DEVELOPMENT CONSENT AUTHORITY
DARWIN DIVISION

NORTHERN TERRITORY PLANNING SCHEME 2020

AGENDA ITEM: 2 **MEETING DATE:** 7/08/2026 **FILE:** PA2026/0187

APPLICATION PURPOSE:	Excavation and fill (erosion gully remediation)
SUBJECT SITE:	Lot 4873 (577) Lee Point Road, Lee Point, Town of Nightcliff
ZONE:	Zone CN (Conservation)
SITE AREA:	81.33 ha
APPLICANT	Cunnington Rosse Town Planning and Consulting Director - Brad Cunnington
PERSONS ON WHOSE BEHALF THE APPLICATION IS MADE	Landowner
LANDOWNER	Defence Housing Australia Brendan O'Brien
ANY PERSON WITH AN AGREEMENT TO ACQUIRE AN INTEREST IN THE LAND	None

1. PROPOSAL

The application is for excavation and fill (erosion gully remediation) at Lot 4873 (577) Lee Point Road, Lee Point, Town of Nightcliff. The 81.33 ha lot (the site) is in Zones FD (Future Development) and CN (Conservation) of the Northern Territory Planning Scheme 2020 (NTPS2020). The areas subject to this application (the development sites) are located towards the western side of the property within Zone CN, on the western side of a small escarpment which extends across the majority of the site.

The application was submitted by Brad Cunnington of Cunnington Rosse Town Planning and Consulting, on behalf of the landowner Defence Housing Australia (via General Manager Development and Construction Brendan O'Brien). While the site is an estate in fee simple owned by DHA, the application provided supporting documentation from the Northern Territory Government Crown Land Estate advising that the development of the Lee Point locality is subject to a Development Agreement between the Northern Territory of Australia and DHA.

The application seeks approval for excavation and fill works to remediate historic erosion gullies within the Zone CN portion of the site. The erosion areas consist of several large gullies in the south-western part of the site and smaller erosion features in the north-west near former Defence infrastructure. The application states that the proposed rehabilitation works are required under the Project Development Agreement between DHA and the Northern Territory Government, which requires rehabilitation of the conservation land before it is transferred into public ownership and incorporated into the Casuarina Coastal Reserve.

The proposed works involve reshaping and stabilising the gullies, importing clean fill material sourced from the adjacent Lee Point subdivision works (specifically identified as from the development of a stormwater detention basin), restoring ground levels to match the surrounding landscape, and revegetating disturbed areas with native species. Limited vegetation clearing will be necessary to provide safe access for machinery and to undertake the earthworks, however clearing is proposed to be minimised, significant trees retained where practicable, and all disturbed areas rehabilitated following construction. The works are planned to occur during the dry season and will be supported by erosion and sediment control measures to prevent further environmental impacts.

A key objective of the proposal is to address long-standing erosion issues that have contributed sediment into the receiving environment, namely Sandy Creek and the Casuarina Coastal Reserve. The rehabilitation works are intended to restore natural landforms, reduce sediment movement, improve downstream water quality, and result in a stable landform. In conjunction with the broader Lee Point development, future stormwater management infrastructure will divert upstream runoff away from the rehabilitated gullies, significantly reducing the likelihood of erosion reoccurring once the works are complete.

A location plan, pink sign and site context photos are provided at **Bookmark A,** with a copy of the application provided at **Bookmark B**.

2. REASON FOR APPLICATION AND LEVEL OF ASSESSMENT

The application is *Impact Assessable* under clause 1.8(1)(c)(i) of the NTPS2020 as the use is shown as *Impact Assessable* on the relevant assessment table in Part 4 of the NTPS 2020. It is noted that clause 1.8(c) of the NTPS2020 states *Impact Assessable – use and development that requires the exercise of discretion by the consent authority to determine if it is appropriate given the location of the site and the potential impacts on surrounding uses, and if it accords with the Strategic Framework*.

Zoning, land use, and assessment category	Part 5 – General and Specific Development Requirements
Zone FD Excavation and fill *Impact Assessable*	5.2.1 General Height Control 5.2.4 Car Parking 5.2.5 Loading Bays 5.2.6 Landscaping 5.2.7 Setbacks for Development Adjacent to Land in Zones LR, LMR, MR or HR 5.8.9 (Excavation and Fill)

The exercise of discretion by the consent authority that applies is clause 1.10(4), which states *In considering an application for a use or development identified as Impact Assessable the consent authority must take into account all of the following:*

(a) any relevant requirements, including the purpose of the requirements, as set out in Parts 5 or 6;
(b) any Overlays and associated requirements in Part 3 that apply to the land;
(c) the guidance provided by the relevant zone purpose and outcomes in Part 4, or Schedule 4.1 Specific Use Zones; and
(d) any component of the Strategic Framework relevant to the land as set out in Part 2.

3. ASSESSMENT SYNOPSIS

This report concludes that the Authority should approve the application subject to conditions on the development permit as detailed in section 7 of this report.

4. BACKGROUND

The subject lot is on the western side of Lee Point Road, is triangular in shape, and slopes towards the west (Casuarina Coastal Reserve). A review of the survey plan found that the site is not encumbered by any easements, nor are any located in proximity to the proposed works.

In the wider context, the site is located in an area intended to be developed for residential and mixed uses as part of the Lee Point Planning Principles and Area Plan, and with residential land uses (Lyons) to the south-east, community purpose (Royal Darwin Hospital precinct) to the south, and conservation/recreation purposes to the west and north (Casuarina Coastal Reserve).

In its specific context, the development sites are located in remnant vegetation, and will see the rehabilitation of gullies which drain into Sandy Creek.

The site has the following relevant planning history –

- DP18/0409 was issued on 30 November 2018 for the purpose of a subdivision to create 513 lots in two stages
- DP18/0409A was issued on 17 November 2020 for the purpose of an extension of time for a period 2 years
- DP18/0409B was issued on 14 July 2022 for the purpose of relocating lot 488, deleting one public open space lot of 450m2, boundary realignments to lots 49, 50, 178, 179, 319 & 320, and reconfiguring the staging to allow the subdivision to occur in five stages
- DP18/0409C was issued on 27 October 2022 for the purpose of an extension of time for a period of 1 year
- DP18/0409D was issued on 1 December 2023 for the purpose of an extension of time for a period 2 years
- DP18/0409E was issued on 22 April 2025 for the purpose of allowing 'Stage 1' to be completed in 2 stages

- DP18/0409F was issued on 22 October 2025 for the purpose of an extension of time for a period of 3 years

A copy of the above permits and associated documents are provided at **Bookmark C**.

5. PUBLIC EXHIBITION

The application was placed on public exhibition for a period of two weeks, between 5 and 19 June 2026. Ten (10) public submissions were received under section 49(1) of the *Planning Act 1999*, with respect to this application.

Photos of the pink signs are provided at **Bookmark A2**.

6. MATTERS TO BE TAKEN INTO ACCOUNT (SECTION 51 OF THE *PLANNING ACT 1999)*

Pursuant to Section 51(1) of the *Planning Act 1999*, a consent authority must, in considering a development application, take into account any of the following relevant to the development:

(a) any planning scheme that applies to the land to which the application relates

The Northern Territory Planning Scheme 2020 (NTPS2020) applies to the land and excavation and fill (erosion gully remediation) requires consent under clause 1.8 (When development consent is required). It is identified as *Impact Assessable* under clause 1.8(1)(c)(i); therefore, the Lee Point Planning Principles and Area Plan (being the most detailed strategic framework document), the zone purpose and outcomes of Zone CN (Conservation), and clauses 5.2.1 (General Height Control), 5.2.4 (Car Parking), 5.2.5 (Loading Bays), 5.2.6 (Landscaping), 5.2.7 (Setbacks for Development Adjacent to Land in Zones LR, LMR, MR or HR) and 5.8.9 (Excavation and Fill), need to be considered.

These clauses have been considered and it is found that the proposal complies with the relevant requirements of the NTPS2020.

A copy of the technical assessment completed by DAS is provided at **Bookmark D1**.

A summary of the relevant parts of the NTPS2020 is as follows:

Part 2 – Strategic framework

<u>Lee Point Planning Principles and Area Plan</u>

The purpose of the Lee Point Planning Principles and Area Plan (LPPPAP) is to *Preserve and integrate areas and items of environmental and heritage significance by:*

(a) limiting development below the escarpment to community uses, tourism activity and pedestrian /cycle tracks that protect the environmental values of the coastal reserve and adjoining vegetation types;

(b) implementing appropriate environmental and engineering measures including but not limited to the application of principles of water sensitive urban design; …

The application is considered to support this outcome through the proposed infilling and stabilisation works which will arrest the existing erosion which is taking place. The works are reasonably expected to reduce sediment loss, improve the capacity for native vegetation

establishment, and promote the gradual re-establishment of habitat characteristics over time. As a result, the proposal is expected to deliver a net environmental benefit, with the long-term ecological outcomes supporting the outcomes envisaged by the LPPPAP.

Part 3 – Overlays

Clause 3.2 (CNV – Clearing of Native Vegetation)

The purpose of this overlay is to *Ensure that clearing of native vegetation does not unreasonably contribute to environmental degradation of the locality*.

While this application on balance proposes the rehabilitation of gullies, the application states that vegetation may be removed where necessary as part of the rehabilitation, and for site access.

Administratively, subclause 5 states *This Overlay does not apply to the clearing of native vegetation that: (a) is required or controlled under any Act in force in the Territory, including but not limited to: … (ii) Environment Protection and Biodiversity Conservation Act 1999 (Cth) ….*

The application has provided evidence that EPBC 2015/7591 was varied on 27 July 2025 (**Bookmark B9**) to include condition 2B, which states *The approval holder may undertake clearing in the area identified in Attachment D2 as Casuarina Coastal Reserve and CCR for the purpose of rehabilitating existing erosion gullies and maintenance of existing bike tracks*.

This is considered suitable at demonstrating that clearing of native vegetation as part of this application is a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999*.

Clause 3.7 (LSSS – Land Subject to Storm Surge)

The purpose of this clause is to *Identify areas with a known risk of inundation from primary or secondary storm surges and ensure that development in these areas demonstrates adequate measures to minimise the associated the risk to people, damage to property and costs to the general community caused by storm surge*.

Of relevance, clause 3.7(8) requires that *Development in the PSSA should be limited to uses such as open space, recreation, non-essential public facilities (wastewater treatment works excepted) and short-stay tourist camping/caravan areas*, where the western boundary of the site, and possibly a small extent of identified gullies are located within the primary and secondary storm surge area.

The application does not propose the construction of any permanent structures or establishment of ongoing land uses within land identified as being subject to storm surges. While the application may infill gullies within the secondary storm surge zone, this infilling is not considered likely to be of a scale that would alter storm surge extents in the locality. As such, the application is considered acceptable against the requirements of this overlay.

Part 4 – Zoning

Clause 4.23 (Zone CN – Conservation)

The purpose of this zone is to *Conserve and protect the flora, fauna and character of natural areas*.

The proposed rehabilitation and subsequent stabilisation of erosion gullies directly supports the purpose of Zone CN by conserving and protecting the environmental values of the site. The active erosion taking place at the development sites represents an ongoing threat to the downstream environment, resulting in the loss of soils, degradation of vegetation communities and the transport of sediment to adjacent habitats and watercourses. By infilling and stabilising the gullies with local material, the proposal will arrest these degradation processes, reduce the potential for further environmental decline and assist in maintaining the ecological integrity of the broader natural area. The works are therefore directed towards protecting existing flora, fauna habitat and landscape values that may otherwise be adversely affected by continued erosion.

The proposal will also facilitate the recovery and enhancement of the site's natural character over time. Following stabilisation, the rehabilitated landform will provide improved conditions for the establishment and regeneration of native vegetation, contributing to the restoration of habitat values and ecological function. The works are intended to return the site to a more stable and self-sustaining condition that is consistent with its environmental values. On balance, the rehabilitation of the gullies is considered to further the intention of Zone CN by promoting the long-term conservation and protection of the flora, fauna and character of the natural area.

Part 5 – Development requirements

While the application was considered to be compliant with the other identified relevant development requirements, it is considered that further discussion of clause 5.8.9 (Excavation and Fill) is warranted.

Clause 5.8.9 (Excavation and fill)

The purpose of this clause is to *Ensure that the excavation or filling of land does not adversely affect adjacent land or waters, or the quality of adjacent waterways, and associated riparian areas and is suited to the intended future use of the site.*

Of relevance are subclauses 3 and 4.

Subclause 3 requires that *Provide a hydrological assessment of potential upstream and downstream impacts of the excavation or filling*.

In response to subclause 3, the application provided a technical memorandum completed by Byrne consulting. This technical memorandum detailed the proposed methodology which would minimise the loss of existing vegetation while remediating the gullies, and what erosion and sediment controls can be implemented to prevent adverse outcomes during remediation works. The technical memorandum states *The finished surface will be designed to tie in with the surrounding topography, including maintaining natural depressions and drainage lines where appropriate. In relation to the upstream and downstream impacts of the proposed works.*

The Works will have no adverse impacts on upstream catchments. Existing hydrological flow paths will be maintained, until such time that upstream flow paths are diverted around the Site during the future 2CRU Subdivision works.

The Works will have a positive impact on downstream environments, by effectively stabilising the Site and mitigating the risk of ongoing erosion. Existing hydrological flow paths will be maintained, until such time that upstream flow paths are diverted around the Site during the future 2CRU Subdivision works. Existing storm water flow volumes will be maintained into CCR and Sandy Creek.

The above is considered acceptable at demonstrating consideration of the upstream and downstream impacts of the proposed works.

Subclause 4 then requires that an application *Provide a plan of management to control erosion and sedimentation, particularly of creeks and riparian areas*.

In response to subclause 4, while the application included an erosion and sediment control plan prepared by a certified professional in erosion and sediment control, its implementation and ongoing compliance thereof can be addressed through standard permit conditions.

(b) any proposed amendments to such a planning scheme:
(i) that have been or are on exhibition under Part 2, Division 3;
(ii) in respect of which a decision has not been made under Part 2, Division 5; and
(iii) that are relevant to the development proposed in the development application

There are no proposed amendments to the NTPS2020 which are considered relevant to this application.

(c) an interim development control order, if any, in respect of the land to which the application relates

There are no interim development control orders that affect this application.

(d) an environment protection objective within the meaning of the Waste Management and Pollution Control Act 1998 that is relevant to the land to which the application relates

There are no environment protection objectives that are considered to affect this application. Additionally, the Development Coordination Branch of the Department of Lands, Planning and Environment (who coordinate responses from various entities including the Environment Division) did not communicate any requirements or concerns regarding this application.

(e) any submissions made under section 49, and any evidence or information received under section 50, in relation to the development application

The application was placed on public exhibition for a period of two weeks, between 5 June and 19 June 2026. Ten (10) public submissions were received under section 49(1) of the *Planning Act 1999*, with respect to this application.

Of the total submissions received, 8 submitters expressed an objection to the application, and 2 expressed conditional support for the proposal subject to comments and recommendations.

The main thematic comments and concerns identified by DAS include:

1. Lack of information about the future detention basin and drainage system.
2. Concern that remediation depends on infrastructure not yet constructed.
3. Risks to Sandy Creek, mangroves and Casuarina Coastal Reserve and concerns about erosion, sedimentation and hydrology.

4. Questions regarding environmental assessment and EPBC compliance.
5. Requests for independent expert review.
6. Concerns about habitat loss and conservation outcomes.
7. Desire for greater consultation, including with Larrakia traditional owners.
8. Need for clearer rehabilitation, monitoring and long-term management measures.

Each submission has been summarised below.

Justin Tutty (**Bookmark E1**) submits that the application is not ready for determination because it lacks sufficient information to enable proper assessment under the *Planning Act 1999* and NT Planning Scheme 2020. Mr Tutty argues that the proposed gully remediation is dependent on future subdivision works, including a detention basin and drainage diversions, yet the application does not demonstrate that the filled gullies will remain stable if those works are delayed or not completed. Mr Tutty also raises concerns regarding mosquito breeding, impacts on fauna and habitat values, storm surge and hydrological behaviour, loss of natural landforms within the Conservation zone, management of *Cycas armstrongii*, and whether referral under the *Environment Protection Act 2019* has been adequately considered. Mr Tutty requests that additional technical, environmental and engineering information be provided before the application is determined.

Dr Nancy Batenburg and Vanessa Kaye (**Bookmark E2**) strongly object to the application, arguing that it is incomplete, inadequately supported by expert evidence and relies heavily on future works, assumptions and approvals that have not yet been demonstrated. They raise concerns regarding compliance with Commonwealth environmental approvals, erosion and sediment risks, unstable soils, insufficient hydrological analysis, impacts on Casuarina Coastal Reserve and surrounding communities, and the lack of detailed design information for the proposed detention basin. They also express concern about the loss of existing native vegetation and habitat, and argue that revegetation cannot adequately replace mature ecological communities, and request rejection of the application or deferral pending independent specialist assessments and a public hearing.

Nicholas Kirlew on behalf of PLan: The Planning Action Network Inc (**Bookmark E3**) objects to the application on environmental, planning and engineering grounds, submitting that the proposal may conflict with Commonwealth environmental protections and relies on incomplete and evolving technical documentation. Mr Kirlew raises concerns about erosion and sedimentation risks, loss of habitat, altered hydrology, and the absence of sufficient information regarding the detention basin and associated drainage infrastructure upon which the remediation strategy relies. Mr Kirlew argues that the proposal is being assessed in a piecemeal manner, preventing proper consideration of cumulative environmental impacts, and requests that the application be rejected or deferred until further engineering, environmental and hydrological assessments are completed and made publicly available.

Christine Cox (**Bookmark E4**) does not support the application in its current form and submits that the detention basin, future drainage works and broader stormwater management framework are critical components of the proposal that have not been adequately explained. Ms Cox reviews a number of the application documents and notes repeated references to future drainage infrastructure without sufficient information regarding design, operation, discharge arrangements or integration with the remediation works. Ms Cox also raises concerns regarding rehabilitation monitoring and success measures, staging of infrastructure works, cumulative drainage impacts and the absence of any discussion of consultation with Larrakia traditional owners. Ms Cox considers the application incomplete and requests that determination be deferred until sufficient information is provided.

Sonja Pastor (**Bookmark E5**) focuses on whether the proposed remediation can be properly assessed in isolation when its long-term success appears dependent on future detention basin and drainage infrastructure that has not been fully described. Ms Pastor notes that the application relies on future stormwater diversions and drainage works to reduce erosion risk, but provides limited information about how those systems will operate, where stormwater will ultimately discharge or what impacts may occur downstream. Ms Pastor argues that further information should be provided before the application is determined and recommends deferral until the broader drainage framework can be properly assessed.

Ian Redmond, Gayle Laidlaw and David Percival on behalf of Friends of Lee Point (FLP, **Bookmark E6**) do not support the application as exhibited and consider that the proposed detention basin is a fundamental part of the erosion management strategy that should be assessed together with the remediation works. FLP argue that insufficient information has been provided regarding the detention basin design, environmental impacts and relationship with adjoining conservation lands and the Black-footed Tree-rat offset area. FLP request the preparation of a preliminary detention basin design, consideration of rezoning the detention basin area from Future Development to Conservation, and obtaining Free Prior and Informed Consent from Larrakia traditional owners before any works proceed.

David Percival (**Bookmark E7**) raises concerns regarding the environmental impacts of past and future development at Lee Point, arguing that inadequate catchment management has contributed to erosion, sedimentation of Sandy Creek and impacts on mangrove ecosystems. While supporting efforts to address the erosion problem, Mr Percival suggests that the design and planning of the proposed detention basin and broader drainage infrastructure do not appear to be fully resolved and expresses concern that further clearing and construction could unnecessarily damage native vegetation and habitat. Mr Percival also highlights the potential for increased sediment, pollutants and urban runoff to affect Sandy Creek and downstream environmental values.

Dr Amanda Lilleyman (**Bookmark E8**) submits that the application cannot be adequately assessed because it relies on a detention basin and broader drainage infrastructure for which insufficient information has been provided. Dr Lilleyman notes that the detention basin remains within Future Development zoned land adjoining future conservation areas and a Black-footed Tree-rat offset area, and raises concerns about potential impacts on those environmental values. Dr Lilleyman argues that the broader stormwater management framework, including downstream drainage and discharge arrangements, remain unclear and requests that the application be deferred until these matters are properly documented and assessed.

Deborah Hall on behalf of Friends of Casuarina Coastal Reserve (FCCR, **Bookmark E9**) advises that FCCR generally support the proposed remediation works and welcome efforts to address long-standing erosion impacts affecting Casuarina Coastal Reserve, Sandy Creek and associated environmental values. Rather than objecting to the proposal, the group seeks clarification on a range of implementation matters, including protection of large habitat trees, revegetation methods and timing, weed and fire management, fauna protection during construction, remediation of downstream erosion impacts, stormwater outfall arrangements, detention basin design and long-term rehabilitation criteria. The group's submission is largely supportive but requests additional detail to ensure environmental values are protected and restoration outcomes achieved.

Terrance Sirianni (**Bookmark E10**) advises that he supports remediation of the erosion gullies and is not opposed to development proceeding, but seeks clarification regarding potential contamination associated with the former 2CRU site. Mr Sirianni raises concerns about possible asbestos contamination, particularly in relation to a former earth mound and historical military

compound area, and requests information regarding contamination testing, the source and testing of fill material, dust and air-quality monitoring during earthworks, and the availability of environmental assessment reports. Mr Sirianni also seeks assurance that the proposed remediation will remain effective and safe in the context of future drainage infrastructure works.

The applicant provided a written response to the comments and concerns raised within the submissions. This response, was circulated on 27 July 2026 to all those who made a submission.

The applicant's response is provided at **Bookmark F**.

An assessment of the themes raised in the public submissions, and taking into consideration the applicant's response, is provided below.

1. Lack of information about the future detention basin and drainage system.

There are no specific requirements within the *Planning Act 1999* or NTPS2020 that need to be considered in relation to the proposed stormwater arrangements of the Lee Point residential development.

In addition, it is noted that clause 3(c)(ii) of Schedule 3 (Exceptions) of the NTPS2020 states *This Planning Scheme does not prevent any of the following: … (c) the construction, alteration, repair or maintenance of: … ii. public infrastructure for stormwater drainage and flood mitigation*.

2. Concern that remediation depends on infrastructure not yet constructed.

The application has stated that the fill material will be sourced from spoil produced as part of the construction of a nearby detention basin. It is considered that any positive determination in relation to this application simply provides the developer with an option for managing this spoil material.

3. Risks to Sandy Creek, mangroves and Casuarina Coastal Reserve and concerns about erosion, sedimentation and hydrology

The proposed works are specifically intended to address existing land degradation associated with active erosion gullies, with sediment currently being deposited in downstream environments. In the absence of intervention, continued erosion is likely to result in further soil instability and adverse impacts on downstream environmental quality. Any short-term disturbance associated with construction activities will be localised and temporary in nature and will be managed through the implementation of appropriate environmental controls and rehabilitation measures.

4. Questions regarding environmental assessment and EPBC compliance.

The applicant provided evidence that the permit which currently controls environmental impacts at the site under the *Environment Protection and Biodiversity Conservation Act 1999* was varied to specifically reference the gully rehabilitation works.

In relation to other environmental assessment concerns, it is noted that no adverse comments were received from the environmental divisions of the Department of Lands, Planning and Environment.

5. Requests for independent expert review.

There are no specific requirements within the *Planning Act 1999* or NTPS2020 that need to be considered in relation to requiring subject matter experts to review applications, or elements thereof.

6. Concerns about habitat loss and conservation outcomes.

The application seeks to re-utilise site-borne spoil produced from the excavation of a stormwater detention basin for the rehabilitation of gullies formed from uncontrolled erosion. The proposed infilling and stabilisation works are therefore considered necessary to arrest the degradation process and protect the long-term ecological function of the site. Any short-term disturbance associated with construction activities will be localised and temporary in nature and will be managed through the implementation of appropriate environmental controls and rehabilitation measures.

7. Desire for greater consultation, including with Larrakia traditional owners.

There are no specific requirements within the *Planning Act 1999* or NTPS2020 in relation to what consultation an applicant must undertake prior to lodging an application. In addition, it is noted that, with the exception of the local government council and any service authorities the consent authority consider relevant, there are no requirements within the *Planning Act 1999* or NTPS2020 in relation to whom an application must be circulated to.

8. Need for clearer rehabilitation, monitoring and long-term management measures

It is not considered necessary or proportionate to impose permit conditions requiring such measures in this instance. The proposal is limited in scale and nature, comprising rehabilitation works intended to stabilise existing erosion features and facilitate natural regeneration of the site. The anticipated impacts are localised and relatively low risk, and there is no evidence to suggest that ongoing management, monitoring or reporting requirements are warranted to achieve the objectives of the development permit. Imposing extensive post-construction obligations would place an unreasonable burden on the proponent that is disproportionate to the scale, complexity and potential environmental effects of the works. As such, it is not considered that permit conditions requiring the implantation of any monitoring or long-term management as part of any development permit issued under the *Planning Act 1999* are necessary.

The submissions received have been taken into account and the proposed development carefully considered in this context. For the reasons as discussed above, it is considered that planning matters raised in the submissions are either acceptable in nature, or are addressed by the inclusion of permit conditions, as recommended at section 7 of this report.

(f) a matter that the Minister has, under section 85, directed it to consider in relation to development applications generally

The Minister has not given any direction in relation to this application.

(h) the merits of the proposed development as demonstrated in the application

The application submits that it has the following merits:

The proposed excavation and fill works will remediate historic erosion damage and mitigate further downstream silt / sedimentation and the risk of recurrence or erosion impacts. Works will be

undertaken in a manner that minimises clearing of existing vegetation, and revegetation will respond to adjacent vegetation communities and provide additional opportunity for habitat creation.

(j) the capability of the land to which the proposed development relates to support the proposed development and the effect of the development on the land and on other land, the physical characteristics of which may be affected by the development

The land is considered to be capable of supporting the proposed development, which will return existing gullies to their original ground level. In addition, the Land Resources Division of DLPE did not identify or raise any issues of concern in relation to land capability.

(k) the public facilities or public open space available in the area in which the land is situated and the requirement, if any, for the facilities, or land suitable for public recreation, to be provided by the developer

There is not considered to be a requirement for the provision of public facilities or open space as part of the proposed application. Notwithstanding, it is considered that the remediation of the gullies may improve the potential for the development sites to be used for formal or information recreation (such as walking tracks or mountain biking).

(m) the public utilities or infrastructure provided in the area in which the land is situated, the requirement for public facilities and services to be connected to the land and the requirement, if any, for those facilities, infrastructure or land to be provided by the developer for that purpose

Below is a summary of service authority submissions –

Local authority:

City of Darwin (**Bookmark G1**) has requested conditions precedent relating to a site construction management plan; and general conditions relating weed management. In addition, City of Darwin provided advice in relation to weed management, soil management, and hydrological impacts, protection of trees, and queried the level of irrigation that will be implement to ensure the successful revegetation of the site.

DAS response: A condition relating to the preparation of a SCMP has been recommended. City of Darwin comments in relation to weed management, hydrological impacts irrigation and tree protection has been included as permit notes.

Service authorities:

Power and Water Corporation (PWC) Power Services (**Bookmark G2**) did not provide an objection or note any requirements with reference to matters under their responsibility.

DAS response: Noted. No conditions or notes relating to Power Services have been recommended on the development permit.

PWC Water Services (**Bookmark G3**) did not provide an objection or note any requirements with reference to matters under their responsibility.

DAS response: Noted. No conditions or notes relating to Water Services have been recommended on the development permit.

The Development Coordination Branch of the Department of Lands, Planning and Environment (DLPE, who coordinate responses from various DLPE entities) (**Bookmark G4**) advised/requested the following:

Land Management Unit

- Requested permit conditions relating to Type 2 erosion and sediment control measures.

Weed Management Branch

- Requested permit notes relating to weed management.

Flora and Fauna Division

- The Flora and Fauna Division supports the proposed rehabilitation of the erosion in the southwestern part of 2CRU.
- Advised the works are unlikely to impact on important populations of threatened species or habitat critical for biodiversity

Heritage Branch

- There are no nominated, provisionally declared or declared heritage places or objects within the subject area, nor any known Aboriginal or Macassan archaeological places and objects within the subject site.
- The likelihood of unrecorded Aboriginal or Macassan archaeological places has been assessed as unlikely. Recommended that an unexpected finds protocol and site inductions for heritage are developed and implemented for this project.

Water Resources

- As the proposed work is intended to restore previous natural conditions, a Permit to Interfere With a Waterway is not required.

Environment Regulation

- Application does not appear to trigger the licensing requirements of an Environment Protection Approval under the *Waste Management and Pollution Control Act 1998*.
- Advised that the there are statutory obligations under the WMPC Act that require all persons to take all measures that are reasonable and practicable to prevent or minimise pollution or environmental harm and reduce the amount of waste.

DAS response: Standard permit conditions and notes have been included within the recommended conditions.

