituent Species;
- developed a Habitat Management Plan with amelioration and offsetting measures – including community education programs and measures for future land owners within the community subdivision;
- retained the better quality habitat in park areas to be managed and habitat enhanced by the Community Association;
- through the Habitat Management Plan, identified sound domestic pet management practices to protect native flora and fauna.

“(ca) to provide for the protection and conservation of heritage;”

Response for the development

The proposed development has achieved this objective, as it has;

- had input with the land owner BGLALC;
- been prepared and lodged pursuant to the relevant NSW government and CVC planning instruments;
- been referred for consideration pursuant to the EPBC Act;
- been through a formal Aboriginal Cultural Heritage Assessment;
- been through an Archeological Assessment;
- recognised the Gondwana Rainforests of Australia (Iluka Nature Reserve) designation as a World Heritage Property and National Heritage Place. It does not impact on the Nominated OUV Constituent Species, and does not impact on the existing Australian Government and NSW Government institutional arrangements for the protection and management of the Gondwana Rainforests.

“(d) to promote a co operative approach to the protection and management of the environment involving governments, the community, land holders and indigenous peoples;”

Response for the development

The proposed development has achieved this objective, as it has;

- been prepared and lodged pursuant to the relevant NSW government and CVC planning instruments;
- enabled third party submissions to be made in relation to the development;
- been through a public meeting input phase;
- been referred to the NSW Joint Regional Planning Panel for consideration;
- been referred for consideration pursuant to the EPBC Act;
- been through a formal Aboriginal Cultural Heritage Assessment;
- had input with the land owner BGLALC.

“(e) to assist in the co operative implementation of Australia’s international environmental responsibilities;”

Response for the development

The proposed development has achieved this objective, as it has;

- been referred for consideration pursuant to the EPBC Act.

“(f) to recognise the role of indigenous people in the conservation and ecologically sustainable use of Australia’s biodiversity;”

Response for the development

The proposed development has achieved this objective, as it has;

- had input with the land owner BGLALC;
- been prepared and lodged pursuant to the relevant NSW government and CVC planning instruments;
- been referred for consideration pursuant to the EPBC Act;
- been through a formal Aboriginal Cultural Heritage Assessment;
- been through an Archeological Assessment.

“(g) to promote the use of indigenous peoples’ knowledge of biodiversity with the involvement of, and in co operation with, the owners of the knowledge.”

Response for the development

The proposed development has achieved this objective, as it has;

- had input with the land owner BGLALC;
- is part of an agreement with the BGLALC to develop the land;
- been prepared and lodged pursuant to the relevant NSW government and CVC planning instruments;
- been referred for consideration pursuant to the EPBC Act;
- been through a formal Aboriginal Cultural Heritage Assessment.

ATTACHMENT 1 - Birrigan Gargle Local Aboriginal Land Council letter

ATTACHMENT 2 - DEE letters dated:

- 6 October 2017 - Decision on referral – Iluka Residential Subdivision, Hickey Street, Iluka, NSW – the proposed action is a controlled action; and
- 25 October 2017 – Additional Information required for preliminary documentation Iluka Residential Subdivision, Hickey Street, Iluka, NSW.

ATTACHMENT 3 - Community Subdivision Drawings

ATTACHMENT 4 - Landscape Masterplan

ATTACHMENT 5 - Habitat Management Plan

ATTACHMENT 6 – Keystone Ecological Response Report

ATTACHMENT 7 – Aboriginal Cultural Heritage Management Protocol

ATTACHMENT 8 - Original EPBC Act Referral Form and Attachments – Iluka Residential Subdivision, Hickey Street, Iluka, NSW