The Parks and Wildlife Commission, DLPE (**Bookmark G5**) advised that they have no concerns so long as the developer proceeds in accordance with other agreements.

DAS response: Noted. While details of any agreements between the landowner and the Parks and Wildlife Commission were not provided with this application, or with these comments, it is not considered that this information in necessary.

Medical Entomology of the Department of Health (**Bookmark G6**) did not object to the application, and provided comments around the risk of downstream sedimentation in the event that any proposed erosion and sediment control structures fail. Medical Entomology requested a permit condition requiring progress works and post works inspections be carried out between the Developer, PWCNT, Medical Entomology and the relevant ESCP agency.

DAS response: Noted. While Medical Entomology have requested that they be part of any site inspections taken in relation to any approved erosion and sediment control plan, it is considered that the standard permit conditions requiring the preparation, implementation, and subsequent certification of an erosion and sediment control plan by a suitably qualified person are considered adequate to address the risk of sedimentation as a result of any failures with erosion and sediment control structures.

(n) the potential impact on the existing and future amenity of the area in which the land is situated

Amenity is defined in the *Planning Act 1999* as *in relation to a locality or building, any quality, condition or factor that makes or contributes to making the locality or building harmonious, pleasant or enjoyable*.

The proposed infilling of the identified gullies to the natural ground level will improve site drainage and result in a topography that is sympathetic and consistent with the original landform. While the works are likely to impact on visual amenity through the clearing of vegetation and temporarily to the audible amenity through the use of machinery, the development is considered acceptable as the rehabilitated gullies will likely provide a greater environmental outcome than being left in their current state. As such, these works will reasonably improve the amenity of the area.

(p) the public interest, including (if relevant) how the following matters are provided for in the application:
- ***(i) community safety through crime prevention principles in design;***
- ***(ii) water safety;***
- ***(iii) access for persons with disabilities***

It is in the public interest to ensure that development generally accords with the land use requirements as stipulated within the NTPS2020, as this sets out reasonable expectations of the community for developments in a given locality.

In response to (i), it is not considered that community safety through crime prevention principles in design are relevant to this application, by virtue that application does not propose any buildings or public open spaces.

In response to (ii), water safety is not considered to be relevant to this proposal.

In response to (iii), no buildings are proposed as part of this application.

(pa) for a proposed subdivision or consolidation of land in a Restricted Water Extraction Area – whether the subdivision or consolidation complies with the restrictions of sections 14A and 14B of the Water Act 1992 and the requirements of section 14C(1) of that Act;

Subdivision is not proposed as part of this application.

(q) for a proposed subdivision of land on which a building is, or will be, situated – whether the building complies, or will comply, with any requirements prescribed by regulation in relation to the building (including, for example, requirements about the structural integrity and fire safety of the building)

Subdivision is not proposed as part of this application.

(r) any potential impact on natural, social, cultural or heritage values, including, for example, the heritage significance of a heritage place or object under the Heritage Act 2011

There are no known specific social, cultural or heritage values of note in proximity of development sites, nor were any identified as part of the public exhibition or assessment of this application.

While the site contains recognised natural values, such as threatened species, the proposed works are specifically intended to address ongoing land degradation associated with active erosion gullies. In the absence of intervention, continued erosion is likely to result in further loss of soil stability, vegetation, habitat values and downstream environmental quality. The proposed infilling and stabilisation works are therefore considered necessary to arrest the degradation process and protect the long-term ecological function of the site. Any short-term disturbance associated with construction activities will be localised and temporary in nature and will be managed through the implementation of appropriate environmental controls and rehabilitation measures.

Importantly, the proposal has been designed to facilitate the recovery and enhancement of natural values through landform stabilisation and revegetation. By restoring stable conditions, the works will reduce sediment loss, improve the capacity for native vegetation establishment, and promote the gradual re-establishment of habitat characteristics over time. As a result, the proposed development is expected to deliver a net environmental benefit, with the long-term ecological outcomes outweighing the limited and temporary impacts associated with undertaking the rehabilitation works. Consequently, the presence of natural values is not considered a constraint and, on balance, support the need for active rehabilitation of the development sites.

(s) any beneficial uses, quality standards, criteria, or objectives, that are declared under section 73 of the Water Act 1992

The site is located within the declared Darwin Harbour beneficial use area, which exists to protect surface water in the declared area for aquaculture, environment, cultural, rural stock and domestic purposes. It is noted that it is the responsibility of the developer and landowner to ensure that land use does not result in a contravention of the *Water Act 1992*.

(t) other matters it thinks fit

No other matters have been identified as warranting consideration.

Section 51(2) of the Planning Act 1999

If a development proposal is required to be referred to the NT EPA under Part 4, Division 3 of the Environment Protection Act 2019, the consent authority must not make a decision under this Division in relation to a development application for the proposal unless:
(a) the NT EPA has determined that an environmental impact assessment is not required under that Act for that proposal; or

(b) if the NT EPA has determined that an environmental impact assessment is required – an environmental approval has been granted under that Act for the proposal and the decision is consistent with that approval; or
(c) the Environment Protection Act 2019 otherwise permits the making of the decision.

In response to (a), although no comments were received from the Development Coordination Branch, DLPE, the proposed development is not considered to be of scale or intensity that would reasonably require the preparation of any environmental reports or impact statements under the *Environmental Protection Act 2019*. As such, pursuant to (c), the consent authority may make a decision by virtue that referral is not reasonably required.

7. RECOMMENDATION

That, pursuant to section 53(a) of the *Planning Act 1999*, the Development Consent Authority consent to the application to develop Lot 4873 (577) Lee Point Road, Lee Point, Town of Nightcliff for the purpose of excavation and fill (erosion gully remediation), subject to the following conditions:

CONDITIONS PRECEDENT

1. Prior to the commencement of works (including site preparation), the applicant is to prepare a site construction management plan (SCMP) to the requirements of the City of Darwin, to the satisfaction of the consent authority. The SCMP should specifically address the impact to Council owned public spaces and include a waste management plan for disposal of waste to Shoal Bay, traffic control for affected City of Darwin roads, haulage routes, stormwater drainage and sediment control, use of City of Darwin land, and how this land will be managed during the construction phase.

2. Prior to the commencement of works (including site preparation), a Type 2 Erosion and Sediment Control Plan (ESCP) must be developed in accordance with the Department of Lands, Planning and Environment (DLPE) ESCP Procedures. The ESCP must be certified by a suitably qualified and experienced professional and must be submitted to Development Assessment Services (via email: das.ntg@nt.gov.au).
   Please refer to notes 1, 2 and 3 for further information.

GENERAL CONDITIONS

3. The works carried out under this permit shall be in accordance with the drawings numbered 2026/0187/01 to 2026/0187/02 endorsed as forming part of this permit.

4. Any developments on or adjacent to any easements on site shall be carried out to the requirements of the relevant service authority to the satisfaction of the consent authority.

5. At completion of works, certification must be provided by a suitably qualified and experienced professional regarding satisfactory implementation of permanent erosion and sediment control measures and site stabilisation. This certification must be submitted to Development Assessment Services via email: das.ntg@nt.gov.au.

6. Should the certified Type 2 ESCP require amendment, the revised ESCP must be certified by a suitably qualified and experienced professional and submitted to Development Assessment Services (via email: das.ntg@nt.gov.au).

7. All works relating to this permit must be undertaken in accordance with the certified Type 2 ESCP.

Notes

1. The DLPE ESCP Procedures factsheet is available at: https://environment.nt.gov.au/rangelands/technical-notes-and-fact-sheets/land-management-technical-notes-and-fact-sheets.

2. A suitably qualified and experienced professional in erosion and sediment control as defined by the International Erosion Control Association (IECA) Australasia at https://www.austieca.com.au/rsp-esc/suitably-qualified-professional.

3. Information regarding erosion and sediment control can be obtained from the IECA Best Practice Erosion and Sediment Control 2008 books available at www.austieca.com.au and Land Management Factsheets available at https://nt.gov.au/environment/soil-land-vegetation. For further advice, contact the Development Coordination Branch: (08) 8999 4446.

4. City of Darwin advises the following:
    a. A Weed Management Plan should be prepared to prevent the establishment and spread of weeds, including high-risk species such as Gamba Grass (*Andropogon gayanus*) and Mission Grass (*Pennisetum spp*.). The plan should include follow up weed removal within the revegetation areas for at least the first two years until the native plants are established.
    b. The revegetation strategy should be revised to include irrigation for at least the first two dry seasons to support the long-term establishment and survival of revegetation.
    c. Consideration should be given to implementing a monitoring program for the filled gullies during the first wet season following completion of works, with inspection requirements and contingency measures to confirm that erosion is not recurring. Kandosol soils proposed as fill (sourced from the detention basin) are consistent with the highly erosive soils present in the gully system. Further assessment is recommended to confirm their suitability and demonstrate they will perform as intended without contributing to future erosion risk.
    d. Alterations to surface water flows and infiltration associated with the proposed detention basin may modify downstream hydrological regimes. This may, in turn, influence groundwater availability to Melaleuca stands and monsoon forest communities located at the base of the slope. Consideration should be given to assessing potential impacts and identifying any appropriate mitigation measures.
    e. Plans indicate the contractor will be responsible for tree protection; however, this alone is not considered sufficient to maintain the safety, amenity and environmental value of retained trees. An Arboricultural Impact Assessment (AIA) should be prepared in accordance with AS 4970–2025 by a suitably qualified arborist (AQF Level 5+), identifying impacted trees, establishing Tree Protection Zones, and outlining protection measures. Any recommendations should be implemented where practicable to minimise impacts.

5. The permit holder is advised that it is an offence to disturb or destroy prescribed archaeological places without consent under the *Heritage Act 2011*. Should any heritage or archaeological material be discovered during the clearing operation, cease operation

and please contact the Heritage Branch of the Department of Lands, Planning and Environment.

6. All land in the Northern Territory is subject to the *Weeds Management Act 2001* (WM Act). The WM Act describes the legal requirements and responsibilities that apply to owners and occupiers of land regarding declared weeds. Section 9 general duties include the requirement to take all reasonable measures to prevent land being infested with a declared weed and to prevent a declared weed from spreading. There are additional duties including a prohibition on buying, selling, cultivating, moving or propagating any declared weed and the requirement to notify the Weed Management Branch of a declared weed not previously present on the land within 14 days of detection.
   Should you require further weed management advice contact the weed management branch by phone on (08) 8999 4567 or by email to weedinfo@nt.gov.au.

7. There are statutory obligations under the *Waste Management and Pollution Control Act 1998* (the Act), that require all persons to take all measures that are reasonable and practicable to prevent or minimise pollution or environmental harm and reduce the amount of waste. The proponent is required to comply at all times with the Act, including the General Environmental Duty under Section 12 of the Act. There is also a requirement to obtain an authorisation prior to conducting any of the activities listed in Schedule 2 of the Act. Guidelines to assist proponents to avoid environmental impacts are available on the Northern Territory Environment Protection Authority website at https://ntepa.nt.gov.au/publications-and-advice/environmental-management.
   The Act, administered by the Northern Territory Environment Protection Authority, is separate to and not reduced or affected in any way by other legislation administered by other Departments or Authorities. The Environment Operations Branch of the Environment Division may take enforcement action or issue statutory instruments should there be non-compliance with the Act.

8. REASONS FOR THE RECOMMENDATION

1. The application is for excavation and fill (erosion gully remediation) at Lot 4873 (577) Lee Point Road, Lee Point, Town of Nightcliff. The 81.33 ha lot (the site) is in Zones FD (Future Development) and CN (Conservation) of the Northern Territory Planning Scheme 2020 (NTPS2020). The areas subject to this application (the development sites) are located towards the western side of the property within Zone CN, on the western side of a small escarpment which extends across the majority of the site.

   The application seeks approval for excavation and fill works to remediate historic erosion gullies within the Zone CN portion of the site. The erosion areas consist of several large gullies in the south-western part of the site (stage 1) and smaller erosion features in the north-west (stage 2) near former Defence infrastructure. The application states that the proposed rehabilitation works are required under the Project Development Agreement between DHA and the Northern Territory Government, which requires rehabilitation of the conservation land before it is transferred into public ownership and incorporated into the Casuarina Coastal Reserve.

   The proposed works involve reshaping and stabilising the gullies, importing clean fill material sourced from the adjacent Lee Point subdivision works (specifically identified as from the development of a stormwater detention basin), restoring ground levels to match the surrounding landscape, and revegetating disturbed areas with native species. Limited vegetation clearing will be necessary to provide safe access for machinery and to undertake the earthworks, however clearing is proposed to be minimised, significant trees retained

where practicable, and all disturbed areas rehabilitated following construction. The works are planned to occur during the dry season and will be supported by erosion and sediment control measures to prevent further environmental impacts.

A key objective of the proposal is to address long-standing erosion issues that have contributed sediment into the receiving environment, namely Sandy Creek and the Casuarina Coastal Reserve. The rehabilitation works are intended to restore natural landforms, reduce sediment movement, improve downstream water quality, and result in a stable landform. In conjunction with the broader Lee Point development, future stormwater management infrastructure will divert upstream runoff away from the rehabilitated gullies, significantly reducing the likelihood of erosion reoccurring once the works are complete.

2. Pursuant to section 51(1)(a) of the *Planning Act 1999*, the consent authority must take into consideration the planning scheme that applies to the land to which the application relates.

The Northern Territory Planning Scheme 2020 (NTPS2020) applies to the land and excavation and fill (erosion gully remediation) requires consent under clause 1.8 (When development consent is required). It is identified as *Impact Assessable* under clause 1.8(1)(c)(i); therefore, the Lee Point Planning Principles and Area Plan (being the most detailed strategic framework document), the zone purpose and outcomes of Zone CN (Conservation), and clauses 5.2.1 (General Height Control), 5.2.4 (Car Parking), 5.2.5 (Loading Bays), 5.2.6 (Landscaping), 5.2.7 (Setbacks for Development Adjacent to Land in Zones LR, LMR, MR or HR) and 5.8.9 (Excavation and Fill), need to be considered.

These clauses have been considered and it is found that the proposal complies with the relevant requirements of the NTPS2020.

A summary of the relevant parts of the NTPS2020 is as follows:

Part 2 – Strategic framework

Lee Point Planning Principles and Area Plan

The purpose of the Lee Point Planning Principles and Area Plan (LPPPAP) is to *Preserve and integrate areas and items of environmental and heritage significance by*:

(a) limiting development below the escarpment to community uses, tourism activity and pedestrian /cycle tracks that protect the environmental values of the coastal reserve and adjoining vegetation types;

(b) implementing appropriate environmental and engineering measures including but not limited to the application of principles of water sensitive urban design; …

The application is considered to support this outcome through the proposed infilling and stabilisation works which will arrest the existing erosion which is taking place. The works are reasonably expected to reduce sediment loss, improve the capacity for native vegetation establishment, and promote the gradual re-establishment of habitat characteristics over time. As a result, the proposal is expected to deliver a net environmental benefit, with the long-term ecological outcomes supporting the outcomes envisaged by the LPPPAP.

Part 3 – Overlays

Clause 3.2 (CNV – Clearing of Native Vegetation)

The purpose of this overlay is to *Ensure that clearing of native vegetation does not unreasonably contribute to environmental degradation of the locality*.

While this application on balance proposes the rehabilitation of gullies, the application states that vegetation may be removed where necessary as part of the rehabilitation, and for site access.

Administratively, subclause 5 states *This Overlay does not apply to the clearing of native vegetation that: (a) is required or controlled under any Act in force in the Territory, including but not limited to: … (ii) Environment Protection and Biodiversity Conservation Act 1999 (Cth) ….*

The application has provided evidence that EPBC 2015/7591 was varied on 27 July 2025 (**Bookmark B9**) to include condition 2B, which states *The approval holder may undertake clearing in the area identified in Attachment D2 as Casuarina Coastal Reserve and CCR for the purpose of rehabilitating existing erosion gullies and maintenance of existing bike tracks*.

This is considered suitable at demonstrating that clearing of native vegetation as part of this application is a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999*.

Clause 3.7 (LSSS – Land Subject to Storm Surge)

The purpose of this clause is to *Identify areas with a known risk of inundation from primary or secondary storm surges and ensure that development in these areas demonstrates adequate measures to minimise the associated the risk to people, damage to property and costs to the general community caused by storm surge*.

Of relevance, clause 3.7(8) requires that *Development in the PSSA should be limited to uses such as open space, recreation, non-essential public facilities (wastewater treatment works excepted) and short-stay tourist camping/caravan areas*, where the western boundary of the site, and possibly a small extent of identified gullies are located within the primary and secondary storm surge area.

The application does not propose the construction of any permanent structures or establishment of ongoing land uses within land identified as being subject to storm surges. While the application may infill gullies within the secondary storm surge zone, this infilling is not considered likely to be of a scale that would alter storm surge extents in the locality. As such, the application is considered acceptable against the requirements of this overlay.

Part 4 – Zoning

Clause 4.23 (Zone CN – Conservation)

The purpose of this zone is to *Conserve and protect the flora, fauna and character of natural areas*.

The proposed rehabilitation and subsequent stabilisation of erosion gullies directly supports the purpose of Zone CN by conserving and protecting the environmental values of the site. The active erosion taking place at the development sites represents an ongoing threat to the downstream environment, resulting in the loss of soils, degradation of

vegetation communities and the transport of sediment to adjacent habitats and watercourses. By infilling and stabilising the gullies with local material, the proposal will arrest these degradation processes, reduce the potential for further environmental decline and assist in maintaining the ecological integrity of the broader natural area. The works are therefore directed towards protecting existing flora, fauna habitat and landscape values that may otherwise be adversely affected by continued erosion.

The proposal will also facilitate the recovery and enhancement of the site's natural character over time. Following stabilisation, the rehabilitated landform will provide improved conditions for the establishment and regeneration of native vegetation, contributing to the restoration of habitat values and ecological function. The works are intended to return the site to a more stable and self-sustaining condition that is consistent with its environmental values. On balance, the rehabilitation of the gullies is considered to further the intention of Zone CN by promoting the long-term conservation and protection of the flora, fauna and character of the natural area.

Part 5 – Development requirements

While the application was considered to be compliant with the other identified relevant development requirements, it is considered that further discussion of clause 5.8.9 (Excavation and Fill) is warranted.

Clause 5.8.9 (Excavation and Fill)

The purpose of this clause is to *Ensure that the excavation or filling of land does not adversely affect adjacent land or waters, or the quality of adjacent waterways, and associated riparian areas and is suited to the intended future use of the site.*

Of relevance are subclauses 3 and 4.

Subclause 3 requires that *Provide a hydrological assessment of potential upstream and downstream impacts of the excavation or filling*.

In response to subclause 3, the application provided a technical memorandum completed by Byrne consulting. This technical memorandum detailed the proposed methodology which would minimise the loss of existing vegetation while remediating the gullies, and what erosion and sediment controls can be implemented to prevent adverse outcomes during remediation works. The technical memorandum states *The finished surface will be designed to tie in with the surrounding topography, including maintaining natural depressions and drainage lines where appropriate. In relation to the upstream and downstream impacts of the proposed works.*

The Works will have no adverse impacts on upstream catchments. Existing hydrological flow paths will be maintained, until such time that upstream flow paths are diverted around the Site during the future 2CRU Subdivision works.

The Works will have a positive impact on downstream environments, by effectively stabilising the Site and mitigating the risk of ongoing erosion. Existing hydrological flow paths will be maintained, until such time that upstream flow paths are diverted around the Site during the future 2CRU Subdivision works. Existing storm water flow volumes will be maintained into CCR and Sandy Creek.

The above is considered acceptable at assessing the upstream and downstream impacts of the proposed works.

Subclause 4 then requires that an application *Provide a plan of management to control erosion and sedimentation, particularly of creeks and riparian areas*.

In response to subclause 4, while the application included an erosion and sediment control plan prepared by a certified professional in erosion and sediment control, its implementation and ongoing compliance thereof can be addressed through standard permit conditions.

3. Pursuant to section 51(1)(e) of the *Planning Act 1999*, the consent authority must take into consideration any submissions made under section 49, and any evidence or information received under section 50, in relation to the development application.

   The application was placed on public exhibition for a period of two weeks, between 5 June and 19 June 2026. Ten (10) public submissions were received under section 49(1) of the *Planning Act 1999*, with respect to this application.

   Of the total submissions received, 8 submitters expressed an objection to the application, and 2 expressed conditional support for the proposal subject to comments and recommendations.

   The main thematic comments and concerns identified include:

   1. Lack of information about the future detention basin and drainage system.
   2. Concern that remediation depends on infrastructure not yet constructed.
   3. Risks to Sandy Creek, mangroves and Casuarina Coastal Reserve and concerns about erosion, sedimentation and hydrology.
   4. Questions regarding environmental assessment and EPBC compliance.
   5. Requests for independent expert review.
   6. Concerns about habitat loss and conservation outcomes.
   7. Desire for greater consultation, including with Larrakia traditional owners.
   8. Need for clearer rehabilitation, monitoring and long-term management measures

   An assessment of the themes raised in the public submissions is provided below.

   1. Lack of information about the future detention basin and drainage system.

   There are no specific requirements within the *Planning Act 1999* or NTPS2020 that need to be considered in relation to the proposed stormwater arrangements of the Lee Point residential development.

   In addition, it is noted that clause 3(c)(ii) of Schedule 3 (Exceptions) of the NTPS2020 states *This Planning Scheme does not prevent any of the following: … (c) the construction, alteration, repair or maintenance of: … ii. public infrastructure for stormwater drainage and flood mitigation*.

2. Concern that remediation depends on infrastructure not yet constructed.

The application has stated that the fill material will be sourced from spoil produced as part of the construction of a nearby detention basin. It is considered that any positive determination in relation to this application simply provides the developer with an option for managing this spoil material.

3. Risks to Sandy Creek, mangroves and Casuarina Coastal Reserve and concerns about erosion, sedimentation and hydrology.

The proposed works are specifically intended to address existing land degradation associated with active erosion gullies, with sediment currently being deposited in downstream environments. In the absence of intervention, continued erosion is likely to result in further soil instability and adverse impacts on downstream environmental quality. Any short-term disturbance associated with construction activities will be localised and temporary in nature and will be managed through the implementation of appropriate environmental controls and rehabilitation measures.

4. Questions regarding environmental assessment and EPBC compliance.

The applicant provided evidence that the permit which currently controls environmental impacts at the site under the *Environment Protection and Biodiversity Conservation Act 1999* was varied to specifically reference the gully rehabilitation works.

In relation to other environmental assessment concerns, it is noted that no adverse comments were received from the environmental divisions of the Department of Lands, Planning and Environment.

5. Requests for independent expert review.

There are no specific requirements within the *Planning Act 1999* or NTPS2020 that need to be considered in relation to requiring subject matter experts to review applications, or elements thereof.

6. Concerns about habitat loss and conservation outcomes.

The application seeks to re-utilise site-borne spoil produced from the excavation of a stormwater detention basin for the rehabilitation of gullies formed from uncontrolled erosion. The proposed infilling and stabilisation works are therefore considered necessary to arrest the degradation process and protect the long-term ecological function of the site. Any short-term disturbance associated with construction activities will be localised and temporary in nature and will be managed through the implementation of appropriate environmental controls and rehabilitation measures.

7. Desire for greater consultation, including with Larrakia traditional owners.

There are no specific requirements within the *Planning Act 1999* or NTPS2020 in relation to what consultation an applicant must undertake prior to lodging an application. In addition, it is noted that, with the exception of the local government council and any service authorities the consent authority consider relevant, there are no requirements within the *Planning Act 1999* or NTPS2020 in relation to whom an application must be circulated to.

8. Need for clearer rehabilitation, monitoring and long-term management measures.

It is not considered necessary or proportionate to impose permit conditions requiring such measures in this instance. The proposal is limited in scale and nature, comprising rehabilitation works intended to stabilise existing erosion features and facilitate natural regeneration of the site. The anticipated impacts are localised and relatively low risk, and there is no evidence to suggest that ongoing management, monitoring or reporting requirements are warranted to achieve the objectives of the development permit. Imposing extensive post-construction obligations would place an unreasonable burden on the proponent that is disproportionate to the scale, complexity and potential environmental effects of the works. As such, it is not considered that permit conditions requiring the implantation of any monitoring or long-term management as part of any development permit issued under the *Planning Act 1999* are necessary.

The submissions received have been taken into account and the proposed development carefully considered in this context. For the reasons as discussed above, it is considered that planning matters raised in the submissions are either acceptable in nature, or are addressed by the inclusion of permit conditions.

4. Pursuant to section 51(1)(n) of the *Planning Act 1999*, the consent authority must take into consideration the potential impact on the existing and future amenity of the area in which the land is situated.

   Amenity is defined in the *Planning Act 1999* as *in relation to a locality or building, any quality, condition or factor that makes or contributes to making the locality or building harmonious, pleasant or enjoyable*.

   The proposed infilling of the identified gullies to the natural ground level will improve site drainage and result in a topography that is sympathetic and consistent with the original landform. While the works are likely to impact on visual amenity through the clearing of vegetation and temporarily to the audible amenity through the use of machinery, the proposed works are considered acceptable as the rehabilitated gullies will likely provide a greater environmental outcome than being left in their current state. As such, these works will reasonably improve the amenity of the area.

5. Pursuant to section 51(1)(r) of the *Planning Act 1999*, the consent authority must take into consideration any potential impact on natural, social, cultural or heritage values, including, for example, the heritage significance of a heritage place or object under the *Heritage Act 2011*.

   There are no known specific social, cultural or heritage values of note in proximity of development sites, nor were any identified as part of the public exhibition or assessment of this application.

   While the site contains recognised natural values, such as threatened species, the proposed works are specifically intended to address ongoing land degradation associated with active erosion gullies. In the absence of intervention, continued erosion is likely to result in further loss of soil stability, vegetation, habitat values and downstream environmental quality. The proposed infilling and stabilisation works are reasonably expected to arrest the degradation process and protect the long-term ecological function of the site. Any short-term disturbance associated with construction activities will be localised and temporary in nature and will be managed through the implementation of appropriate environmental controls and rehabilitation measures.

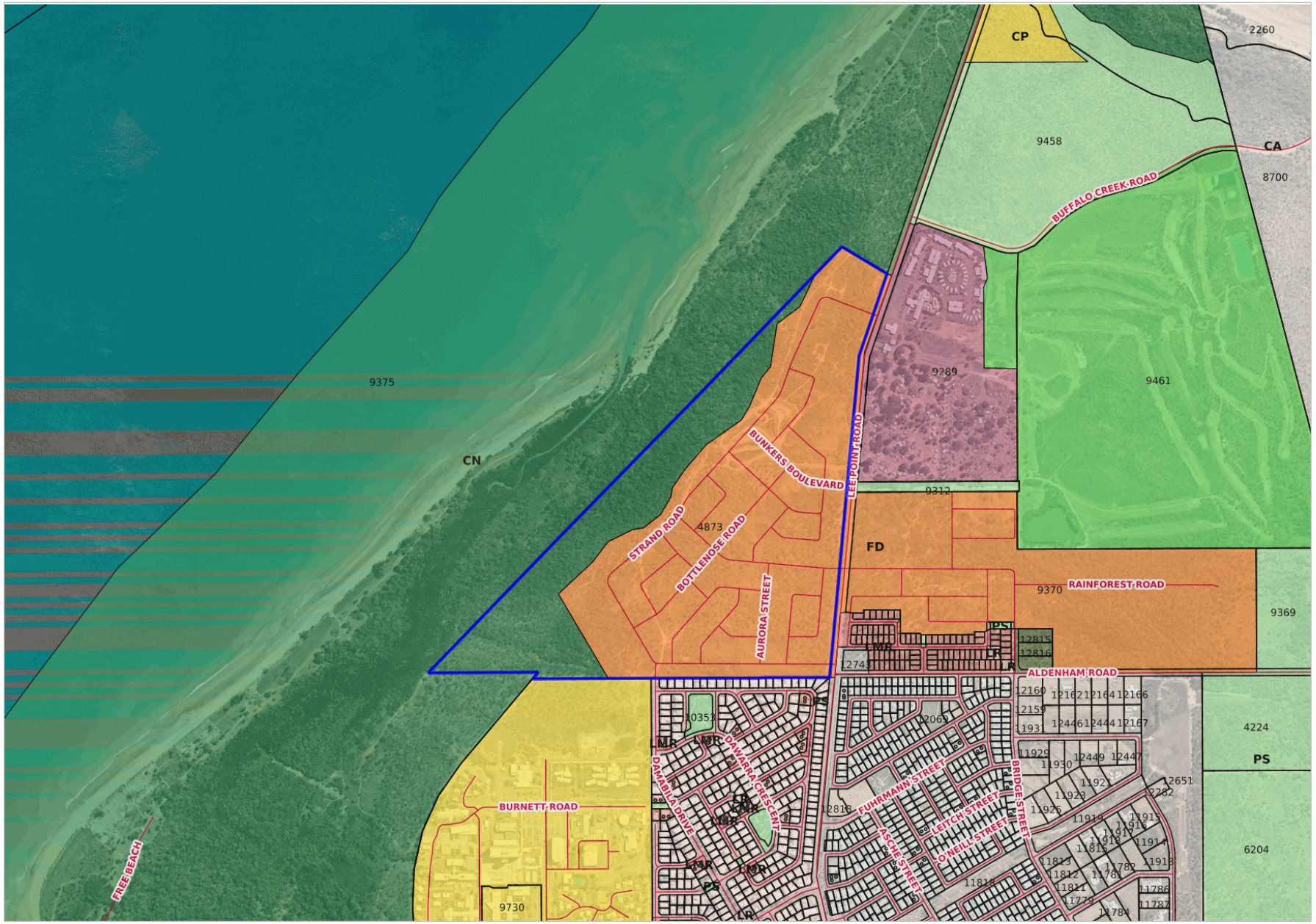
Importantly, the proposal has been designed to facilitate the recovery and enhancement of natural values through landform stabilisation and revegetation. By restoring stable conditions, the works will reasonably reduce sediment loss, improve the capacity for native vegetation establishment, and promote the gradual re-establishment of habitat characteristics over time. As a result, the proposed works are expected to deliver a net environmental benefit, with the long-term ecological outcomes outweighing the limited and temporary impacts associated with undertaking the rehabilitation works. Consequently, the presence of natural values is not considered a constraint and, on balance, support the need for active rehabilitation of the development sites.

AUTHORISED: .....

A/MANAGER – URBAN PLANNING
DEVELOPMENT ASSESSMENT SERVICES

NR MAPS

PA2026/0187



Legend

TOWN_PLANNING_ZONES

- A - Agriculture
- CV - Caravan Park
- CB - Central Business
- C - Commercial
- CL - Community Living
- CP - Community Purpose
- CN - Conservation
- DV - Development
- RR - Rural Residential
- GI - General Industry
- HT - Heritage
- HR - High Density Residential
- H - Horticulture
- LI - Light Industry
- M - Main Road
- MR - Medium Density Residential
- LMR - Low-Meduim Density Resid
- CA - No Planning Scheme Contrc
- OR - Organised Recreation
- PM - Proposed Main Road
- PS - Public Open Space
- RW - Railway
- RD - Restricted Development
- R - Rural
- RL - Rural Living
- SC - Service Commercial
- LR - Low Density Residential
- S - Specific Use

N

Km 0.2 0.4 0.6

nrmaps.nt.gov.au

Geospatial Services Unit

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Department of Lands, Planning and Environment
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Created by Kaleb.Thomas@nt.gov.au, 05 Jun 2026

Lee Point Road (northern site entrance) pink sign



Lee Point Road (northern site entrance) pink sign



Lee Point Road (opposite Aldenham Road) pink sign



Lee Point Road (opposite Aldenham Road) pink sign

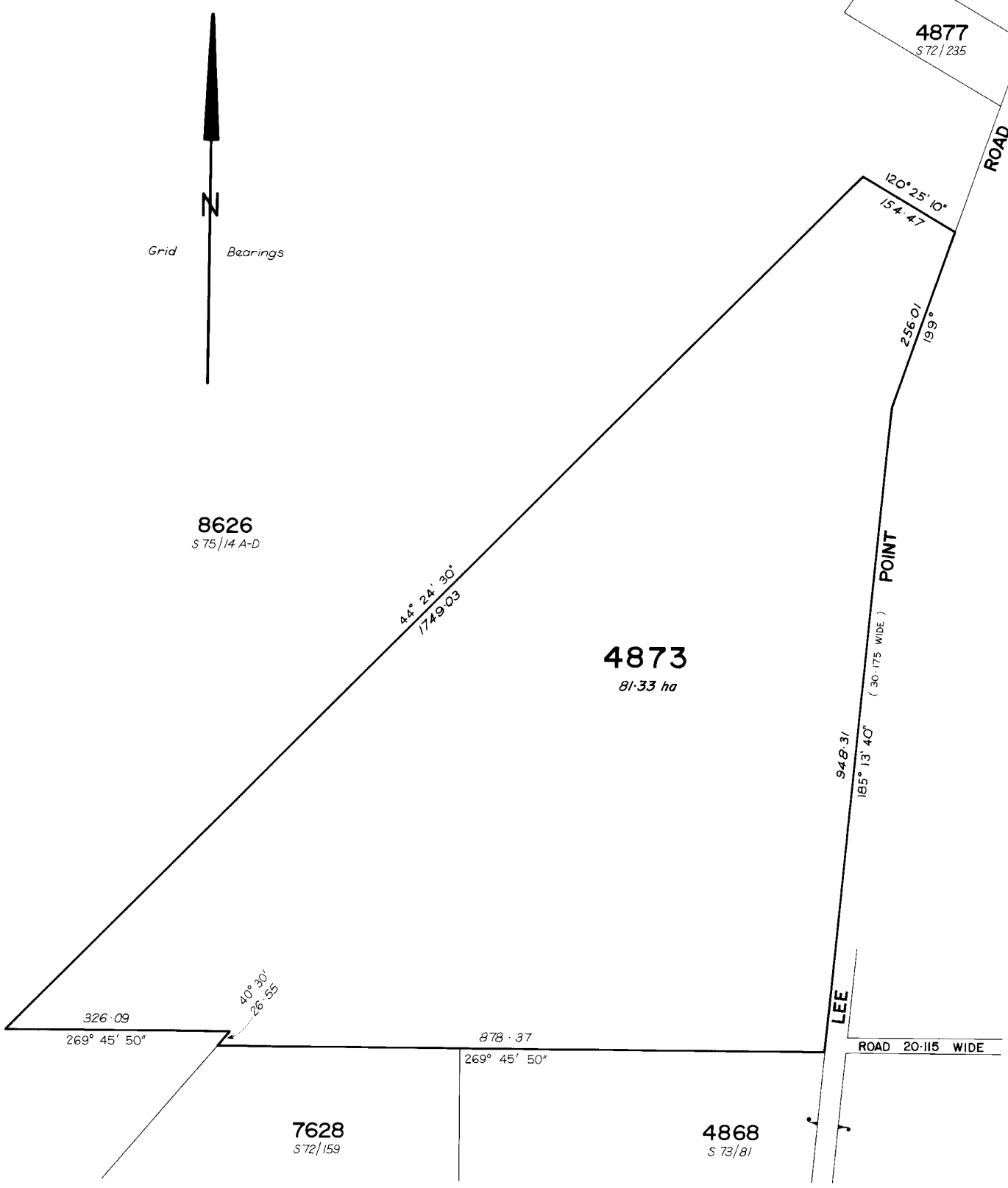


Damabila Drive pink sign



Damabila Drive pink sign





No	REFERENCE	DETAILS	APPROVED	DATE

AMENDMENTS

METRES 100 0 100 200 300 400 500

SURVEYOR'S CERTIFICATE

I, ...
hereby certify that the survey represented on this plan was carried out by me or under my immediate supervision and was completed on .....
and that this survey has been executed in accordance with the Licensed Surveyors Ordinance 1933–1937 and the Regulations thereunder

Date ..... Compiled
Licensed Surveyor

SURVEY APPROVED

Date 22.4.1983
Surveyor–General

File No. S 78/107
Compiled from plans S 72/159, S73/81, S 75/14 C & D, S83/128 and file S 78/107 folio 10
Index Plan Darwin 10 000 Sh 3
Drawn Australian Survey Office 16.8.78
Examined Ian Bailey 19-4-83
Calculation Book No. File S78/107

P..... Draftsman
Da... 22.4.83

SURVEY OFFICE NORTHERN TERRITORY

LOT 4873

Town of Nightcliff

Hundred of Bagot — *County of Palmerston*

LEGEND

Concrete Block ■
Concrete Post ■
Wooden Post, Peg or Stake ○
Reference Mark ×
Lockspit ⋈
Fence Post ⊗

AZIMUTH

A Assumed from .....

B Observed at .....
Latitude Datum .....

SCALE

1 : 5000

S 78/107

Survey Plan S78/107

Viewed at 14:06:34 on 05/06/2026 by KALTH.

Date Registered: 29/05/2014 **Volume** 788 **Folio** 729

Duplicate Certificate as to Title issued? No

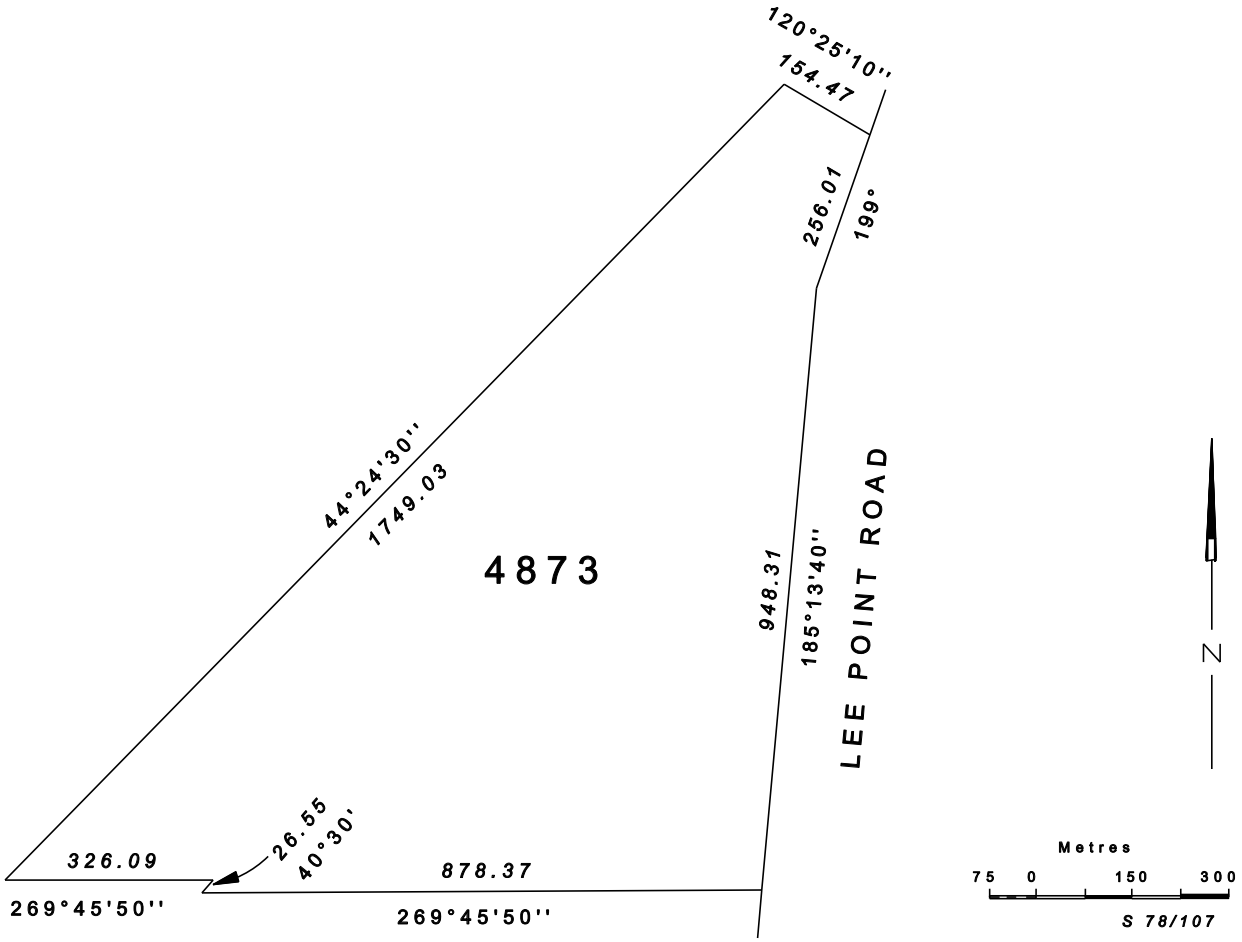
SEARCH CERTIFICATE

Lot 4873 Town of Nightcliff from plan(s) S 78/107
Area under title is 81 hectares 3300 square metres

Owner:
Defence Housing Australia
of 26 Brisbane Avenue, Barton ACT 2600

Registered Date	Dealing Number	Description
		Previous title is **Volume** 786 **Folio** 001
04/06/2014	823893	Request to withdraw Caveat (823114)
27/05/2014	823114	Lapsing Caveat Defence Housing Australia - expiring 27/08/2014

End of Dealings



NORTHERN TERRITORY OF AUSTRALIA

Record of Administrative Interests and Information

Record of Administrative Interests and Information
The information contained in this record of Administrative Interests only relates to the below parcel reference.

Parcel Reference: Lot 04873 Town of Nightcliff plan(s) S 78/107

(See section 38 of the Land Title Act)

Note: The Record of Administrative Interests and Information is not part of the Land Register and is not guaranteed by the Northern Territory of Australia, and the NT Government accepts no Liability for any omission, misstatement or inaccuracy contained in this statement.

Registrar General

Government Land Register
(none found)

Custodian - Registrar General (+61 8 8999 6252)

Current Title
CUFT 788 729 (order 1)

Tenure Type
ESTATE IN FEE SIMPLE

Tenure Status
Current

Area Under Title
81 hectares 3300 square metres

Owners
Defence Housing Australia
26 Brisbane Avenue, Barton ACT 2600

Easements
(none found)

Scheme Name
(none found)

Scheme Body Corporate Name
(none found)

Reserved Name(s)
(none found)

Unit Entitlements
(none found)

Transfers
29/05/2014 for $18,440,000

Tenure Comments
(none found)

Historic Titles
CUFT 786 001 (order 1)
CUFT 614 082 (order 1)
Visit the website http://www.nt.gov.au/justice/bdm/land_title_office/

Custodian - Surveyor General (+61 8 8995 5346)

Address
577 LEE POINT RD, LEE POINT

Survey Plan
S 78/107

Survey Status
Approved

Parcel Status
CURRENT

Parcel Area
81 hectares, 3300 square metres

Map Reference
Code 200 Scale 2500 Sheet 32.30
Code 200 Scale 2500 Sheet 31.30
Code 200 Scale 2500 Sheet 32.31

Parent Parcels
(none found)

Parcel Comments
FORMER HD BAGOT POR 1381 S72/235/25 RAAF RADAR SITE S78/107/4. ACQ BY C OFA CG 5 0 19/12/1978. NATIVE TITLE CLAIM DC96/7 DISMISSED 27/2/2008. STREETNUMBER ALLOCA TED 3/09 ON RURAL ADDRESSING SYSTEM. TO BE SUBDIVIDED INTO LOTS 12844 TO 12956 - LTO2022/025.

Survey Comments
(none found)

Proposed Easements
(none found)

Local Government Area
DARWIN MUNICIPALITY

Region
DARWIN

Custodian - Valuer General (+61 8 8995 5375)

Owner's Last Known Address
DEFENCE HOUSING AUSTRALIA, FINANCIAL SERVICES, PO BOX 4923, KINGSTON ACT 2604

Parcels in Valuation
Lot 04873 Town of Nightcliff

Unimproved Capital Value
$13,425,000 on 01/07/2023
$12,200,000 on 01/07/2020
$16,975,000 on 01/07/2017
$17,500,000 on 01/07/2014
$20,000,000 on 01/07/2011
$10,100,000 on 01/07/2008
$10,100,000 on 01/07/2005
$8,250,000 on 01/07/2002
$7,500,000 on 01/07/1999
$2,000,000 on 01/07/1996
$500,000 on 01/07/1993
$440,000 on 01/01/1991
$400,000 on 01/01/1988
$260,000 on 01/01/1985
$160,000 on 01/01/1982
$100,000 on 01/05/1979

Custodian - Property Purchasing (+61 8 8999 6886)

Acquisitions
(none found)

Custodian - Building Advisory Service (+61 8 8999 8965)

Building Control Areas
BBDAR001 - Building Control Area DARWIN BUILDING AREA

Building Permits
(none found)

Visit the website http://www.nt.gov.au/building/

Custodian - Town Planning and Development Assessment Services (+61 8 8999 6046)

Planning Scheme Zone
MZ (Multi Zone)

Overlays: The following overlays may apply to your land
- HLSSI - Helicopter Landing Sites of Strategic Importance
- CNV - Clearing of Native Vegetation
- LSSS - Land Subject to Storm Surge

Refer to the NT Planning Scheme 2020 for more information.

Strategic Frameworks: The following strategic frameworks may apply to your land
Regional Plans:
- Darwin Regional Land Use Plan

Sub Regional Plans:
- None

Area Plans:
- Lee Point Area Plan

Interim Development Control Orders
(none found)

Planning Notes
(none found)

Planning Applications

File Number
PA2026/0187

Type
Development

Date Received
01/06/2026

Application Purpose
Excavation and fill (erosion gully remediation)

Application Status
Current

Other Affected Parcels
(none found)

Instrument Signed

Instrument Number

Instrument Issued
Not Complete

Instrument Status

File Number
PA2017/0569

Type
Extension of Time

Date Received
09/10/2025

Application Purpose
Extension of time to DP18/0409E for a period of 3 years

Application Status
Approved

Other Affected Parcels
(none found)

Instrument Signed
22/10/2025

Instrument Number
DP18/0409F

Instrument Issued
Signed

Instrument Status
Current

File Number
PA2017/0569

Type
Variation of Development Permit

Date Received
10/04/2025

Application Purpose
Variation to Condition 11 of Development Permit DP18/0409B to allow "Stage 1" works to be completed in 2 stages

Application Status
Approved

Other Affected Parcels
(none found)

Instrument Signed
22/04/2025

Instrument Number
DP18/0409E

Instrument Issued
Signed

Instrument Status
Current

File Number
PA2017/0569

Type
Appeal

Date Received
10/02/2025

Application Purpose

Application Status
Current

Other Affected Parcels
(none found)

Instrument Signed

Instrument Number

Instrument Issued
Not Complete

Instrument Status

File Number
PA2017/0569

Type
Appeal

Date Received
02/01/2025

Application Purpose

Application Status
Current

Other Affected Parcels
(none found)

Instrument Signed

Instrument Number

Instrument Issued
Not Complete

Instrument Status

File Number
PA2017/0569

Type
Appeal

Date Received
14/05/2024

Application Purpose

Application Status
Completed

Other Affected Parcels
(none found)

Instrument Signed
20/08/2024

Instrument Number

Instrument Issued
Not Complete

Instrument Status
Completed

File Number
PA2017/0569

Type
Extension of Time

Date Received
27/10/2023

Application Purpose
Extension of Time for a period of two years

Application Status
Approved

Other Affected Parcels
(none found)

Instrument Signed
01/12/2023

Instrument Number
DP18/0409D

Instrument Issued
Signed

Instrument Status
Current

File Number
PA2017/0569

Type
Extension of Time

Date Received
06/10/2022

Application Purpose
Extension of Time - DP18/0409B (12 months)

Application Status
Approved

Other Affected Parcels
(none found)

Instrument Signed
27/10/2022

Instrument Number
DP18/0409C

Instrument Issued
Signed

Instrument Status
Current

File Number
PA2017/0569

Type
Variation of Development Permit

Date Received
21/06/2022

Application Purpose
Variation to condition 11 of DP18/0409 for the purpose of relocating lot 488, deleting one public open space lot of 450m2, boundary realignments to lots 49, 50, 178, 179, 319 & 320, and reconfiguring the staging to allow the subdivision to occur in five stages

Application Status
Approved

Other Affected Parcels
(none found)

Instrument Signed
14/07/2022

Instrument Number
DP18/0409B

Instrument Issued
Signed

Instrument Status
Current

File Number
PA2017/0569

Type
Extension of Time

Date Received
06/10/2020

Application Purpose
Extension of time - DP18/0409 (2 years)

Application Status
Approved

Other Affected Parcels
(none found)

Instrument Signed
17/11/2020

Instrument Number
DP18/0409A

Instrument Issued
Signed

Instrument Status
Current

File Number
PA2019/0134

Type
Development

Date Received
11/04/2019

Application Purpose
Excavation and fill (stockpile)

Application Status
Approved

Other Affected Parcels
(none found)

Instrument Signed
21/05/2019

Instrument Number
DP19/0129

Instrument Issued
Signed

Instrument Status
Current

File Number
PA2017/0569

Type
Subdivision

Date Received
27/11/2017

Application Purpose
Subdivision to create 513 lots in two stages

Application Status
Approved

Other Affected Parcels
(none found)

Instrument Signed
30/11/2018

Instrument Number
DP18/0409

Instrument Issued
Signed

Instrument Status
Current

File Number
PA2014/0922

Type
Planning Scheme Amendment

Date Received
20/11/2014

Application Purpose
To include Lot 4873 Town of Nightcliff into the NTPS to Zone FD (Future Development) and to rezone Lot 9370 Town of Nightcliff from Zone SD26 (Specific Use Darwin No. 26) to Zone FD (Future Development) and to introduce the Lee Point Area Plan to Part 8 of the NTPS

Application Status
Approved

Other Affected Parcels
Lot 09370 Town of Nightcliff

Instrument Signed

Instrument Number
369

Instrument Issued
Signed

Instrument Status
Current

Custodian - Pastoral Estate - Vegetation Assessment Unit (+61 8 8999 4454)
(none found)

Visit the website for information on Pastoral land permits.

Custodian - Power and Water Corporation (1800 245 092)

Meters on Parcel

Power Water - Electricity	2
Power Water - Water	2

For Account balances, contact the Power and Water Corporation.

Custodian - Pool Fencing Unit (+61 8 8924 3641)

Swimming Pool/Spa Status
(none found)

For more information, contact the Pool Fencing Unit (+61 8 8924 3641).

Custodian - Department of Mining and Energy (+61 8 8999 5263)

Mineral Titles

Title ID	Status	Title Type	Expiry Date	Legislation
RL390	Granted	Reserve Land		Mineral Titles Act 2010

For additional information contact the Mineral Titles Team on +61 8 8999 5322

Energy Titles

Title ID	Status	Title Type	Expiry Date	Legislation
GRO1	Granted	Geothermal Reserved from Occupation		Geothermal Energy Act 2009
RB56	Granted	Reservation of Blocks		Petroleum Act 1984
RB101	Granted	Reservation of Blocks		Petroleum Act 1984

For additional information contact the Petroleum Tenure Team on +61 8 8999 5263

Land Access Agreements

(none found)

For additional information contact the Land Access Team on +61 8 8999 5240

For further information contact as above or visit the website https://strike.nt.gov.au

Custodian - NT Environment Protection Authority (+61 8 8924 4218)

Results of site contamination assessment

(none found)

For further information contact Environment Protection Authority or visit the website https://ntepa.nt.gov.au/your-business/public-registers/contaminated-land-audits

Custodian - Heritage Branch (+61 8 8999 5039)

Heritage Listing:

(none found)

For further information on heritage places contact Heritage Branch or visit the website https://nt.gov.au/property/land/heritage-register-search-for-places-or-objects

Other Interests

For Account balances, contact Darwin City Council

Storm Surge: This lot is within a primary surge zone. For more information contact Lands Planning on 8999 8963.

Storm Surge: This lot is within a secondary surge zone. For more information contact Lands Planning on 8999 8963.

Locality Diagram



CUNNINGTON ROSSE
Town Planning & Consulting

Statement of Effect

EXCAVATION AND FILL (LEE POINT EROSION GULLY REMEDIATION)

LOT 4873 TOWN OF NIGHTCLIFF

25 May 2026

Contact

Name	Brad Cunnington
Position	Director
Email	brad@crtpc.com.au

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Document Control

Author	Brad Cunnington
Version	1.1
Date	25 May 2026

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Attachment A: DP18/0409 Development Permits and Endorsed Drawings

Attachment B: EIS Assessment Report and Recommendations

Attachment C: EPBC Approval Decision 2015-7591

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Attachment F: Gully Rehabilitation Fill Plan

Attachment G: Revegetation Proposal

Attachment H: Erosion and Sediment Control Plan

Attachment I: Earthworks and Drainage memo

Attachment J: Vegetation Assessment

Attachment K: Title Documents

1.0 Introduction

Cunnington Rosse Town Planning and Consulting have been engaged by Defence Housing Australia to prepare, lodge and manage an application for development permit for excavation and fill, specifically filling and remediating historic erosion damage within the western portion of lot 4873 Town of Nightcliff. This application relates to two areas within the existing parcel – a series of small, relatively minor erosion gullies in the north-western part of the site adjacent the former defence compound; and a series of large, deep erosion gullies in the south-western portion of the site. Both remediation areas are within the portion of lot 4873 currently zoned CN (Conservation), and the proposed works comprise filling and stabilising, placement of topsoil and revegetation with appropriate native species.

The Lee Point subdivision area covers lots 4873 and 9730 Town of Nightcliff, situated at 577 and 544 Lee Point Road on the western and eastern sides of Lee Point Road respectively. Lot 4873 adjacent the western side of Lee Point Road is historically known as the '2CRU' lot, a reference to the site's '2 Controlling and Reporting Unit' designation within the Department of Defence. Lot 9730, a crown land parcel adjacent the eastern side of Lee Point Road, is often referred to as 'Muirhead North.'

Defence Housing Australia identified the extent of pre-existing erosion damage upon obtaining ownership of lot 4873 from the Department of Defence in 2014. As an integrated development of both crown and freehold land, the Lee Point development is subject to a Project Development Agreement (PDA) between Defence Housing Australia and the Northern Territory Government, including transferring the CN portion of lot 4873 to the Northern Territory Government for incorporation into the Casuarina Coastal Reserve. The PDA sets out a number of conditions, including that the erosion gullies be remediated prior to the transfer of this land to the Northern Territory Government.

Various planning decisions relate to the Lee Point Development, including the original rezoning and introduction of the Lee Point Planning Principles and Area Plan into the Northern Territory Planning Scheme in 2015, and subdivision development permits issued over 2CRU and Muirhead North in 2018 and 2019 respectively (together with multiple variations issued since). In addition, the Lee Point development is subject to an approval and conditions from the Australian Department of Climate Change, Energy, the Environment and Water under the *Environment Protection and Biodiversity Conservation Act 1999 (Cth),* and an assessment report and recommendations from the Northern Territory Environment Protection Authority.

The proposed works are consistent with the definition of *excavation and fill* in **Schedule 2.1** of the Northern Territory Planning Scheme. *Excavation and fill* is *impact assessable* in Zone CN, thus a development permit is required pursuant to **Section 44(a)** of the *Northern Territory Planning Act 1999* (the Act). This report details the nature of the subject land and locality, the proposed development, considers the proposal against the relevant provisions of the Planning Scheme (including the Strategic Framework), and the relevant parts of **Section 46(3)** of the Act. This report (and application) is to be read together with the plans, reports and background information contained in **Attachments A** through **K.**

1.1 Background and Context

Rehabilitation of the erosion gullies is required to be undertaken by Defence Housing Australia prior to the transfer of the CN (Conservation) area to the northern Territory Parks and Wildlife Commission, in accordance with the Project Development Agreement. The remediation of these areas as part of the Lee Point development was flagged in the 2014 submission to the Northern Territory Planning Minister to amend the NT Planning Scheme to rezone lots 4873 and 9370 and introduce the Lee Point Planning Principles and Area Plan (PA2014/0922). Following the Planning Scheme amendment, an application for development permit was lodged with the Darwin Division of the Development Consent Authority in 2017 (PA2017/0569), confirming the rehabilitation of the erosion gullies to be undertaken as part of the Lee Point development, noting the gullies are a major source of sediment to Sandy Creek. PA2017/0569 was ultimately approved with Development Permit DP18/0409 (**Attachment A**) permitting the development of 513 lots.

In addition to the planning approvals, the Lee Point development was assessed by the Northern Territory Environment Protection Authority (NTEPA) at the level of an Environmental Impact Statement (EIS) in accordance with the Northern Territory *Environmental Assessment Act*. In October 2018 the NTEPA finalised their assessment and provided *Assessment Report 88 – Lee Point Master-Planned Urban Development, Defence Housing Australia* to the Minister for Environment and Natural Resources. Assessment Report 88 (**Attachment B**) contained 15 recommendations to guide decisions and conditions of approvals, authorisations and other matters, and noted the proponents' commitment to *"…remediate historic erosion issues that have been attributed to increased mosquito breeding in Casuarina Coastal Reserve."* The Assessment Report noted the NT EPA's support for the identified remediation and recommended conditions accordingly (Conditions 9 and 10 relating to stormwater management, discharge and quality).

The Lee Point development is also a controlled action pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* (Cth), and thus requires assessment and approval from the Australian Government. In March 2019 the (then) Australian Department of the Environment and Energy issued an approval (EPBC 2015/7591 – refer **Attachment C**) to Defence Housing Australia to *"construct a master-planned urban residential development on Lot 4873 and lot 9370 at Lee Point, approximately 14 km northeast of Darwin, Northern Territory."* The approval was varied on 27 July 2025 (**Attachment E**) to include the following condition:

> *2B) The approval holder may undertake **clearing** in the area identified in Attachment D2 as Casuarina Coastal Reserve and CCR for the purpose of rehabilitating existing erosion gullies and maintenance of existing bike tracks.*

1.2 Relevant Development Approvals

For the purpose of this application, the following approval history under the Northern Territory *Planning Act 1999* is noted:

- The subdivision of the 2CRU portion of Lee Point (the portion within lot 4873 to the west of Lee Point Road) via Development Permit DP18/0409 was approved by the Darwin division of the Development Consent Authority (the consent authority) on 30 November 2018 for the purpose of *subdivision to create 513 lots in two stages*. The permit included 10 precedent conditions and 18 general conditions;

- On 17 November 2020 the consent authority issued a variation to DP18/0409, being DP18/0409A, for the purpose of an extension to the base period of DP18/0409;

- On 14 July 2022 the consent authority issued DP18/0409B, a further variation to *vary condition 11 of Development Permit DP18/0409 for the purpose of relocating lot 488, deleting one public open space lot of 450m^2, boundary realignments to lots 49, 50, 178, 319 and 320, and reconfiguring the staging to allow the subdivision to occur in five stages;*

- On 27 October 2022 the consent authority issued DP18/0409C, being a further 12 month extension to the base period initially established by DP18/0409 and subsequently extended by DP18/0409A, such that the base period would expire on 30 November 2023;

- On 1 December 2023 the consent authority issued DP18/0409D, being a further 2 year extension to the base period initially established by DP18/0409 and subsequently extended by DP18/0409A and DP18/0409C, such that the base period would expire on 30 November 2025 or 30 November 2027 if works are substantially commenced;

- On 22 April 2025 the consent authority issued DP18/0409E, a further variation to *vary condition 11 of Development Permit DP18/0409B to allow "Stage 1" works to be completed in 2 stages;* and

- On 22 October 2025 the consent authority issued DP18/0409F, being a further 3 year extension to the base period initially established by DP18/0409 and extended via DP18/0409A, DP18/0409C and DP18/0409D, such that the base period will now expire on 30 November 2028 or 30 November 2030 if works are substantially commenced.

The aforementioned development permits and, where applicable, endorsed drawings are included in **Attachment A.** Development on lot 9370 to the east of Lee Point Road is covered under a separate development permit, variations and permit conditions (DP19/0050 and associated variations).

2.0 Site and Locality

The subject land is identified and described in **Table 1** and **Figure 1** below.

Site Details	
Location	Lot 4873 Town of Nightcliff (577 Lee Point Road, Lee Point)
Title Reference and Land Tenure	CUFT 788 729 Estate in Fee Simple (Freehold)
Area Under Title	81.33 hectares
Easements	None identified on title
Landowner	Defence Housing Australia
Planning Scheme Context	
Planning Scheme	Northern Territory Planning Scheme 2020
Existing Zone/s	• Clause 4.23 – CN (Conservation)
Applicable Land Use Definition/s	Excavation and Fill
Strategic Framework	• Darwin Regional Land Use Plan • Lee Point Planning Principles and Area Plan
Overlays (Applicable to Development)	• Clause 3.7 – Land Subject to Storm Surge
General Development Requirements (per Clause 4.23)	• Clause 5.2.1 – General Height Control • Clause 5.2.4 – Car Parking • Clause 5.2.5 – Loading Bays • Clause 5.2.6 – Landscaping

	• Clause 5.2.7 – Setbacks for Development Adjacent Residential Zones
Specific Development Requirements	• Clause 5.8.9 – Excavation and Fill

Table 1: *Site details and Planning Assessment Context*

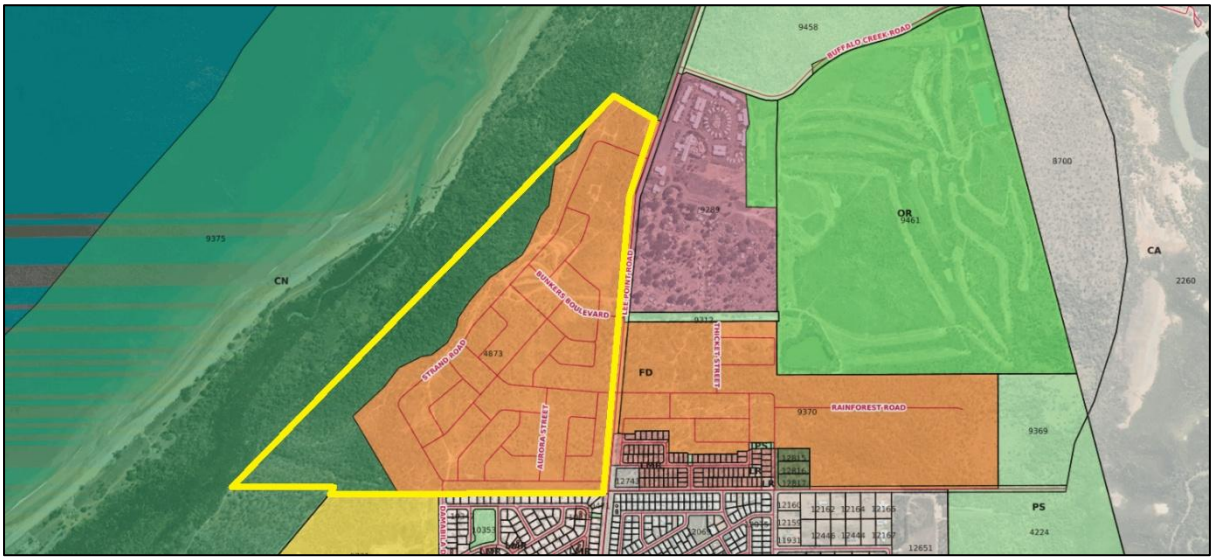


Figure 1: *Subject land – Lot 4873 Town of Nightcliff (yellow border)*

The subject land comprises lot 4873 Town of Nightcliff, situated at 577 Lee Point Road, Lee Point with a land area of 81.33 hectares. Lot 4873 is affected by two planning Zones – FD (Future Development) and CN (Conservation). Zone CN encapsulates the existing escarpment and coastal vegetation within the western portion of 4873, with the remaining area within Zone FD.

Lot 4873 (also known as the *2 Control and Reporting Unit,* or 2CRU / 2CARU) was owned by the Commonwealth Department of Defence until 2014 when ownership transferred to Defence Housing Australia. At the time of DHA's acquisition the site contained a disused defence communications facility (and later training facility) situated approximately 250 metres from Lee Point Road, consisting of a fenced compound with numerous sheds, communication, amenities and storage areas, as well as two large communication equipment platforms. All existing buildings have subsequently been demolished. Approximately 20 hectares of vegetation has been cleared commencing from the area adjacent the Lee Point Road boundary and extending west into the site, associated with the first stages of residential development in the area west of Lee Point Road and south of the lot 9370 boundary. With the exception of the cleared area and the site of the former compound, the remainder of the site largely comprises vegetation cover at varying stages of growth. There is a formal vehicle track from Lee Point Road to the area of the demolished compound, with other less formal vehicle and mountain bike tracks, including from the compound area heading in a southerly direction, ultimately running adjacent the southern site boundary and connecting with the trails in the Casuarina Coastal Reserve. Vehicle tracks and firebreaks are present along the eastern and southern property boundaries.

The site slopes gradually from a central ridge line to both the east and west (generally), with a steep drop in the north-western portion of the site down to the coastal vegetation habitat of the Casuarina Coastal Reserve, and ultimately to Sandy Creek and Casuarina Beach. This drop-off becomes more gradual further south, with the south-western portion sloping more gradually (albeit still noticeably) towards the coastal reserve.

The areas within lot 4873 subject to this application are circled in **figure 2,** specifically the several deep drainage channels and erosion gullies in the south-western portion of the site; and the smaller areas of erosion damage further north along the top of the escarpment adjacent the former compound area.

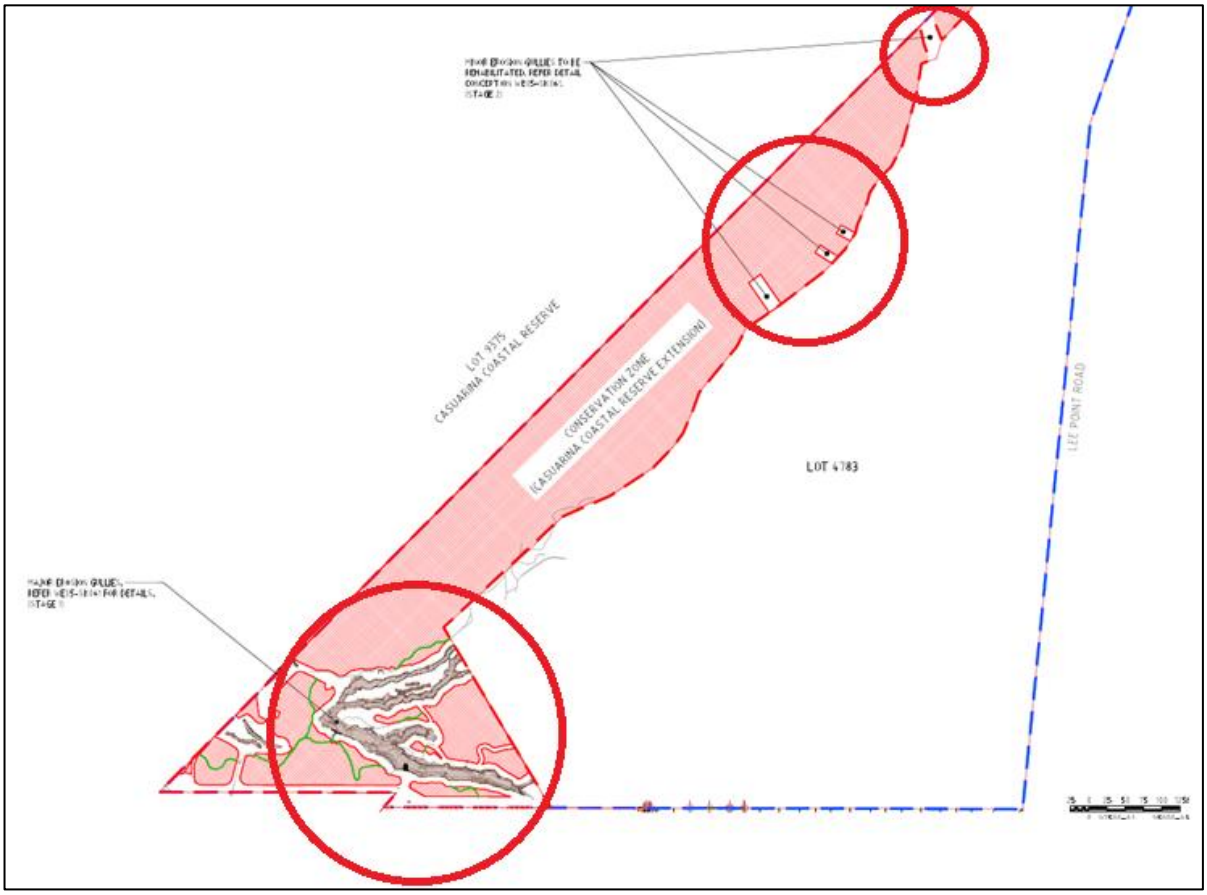


Figure 2: *Existing erosion gullies subject of this application*

2.1 Locality

Figure 1 demonstrates the zoning layout per the Northern Territory Planning Scheme within immediate proximity of the site. The land is situated in the area of Lee Point, bordered by the existing suburb of Lyons and the Royal Darwin Hospital to the south, the Casuarina Coastal Reserve to the west and north, and Lee Point Road to the east. To the east of Lee Point Road, the land is opposite the Lee Point Village / Club Tropical Resort containing a large caravan park including cabins and camp grounds, along with recently developed motel facilities concentrated in the northern portion of the site (adjacent Buffalo Creek Road), and the Muirhead North portion of the Lee Point development.

Buffalo Creek Road, located opposite and slightly north of lot 4873 provides access to the mouth of Buffalo Creek, including boat ramp and car / trailer parking areas.

To the south of the site, the joint Defence Housing / private residential suburbs of Lyons and Muirhead are located on the western and eastern sides of Lee Point Road respectively. Lyons contains approximately 690 lots with Muirhead some 1,200 lots. The final subdivision construction stages of Muirhead have been completed and housing construction is generally complete with a small number of vacant lots remaining. To the north of Muirhead, the first stage of subdivision within Muirhead North (stage 1A) has been completed, with 96 residential lots and a single commercial / community purpose lot. Housing construction has been completed on a number of the stage 1A lots.

Further south, a small commercial precinct containing a childcare centre and hotel is located within Muirhead adjacent Lee Point Road.

Zoning within the greater locality consists of a mix of residential, accommodation, public, community and conservation zones, partly evident in ***figure 1*****.** The Casuarina Coastal Reserve extends adjacent the western side of lot 4873 to the north and south, and together with part of the subject land, is zoned CN (Conservation). To the south of lot 4873, the hospital site is encompassed within Zone CP (Community Purpose), with the suburb of Lyons within Zones LR and LMR (Low and Low-Medium Density Residential). Muirhead, adjacent the southern boundary of lot 9370 and the stage 1A lots, is zoned SD23 (Specific Use Darwin 23), with land adjacent the eastern boundary zoned PS (Public Open Space). To the north of lot 9370, land is zoned OR (Organised Recreation), with a small strip of PS land extending from Lee Point Road adjacent part of the site's northern boundary. The Lee Point Village Resort is zoned CV (Caravan Park), with land further north comprising a combination of PS, CP and CN zones.

3.0 Proposed Development

The proposed development comprises the remediation of existing erosion damage in the south-western and north-western areas of lot 4873. The existing gullies and proposed remediation is identified in the Gully Rehabilitation Plans, Erosion and Sediment Control Plan and Landscaping Revegetation Plans in **Attachments F, G** and **H.** As outlined in the Earthworks and Drainage Memo in **Attachment I,** works will be undertaken as follows:

- Due to their shape, existing gullies will be benched in (maximum) 1 metre steps prior to filling to ensure the gullies can be filled in a safe manner and to achieve appropriate compaction and integration;

- Gullies will be filled with clean fill material sourced from the stage 2 detention basin, with construction of stage 2 to occur concurrently with the proposed works to ensure an appropriate supply of clean fill and minimise transportation and storage impacts. Gullies will generally be filled to existing surface levels in accordance with the NT Subdivision Development Guidelines, with the

finished surface level designed to tie in with the surrounding topography, including maintaining natural depressions and drainage lines where appropriate;

- Once filling and surface finishing is complete, the areas will be revegetated in accordance with the designs in **Attachment G.**

In order to enable sufficient access for earthmoving equipment to prepare and adequately rehabilitate the existing larger gullies in the south-western area, select vegetation clearing will be required both within and in the areas immediately surrounding the gullies. Clearing will be undertaken in the areas identified in **Attachment F** only to the extent required to enable access and works, and will be minimised so far as reasonably practicable with an emphasis on the retention and protection of identified significant trees. Clearing for the smaller north-western gullies is generally limited to removal of weeds and small regrowth. Clearing associated with the gully rehabilitation works will not extend beyond the boundaries of the areas identified as "No Go Zones" and all disturbed areas will be revegetated in accordance with **Attachment G.**

The south-western erosion gullies currently convey stormwater from a large upstream portion of lot 4873. Once completed, the rehabilitated areas will convey overland stormwater flows from within the south-west catchment area only. Flows from the subdivision (the approximate area of subdivision stages 2 and 3) will discharge to the detention basin in stage 2 of the subdivision, then via a stormwater outfall pipe extending along the southern boundary of lot 4873 (subject to detail design approval under the DP18/0409 conditions precedent). The intended drainage regime will substantially reduce the catchment that contributes stormwater to the erosion gullies and mitigate the risk of recurring erosion.

Construction vehicles will access via the existing driveway from Lee Point Road, and a site compound / construction laydown area will be established within an existing cleared area (within the former compound area). Existing informal access tracks will be utilised for vehicle access between the laydown area and the remediation areas to minimise site disturbance.

Proposed works will be undertaken during the dry season (May – September) to minimise erosion risk, and erosion and sediment control measures will be implemented in accordance with the ESCP in **Attachment H.**

3.1 Images (South-West Erosion Gullies)



Image 1



Image 2



Image 3



Image 4

3.2 Images (North-West Erosion Gullies)



Image 5



Image 6



Image 7

4.0 Northern Territory Planning Scheme

4.1 Nature of Development

Schedule 2.1 of the Northern Territory Planning Scheme defines *excavation and fill* as follows:

> ***excavation and fill*** *means the removal or importation of material to, from or within a* ***site*** *that will change the level of the land, but does not include that normally required in association with the construction of a building, swimming pool, ornamental pond or the like;*

The proposed works comprise the importation of fill material from within the site to fill and thus remediate the existing erosion gullies in the western portion of lot 4873. The proposed works will alter the existing ground level, with the existing gullies being filled and stabilised to tie-in with the adjacent surface level. Accordingly, the proposed works are consistent with the definition of *excavation and fill,* identified as *impact assessable* in the assessment table to Zone CN in **Clause 4.23.** Pursuant to **Section 44(a),** a development permit is required for *excavation and fill* in Zone CN.

4.2 Assessment Category

Excavation and fill is an *impact assessable* form of development pursuant to **Clause 1.8(1)(c)** of the Planning Scheme. In accordance with **Clause 1.10(4)**, when considering an application for a use or development identified as Impact Assessable the consent authority must consider all of the following:

a) any relevant requirements, including the purpose of the requirements, as set out in Parts 5 or 6;

b) any Overlays and associated requirements in Part 3 that apply to the land;

c) the guidance provided by the relevant zone purpose and outcomes in Part 4; and

d) any component of the Strategic Framework relevant to the land as set out in Part 2.

In accordance with **Clause 1.10(5)**, the consent authority may consent to a proposed use or development that is not in accordance with a requirement set out in Parts 3, 5 or 6 only if it is satisfied that the variation is appropriate having regard to:

a) the purpose and administration clauses of the requirement; and

b) the considerations listed under Clause 1.10(3) or 1.10(4).

Any variations proposed in this application are addressed in response to the applicable scheme sections.

4.3 Strategic Framework

Part 2 of the Scheme contains the Strategic Framework, consisting of strategic planning policies and strategic land use plans. Consideration of the Strategic Framework is required in an application for development identified as *Impact Assessable.* There are two layers of Strategic Framework policy applicable to the subject land and proposed development:

⇒ Darwin Regional Land Use Plan

⇒ Lee Point Planning Principles and Area Plan

4.3.1 Darwin Regional Land Use Plan

The Darwin Regional Land Use Plan (DRLUP) was prepared by the Northern Territory Planning Commission and incorporated into the Planning Scheme as a policy document in 2015. The plan provides a vision, goals and intended outcomes for development of the Darwin Region, identifies regional opportunities and the intention for development into the medium and long terms. The Land Use Structure on Page 13 of the Plan identifies the subject land as *Urban / Peri-Urban*.

Page 16 of the Plan identifies Urban / Peri-Urban land to include:

- A variety of housing types;
- Retail and commercial;
- Community facilities and services;
- Sport, recreation and urban open space; and
- Natural and conservation areas.

Page 27 of the DRLUP includes the *Key Open Space Objectives* and broader commentary regarding *Open Space and Natural Areas.* The plan recognises the role of open space and conservation areas in protecting land and water resources, conservation of significant vegetation communities and wildlife habitats, and enhancing green infrastructure within the urban environment. The Key Objectives seek to (in summary):

- *Retain the region's natural landscapes, vegetation and habitats where compatibility with appropriate urban and rural development can be maintained.*
- *Minimise the impact of development on the natural environment during the construction phase and ongoing use.*
- *Recognise and promote Darwin Harbour as the region's most valuable natural asset, minimising detrimental impacts from development in the harbour catchment and on its foreshore.*
- *Provide appropriate open space reserves for the conservation of natural environment and heritage features, and for resident and visitor recreation in active and passive activities.*
- *Recognise the role of remnant vegetation corridors in providing interconnectivity of open space and protecting amenity.*
- *Recognise the role of urban green space in reducing urban heat impacts and providing community amenity.*

The proposed works, despite the clearing required, are consistent with the retention and enhancement of natural landscapes, and will improve the pre-existing condition and quality of conservation areas for future open space reserves and for resident and visitor recreation.

4.3.2 Lee Point Planning Principles and Area Plan

The Lee Point Planning Principles and Area Plan (LPPPAP) were introduced into the Northern Territory Planning Scheme in 2015, and updated in 2020 to reflect the new 2020 Planning Scheme. The LPPPAP contains six statements of policy and two Area Plans – one each for the 2CRU and Muirhead North sites. **Figure 3** shows the location of the remediation works within Lee Point Area Plan 1.

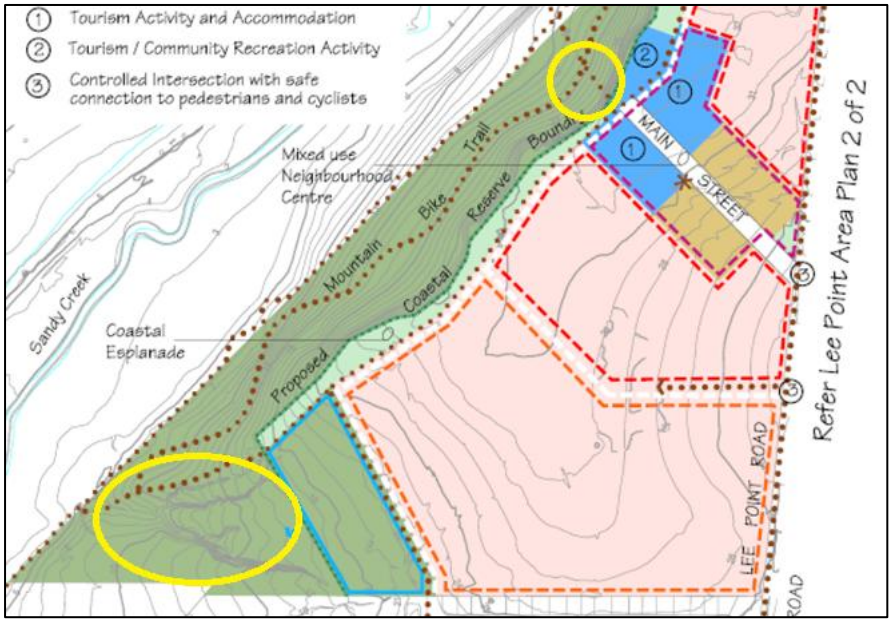


Figure 3: *Location of erosion gullies within the Lee Point Area Plan 1*

The underlying land area is identified as *Development Restricted by Constraints,* reflecting the underlying topography, vegetation communities and other constraints (e.g. proximity to biting insect breeding areas) affecting land use and development within these areas, and is within the *Proposed Coastal Reserve Boundary*. Of the six statements of policy within the Area Plan, the following are not directly applicable to the proposed works:

2. Requires the provision of compacted interconnected neighbourhoods as an extension to the existing northern suburbs. Requirements relate to street layout and built form, public realm design and layout, access to / from existing and future areas, maintained public access, open space and promotion of walking and cycling through design. Though no built form is proposed, rehabilitating conservation areas will improve the quality of land intended to become part of the public realm;

3. Applies to the mixed use village centre comprising the mixed use and tourist commercial areas;

4. Relates to the provision of residential development including lot sizes, residential densities and larger residential lot buffers;

5. Provides guidance on building design, form and height; and

6. Refers to the provision of land for education and community facilities.

Clause 1 provides overall objectives relating to the preservation and integration of areas of environmental significance, and for compact interconnected neighbourhoods, requiring future development:

1. *Preserve and integrate areas and items of environmental and heritage significance by:*

    (a) limiting development below the escarpment to community uses, tourism activity and pedestrian / cycle tracks that protect the environmental values of the coastal reserve and adjoining vegetation types;

The proposed development works are intended to rehabilitate and restore environmental values by restoring pre-existing landforms and vegetation. No land use outcomes for these areas are proposed as part of this application, and the proposed works will preserve existing pedestrian and cycle tracks (with the broader works within the CN area also rehabilitating these trails for public use when the land is incorporated into the Coastal Reserve).

(b) implementing appropriate environmental and engineering measures including but not limited to the application of principles of water sensitive urban design; and

The memo in **Attachment I** and revegetation approach in **Attachment G** outline the environmental and engineering measures to adequately fill and stabilise the existing gullies, revegetate the area and, ultimately, divert overland flows from the upstream subdivision areas around the remediated gullies to avoid recurrence of erosion.

(c) adopting measures that acknowledge the role of Lot 4873 Town of Nightcliff in the Indonesia – Malaysia Confrontation including, where practicable, the retention of existing defence items or replacement with artistic/ cultural interpretive works that reflect the historical significance of the land.

Development response to historic events and heritage items is covered in DP18/0409 and DP19/0050.

4.4 Overlays

The overlays in **sections 4.4.1 – 4.4.3** below are identified on title documents (**Attachment K**) and/or the Northern Territory's Integrated Land Information System (ILIS) as applying to the subject land. Other overlays identified in the Assessment Table to **Clause 4.23** do not apply to the proposed development due to:

- **Clause 3.3 – Restricted Clearing of Native Vegetation:** Not applicable to subject land. ILIS does not apply overlay to lot 4873, and overlay is not referred to on title documents.

- **Clause 3.4 – Coastal Reclamation:** Proposed fill does not apply to areas below the level of the highest astronomical tide.

- **Clause 3.5 – Land in Proximity to Airports:** Land is not subject to the Australian Noise Exposure Forecast 20-unit value contour line or greater.

- **Clause 3.6 – Land Subject to Flooding:** Land is not within a defined flood area and the proposed fill will not impact riverine flooding levels (refer **Attachment I**).

- **Clause 3.8 – Land Adjacent to a Designated Road:** No access from a designated road is proposed or required.

- **Clause 3.9 – Darwin Harbour Dredging:** Application does not apply to the Darwin Harbour seabed.

4.4.1 Clause 3.2 – Clearing of Native Vegetation

Overlay **Clause 3.2** applies to ensure that the clearing of native vegetation does not unreasonably contribute to environmental degradation of the locality. Subclause 3(a) confirms that all clearing of native vegetation in Zone CN requires consent (requires a development permit) unless included in the exemptions in subclause 5 of **Clause 3.2.** Subclause 5 provides the following:

5. *This Overlay does not apply to the clearing of native vegetation that:*

    (a) *is required or controlled under any Act in force in the Territory, including but not limited to:*

        i. *Environment Protection Act 2019;*

        ii. *Environment Protection and Biodiversity Conservation Act 1999 (Cth);*

        iii. *Pastoral Land Act 1992;*

        iv. *Petroleum (Environment) Regulations 2016;*

        v. *Territory Parks and Wildlife Conservation Act 1976; or*

Evident in the original approval notice to EPBC 2015/7591 in **Attachment C**, together with the subsequent variations in **Attachments D** and **E,** the clearing of native vegetation is controlled under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth). Condition 1 of the original approval states:

1. *For the protection of the **EPBC Act listed species** and **the Environment,** the approval holder must not **clear** more than 110 ha within the **project area.***

The variation to the conditions of the original (and varied) approval issued in July 2025 includes condition 2B:

> *2B). The approval holder may undertake **clearing** in the area identified in Attachment D2 as Casuarina Coastal Reserve and CCR for the purpose of rehabilitating existing erosion gullies and maintenance of existing bike tracks.*

The proposed clearing is within the area identified as CCR in Attachment D2 to the variation, and the clearing of native vegetation identified in the application is for rehabilitating the existing erosion gullies. Clearing on the subject land is controlled by an Act in force in the Territory, thus Overlay **Clause 3.2** does not apply pursuant to subclause 5(a)(ii).

Minor clearing works may be required for the removal of silt and sediment over and immediately adjacent the existing shared path within the Casuarina Coastal Reserve immediately west of the lot 4873 boundary, hence the land immediately adjacent this area has been excluded from the "no go zone" on the rehabilitation plans.

4.4.2 Clause 3.7 – Land Subject to Storm Surge

Figure 4 below shows the minor extent of Primary and Secondary Storm Surge inundation into lot 4873.



Figure 4: *Extent of Primary (dark blue) and Secondary (light blue) Storm Surge inundation into lot 4873 (red border)*

There is a minor encroachment of the Secondary Storm Surge zone into the western-most erosion gullies and proposed remediation zone. Subclauses 8, 9 and 10 of **Clause 3.7** limits land uses in the Primary (open space, recreation, non-essential public facilities and short-stay tourist caravan / camping) and Secondary (aforementioned uses as well as industrial and commercial uses) Surge Areas. Subclause 10 stipulates that residential uses, strategic and community services should be avoided in both the Primary and Secondary Surge Areas.

No land use outcome is proposed as part of this application, and the proposed rehabilitation works, specifically the proposed *excavation and fill*, do not conflict with the requirements of **Clause 3.7**. The engineering memo in **Attachment I** confirms that a small amount of filling is required below Secondary Storm Surge levels (approximately RL 6.5 m AHD at Lee Point), however that this will not adversely impact storm surge behaviour.

4.4.3 Clause 3.14 – Land in Proximity to Helicopter Land Sites of Strategic Importance

The subject land is overlain the HLSSI overlay to the extent shown in **figure 5. Subclause 1** of **Clause 3.14** applies the overlay to any development over 8.5 metres in height (including any construction equipment required to carry out the works), contains lighting that projects upwards, coloured or flashing lighting external to the development, or will produce an exhaust plume which has an upward vertical velocity of 4.3 metres per second (or more).

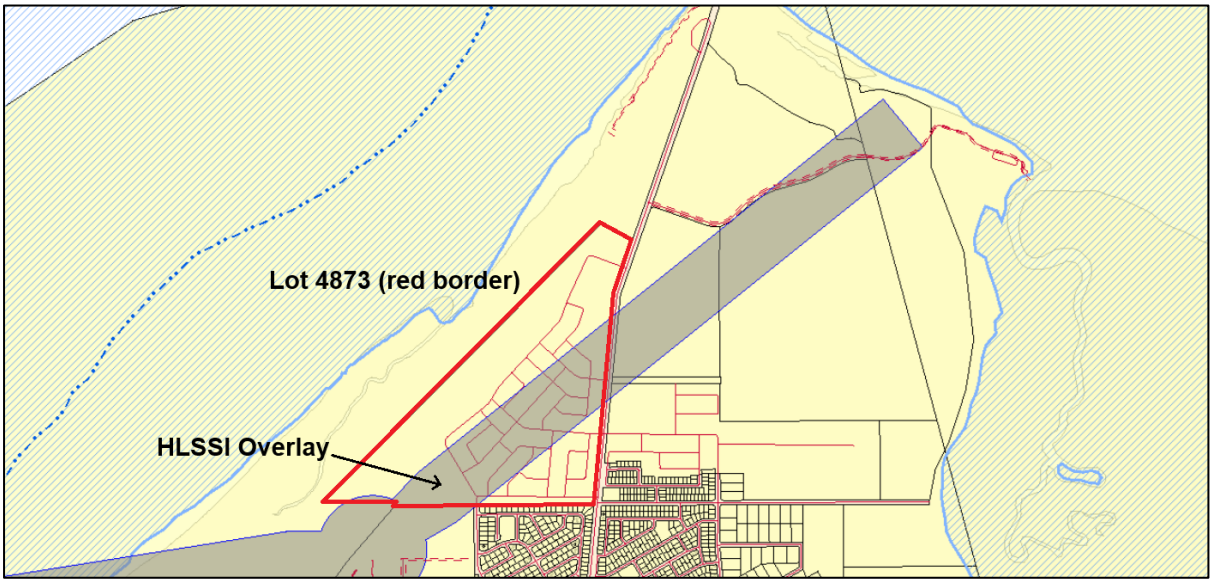


Figure 5: *HLSSI overlay within lot 4873*

The maximum depth of the existing gullies in the south-western area is approximately 4 metres, and the gullies will be filled to tie-in with the adjacent ground level. Works are expected to be undertaken with a small – medium sized excavator, with a maximum height well below 8.5 metres. No lighting or upward exhaust discharge is expected to occur as a result of the proposed development. Precise equipment and machinery details will be resolved upon receipt of a preferred contractor methodology, and confirmation of expected outcomes above can be confirmed via condition precedent on any resultant development permit. On this basis the requirements of Overlay **Clause 3.14** will not be applicable to the proposed works.

4.5 Zone CN

Zone Purpose

Conserve and protect the flora, fauna and character of natural areas.

Zone Outcomes

1. *Conservation space responds to and conserves the recognised environmental values of the land.*

The vegetation assessment in **Attachment J** was prepared by Four Elements Consulting (4E) for Defence Housing Australia to address the assessment requirements of **Clause 3.2** of the Planning Scheme (noting Overlay **Clause 3.2** does not apply to the proposed works per **section 4.4.1** of this report). The area of investigation extends beyond the proposed works covered by this investigation, and will inform separate works relating to the installation of drainage infrastructure, removal of downstream silt and sediment, and the rehabilitation of existing walking trails. The assessment notes that "*no significant or sensitive vegetation was observed within the clearance footprint"* and identified *"the Darwin cycad (Cycas armstrongii), which is listed as Vulnerable under the TWPC Act."*

Clearing will be undertaken in the areas identified in **Attachment F** only to the extent required to enable access and works to be undertaken, and will be minimised so far as reasonably practicable, including the retention where practicable of existing Paperbark, Milkwood and Cycad plants identified in **Attachment G**. Aboriginal Areas Protection Authority Certificate 201802223 notes the request by custodians for the opportunity to identify these particular tree species prior to development within the area of cultural significance identified on the Certificate. Where removal is appropriate, Cycads within the clearing area will be managed in accordance with DHA's existing *Cycas Armstrongii Management Plan* approved in accordance with Condition Precedent 5 of DP18/0409, including:

1. *Identify area to be cleared, as surveyed, and undertake assessment of total numbers of Cycads available for salvage.*

2. *Confirm open space areas immediately available for re-use of Cycads.*

2. *Prepare landscape design plans that identify location and numbers of salvaged Cycads to be utilised in each open space area.*

3. *Prepare Cycad balance sheet to identify excess or shortfall in numbers for this stage of works.*

4. *Where there is a Cycad surplus available for immediate use, plants are to be potted up and stored for future use.*

Clearing for the smaller north-western gullies is generally limited to removal of weeds and small regrowth, and clearing associated with the remediation works will not extend beyond the boundaries of the areas identified as "No Go Zones."

Identified significant trees will be protected and retained, either where identified as such in **Attachments G** and **F,** or otherwise where the ultimate earthworks methodology allows. All cleared / disturbed areas will be rehabilitated in accordance with **Attachment G.**

2. *Development, including **access** for informal recreation, is sensitive to the natural features and habitats of the land, and located and operated to have minimal impact on the environment.*

Clearing works will be limited to that required for access and excavation / fill works to be undertaken, and will not extend beyond the identified boundaries. Landscaping and replanting following the completion of gully remediation works responds to the various vegetation types within the cleared areas, and the rehabilitation will repair existing damage and mitigate recurrence in the future.

3. *Development that is complementary to and supports the conservation values of natural areas, including **exhibition centre**, **shop**, **bar-small** and **food premises-restaurant and cafe/takeaway**, may be established if of a scale and intensity that does not adversely impact on the **amenity** or environment.*

The proposed works do not include the establishment of any temporary or permanent land use or occupation (other than for construction purposes) of the site.

4. *Temporary or periodic use for a **market** is limited to where it can be reasonably accommodated by the existing facilities with minimal impact on the **amenity** and conservation value of the surrounding area.*

Not applicable. No market use is proposed.

5. *Residential use is limited to a **dwelling-caretakers** where it is required for the protection of the conservation values of the area or facilities.*

Not applicable. No residential use is proposed as part of this application.

6. *Development is located, designed and managed to:*

    (a) conserve ecologically important areas and other natural features of the land and the setting;

    (b) maintain the scenic value and visual quality of the area,

    (c) be sympathetic and respectful to places of cultural significance;

    *(d) minimise **excavation and filling** and other changes to landform;*

    (e) minimise soil erosion and adverse impacts on water quality; and

(f) *wherever possible, use existing cleared and degraded areas for the placement of buildings and related works.*

The proposed works will repair existing soil erosion and mitigate recurrence of erosion and downstream impacts from silt / sediment being carried away from the site. Excavation and fill is limited to that required to rehabilitate the area and tie-in with existing natural surface levels, and vegetation clearing will be limited to that required for excavation / fill works to be undertaken. Remediation after fill works have been completed will restore visual amenity.

7. *Development provides for a limited range of infrastructure and services that are commensurate with the protection of the conservation values of the land and incorporates a high quality of built form and landscape design.*

This application is limited to the *excavation and fill* works required for rehabilitation of the erosion gullies. Infrastructure associated with the Lee Point development is addressed via DP18/0409 and DP19/0050.

8. *Development that is not defined in Schedule 2 (Definitions) may occur only when assessment has determined that the development is appropriate in the zone, having regard to the purpose and outcomes of this zone and such matters as the location, nature, scale and intensity of the development.*

Not applicable. The development is defined as *excavation and fill* in **Schedule 2** of the Planning Scheme.

4.6 General Development Requirements

The Assessment Table to Zone CN in **Clause 4.23** identifies a number of general development requirements in **Part 5** of the Planning Scheme as applicable to development in Zone CN. All general development requirements apply to built form and land use outcomes, and are not directly applicable to the proposed erosion gully remediation works (comprising *excavation and fill)*. Specifically:

- **Clause 5.2.1** applies maximum height requirements to buildings and structures. This application will not result in any new or alter any existing buildings or structures;

- **Clause 5.2.4** applies car parking requirements and design for various land uses. No land use is proposed and the remediation includes revegetation works to (ultimately) transfer the land to the Northern Territory Government for incorporation into the Casuarina Coastal Reserve;

- **Clause 5.2.5** stipulates minimum loading bay requirements for certain land uses. No land use outcomes are proposed and no loading bay requirements under **Clause 5.2.5** apply; and

- **Clause 5.2.7** applies specific setback and landscaping requirements for development adjacent land in residential zones (LR, LMR, MR and HR). The remediation area is adjacent land in Zone CN (the adjacent Casuarina Coastal Reserve in lot 9375), Zone CP (Royal Darwin Hospital in lot 9731) and FD (Lee Point

2CRU subdivision area within 4873). No development works are proposed as part of this application adjacent land in a residential zone.

4.6.1 Clause 5.2.6.1 – Landscaping in Zones other than CB

Purpose

*Encourage **landscaping** that enhances local **amenity** by:*

(a) contributing to safe and attractive public spaces and places;

(b) responding to the local climate and soil characteristics;

(c) supporting cooler internal and outdoor areas; and

(d) recognising the value of retaining existing plants and trees.

Administration

1. ***Landscaping** may include, where subordinate to areas for the planting and growing of plants, impervious and unplanted areas for;*

    a. *pedestrian access,*

    b. *outdoor recreation, or*

    c. *natural or ornamental features and the like.*

2. *The consent authority may **consent** to **landscaping** that is not in accordance with sub-clauses 5, 6 and 7 only if it is satisfied it is consistent with the purpose of this clause and the zone purpose and outcomes, and is appropriate to the **site** having regard to the **amenity** of the streetscape, and the potential impact on the **amenity** of the locality and adjoining property.*

Requirements

3. *Where **landscaping** is required by this Scheme it should be designed so that:*

    a. *planting is focused on the area within the street frontage setbacks side setbacks, communal open space areas and uncovered **car parking areas**;*

    b. *it maximises efficient use of water and is appropriate to the local climate;*

    c. *it takes into account the existing streetscape, or any landscape strategy in relation to the area;*

d. *significant trees and vegetation that contribute to the character and **amenity** of the **site** and the streetscape are retained;*

e. *energy conservation of a building is assisted having regard to the need for shade and sunlight at varying times of the year;*

f. *the layout and choice of plants permits surveillance of public and communal areas; and*

g. *it facilitates on-site infiltration of stormwater run-off.*

The Planning Scheme does not specifically require landscaping for the proposed development, however the revegetation plan in **Attachment G** demonstrates the proposed revegetation incorporating specific species suited to the existing areas and to contribute to wildlife habitat. Clearing will be undertaken in the areas identified in **Attachment F** only to the extent required to enable access and works, and will be minimised so far as reasonably practicable, including the retention where identified / practicable of existing Paperbark, Milkwood and Cycad plants.

4. *The quality and extent of the **landscaping** consented to must be maintained for the life of the development.*

No ongoing development or land use is proposed, and the land is intended to be transferred to the Northern Territory Government for incorporation into the Casuarina Coastal Reserve.

5. *Other than in Zones CB, C and TC, not less than 30% (which may include communal open space) of a **site** that is used for **rooming accommodation**, **dwellings-group**, **dwellings-multiple** and **residential care facility** is to be landscaped.*

Not applicable. No residential land uses are proposed as part of this application.

6. *In Zones LI, GI and DV all street frontages, except **access** driveways or footpaths, are to be landscaped to a minimum depth of 3m.*

Not applicable. The subject land is not in an industrial zone.

7. *In Zones MR and HR, side and rear setbacks are to include planting to the length of the setback of no less than 2m deep, except for areas that are used for private open space.*

Not applicable. The subject land is not in Zone MR or HR.

4.7 Specific Development Requirements

4.7.1 Clause 5.8.9 – Excavation and Fill

Purpose

*Ensure that the excavation or filling of land does not adversely affect adjacent land or waters, or the quality of adjacent waterways, and associated riparian areas and is suited to the intended future use of the **site**.*

Administration

1. *The consent authority may **consent** to a use or development that is not in accordance with sub-clauses 2-5, only if it is satisfied it is consistent with the purpose of this clause and the zone purpose and outcomes, and it is appropriate to the **site**.*

Requirements

2. *Demonstrate the suitability of the **site** for the proposed future use.*

No future use is proposed as part of this application, and the works area is proposed for conservation via incorporation into the Casuarina Coastal Reserve.

3. *Provide a hydrological assessment of potential upstream and downstream impacts of the excavation or filling.*

The hydrological assessment in **Attachment I** confirms the proposed works will have no adverse impacts on upstream catchments, with existing flow paths maintained until such time that upstream flow paths are diverted around the site during the adjacent subdivision works. The proposed remediation works will be undertaken concurrently with the stage 2 subdivision to coordinate excavation / fill between the subdivision detention basin and the erosion gullies, and divert upstream flows around the rehabilitated area. The works will positively impact downstream environments by stabilising the site and mitigating the ongoing risk of erosion. The proposed works will not alter stormwater flows into the Casuarina Coastal Reserve and Sandy Creek.

4. *Provide a plan of management to control erosion and sedimentation, particularly of creeks and riparian areas.*

A detailed Erosion and Sediment Control Plan is included at **Attachment H.**

5. *Identify measures to prevent the creation of mosquito breeding areas.*

The earthworks design ensures the site will be free draining to prevent water ponding and mitigate opportunities for biting insect breeding. Together with the upstream subdivision works, the rehabilitation will minimise the amount of stormwater discharging to the existing interdunal depressions and known breeding sites within the Coastal Reserve.

5.0 Section 46(3)(b) – Interim Development Control Order

Title details in **Attachment K** confirm there are no Interim Development Control Orders currently applicable to the subject land.

6.0 Section 46(3)(c) – Referral to the NT EPA

Section 48 of the Environmental Protection Act 2019 (EPA Act) requires a project be referred to the NT Environmental Protection Authority (NT EPA) for assessment if it has the potential to have a significant impact on the environment or meets a referral trigger. The Lee Point Master-planned Urban Development was referred to the Northern Territory Environment protection Authority under the (previous) *Environmental Assessment Act* and assessed at the level of an Environmental Impact Statement (EIS). The NT EPA's assessment identified a number of potential issues in relation to the development, and recommended that the development could proceed if all of the NT EPA's 15 recommendations are implemented to deliver acceptable environmental outcomes. The NT EPA's assessment report and recommendations are included at **Attachment B.**

7.0 Section 46(3)(d) – Merits of Proposed Development

The proposed excavation and fill works will remediate historic erosion damage and mitigate further downstream silt / sedimentation and the risk of recurrence or erosion impacts. Works will be undertaken in a manner that minimises clearing of existing vegetation, and revegetation will respond to adjacent vegetation communities and provide additional opportunity for habitat creation.

8.0 Section 46(3)(e) – Subject Land, Suitability of Development and Effect on Other Land

The nature of the subject land and surrounding locality, and the suitability of the subject land to accommodate the proposed development have been addressed in this report. In summary, the subject land will be rehabilitated to repair existing damage, and revegetated to ensure adequate remediation. The works will reduce impact on other land, particularly siltation / sedimentation impacts on downstream areas.

9.0 Section 46(3)(f) – Public Facilities and Open Space

The proposed works do not relate to land currently identified as public space, however are required as part of the agreement with the Northern Territory Government to incorporate the land into the Casuarina Coastal Reserve. Availability and proximity of public facilities and open space to the subject land itself is not relevant to the consideration of an application for *excavation and fill* for the purpose identified in this application.

10.0 Section 46(3)(g) – Public Utilities and Infrastructure

No public power, water, sewerage or telecommunications infrastructure is required for the proposed works. Construction vehicle road access will be via Lee Point Road and the existing lot 4873 driveway entrance. Internal access will be via existing access tracks where possible to reduce disturbance. Works will be undertaken during the dry season.

11.0 Section 46(3)(h) – Impact on Amenity

Rehabilitation, including revegetation, of existing erosion damage will improve amenity, particularly the mitigation of existing sediment / siltation impacts on the downstream public walkways within the Casuarina Coastal Reserve. The removal of existing vegetation to facilitate access and earthworks may adversely affect amenity. Vegetation removal will be minimised where practicable and limited to that required for access and works, with no clearing occurring in the "no go zones" identified on the design plans. The revegetation works will minimise adverse amenity impacts, and the amenity improvements as a result of the rehabilitation of existing damage is expected to result in a net improvement to amenity.

12.0 Section 46(3)(j) – Benefit/Detriment to Public Interest

Section 51 of the Act requires the consent authority to consider whether the proposal is in the public interest with specific consideration given to (where relevant) how the application addresses community safety through crime prevention principles in design, water safety, and access for persons with disabilities.

In response to these matters:

- No direct CPTED impacts or improvements are expected;
- Filling of the larger gullies will result in a net public safety improvement for any future public access to the space; and
- Accessibility considerations are not applicable due to the lack of land use proposed.

In addition to the above, the proposed works being undertaken by Defence Housing Australia prior to the land being transferred to the Northern Territory Government will minimise general costs to the community by avoiding the burden for remediation being place on the Northern Territory Government.

13.0 Section 46(3)(ja) – Restricted Water Extraction Area

The subject land is not within a restricted water extraction area, and the application does not propose subdivision or consolidation. Accordingly **Section 46(3)(ja)** is not applicable.

14.0 Section 46(3)(k) – Compliance with the Building Act

This application does not seek approval for subdivision, thus **Section 46(3)(k)** is not applicable.

15.0 Section 46(3)(l) – Development of Scheme Land

The application does not comprise the subdivision of land under a unit titles scheme. Accordingly, Section **46(3)(l)** is not applicable.

16.0 Conclusion

The proposed excavation and fill works at Lot 4873 Town of Nightcliff represent a necessary and appropriate response to the remediation of historic erosion damage. The works have been carefully designed to stabilise existing gullies, restore natural landforms, and improve environmental conditions through revegetation with suitable native species.

The proposal is consistent with the intent of the Northern Territory Planning Scheme, including the Strategic Framework and the Zone CN (Conservation) purpose and outcomes. The development will deliver positive environmental outcomes by reducing sediment transport, improving downstream water quality, and mitigating the risk of ongoing erosion, while maintaining sensitivity to the environmental values of the land.

Vegetation clearing required to facilitate the works will be minimised and will be offset through comprehensive rehabilitation and revegetation measures, resulting in an overall net improvement to site condition and amenity. The proposed works align with the requirements of the Project Development Agreement and relevant environmental approvals, ensuring the land can be suitably rehabilitated prior to its transfer to the Northern Territory Government for incorporation into the Casuarina Coastal Reserve.

This application has been prepared in accordance with and addresses the relevant requirements of **Section 46(3)** of the Northern Territory Planning Act and concludes that, on balance, the proposed development will provide an environmental and public benefit and warrants approval.



Brad Cunnington

Cunnington Rosse Town Planning and Consulting

25 May 2026

CUNNINGTON ROSSE
Town Planning & Consulting

Land owner/s authorisation to lodge a development application

The Planning Act 1999

Before you fill in the form

Signatures from ALL landowners registered on the land title must be provided.
The authorisation must be dated within six months of the submission of the application.

Fields marked with an asterisk (*) are required.
Fields marked with a carat (^) are required if applicable.

Applicant
In accordance with Section 46(3)(aa)(i) of the *Planning Act 1999*, a development application is to contain the name and contact details of the **applicant** AND **any person on whose behalf the application is made.**

Name of Applicant/Consultant or Acting agent	Brad Cunnington, Cunnington Rosse Town Planning and Consulting		
Address	PO Box 36004 Winnellie NT 0821		
Phone	0427796140	**Email**	brad@crtpc.com.au

Persons on whose behalf the application is made:

Person/s on whose behalf the application is made:	Brendan O'Brien, DHA General Manager Development and Construction		
Address	Level 5, 111 Phillip Street, Parramatta NSW 2150		
Phone	0407481567	**Email**	brendan.o'brien@dha.gov.au

The applicant is hereby authorised to lodge a development application over the subject land described as:

***Lot/NT portion**	Lot 4873
***Location/town/hundred**	Town of Nightcliff
***Street address**	577 Lee Point Road, Lee Point

NORTHERN TERRITORY GOVERNMENT

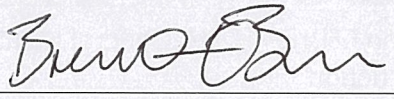
The application is for the purpose of:	
***Proposed development** *Brief description of proposed development*	Excavation and Fill – Remediation and revegetation of existing erosion gullies

Landowner/s signature

In accordance with Section 46(3)(aa)(ii) of the *Planning Act 1999*, a development application is to contain the **name and contact details of the owner of the land** to which the application relates.

Written authorisation from each:

- **Individual owner:** Each person listed on the title must provide written authorisation for the application.
- **Companies**: For each company listed on the title, written authorisation must be obtained from the **director** or **authorised representative** of the company. This authorisation confirms that the company is giving consent for the application and that the person signing on behalf of the company has the legal authority to do so.

***Full name**	Brendan O'brien		
^Company name	Defence Housing Australia		
^Title *(e.g. director/authorised representative)*	General manager Development and Construction		
Phone	0407481567	**Email**	brendan.o'brien@dha.gov.au
***Signature**			
***Date**	21 MAY 2026		

Any Persons with an interest in the land *(as applicable)*

In accordance with section 46(3)(aa)(iii) and (iv) of the *Planning Act 1999*, a development application is to contain the name and contact details of **any person who entered into an agreement** with the applicant and/or landowner, **to acquire an estate or interest in the land to which the application relates**; and **any person with an interest** prescribed by regulation.

^Full name	
^Company name	Northern Territory of Australia
^Title *(e.g. director/authorised representative)*	
^Signature	

Phone		Email	

Privacy Note

The Department of Lands, Planning and Environment, on behalf of the Minister, is authorised under the *Planning Act 1999* to collect the information on this form, or otherwise provided by you, to consider a proposal to grant a Development Permit or to amend a planning scheme. Failure to provide the information in full may result in delays in processing of the application.

Some of the personal information provided by you on this application may be publicly available, as part of a public exhibition process. The information is also regularly provided to other Northern Territory Government agencies, the Australian Valuation Office, local governments and Commonwealth Government Departments and agencies, as required by law.

Collection of personal information on this form is done in accordance with the privacy legislation within the Northern Territory *Information Act 2002*. For more information, please refer to the Northern Territory Government's privacy statement located at https://nt.gov.au/copyright-disclaimer-and-privacy
Any personal information provided can be subsequently accessed by you on request.

NORTHERN TERRITORY GOVERNMENT

Department of **LANDS, PLANNING AND ENVIRONMENT**

Level 5
Energy House
18-20 Cavenagh St
DARWIN NT 0801

Postal address
PO Box 1680
DARWIN NT0801

E CrownLand.Estate@nt.gov.au

T 08 8999 6886

File reference
LD2015/0051-03-0180

Chris Grimm
Senior Development Manager
Defence Housing Australia

Sent via email only to: chris.grim@dha.gov.au

Dear Mr Grimm

Re: Authorisation to lodge a Development Application over Lot 4873 Town of Nightcliff

I refer to the request from Defence Housing Australia (DHA) dated 13 April 2026, seeking this Department's authorisation to lodge a development application with the Development Consent Authority (DCA) over Lot 4873, Town of Nightcliff, for the purpose of excavation and fill works associated with the Lee Point erosion gully remediation project.

As DHA and the Northern Territory of Australia (NTA) are parties to a Development Agreement in respect of Lot 4873, the NTA is required, pursuant to section 46(3)(aa)(iii) and (iv) of the *Planning Act 1999*, to provide its authorisation for DHA to lodge the development application with the DCA.

In accordance with clause 3.7(a)–(e) of the Project Development Agreement, this Department approves DHA, or its appointed agent, Cunnington Rosse Town Planning and Consulting, to lodge the abovementioned development application.

This letter is not to be construed as an approval of this application under the *Planning Act 1999* or as any indication of the Northern Territory Government's position on DHA's obligations under the Project Development Agreement.

For any queries, please contact Janelle Shaw, A/Senior Project Officer Land Transactions, by telephone (08) 8999 6860 or email janelle.shaw@nt.gov.au.

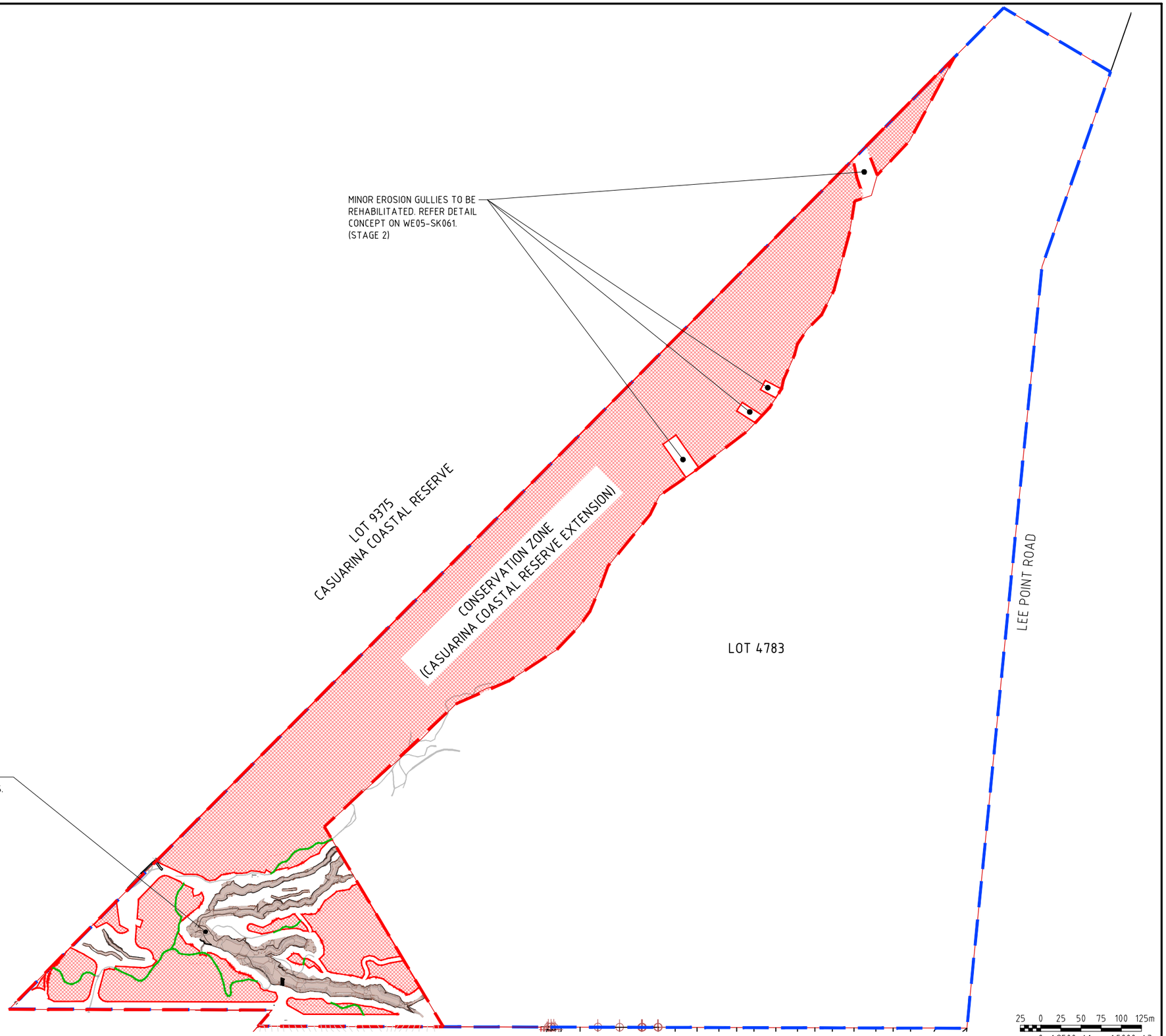
Yours sincerely

Kerri O'Brien
Executive Director, Crown Land Estate
19 May 2026

ISSUED FOR INFORMATION

N

PRINT IN COLOUR



LEGEND

- LOT 4873 BOUNDARY
- CONSERVATION ZONE BOUNDARY
- LIMIT OF CLEARING
- EXISTING TRACKS TO BE CLOSED AND AREAS TO BE REHABILITATED. ALL WORK TO BE COMPLETED BY HAND AND/OR EQUIPMENT OF MAX. 1200mm WIDTH.
- NO GO ZONE

25 0 25 50 75 100 125m

0 1:2500-A1 1:5000-A3

No	DATE	INITIAL	AMENDMENT
B	22/05/26	PD	RE-ISSUED FOR INFORMATION
A	26/03/26	PC	ISSUED FOR INFORMATION

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CLIENT: DHA Defence Housing Australia

byrne
ABN 78 124 388 192
P.O.Box 43420 Casuarina NT 0811
Ph. 08 89472476 Fax: 08 89475098

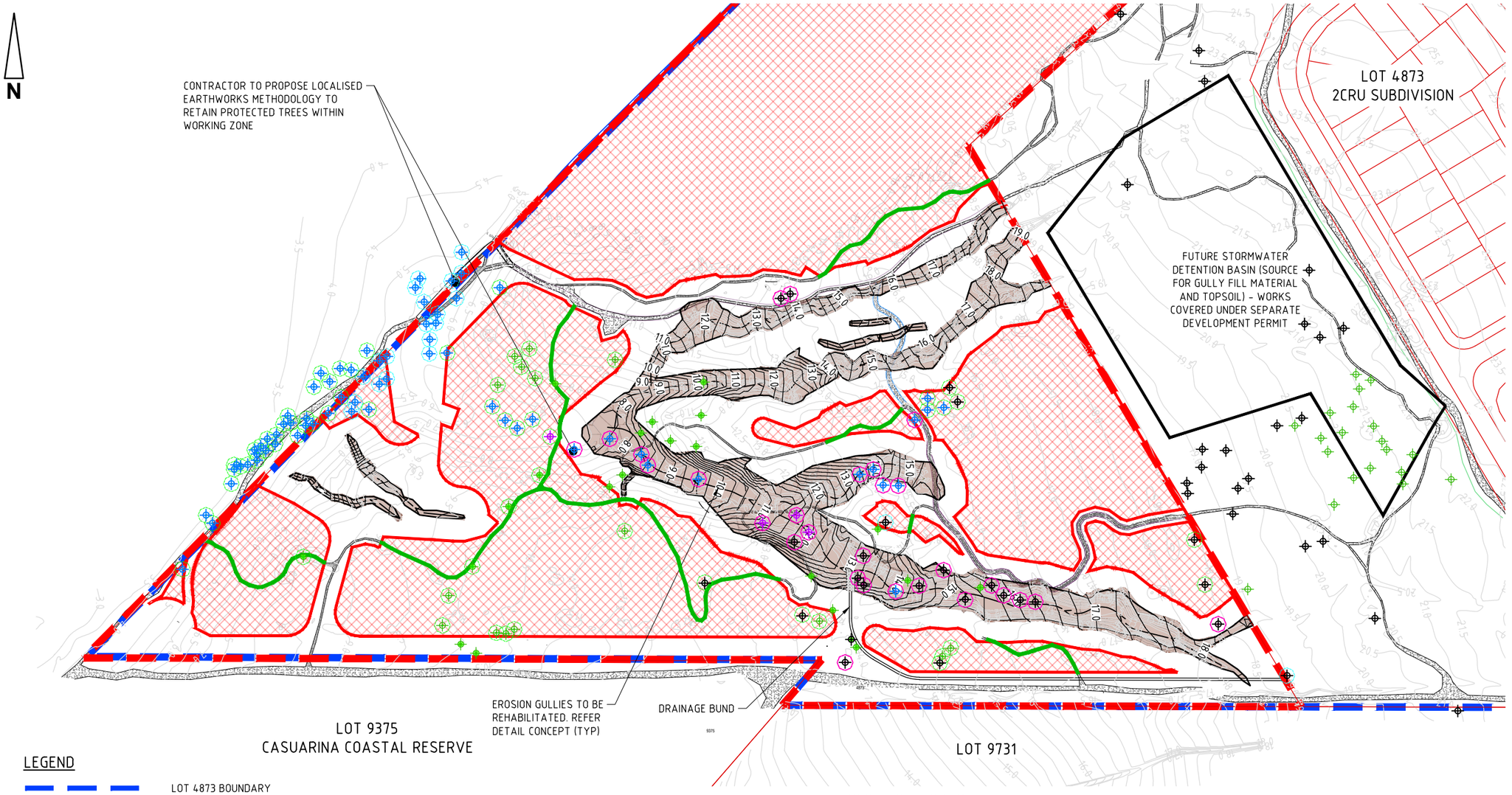
APPROVED	
PB	
DRAWN	CHECKED
AD	PB
DESIGNED	CHECKED
PC	PB

TITLE **2CRU SUBDIVISION - GULLY REHAB WORKS**
NT LOT 4873, LEE POINT
OVERALL LAYOUT

SCALE	PROJECT No	DRAWING No	AMDT
AS SHOWN	NT24102	WE05-SK060	B

PLOTTED ON: 22/May/2026 3:43 PM
USER: NICK SULLIVAN
FILE LOCATION: C:\12dsws\data\BYRNE-TMS\NT24102 - WE05 - 2CRU Stage 2 Outfall and Gully Rehab (NT24082)_1597\04 CADD\4.2 DWG\SketchesINT24102_SK060_SK062.dwg

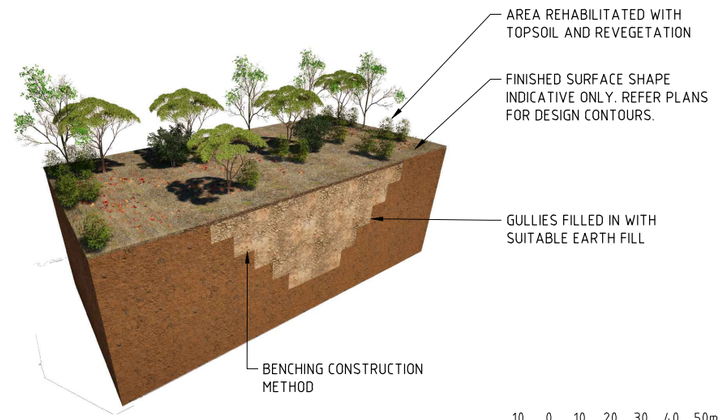
ISSUED FOR INFORMATION



SCOPE OF WORKS
SCALE 1:1000

LEGEND

- LOT 4873 BOUNDARY
- CONSERVATION ZONE BOUNDARY
- LIMIT OF CLEARING
- EXISTING TRACKS TO BE CLOSED AND AREAS TO BE REHABILITATED. ALL WORK TO BE COMPLETED BY HAND AND/OR EQUIPMENT OF MAX. 1200mm WIDTH.
- EXISTING SURFACE CONTOURS (0.5m) INTERVAL
- DESIGN CONTOUR (0.25m) INTERVAL
- NO GO ZONE
- TREES AND CYCADS TO BE RETAINED AND PROTECTED
- TREES TO BE REMOVED WITHIN EARTHWORKS ZONE
- TREES TO BE RETAINED AND PROTECTED WHERE WORK METHODOLOGY ALLOWS
- CYCAD / GROUP OF CYCADS TO BE SALVAGED
- MILKWOOD
- CYCAD
- WEEPING PAPERBARK
- BROAD-LEAVED PAPERBARK



EROSION GULLY REHABILITATION DETAIL CONCEPT
NTS

10 0 10 20 30 40 50m
0 1:1000-A1 1:2000-A3

No	DATE	INITIAL	AMENDMENT
B	22/05/26	PD	RE-ISSUED FOR INFORMATION
A	26/03/26	PC	ISSUED FOR INFORMATION

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CLIENT: DHA Defence Housing Australia

byrne
ABN 78 124 388 192
P.O.Box 43420 Casuarina NT 0811
Ph. 08 89472476 Fax: 08 89475098

APPROVED	
PB	
DRAWN	CHECKED
AD	PB
DESIGNED	CHECKED
PC	PB

TITLE: **2CRU SUBDIVISION - GULLY REHAB WORKS**
NT LOT 4873, LEE POINT
MAJOR EROSION GULLIES

SCALE	PROJECT No	DRAWING No	AMDT
AS SHOWN	NT24102	WE05-SK061	B

PRINT IN COLOUR

PLOTTED ON: 22/May/2026 3:43 PM
USER: NICK SULLIVAN
FILE LOCATION: C:\12dsw\data\BYRNE-TMS\NT24102 - WE05 - 2CRU Stage 2 Outfall and Gully Rehab (NT24082)_1597\04 CADD\4.2 DWGS\Sketches\NT24102_SK060_SK062.dwg

NORTHERN TERRITORY OF AUSTRALIA

Planning Act - sections 54 and 55

DEVELOPMENT PERMIT

DP18/0409

DESCRIPTION OF LAND THE SUBJECT OF THE PERMIT

Lot 04873
Town of Nightcliff
577 LEE POINT RD, LEE POINT

APPROVED PURPOSE

To use and develop the land for the purpose of a subdivision to create 513 lots in two stages, in accordance with the attached schedule of conditions and the endorsed plans.

VARIATIONS GRANTED

Clause 11.2.3 (Lot Size and Configuration in Residential Subdivisions) of the Northern Territory Planning Scheme.

BASE PERIOD OF THE PERMIT

Subject to the provisions of sections 58, 59 and 59A of the Planning Act, this permit will lapse two years from the date of issue.

D. Parkes

Dawn Parkes
2018.11.30
14:38:09
+09'30'

DAWN PARKES
Delegate
Development Consent Authority

30 November 2018

DEVELOPMENT PERMIT

DP18/0409

SCHEDULE OF CONDITIONS

CONDITIONS PRECEDENT

1. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), amended plans are to be submitted showing:
   (a) A 7m carriageway included within the 15m local road reserve, to the requirements of the City of Darwin.
   (b) The removal of the lake, or otherwise the written consent of the City of Darwin and Medical Entomology, Department of Health for this feature.
   (c) The minor boundary changes submitted during assessment of the application.
   The above is to be completed to the satisfaction of the consent authority.

2. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), the proponent is to develop and commence implementation of a monitoring program to quantify impacts on shorebirds. The program is to be developed on the advice of the Flora and Fauna division, Department of Environment and Natural Resources, Wildlife and Heritage division, Department of Tourism and Culture, to the satisfaction of the consent authority.

3. Prior to the endorsement of plans and prior to the commencement of works (including site preparation, the proponent is to prepare a Construction and Environmental Management Plan. The Plan is to address waste management, traffic control, haulage routes, stormwater drainage, and how Council land will be managed during construction, to the requirements of the City of Darwin.
   The Plan is also to address dust, noise and vibration impacts, and waste management, and include processes for:
   - communicating anticipated impacts of construction to stakeholders;
   - the reporting of, and responding to complaints; and
   - identifying when there are unexpected and unacceptable impacts to stakeholders and amending construction practices as appropriate, on the advice of the Environment division, Department of Environment and Natural Resources. The Plan must demonstrate compliance with NT EPA Noise Guidelines for Development Sites, and the NT EPA Noise Management Framework Guideline, and is also to include scope for regular review and updates and include the schedule for construction stages.

   The above is to be completed to the satisfaction of the consent authority.

4. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), the design and specifications of the on-site collection of stormwater and its discharge into the City of Darwin stormwater drainage system or another location shall be submitted to and approved by the City of Darwin, Medical Entomology, Department of Health, and the Park Development division, Department of Tourism and Culture, to the satisfaction of the consent authority.
   The stormwater design should be completely free draining to avoid the potential for mosquito breeding during low flow periods. All discharge drains to the conservation reserve must be fitted with concrete low flow inverts that terminate at a free draining tidal area.

Access to, and maintenance of the discharge drains in the Casuarina Coastal Reserve must be clarified and accepted by the Park Development division, Department of Tourism and Culture, and Medical Entomology, Department of Health.

5. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), a landscape plan is to be prepared and must be generally in accordance with the landscape concept submitted with the application but modified as follows:
   (a) The plan is to address landscaping details for all proposed road reserves and public areas, to the approval of the City of Darwin.
   (b) The plan is to include, and confirm the location of the 50m open wind buffer to the western edge of the monsoon forest boundary (or the edge of the escarpment if this is closer). The 50m open wind buffer is to comprise tall-growing, long-lived, hardy native trees, with a mature tree crown coverage of approximately 10% only, on the advice of Medical Entomology, Department of Health.
   (c) The plan is to include the location and design of trails through the conservation area, to the approval of the Park Development division, Department of Commission.
   (d) The plan is to demonstrate that mature trees in the Casuarina Coastal Reserve have been preserved, on the advice of the Aboriginal Areas Protection Authority.
   The above is to be completed to the satisfaction of the consent authority.

6. Prior to the commencement of works, an Erosion and Sediment Control Plan (ESCP) is to be submitted to and approved by the consent authority of the advice of the Rangelands division, Department of Environment and Natural Resources. The ESCP must be developed by a Certified Professional in Erosion and Sediment Control (CPESC) and should detail methods and treatments for minimising erosion and sediment loss from the site during both the clearing and establishment phases of the development. Information regarding erosion and sediment control and ESCP content is available at www.austieca.com.au and the NTG website: https://nt.gov.au/environment/soil-land-vegetation. The ESCP should be emailed for assessment to: developmentassessment.denr@nt.gov.au.

7. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), a site earthworks plan indicating finished levels of all proposed lots is to be submitted to and approved by the City of Darwin to the satisfaction of the consent authority. All cut and fill works are to be designed to eliminate the need for excessive cut/fill/retaining wall works for the proposed lots.

8. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), traffic management details including amendments to the proposed road configurations to meet the relevant subdivision and development guidelines are to be provided to the requirements of the City of Darwin, to the satisfaction of the consent authority.

9. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), public transport details including bus stop locations and designs, and a route that considers the staging of the development are to be provided to the requirements of Transport and Civil Services, Department of Infrastructure, Planning and Logistics, to the satisfaction of the consent authority.

10. Prior to the commencement of works, a proposed zoning plan must be submitted to and approved by the consent authority. The zoning plan must be consistent with the description given in the application.

GENERAL CONDITIONS

11. The works carried out under this permit shall be in accordance with the drawings endorsed as forming part of this permit.

12. The development must proceed in the order of stages as shown on the endorsed plan unless otherwise agreed in writing by the consent authority.

13. The owner of the land must enter into agreements with the relevant authorities for the provision of water supply, sewerage facilities, electricity services and telecommunication services to each lot shown on the endorsed plan in accordance with the authorities' requirements and relevant legislation at the time.

14. All existing and proposed easements and sites for existing and required utility services must be vested in the relevant authority for which the easement or site is to be created on the plan of subdivision submitted for approval by the Surveyor General.

15. Any developments on or adjacent to any easements on site shall be carried out to the requirements of the relevant service authority to the satisfaction of the consent authority.

16. All proposed roads to be created on the plan of subdivision submitted for approval by the Surveyor General must be dedicated to the relevant Northern Territory or local government authority.

17. The monitoring program to quantify impacts on shorebirds is to be implemented on the advice of the Flora and Fauna division, Department of Environment and Natural Resources, Wildlife and Heritage division, Department of Tourism and Culture, to the satisfaction of the consent authority. The results and annual updates from the program must be made publically available.

18. The Construction and Environmental Management Plan is to be implemented on the advice of the City of Darwin, and the Environment division, Department of Environment and Natural Resources, to the satisfaction of the consent authority. The Plan is also to remain publically available for the duration of construction.

19. Engineering design and specifications for the proposed and affected roads, street lighting, stormwater drainage, site earthworks, vehicular access, pedestrian/ cycle corridors and streetscaping are to be to the technical requirements of City of Darwin, to the satisfaction of the consent authority and all approved works constructed at the owner's expense. Any street and reserve lighting directly visible from the beach is also to be provided on the advice of the Environment division, Department of Environment and Natural Resources, with regards to demonstrating details of how the Western Australian Guideline for Protecting Marine Turtles from Light Impacts (WA EPA, 2010) have been incorporated.

20. Before the use commences the owner must, in accordance with Part 6 of the Planning Act, pay a monetary contribution to the City of Darwin for the upgrade of local infrastructure, in accordance with its Lee Point Road Roadwork Contribution Plan.

21. Stormwater is to be collected and discharged into the drainage network to the technical standards of the City of Darwin, the Medical Entomology division of the Department of Health, and the Park Development division, Department of Tourism and Culture, to the satisfaction of the consent authority.

22. The applicant is to demonstrate all discharge drains, including the end of point of the drains in the Casuarina Coastal Reserve, include suitable access to allow for maintenance on the advice of the Park Development division, Department of Tourism and Culture, and Medical Entomology, Department of Health, to the satisfaction of the consent authority.

23. The landscaping works shown on the endorsed plans must be carried out and completed to the satisfaction of Medical Entomology, Department of Health, the Park Development division, Department of Tourism and Culture, and the Aboriginal Areas Protection Authority, to the satisfaction of the consent authority.

24. All works relating to this permit are to be undertaken in accordance with the approved Erosion and Sediment Control Plan to the requirements of the consent authority on the advice of the Rangelands division, Department of Environment and Natural Resources.

25. Any offset or offset management plan required by the Australian Government with respect to the significant residual impact to the black-footed tree-rat (Mesembriomys gouldii gouldii) is to be completed, on the advice of the Flora and Fauna division, Department of Environment and Natural Resources, to the satisfaction of the consent authority.

26. A qualified person, under section 68 of the Waste Management and Pollution Control Act, must provide certification that the site is suitable for the intended use on the advice of the Environment division, Department of Environment and Natural Resources, to the satisfaction of the consent authority.

27. The proponent must ensure that only clean fill (virgin excavated natural material) is accepted and that the fill has been adequately assessed as being suitable for its intended use, to the requirements of the Environment division, Department of Environment and Natural Resources.

28. Before the issue of Titles, the developer is to provide written confirmation (in the form of plans or drawings) demonstrating that all lots less than 600m² for single dwellings allow for future vehicle access via a single driveway unrestricted by street infrastructure (including any power, water, sewer, or stormwater infrastructure) which demonstrates that a 3.5m driveway can be located on each lot whilst ensuring that each lot's street frontage has a minimum continuous length of 6.5m, to the satisfaction of the consent authority.

NOTES

1. Consent is required for any changes to the approved staging of the subdivision and the applicant should contact Development Assessment Services on (08) 8999 6046 for more information.

2. The Power and Water Corporation advises that the Water and Sewer Services Development Section (landdevelopmentnorth@powerwater.com.au) and Power Network Engineering Section (powerconnections@powerwater.com.au) should be contacted via email a minimum of one month prior to construction works commencing to determine the Corporation's servicing requirements, and the need for upgrading of on-site and/or surrounding infrastructure.

3. If you choose nbn to service your development, you will need to enter into a development agreement with nbn. The first step is to register the development via http://www.nbnco.com.au/develop-or-plan-with-the-nbn/new-developments.html once registered nbn will be in contact to discuss the specific requirements for the development. Nbn requires

you to apply at least 3 months before any civil works commence. All telecommunications infrastructure should be built to nbn guidelines found at http://www.nbnco.com.au/develop-or-plan-with-the-nbn/new-developments/builders-designers.html

4. The Northern Territory Environment Protection Authority advises that construction work should be conducted in accordance with the Authority's Noise Guidelines for Development Sites. The guidelines specify that on-site construction activities are restricted to between 7am and 7pm Monday to Saturday and 9am to 6pm Sunday and Public Holidays. For construction activities outside these hours refer to the guidelines for further information.

5. Any proposed works which fall within the scope of the Construction Industry Long Service Leave and Benefits Act must be notified to NT Build by lodgement of the required Project Notification Form. Payment of any levy must be made prior to the commencement of any construction activity. NT Build should be contacted via email (info@ntbuild.com.au) or by phone on 08 89364070 to determine if the proposed works are subject to the Act.

6. As part of any subdivision, the parcel numbers for addressing should comply with the Australian Standard (AS/NZS 4819:2011). For more information contact Survey and Land Records surveylandrecords@nt.gov.au 08 8995 5354. The numbers shown on the plans endorsed as forming part of this permit are indicative only and are not for addressing purposes.

7. All new roads, including alterations and extensions to existing roads, are required to be named under the Place Names Act. You should immediately make application to the Place Names Committee to commence the road naming process. Contact the Place Names Unit on 08 8995 5333 or place.names@nt.gov.au

8. The Northern Territory Environment and Protection Authority has advised that the proponent must comply with their General Environment Duty provided by section 12 of the *Waste Management and Pollution Control Act.*

9. There are statutory obligations under the Weeds Management Act to take all practical measures to manage weeds on the property. For advice on weed management please contact the Rangelands division, Department of Environment and Natural Resources.

NORTHERN TERRITORY OF AUSTRALIA

Planning Act 1999 - section 59

EXTENSION OF PERIOD OF PERMIT

DP18/0409A

DESCRIPTION OF LAND THE SUBJECT OF THE PERMIT

Lot 04873
Town of Nightcliff
577 LEE POINT RD, LEE POINT

PERIOD OF EXTENSION

The Development Consent Authority has determined to extend the period of Development Permit DP18/0409 by a period of 2 years.

Development Permit DP18/0409 will now lapse on 30 November 2022. Should works be substantially commenced in accordance with DP18/0409 on or before 30 November 2022, DPDP18/0409 will lapse on 30 November 2024.

In all other respects DP18/0409 remains unchanged.

ANN-MARIE REYNOLDS
Delegate
Development Consent Authority

17 November 2020

NORTHERN TERRITORY OF AUSTRALIA

Planning Act 1999 - Section 57(3)

VARIATION OF CONDITIONS

DP18/0409B

DESCRIPTION OF LAND THE SUBJECT OF THE PERMIT

Lot 04873
Town of Nightcliff
577 LEE POINT RD, LEE POINT

VARIATION

Consent is granted to vary Condition 11 of Development Permit DP18/0409 for the purpose of relocating lot 488, deleting one public open space lot of 450m2, boundary realignments to lots 49, 50, 178, 178, 319 & 320, and reconfiguring the staging to allow the subdivision to occur in five stages, in accordance with the drawings endorsed as forming part of this permit.

In all other respects Development Permit DP18/0409 remains unchanged.

BASE PERIOD OF THE PERMIT

The base period of the original permit was previously extended by DP18/0409A for a period of 2 years. This variation of conditions development permit does not further extend this base period.

SUZANNE PHILIP
Delegate
Development Consent Authority

14 July 2022

SCHEDULE OF CONDITIONS

DEVELOPMENT PERMIT

DP18/0409B

CONDITIONS PRECEDENT

1. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), amended plans are to be submitted showing:
   (a) A 7m carriageway included within the 15m local road reserve, to the requirements of the City of Darwin.
   (b) The removal of the lake, or otherwise the written consent of the City of Darwin and Medical Entomology, Department of Health for this feature.
   (c) The minor boundary changes submitted during assessment of the application.
   The above is to be completed to the satisfaction of the consent authority.

2. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), the proponent is to develop and commence implementation of a monitoring program to quantify impacts on shorebirds. The program is to be developed on the advice of the Flora and Fauna division, Department of Environment and Natural Resources, Wildlife and Heritage division, Department of Tourism and Culture, to the satisfaction of the consent authority.

3. Prior to the endorsement of plans and prior to the commencement of works (including site preparation, the proponent is to prepare a Construction and Environmental Management Plan. The Plan is to address waste management, traffic control, haulage routes, stormwater drainage, and how Council land will be managed during construction, to the requirements of the City of Darwin.
   The Plan is also to address dust, noise and vibration impacts, and waste management, and include processes for:
   • communicating anticipated impacts of construction to stakeholders;
   • the reporting of, and responding to complaints; and
   • identifying when there are unexpected and unacceptable impacts to stakeholders and amending construction practices as appropriate, on the advice of the Environment division, Department of Environment and Natural Resources. The Plan must demonstrate compliance with NT EPA Noise Guidelines for Development Sites, and the NT EPA Noise Management Framework Guideline, and is also to include scope for regular review and updates and include the schedule for construction stages.
   The above is to be completed to the satisfaction of the consent authority.

4. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), the design and specifications of the on-site collection of stormwater and its discharge into the City of Darwin stormwater drainage system or another location shall be submitted to and approved by the City of Darwin, Medical Entomology, Department of Health, and the Park Development division, Department of Tourism and Culture, to the satisfaction of the consent authority.

The stormwater design should be completely free draining to avoid the potential for mosquito breeding during low flow periods. All discharge drains to the conservation reserve must be fitted with concrete low flow inverts that terminate at a free draining tidal area.
Access to, and maintenance of the discharge drains in the Casuarina Coastal Reserve must be clarified and accepted by the Park Development division, Department of Tourism and Culture, and Medical Entomology, Department of Health.

5. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), a landscape plan is to be prepared and must be generally in accordance with the landscape concept submitted with the application but modified as follows:
(a) The plan is to address landscaping details for all proposed road reserves and public areas, to the approval of the City of Darwin.
(b) The plan is to include, and confirm the location of the 50m open wind buffer to the western edge of the monsoon forest boundary (or the edge of the escarpment if this is closer).The 50m open wind buffer is to comprise tall-growing, long-lived, hardy native trees, with a mature tree crown coverage of approximately 10% only, on the advice of Medical Entomology, Department of Health.
(c) The plan is to include the location and design of trails through the conservation area, to the approval of the Park Development division, Department of Commission.
(d) The plan is to demonstrate that mature trees in the Casuarina Coastal Reserve have been preserved, on the advice of the Aboriginal Areas Protection Authority.
The above is to be completed to the satisfaction of the consent authority.

6. Prior to the commencement of works, an Erosion and Sediment Control Plan (ESCP) is to be submitted to and approved by the consent authority of the advice of the Rangelands division, Department of Environment and Natural Resources.The ESCP must be developed by a Certified Professional in Erosion and Sediment Control (CPESC) and should detail methods and treatments for minimising erosion and sediment loss from the site during both the clearing and establishment phases of the development. Information regarding erosion and sediment control and ESCP content is available at www.austieca.com.au and the NTG website: https://nt.gov.au/environment/soil-land-vegetation.The ESCP should be emailed for assessment to: developmentassessment.denr@nt.gov.au.

7. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), a site earthworks plan indicating finished levels of all proposed lots is to be submitted to and approved by the City of Darwin to the satisfaction of the consent authority. All cut and fill works are to be designed to eliminate the need for excessive cut/fill/retaining wall works for the proposed lots.

8. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), traffic management details including amendments to the proposed road configurations to meet the relevant subdivision and development guidelines are to be provided to the requirements of the City of Darwin, to the satisfaction of the consent authority.

9. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), public transport details including bus stop locations and designs, and a route that considers the staging of the development are to be provided to the requirements of Transport and Civil Services, Department of Infrastructure, Planning and Logistics, to the satisfaction of the consent authority.

10. Prior to the commencement of works, a proposed zoning plan must be submitted to and approved by the consent authority. The zoning plan must be consistent with the description given in the application.

GENERAL CONDITIONS

11. The works carried out under this permit shall be in accordance with the drawings endorsed as forming part of this permit.

12. The development must proceed in the order of stages as shown on the endorsed plan unless otherwise agreed in writing by the consent authority.

13. The owner of the land must enter into agreements with the relevant authorities for the provision of water supply, sewerage facilities, electricity services and telecommunication services to each lot shown on the endorsed plan in accordance with the authorities' requirements and relevant legislation at the time.

14. All existing and proposed easements and sites for existing and required utility services must be vested in the relevant authority for which the easement or site is to be created on the plan of subdivision submitted for approval by the Surveyor General.

15. Any developments on or adjacent to any easements on site shall be carried out to the requirements of the relevant service authority to the satisfaction of the consent authority.

16. All proposed roads to be created on the plan of subdivision submitted for approval by the Surveyor General must be dedicated to the relevant Northern Territory or local government authority.

17. The monitoring program to quantify impacts on shorebirds is to be implemented on the advice of the Flora and Fauna division, Department of Environment and Natural Resources, Wildlife and Heritage division, Department of Tourism and Culture, to the satisfaction of the consent authority. The results and annual updates from the program must be made publically available.

18. The Construction and Environmental Management Plan is to be implemented on the advice of the City of Darwin, and the Environment division, Department of Environment and Natural Resources, to the satisfaction of the consent authority. The Plan is also to remain publically available for the duration of construction.

19. Engineering design and specifications for the proposed and affected roads, street lighting, stormwater drainage, site earthworks, vehicular access, pedestrian/ cycle corridors and streetscaping are to be to the technical requirements of City of Darwin, to the satisfaction of the consent authority and all approved works constructed at the owner’s expense. Any street and reserve lighting directly visible from the beach is also to be provided on the advice of the Environment division, Department of Environment and Natural Resources, with regards to demonstrating details of how the Western Australian Guideline for Protecting Marine Turtles from Light Impacts (WA EPA, 2010) have been incorporated.

20. Before the use commences the owner must, in accordance with Part 6 of the Planning Act, pay a monetary contribution to the City of Darwin for the upgrade of local infrastructure, in accordance with its Lee Point Road Roadwork Contribution Plan.

21. Stormwater is to be collected and discharged into the drainage network to the technical standards of the City of Darwin, the Medical Entomology division of the Department of Health, and the Park Development division, Department of Tourism and Culture, to the satisfaction of the consent authority.

22. The applicant is to demonstrate all discharge drains, including the end of point of the drains in the Casuarina Coastal Reserve, include suitable access to allow for maintenance on the advice of the Park Development division, Department of Tourism and Culture, and Medical Entomology, Department of Health, to the satisfaction of the consent authority.

23. The landscaping works shown on the endorsed plans must be carried out and completed to the satisfaction of Medical Entomology, Department of Health, the Park Development division, Department of Tourism and Culture, and the Aboriginal Areas Protection Authority, to the satisfaction of the consent authority.

24. All works relating to this permit are to be undertaken in accordance with the approved Erosion and Sediment Control Plan to the requirements of the consent authority on the advice of the Rangelands division, Department of Environment and Natural Resources.

25. Any offset or offset management plan required by the Australian Government with respect to the significant residual impact to the black-footed tree-rat (Mesembriomys gouldii gouldii) is to be completed, on the advice of the Flora and Fauna division, Department of Environment and Natural Resources, to the satisfaction of the consent authority.

26. A qualified person, under section 68 of the Waste Management and Pollution Control Act, must provide certification that the site is suitable for the intended use on the advice of the Environment division, Department of Environment and Natural Resources, to the satisfaction of the consent authority.

27. The proponent must ensure that only clean fill (virgin excavated natural material) is accepted and that the fill has been adequately assessed as being suitable for its intended use, to the requirements of the Environment division, Department of Environment and Natural Resources.

28. Before the issue of Titles, the developer is to provide written confirmation (in the form of plans or drawings) demonstrating that all lots less than 600m² for single dwellings allow for future vehicle access via a single driveway unrestricted by street infrastructure (including any power, water, sewer, or stormwater infrastructure) which demonstrates that a 3.5m driveway can be located on each lot whilst ensuring that each lot's street frontage has a minimum continuous length of 6.5m, to the satisfaction of the consent authority.

Notes

1. Consent is required for any changes to the approved staging of the subdivision and the applicant should contact Development Assessment Services on (08) 8999 6046 for more information.

2. The Power and Water Corporation advises that the Water and Sewer Services Development Section (landdevelopmentnorth@powerwater.com.au) and Power Network Engineering Section (powerconnections@powerwater.com.au) should be contacted via email a minimum of one month prior to construction works commencing to determine the Corporation's servicing requirements, and the need for upgrading of on-site and/or surrounding infrastructure.

3. If you choose nbn to service your development, you will need to enter into a development agreement with nbn. The first step is to register the development via http://www.nbnco.com.au/develop-or-plan-with-the-nbn/new-developments.html once registered nbn will be in contact to discuss the specific requirements for the development. Nbn requires you to apply at least 3 months before any civil works commence. All telecommunications infrastructure should be built to nbn guidelines found at http://www.nbnco.com.au/develop-or-plan-with-the-nbn/new-developments/builders-designers.html

4. The Northern Territory Environment Protection Authority advises that construction work should be conducted in accordance with the Authority's Noise Guidelines for Development Sites. The guidelines specify that on-site construction activities are restricted to between 7am and 7pm Monday to Saturday and 9am to 6pm Sunday and Public Holidays. For construction activities outside these hours refer to the guidelines for further information.

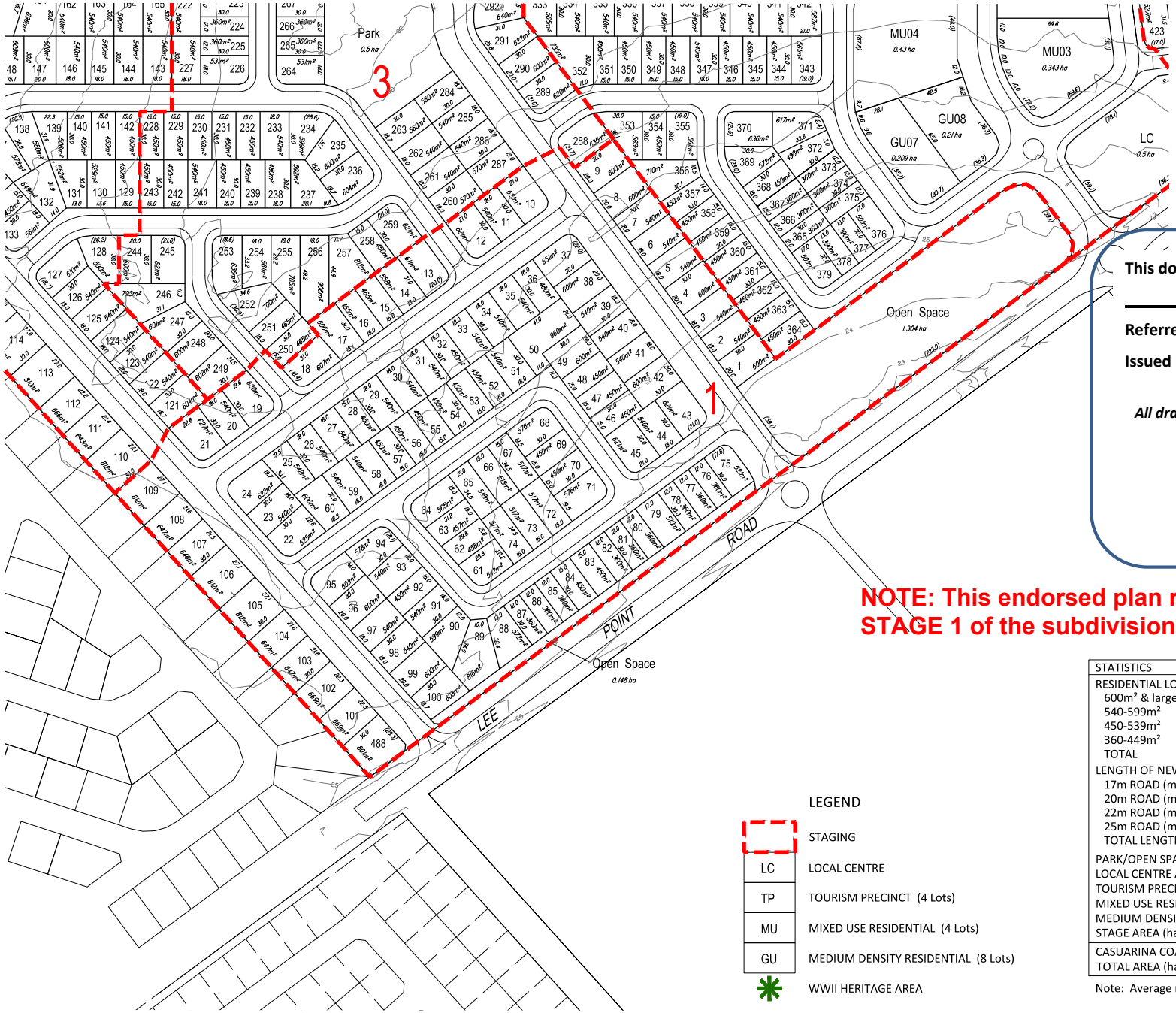
5. Any proposed works which fall within the scope of the Construction Industry Long Service Leave and Benefits Act must be notified to NT Build by lodgement of the required Project Notification Form. Payment of any levy must be made prior to the commencement of any construction activity. NT Build should be contacted via email (info@ntbuild.com.au) or by phone on 08 89364070 to determine if the proposed works are subject to the Act.

6. As part of any subdivision, the parcel numbers for addressing should comply with the Australian Standard (AS/NZS 4819:2011). For more information contact Survey and Land Records surveylandrecords@nt.gov.au 08 8995 5354. The numbers shown on the plans endorsed as forming part of this permit are indicative only and are not for addressing purposes.

7. All new roads, including alterations and extensions to existing roads, are required to be named under the Place Names Act. You should immediately make application to the Place Names Committee to commence the road naming process. Contact the Place Names Unit on 08 8995 5333 or place.names@nt.gov.au

8. The Northern Territory Environment and Protection Authority has advised that the proponent must comply with their General Environment Duty provided by section 12 of the Waste Management and Pollution Control Act.

9. There are statutory obligations under the Weeds Management Act to take all practical measures to manage weeds on the property. For advice on weed management please contact the Rangelands division, Department of Environment and Natural Resources.



NOTES

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(2) The contours on this plan are derived from Bennett & Bennett Detail Survey 160549_001_DET_C.

(3) The dimensions, areas, size and location of improvements, flood information (if shown) and number of lots shown on this plan are approximate only and may vary.

(4) This plan may not be reproduced unless these notes are included.

This document contains drawing numbers:
2017/0569/01B

Referred to in Permit No: DP18/0409B

Issued by the consent authority on: 14 July 2022

All drawings contained within this document have been authorised by the delegate of the consent authority.

Delegate

NOTE: This endorsed plan relates to STAGE 1 of the subdivision only

Drawing number 2017/0569/01B

Referred to in Permit No: DP18/0409

LEGEND

	STAGING
LC	LOCAL CENTRE
TP	TOURISM PRECINCT (4 Lots)
MU	MIXED USE RESIDENTIAL (4 Lots)
GU	MEDIUM DENSITY RESIDENTIAL (8 Lots)
*	WWII HERITAGE AREA

STATISTICS	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	TOTAL
RESIDENTIAL LOTS						
600m² & larger	36	31	21	13	11	112 (23%)
540-599m²	36	24	28	15	23	126 (26%)
450-539m²	29	21	34	35	49	168 (34%)
360-449m²	9	16	14	18	25	82 (17%)
TOTAL	110	92	97	81	108	488 (100%)
LENGTH OF NEW						
17m ROAD (m)	580	390	720	540	805	3135
20m ROAD (m)	270	455	195	1400	380	2700
22m ROAD (m)	245	270	0	0	0	515
25m ROAD (m)	245	150	460	605	0	1460
TOTAL LENGTH (m)	1340	1265	1375	2545	1285	7810
PARK/OPEN SPACE AREA (ha)	1.45	4.9	1.15	1.31	2.51	11.32
LOCAL CENTRE AREA (ha)	0	0	0	0.5	0	0.5
TOURISM PRECINCT AREA (ha)	0	0	0	2.83	0	2.83
MIXED USE RESIDENTIAL AREA (ha)	0	0	0	1.45	0	1.45
MEDIUM DENSITY RES. AREA (ha)	0	0	0	1.06	0.6	1.66
STAGE AREA (ha)	10.19	12.52	9.18	16.55	10.94	59.38
CASUARINA COASTAL RESERVE (CCR) DEDICATION (ha)						21.95
TOTAL AREA (ha)						81.33

Note: Average residential lot size is 520m²

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JFP URBAN CONSULTANTS PTY LTD A.C.N. 050 414 045
PLANNERS
URBAN DESIGNERS
SURVEYORS
ENGINEERS
LANDSCAPE ARCHITECTS

NORTH:

SCALE: SCALE: @ A3 1:2500
0 25 50 75 100 125 150 175
THIS SCALE SHOWN IS ORIGINAL DRAWING SCALE - (A3 SIZE)
DO NOT SCALE FROM THIS DRAWING - USE ONLY DIMENSIONS PROVIDED - IF IN DOUBT PLEASE ENQUIRE

DESIGNED	TJM	CHECKED	GB	L.A.	DARWIN CITY COUNCIL
DRAWN	TJM	APPROVED	GB	COUNCIL REF	

ISSUES:

J	TRIANGULAR LOTS AMENDED	16-06-22	TJM
H	ROAD INTERSECTION AMENDED	02-03-22	TJM
G	LOTS 484-488 AMENDED	13-10-21	TJM
F	LOTS 101, 102, 489 AMENDED	08-10-21	TJM
E	STAGE 1 ADDITIONAL LOT	29-09-21	TJM
D	LAYOUT AMENDED	05-04-19	TJM
A	ORIGINAL	21-11-17	TJM

ISSUE: DETAILS: DATE: INIT:

TITLE:

PROPOSAL PLAN STAGES 1-5
DEFENCE HOUSING AUSTRALIA
LEE POINT ROAD, LEE POINT - DARWIN

DETAILS:
JOB NUMBER: M2737P_DA1 PLAN: R1 ISSUE: J
SHEET: 2 OF 4
DATE: 16th June 2022

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PROPERTY DESCRIPTION

LOT 4873 ON S78/107
TOTAL AREA 81.33 ha

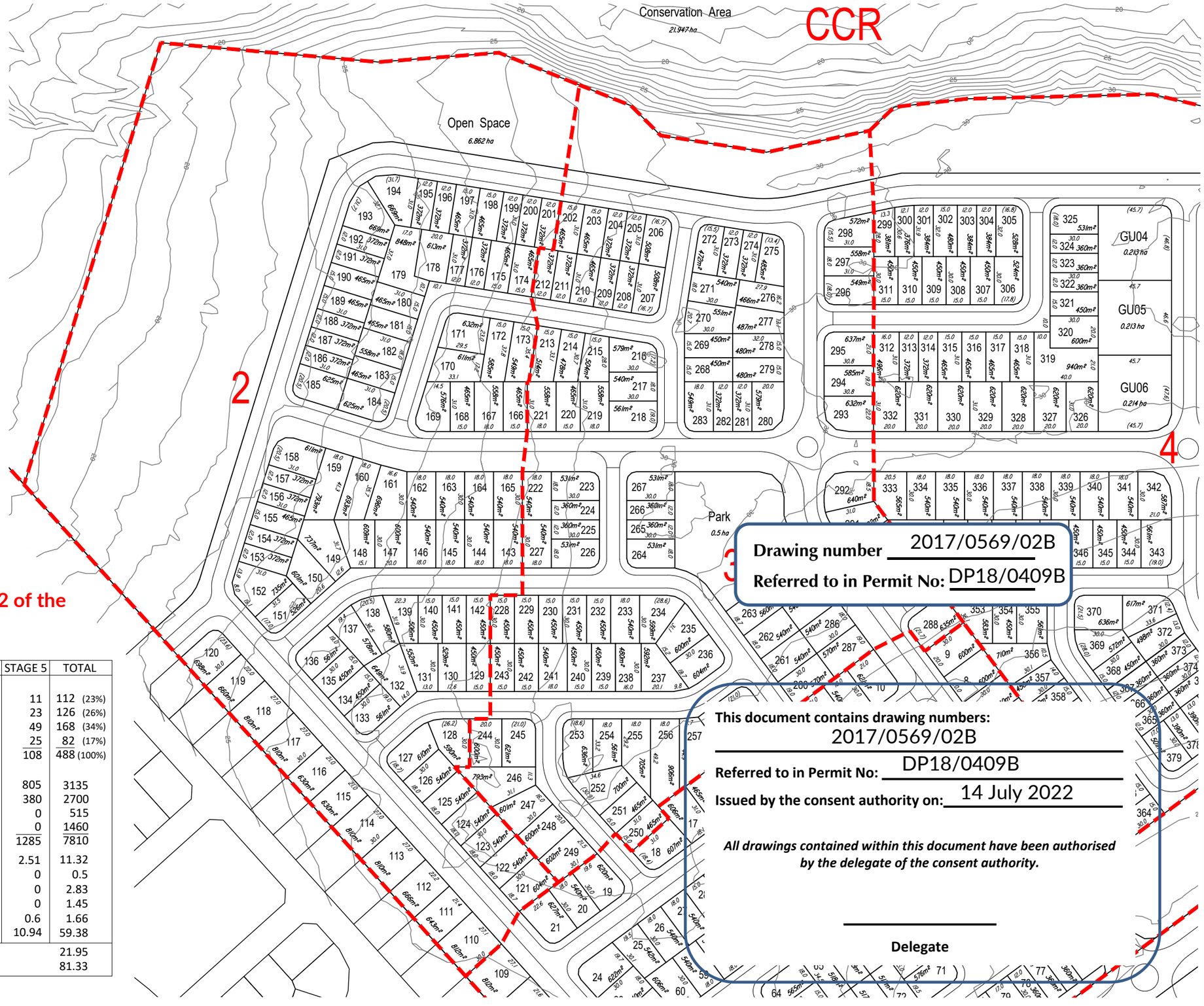
LEGEND

	STAGING
LC	LOCAL CENTRE
TP	TOURISM PRECINCT (4 Lots)
MU	MIXED USE RESIDENTIAL (4 Lots)
GU	MEDIUM DENSITY RESIDENTIAL (8 Lots)
*	WWII HERITAGE AREA

Note: This endorsed plan relates to STAGE 2 of the subdivision only.

STATISTICS	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	TOTAL
RESIDENTIAL LOTS						
600m² & larger	36	31	21	13	11	112 (23%)
540-599m²	36	24	28	15	23	126 (26%)
450-539m²	29	21	34	35	49	168 (34%)
360-449m²	9	16	14	18	25	82 (17%)
TOTAL	110	92	97	81	108	488 (100%)
LENGTH OF NEW						
17m ROAD (m)	580	390	720	540	805	3135
20m ROAD (m)	270	455	195	1400	380	2700
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LOCAL CENTRE AREA (ha)	0	0	0	0.5	0	0.5
TOURISM PRECINCT AREA (ha)	0	0	0	2.83	0	2.83
MIXED USE RESIDENTIAL AREA (ha)	0	0	0	1.45	0	1.45
MEDIUM DENSITY RES. AREA (ha)	0	0	0	1.06	0.6	1.66
STAGE AREA (ha)	10.19	12.52	9.18	16.55	10.94	59.38
CASUARINA COASTAL RESERVE (CCR) DEDICATION (ha)						21.95
TOTAL AREA (ha)						81.33

Note: Average residential lot size is 520m²



Drawing number 2017/0569/02B
Referred to in Permit No: DP18/0409B

This document contains drawing numbers:
2017/0569/02B
Referred to in Permit No: DP18/0409B
Issued by the consent authority on: 14 July 2022

All drawings contained within this document have been authorised by the delegate of the consent authority.

Delegate

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NORTH:

SCALE:
SCALE: @ A3 1:2500
0 25 50 75 100 125 150 175
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DESIGNED	TJM	CHECKED	GB	L.A. DARWIN CITY COUNCIL
DRAWN	TJM	APPROVED	GB	COUNCIL REF

ISSUES:

ISSUE:	DETAILS:	DATE:	INIT:
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TITLE:

PROPOSAL PLAN STAGES 1-5
DEFENCE HOUSING AUSTRALIA
LEE POINT ROAD, LEE POINT - DARWIN

DETAILS:
JOB NUMBER: M2737P_DA1 PLAN: R1 ISSUE: J
SHEET: 3 OF 4
DATE: 16th June 2022

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LOT 4873 ON S78/107
TOTAL AREA 81.33 ha

Drawing number 2017/0569/03B
Referred to in Permit No: DP18/0409B

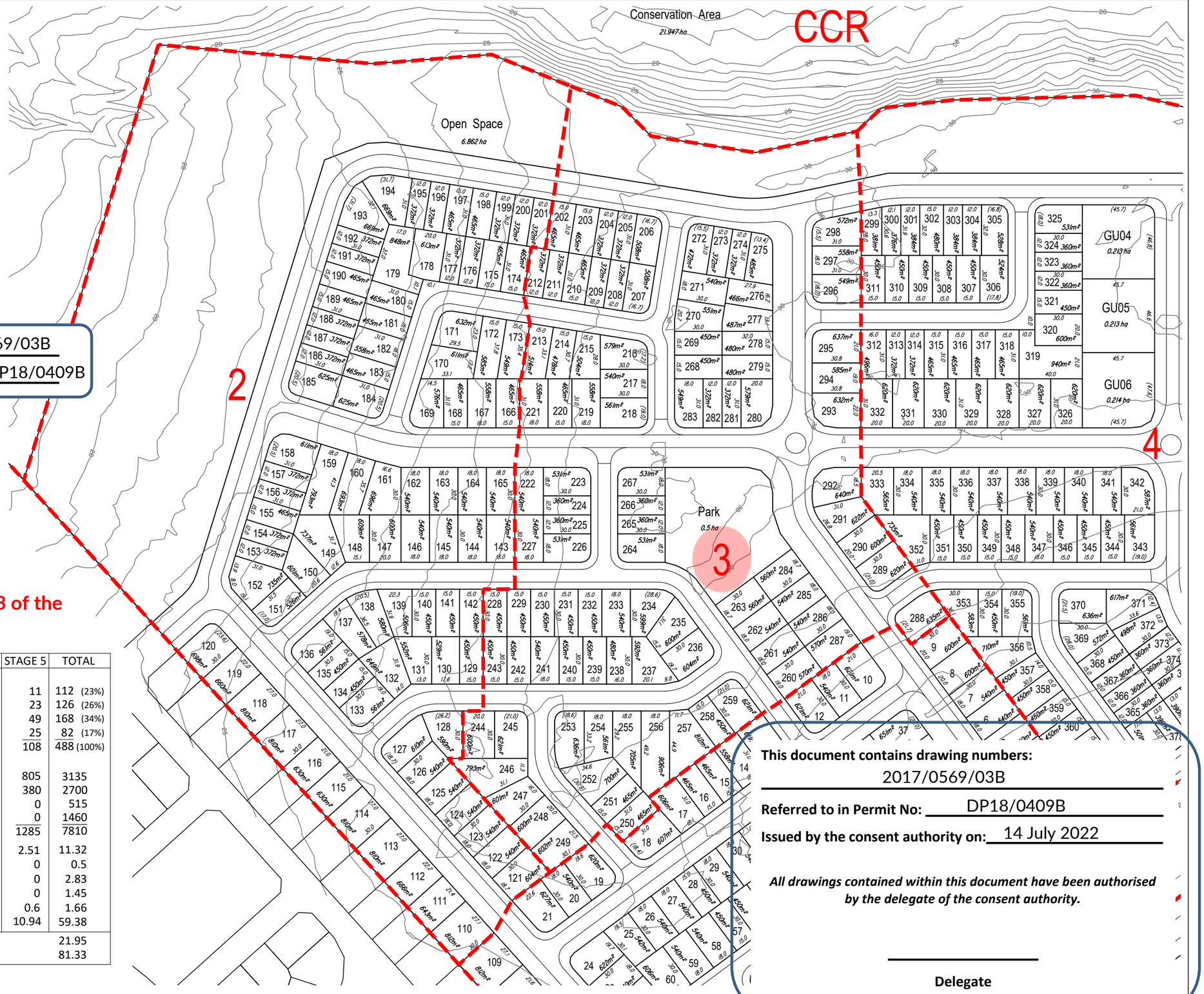
LEGEND

	STAGING
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TP	TOURISM PRECINCT (4 Lots)
MU	MIXED USE RESIDENTIAL (4 Lots)
GU	MEDIUM DENSITY RESIDENTIAL (8 Lots)
✱	WWII HERITAGE AREA

Note: This endorsed plan relates to STAGE 3 of the subdivision only.

STATISTICS	STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5	TOTAL
RESIDENTIAL LOTS						
600m² & larger	36	31	21	13	11	112 (23%)
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CASUARINA COASTAL RESERVE (CCR) DEDICATION (ha)						21.95
TOTAL AREA (ha)						81.33

Note: Average residential lot size is 520m²



This document contains drawing numbers:
2017/0569/03B

Referred to in Permit No: DP18/0409B

Issued by the consent authority on: 14 July 2022

All drawings contained within this document have been authorised by the delegate of the consent authority.

Delegate

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0 25 50 75 100 125 150 175
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DESIGNED	TJM	CHECKED	GB	L.A. DARWIN CITY COUNCIL
DRAWN	TJM	APPROVED	GB	COUNCIL REF

ISSUES:

	DETAILS:	DATE:	INIT:
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E	STAGE 1 ADDITIONAL LOT	29-09-21	TJM
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A	ORIGINAL	21-11-17	TJM

TITLE:
PROPOSAL PLAN STAGES 1-5
DEFENCE HOUSING AUSTRALIA
LEE POINT ROAD, LEE POINT - DARWIN

DETAILS:
JOB NUMBER: M2737P_DA1 PLAN ISSUE: R1 J
SHEET: 3 OF 4
DATE: 16th June 2022

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NORTHERN TERRITORY OF AUSTRALIA

Planning Act 1999 - section 59

EXTENSION OF PERIOD OF PERMIT

DP18/0409C

DESCRIPTION OF LAND THE SUBJECT OF THE PERMIT

Lot 04873
Town of Nightcliff
577 LEE POINT RD, LEE POINT

PERIOD OF EXTENSION

The Development Consent Authority has determined to extend the period of Development Permit DP18/0409B by a period of one year.

Development Permit DP18/0409B will now lapse on 30 November 2023. Should works be substantially commenced in accordance with DP18/0409B on or before 30 November 2023, DP18/0409B will lapse on 30 November 2025.

In all other respects DP18/0409B remains unchanged.

Suzanne Philip
2022.10.27
10:46:59
+09'30'

SUZANNE PHILIP
Delegate
Development Consent Authority
27 October 2022

NORTHERN TERRITORY OF AUSTRALIA

Planning Act 1999 - section 59

EXTENSION OF PERIOD OF PERMIT

DP18/0409D

DESCRIPTION OF LAND THE SUBJECT OF THE PERMIT

Lot 04873
Town of Nightcliff
577 LEE POINT RD, LEE POINT

PERIOD OF EXTENSION

The Development Consent Authority has determined to extend the period of Development Permit DP18/0409C by a period of two years.

Development Permit DP18/0409C will now lapse on 30 November 2025. Should works be substantially commenced in accordance with DP18/0409C on or before 30 November 2025, DP18/0409C will lapse on 30 November 2027.

In all other respects DP18/0409C remains unchanged.

SUZANNE PHILIP
Delegate
Development Consent Authority

01 December 2023

NORTHERN TERRITORY OF AUSTRALIA

Planning Act 1999 - Section 57(3)

VARIATION OF CONDITIONS

DP18/0409E

DESCRIPTION OF LAND THE SUBJECT OF THE PERMIT

Lot 04873
Town of Nightcliff
577 LEE POINT RD, LEE POINT

VARIATION

Consent is granted to vary Condition 11 of Development Permit DP18/0409B to allow "Stage 1" works to be completed in 2 stages, in accordance with the drawing numbered 2017/0569/01E, endorsed as forming part of this permit.

In all other respects Development Permit DP18/0409 and DP18/0409B remain unchanged.

BASE PERIOD OF THE PERMIT

The base period of the original permit was previously extended by DP18/0409D for a period of 2 years. This variation of conditions development permit does not further extend this base period.

AMIT MAGOTRA
Delegate
Development Consent Authority
22 April 2025

SCHEDULE OF CONDITIONS

DEVELOPMENT PERMIT

DP18/0409E

CONDITIONS PRECEDENT

1. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), amended plans are to be submitted showing:
   a. A 7m carriageway included within the 15m local road reserve, to the requirements of the City of Darwin.
   b. The removal of the lake, or otherwise the written consent of the City of Darwin and Medical Entomology, Department of Health for this feature.
   c. The minor boundary changes submitted during assessment of the application.

   The above is to be completed to the satisfaction of the consent authority.

2. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), the proponent is to develop and commence implementation of a monitoring program to quantify impacts on shorebirds. The program is to be developed on the advice of the Flora and Fauna division, Department of Environment and Natural Resources, Wildlife and Heritage division, Department of Tourism and Culture, to the satisfaction of the consent authority.

3. Prior to the endorsement of plans and prior to the commencement of works (including site preparation, the proponent is to prepare a Construction and Environmental Management Plan. The Plan is to address waste management, traffic control, haulage routes, stormwater drainage, and how Council land will be managed during construction, to the requirements of the City of Darwin.

   The Plan is also to address dust, noise and vibration impacts, and waste management, and include processes for:
   - communicating anticipated impacts of construction to stakeholders;
   - the reporting of, and responding to complaints; and
   - identifying when there are unexpected and unacceptable impacts to stakeholders and amending construction practices as appropriate, on the advice of the Environment division, Department of Environment and Natural Resources. The Plan must demonstrate compliance with NT EPA Noise Guidelines for Development Sites, and the NT EPA Noise Management Framework Guideline, and is also to include scope for regular review and updates and include the schedule for construction stages.

   The above is to be completed to the satisfaction of the consent authority

4. Prior to the endorsement of plans and prior to the commencement of works (including site reparation), the design and specifications of the on-site collection of stormwater and its discharge into the City of Darwin stormwater drainage system or another location shall be submitted to and approved by the City of Darwin, Medical Entomology, Department of Health, and the Park Development division, Department of Tourism and Culture, to the satisfaction of the consent authority. The stormwater design should be completely free draining to avoid the potential for mosquito breeding during low flow periods. All discharge drains to the conservation reserve must

be fitted with concrete low flow inverts that terminate at a free draining tidal area. Access to, and maintenance of the discharge drains in the Casuarina Coastal Reserve must be clarified and accepted by the Park Development division, Department of Tourism and Culture, and Medical Entomology, Department of Health.

5. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), a landscape plan is to be prepared and must be generally in accordance with the landscape concept submitted with the application but modified as follows:
   a. The plan is to address landscaping details for all proposed road reserves and public areas, to the approval of the City of Darwin.
   b. The plan is to include, and confirm the location of the 50m open wind buffer to the western edge of the monsoon forest boundary (or the edge of the escarpment if this is closer).The 50m open wind buffer is to comprise tall-growing, long-lived, hardy native trees, with a mature tree crown coverage of approximately 10% only, on the advice of Medical Entomology, Department of Health.
   c. The plan is to include the location and design of trails through the conservation area, to the approval of the Park Development division, Department of Commission.
   d. The plan is to demonstrate that mature trees in the Casuarina Coastal Reserve have been preserved, on the advice of the Aboriginal Areas Protection Authority.

   The above is to be completed to the satisfaction of the consent authority.

6. Prior to the commencement of works, an Erosion and Sediment Control Plan (ESCP) is to be submitted to and approved by the consent authority of the advice of the Rangelands division, Department of Environment and Natural Resources. The ESCP must be developed by a Certified Professional in Erosion and Sediment Control (CPESC) and should detail methods and treatments for minimising erosion and sediment loss from the site during both the clearing and establishment phases of the development. Information regarding erosion and sediment control and ESCP content is available at www.austieca.com.au and the NTG website:https://nt.gov.au/environment/soil-land-vegetation.The ESCP should be emailed for assessment to: developmentassessment.denr@nt.gov.au

7. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), a site earthworks plan indicating finished levels of all proposed lots is to be submitted to and approved by the City of Darwin to the satisfaction of the consent authority. All cut and fill works are to be designed to eliminate the need for excessive cut/fill/retaining wall works for the proposed lots.

8. Prior to the endorsement of plans and prior to the commencement of works (including site preparation), traffic management details including amendments to the proposed road configurations to meet the relevant subdivision and development guidelines are to be provided to the requirements of the City of Darwin, to the satisfaction of the consent authority.

9. Prior to the endorsement of plans and prior to the commencement of works (including site reparation), public transport details including bus stop locations and designs, and a route that considers the staging of the development are to be provided to the requirements of Transport and Civil Services, Department of Infrastructure, Planning and Logistics, to the satisfaction of the consent authority.

10. Prior to the commencement of works, a proposed zoning plan must be submitted to and approved by the consent authority. The zoning plan must be consistent with the description given in the application.

GENERAL CONDITIONS

11. The works carried out under this permit shall be in accordance with the drawings numbered 2017/0569/01E endorsed as forming part of this permit.

12. The development must proceed in the order of stages as shown on the endorsed plan unless otherwise agreed in writing by the consent authority.

13. The owner of the land must enter into agreements with the relevant authorities for the provision of water supply, sewerage facilities, electricity services and telecommunication services to each lot shown on the endorsed plan in accordance with the authorities' requirements and relevant legislation at the time.

14. All existing and proposed easements and sites for existing and required utility services must be vested in the relevant authority for which the easement or site is to be created on the plan of subdivision submitted for approval by the Surveyor General.

15. Any developments on or adjacent to any easements on site shall be carried out to the requirements of the relevant service authority to the satisfaction of the consent authority.

16. All proposed roads to be created on the plan of subdivision submitted for approval by the Surveyor General must be dedicated to the relevant Northern Territory or local government authority.

17. The monitoring program to quantify impacts on shorebirds is to be implemented on the advice of the Flora and Fauna division, Department of Environment and Natural Resources, Wildlife and Heritage division, Department of Tourism and Culture, to the satisfaction of the consent authority. The results and annual updates from the program must be made publicly available.

18. The Construction and Environmental Management Plan is to be implemented on the advice of the City of Darwin, and the Environment division, Department of Environment and Natural Resources, to the satisfaction of the consent authority. The Plan is also to remain publicly available for the duration of construction.

19. Engineering design and specifications for the proposed and affected roads, street lighting, stormwater drainage, site earthworks, vehicular access, pedestrian/ cycle corridors and streetscaping are to be to the technical requirements of City of Darwin, to the satisfaction of the consent authority and all approved works constructed at the owner’s expense. Any street and reserve lighting directly visible from the beach is also to be provided on the advice of the Environment division, Department of Environment and Natural Resources, with regards to demonstrating details of how the Western Australian Guideline for Protecting Marine Turtles from Light Impacts (WA EPA, 2010) have been incorporated.

20. Before the use commences the owner must, in accordance with Part 6 of the *Planning Act,* pay a monetary contribution to the City of Darwin for the upgrade of local infrastructure, in accordance with its Lee Point Road Roadwork Contribution Plan.

21. Stormwater is to be collected and discharged into the drainage network to the technical standards of the City of Darwin, the Medical Entomology division of the Department of Health, and the Park Development division, Department of Tourism and Culture, to the satisfaction of the consent authority.

22. The applicant is to demonstrate all discharge drains, including the end of point of the drains in the Casuarina Coastal Reserve, include suitable access to allow for maintenance on the advice of the Park Development division, Department of Tourism and Culture, and Medical Entomology, Department of Health, to the satisfaction of the consent authority.

23. The landscaping works shown on the endorsed plans must be carried out and completed to the satisfaction of Medical Entomology, Department of Health, the Park Development division, Department of Tourism and Culture, and the Aboriginal Areas Protection Authority, to the satisfaction of the consent authority.

24. All works relating to this permit are to be undertaken in accordance with the approved Erosion and Sediment Control Plan to the requirements of the consent authority on the advice of the Rangelands division, Department of Environment and Natural Resources.

25. Any offset or offset management plan required by the Australian Government with respect to the significant residual impact to the black-footed tree-rat (Mesembriomys gouldii gouldii) is to be completed, on the advice of the Flora and Fauna division, Department of Environment and Natural Resources, to the satisfaction of the consent authority.

26. A qualified person, under section 68 of the *Waste Management and Pollution Control Act*, must provide certification that the site is suitable for the intended use on the advice of the Environment division, Department of Environment and Natural Resources, to the satisfaction of the consent authority.

27. The proponent must ensure that only clean fill (virgin excavated natural material) is accepted and that the fill has been adequately assessed as being suitable for its intended use, to the requirements of the Environment division, Department of Environment and Natural Resources.

28. Before the issue of Titles, the developer is to provide written confirmation (in the form of plans or drawings) demonstrating that all lots less than 600m² for single dwellings allow for future vehicle access via a single driveway unrestricted by street infrastructure (including any power, water, sewer, or stormwater infrastructure) which demonstrates that a 3.5m driveway can be located on each lot whilst ensuring that each lot's street frontage has a minimum continuous length of 6.5m, to the satisfaction of the consent authority.

NOTES

1. Consent is required for any changes to the approved staging of the subdivision and the applicant should contact Development Assessment Services on (08) 8999 6046 for more information.

2. The Power and Water Corporation advises that the Water and Sewer Services Development Section (landdevelopmentnorth@powerwater.com.au) and Power Network Engineering Section (powerconnections@powerwater.com.au) should be contacted via email a minimum of one month prior to construction works commencing to determine the Corporation's servicing requirements, and the need for upgrading of on-site and/or surrounding infrastructure

3. If you choose nbn to service your development, you will need to enter into a development agreement with nbn. The first step is to register the development via http://www.nbnco.com.au/develop-or-plan-with-the-nbn/new-developments.html once registered nbn will be in contact to discuss the specific requirements for the development. Nbn requires you to apply at least 3 months before any civil works commence. All telecommunications infrastructure should be built to nbn guidelines found at http://www.nbnco.com.au/develop-or-plan-with-the-nbn/new-developments/builders-designers.html

4. The Northern Territory Environment Protection Authority advises that construction work should be conducted in accordance with the Authority's Noise Guidelines for Development Sites. The guidelines specify that on-site construction activities are restricted to between 7am and 7pm Monday to Saturday and 9am to 6pm Sunday and Public Holidays. For construction activities outside these hours refer to the guidelines for further information.

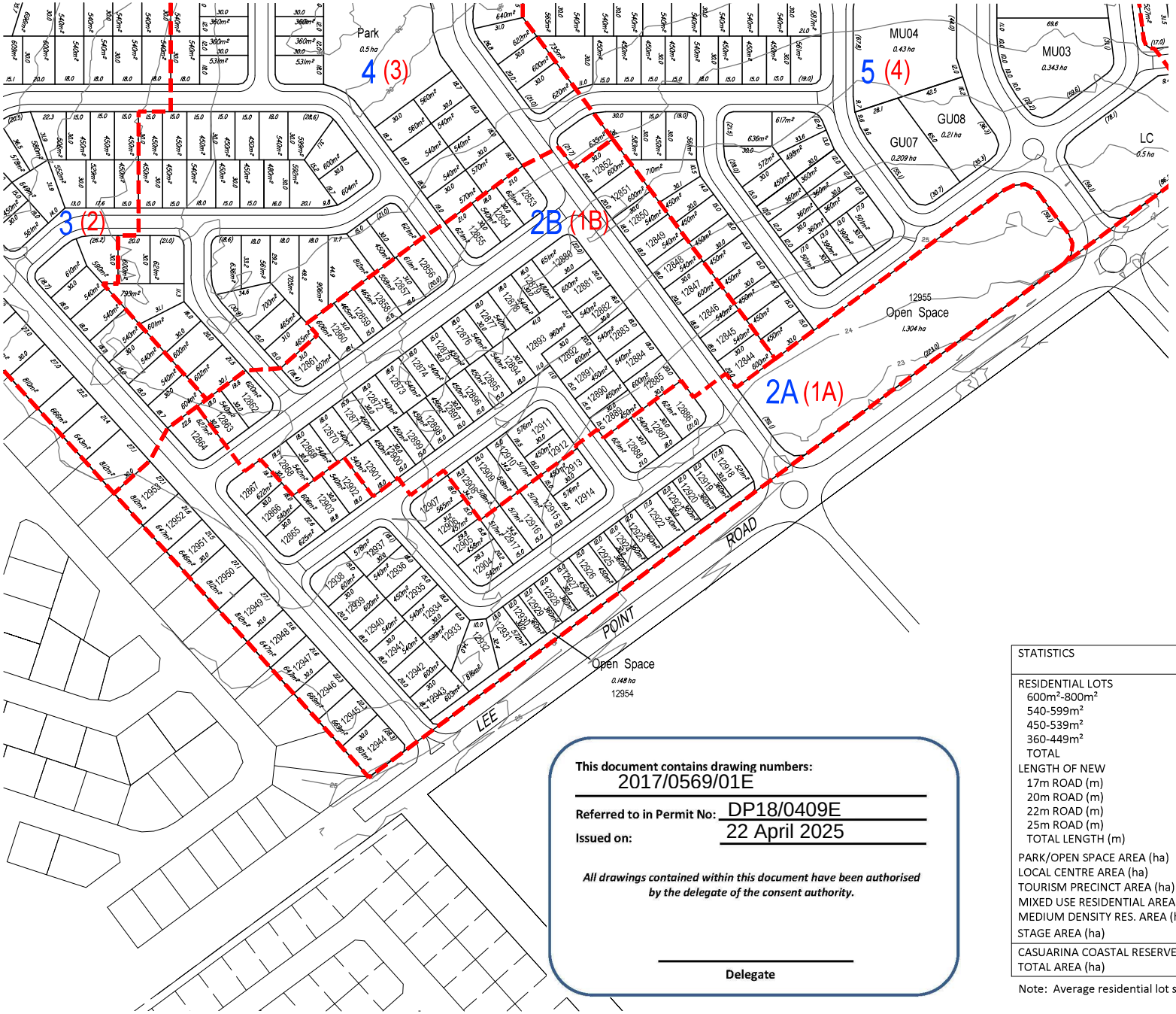
5. Any proposed works which fall within the scope of the *Construction Industry Long Service Leave and Benefits Ac*t must be notified to NT Build by lodgement of the required Project Notification Form. Payment of any levy must be made prior to the commencement of any construction activity. NT Build should be contacted via email (info@ntbuild.com.au) or by phone on 08 89364070 to determine if the proposed works are subject to the Act.

6. As part of any subdivision, the parcel numbers for addressing should comply with the Australian Standard (AS/NZS 4819:2011). For more information contact Survey and Land Records surveylandrecords@nt.gov.au 08 8995 5354. The numbers shown on the plans endorsed as forming part of this permit are indicative only and are not for addressing purposes.

7. All new roads, including alterations and extensions to existing roads, are required to be named under the *Place Names Act*. You should immediately make application to the Place Names Committee to commence the road naming process. Contact the Place Names Unit on 08 8995 5333 or place.names@nt.gov.au.

8. The Northern Territory Environment and Protection Authority has advised that the proponent must comply with their General Environment Duty provided by section 12 of the *Waste Management and Pollution Control Act.*

9. There are statutory obligations under the *Weeds Management Ac*t to take all practical measures to manage weeds on the property. For advice on weed management please contact the Rangelands division, Department of Environment and Natural Resources.



NOTES

(1) This plan was prepared for the purpose and exclusive use of DEFENCE HOUSING AUSTRALIA to accompany an application to the DEVELOPMENT CONSENT AUTHORITY for approval to subdivide the land described in the plan and is not to be used for any other purpose or by any other person or corporation.
JFP URBAN CONSULTANTS PTY LTD accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this plan in contravention to the terms of this clause or clauses 2, 3 or 4 hereof.

(2) The contours on this plan are derived from Bennett & Bennett Detail Survey 160549_001_DET_C.

(3) The dimensions, areas, size and location of improvements, flood information (if shown) and number of lots shown on this plan are approximate only and may vary.

(4) This plan may not be reproduced unless these notes are included.

PROPERTY DESCRIPTION
LOT 4873 ON S78/107
TOTAL AREA 81.33 ha

LEGEND

	STAGING
LC	LOCAL CENTRE
TP	TOURISM PRECINCT (4 Lots)
MU	MIXED USE RESIDENTIAL (4 Lots)
GU	MEDIUM DENSITY RESIDENTIAL (8 Lots)
✱	WWII HERITAGE AREA
(2A)	OVERALL STAGE NUMBER
(1A)	*STAGE NUMBER FOR 2CRU (DP18/0409)*

STATISTICS	STAGE 2A *STAGE 1A*	STAGE 2B *STAGE 1B*	STAGE 3 *STAGE 2*	STAGE 4 *STAGE 3*	STAGE 5 *STAGE 4*	STAGE 8 *STAGE 5*	TOTAL	
RESIDENTIAL LOTS								
600m²-800m²	21	15	31	21	13	11	112	(23%)
540-599m²	13	23	24	28	15	23	126	(26%)
450-539m²	11	18	21	34	35	49	168	(34%)
360-449m²	9	0	16	14	18	25	82	(17%)
TOTAL	54	56	92	97	81	108	488	(100%)
LENGTH OF NEW								
17m ROAD (m)	380	200	390	720	540	805	3035	
20m ROAD (m)	20	250	455	195	1400	380	2700	
22m ROAD (m)	245	0	270	0	0	0	515	
25m ROAD (m)	70	175	150	460	605	0	1460	
TOTAL LENGTH (m)	715	625	1265	1375	2545	1185	7710	
PARK/OPEN SPACE AREA (ha)	1.45	0	4.9	1.15	1.31	2.51	11.32	
LOCAL CENTRE AREA (ha)	0	0	0	0	0.5	0	0.5	
TOURISM PRECINCT AREA (ha)	0	0	0	0	2.83	0	2.83	
MIXED USE RESIDENTIAL AREA (ha)	0	0	0	0	1.45	0	1.45	
MEDIUM DENSITY RES. AREA (ha)	0	0	0	0	1.06	0.6	1.66	
STAGE AREA (ha)	5.87	4.32	12.52	9.18	16.55	10.94	59.38	
CASUARINA COASTAL RESERVE (CCR) DEDICATION (ha)							21.95	
TOTAL AREA (ha)							81.33	

Note: Average residential lot size is 520m²

This document contains drawing numbers:
2017/0569/01E

Referred to in Permit No: DP18/0409E

Issued on: 22 April 2025

All drawings contained within this document have been authorised by the delegate of the consent authority.

Delegate

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ENGINEERS
LANDSCAPE ARCHITECTS

NORTH:

SCALE: SCALE: @ A3 1:2500
0 25 50 75 100 125 150 175
THIS SCALE SHOWN IS ORIGINAL DRAWING SCALE - (A3 SIZE)
DO NOT SCALE FROM THIS DRAWING - USE ONLY DIMENSIONS PROVIDED - IF IN DOUBT PLEASE ENQUIRE

DESIGNED	TJM	CHECKED	AD	L.A.	DARWIN CITY COUNCIL
DRAWN	TJM	APPROVED	AD	COUNCIL REF	

ISSUES:

ISSUE:	DETAILS:	DATE:	INIT:
B	STAGING UPDATED	17-04-25	TJM
A	ORIGINAL	15-01-25	TJM

TITLE:

PROPOSAL PLAN STAGES 2A & 2B
DEFENCE HOUSING AUSTRALIA
LEE POINT ROAD, LEE POINT - DARWIN

DETAILS:
JOB NUMBER: M2737P_DA1 PLAN: ISSUE: R2 B
SHEET: 1 OF 1
DATE: 17th April 2025

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NORTHERN TERRITORY OF AUSTRALIA

Planning Act 1999 - section 59

EXTENSION OF PERIOD OF PERMIT

DP18/0409F

DESCRIPTION OF LAND THE SUBJECT OF THE PERMIT

Lot 04873
Town of Nightcliff
577 LEE POINT RD, LEE POINT

PERIOD OF EXTENSION

The Development Consent Authority has determined to extend the period of Development Permit DP18/0409E by a period of three (3) years.

Development Permit DP18/0409E will now lapse on 30 November 2028.

Should works be substantially commenced in accordance with DP18/0409E on or before 30 November 2028, the permit will lapse on 30 November 2030.

In all other respects DP18/0409E remains unchanged.

SUZANNE PHILIP
Chair
Development Consent Authority

22 October 2025

Northern Territory Environment Protection Authority

ASSESSMENT REPORT 88

LEE POINT MASTER-PLANNED URBAN DEVELOPMENT
Defence Housing Australia

October 2018

Environmental impact assessment process timeline

Date	Progress stage
24/08/2015	Receipt of Notice of Intent (NOI)
18/01/2016	NT EPA decision - Environmental Impact Statement (EIS)
23/04/2016	Draft Terms of Reference (ToR) released for public comment
20/05/2016	Final ToR issued to proponent
18/11/2017	Draft EIS released for public comment for 12 weeks
8/02/2018	NT EPA direction to prepare EIS Supplement
3/08/2018	EIS Supplement received
30/10/2018	Assessment Report issued



Dr Paul Vogel
Chair

30 October 2018

Northern Territory Environment Protection Authority
GPO Box 3675
Darwin
Northern Territory 0801

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Important Disclaimer

This document has been prepared with all due diligence and care, based on the best available information at the time of publication. Any decisions made by other parties based on this document are solely the responsibility of those parties.

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Abbreviations and glossary

Advisory bodies	Agencies having administrative responsibilities in respect of the proposed action
DENR	Department of Environment and Natural Resources
Draft EIS	Draft Environmental Impact Statement
DCA	Development Consent Authority
EA Act	*Environmental Assessment Act*
EAAP	Environmental Assessment Administrative Procedures
EIA	Environmental Impact Assessment
EIS	Environmental Impact Statement
Environment	All aspects of the surroundings of man including the physical, biological, economic, cultural and social aspects (Section 3 of the *Environmental Assessment Act*)
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
ESD	Ecologically Sustainable Development
Minister for Environment	Australian Minister for the Environment
NOI	Notice of Intent
NT EPA	Northern Territory Environment Protection Authority
Responsible Minister	Northern Territory Minister for Infrastructure, Planning and Logistics
The Minister	Northern Territory Minister for Environment and Natural Resources
The Proposal	Lee Point Master-planned Urban Development
The Proponent	Defence Housing Australia
The Supplement	Supplement to the Draft EIS
the/this Report	Assessment Report 88, for the Lee Point Master-planned Urban Development
TPWC Act	*Territory Parks and Wildlife Conservation Act*

Summary and recommendations

Environmental impact assessment (EIA) is a process for identifying potential environmental impacts and risks of a proposed action, evaluating the significance of those impacts and risks and determining appropriate avoidance, minimisation/mitigation measures to reduce those potential impacts and risks to acceptable levels.

This Assessment Report (the Report) evaluates the environmental impacts and risks associated with the Lee Point Master-planned Urban Development (the Proposal) proposed by Defence Housing Australia (the Proponent). This Report marks the end of the assessment process by the Northern Territory Environment Protection Authority (NT EPA).

This Report is provided to the Northern Territory Minister for Environment and Natural Resources (the Minister) who must provide the report to the Minister for Infrastructure, Planning and Logistics (the Responsible Minister) to be taken into account in decisions made by the Territory Government. This Report is not intended to provide an environmental approval.

The Proposal is located approximately 14 km north-east of Darwin on the northern edge of residential suburbs Muirhead and Lyons. The Proposal would provide for a range of residential types, tourist and commercial components as well as community services (including a primary school) and open space areas. The Proposal would be constructed over a period of approximately seven years.

The NT EPA has assessed the Proposal at the level of an Environmental Impact Statement (EIS) under the *Environmental Assessment Act* (EA Act).

The NT EPA initially identified that assessment was required due to potentially significant environmental impacts and risks to:

- listed threatened and migratory species
- the Casuarina Coastal Reserve
- cultural heritage
- land and water from erosion and sedimentation
- future residents from biting insects.

In making this Report, the NT EPA had regard to information provided by the Proponent (Draft EIS and Supplement, collectively referred to as the EIS), public submissions on the Draft EIS, advice from specialists within the NT Government, and relevant guidelines and standards.

The NT EPA assessed the Proposal against the NT EPA's key environmental factors and objectives for Social, economic and cultural surroundings, Human health and Terrestrial flora and fauna.

The NT EPA identified that the key potential impacts which relate to the social and cultural values onsite and in the adjacent Casuarina Coastal Reserve, including the Reserve's iconic value for turtle nesting and migratory shorebirds and the community's expectations for their tropical lifestyle and amenity. The avoidance and mitigations proposed by the Proponent are considered adequate for ensuring natural values of Casuarina Coastal Reserve continue to be available for visitors.

The NT EPA identified a potential conflict of siting an urban development near an existing wastewater treatment facility, with potential for offensive odours to impact on future resident's lifestyle and amenity. Similarly, potential health impacts to residents from proximity to breeding habitat for biting insects is also of concern. The NT EPA has recommended that future residents of the potentially affected lots are to be notified through a Caution Notice (or similar) on the property titles.

The NT EPA considers that the Proposal is likely to have a significant residual impact to the endangered black-footed tree-rat that may extend beyond the Proposal boundary. The Proponent's commitment to provide offsets to compensate for the significant residual impacts will need to contribute to the conservation of the species, and the NT EPA recommends that the offsets are considered and approved by the Department of Environment and Natural Resources in consultation with the Federal Department of Environment and Energy.

The NT EPA has carefully considered all these issues and has recommended that the development could proceed if all the NT EPA's recommendations are implemented. The NT EPA emphasises that the environmental commitments, safeguards and recommendations detailed in the EIS, this Assessment Report and in the final management plans, must be implemented to deliver acceptable environmental outcomes. Furthermore, the Proponent would be required to monitor the performance of proposed mitigation and management measures. The results of the monitoring program should be used to further refine and ensure that key environmental values are adequately protected.

The NT EPA makes 15 recommendations as an outcome of the EIA of the Proposal. These recommendations are for the Proponent and decision makers to consider in future approval processes and for the execution of the Proposal.

List of recommendations

Recommendation 1

The Proponent shall ensure that the Lee Point Master-planned Urban Development is implemented in accordance with all environmental commitments and safeguards:

- **identified in the EIS for the Lee Point Master-planned Urban Development (Draft Environmental Impact Statement and Supplement)**
- **recommended in this Assessment Report 88**
- **to the satisfaction of the relevant regulator.**

The Northern Territory Environment Protection Authority considers that all safeguards and mitigation measures outlined in the Environmental Impact Statement are binding commitments made by the Proponent. In addition all the NT EPA recommendations should be implemented and where there is conflict between the EIS commitments and the NT EPA recommendations the latter will take precedence.

Recommendation 2

The Proponent should provide written notice to the Northern Territory Environment Protection Authority and the Responsible Minister if it alters the Lee Point Master-planned Urban Development and/or commitments, safeguards or mitigation measures described in the Environmental Impact Statement in such a manner that the environmental significance of the action may change, in accordance with clause 14A of the Environmental Assessment Administrative Procedures.

Recommendation 3

That approvals for the proposal should include a condition that requires the Proponent to develop and implement a monitoring program to quantify impacts from the Proposal on local shorebirds. The program is to be designed in consultation with Flora and Fauna Division, Department of Environment Natural Resources, and Wildlife and Heritage Division, Department of Tourism and Culture Parks, and implemented before commencement of construction activities. Results and annual updates from the program should be made publicly available on the internet.

Recommendation 4

That development applications for development stages adjacent to Casuarina Coastal Reserve (Stages 2, 3, 4 and 5 shown on Figures 2 and 3) should include details of how the Western Australian Guideline for Protecting Marine Turtles from Light Impacts (WA EPA, 2010) have been incorporated.

Recommendation 5

That development approvals for the Proposal should include conditions that require Western Australian Guideline for Protecting Marine Turtles from Light Impacts (WA EPA, 2010) to be adequately incorporated.

Recommendation 6

That approvals for each development stage of the Proposal should include conditions that require the dust, noise and vibration management plans in the Construction Environmental Management Plan to be developed in consultation with community stakeholders and include processes for:

- **communicating anticipated impacts to occupants**
- **reporting of, and responding to, complaints**
- **identifying unexpected and unacceptable impacts to occupants and amending construction practices as appropriate.**

The Construction Environmental Management Plan should be developed and implemented prior to construction commencing, be made publicly available on the websites of the Proponent, the construction company and relevant authorities, and include scope for regular reviews and updates including the schedule for construction stages.

Recommendation 7

That construction of the Proposal should comply with the *Northern Territory Environment Protection Authority Noise Guidelines for Development Sites*, and the *Northern Territory Environment Protection Authority Noise Management Framework Guideline*.

Recommendation 8

That prior to issuing of titles, the Proponent should ensure that a Caution Notice (or similar as agreed with the responsible authority under the Planning Act) is lodged with the Registrar General under Section 34 of the Titles Act for all lots within a 1.7 km buffer from the Leanyer Sanderson Wastewater Treatment Facility.

The Caution Notice (or similar) is to notify potential developers and landholder/s that the lot:

- **occurs within the identified odour buffer for the Leanyer Sanderson Wastewater Treatment Plant**
- **may be subject to occasional odours associated with the operation of the Leanyer Sanderson Wastewater Treatment Plant.**

Recommendation 9

That development approvals for the Proposal should have conditions that ensure stormwater discharges from the development terminate at a daily flushed tidal area or frontal beachline and are constructed to the satisfaction of the Medical Entomology Unit, NT Department of Health, on behalf of the final drain maintenance authority. All discharge drains, including the end point of the drains, should be excised as separate lots and appropriately zoned to allow the drain owner to carry out expedient maintenance.

Recommendation 10

That development approvals for the Proposal should have conditions that require stormwater treatment structures, including potential detention storage

and water features or lakes, to be designed and constructed to be free from potential mosquito breeding sites to the satisfaction of the Medical Entomology Unit, NT Department of Health, on behalf of the final maintenance authority.

Recommendation 11

That approvals for the Proposal should require a minimum 50 m open wind buffer between the western edge of the 2CRU residential and commercial area and the monsoon forest boundary (or edge of the escarpment if this is closer). The wind buffer should only be planted with tall-growing, long-lived, hardy native trees, with a suggested mature tree crown coverage of approximately 10%.

Recommendation 12

That the Responsible Minister should include a condition on future Development Permit(s) requiring that the Proponent ensure any lots in Muirhead North within the biting insect buffer, as shown in Figure 4:

- **have a minimum area of 4000 m^2**
- **cannot ever be subdivided.**

Recommendation 13

That prior to issuing of titles, the Proponent should ensure that a Caution Notice is lodged with the Registrar General under Section 34 of the *Titles Act* (or similar as agreed with the responsible authority under the *Planning Act*) for all lots located within the identified biting insect buffer (in consideration of Recommendation 12 above).

Each Caution Notice (or similar) should indicate the following:

- **that the lot occurs within the biting insect buffer**
- **that the lot is subject to seasonal mosquito and biting midge pest problems arising from the adjacent mangroves of Buffalo Creek and tidal marshes and mangroves in Leanyer Swamp.**

Recommendation 14

That approvals for the Proposal should require that the Proponent demonstrate consultation with, and support by, Flora and Fauna Division of the Department of Environment and Natural Resources, in relation to any offset or offset management plan required by the Australian Government with respect to the significant residual impact to the black-footed tree-rat (*Mesembriomys gouldii gouldii*).

Recommendation 15

That approvals for Muirhead North should provide adequate protection for the monsoon rainforest patch and habitat for the black-footed tree-rat. In particular, it is recommended that any approval require:

- **a vegetated buffer of at least 25 m around the monsoon rainforest patch in Muirhead North**

- **the retention of native vegetation in the 'Drainage/Conservation Area' (Figure 4), excluding the 1.85 ha 'Detention Storage'**
- **rezoning the retained area of native vegetation as CN conservation under the NT Planning Scheme.**

1 Introduction

1.1 Purpose of this report

Defence Housing Australia (the Proponent) proposes the Lee Point Master-planned Urban Development (the Proposal) comprising land clearing, earthworks and excavation for the purpose of creating land suitable for residential housing, tourism/commercial infrastructure and community facilities, including internal and connecting roads and utilities.

The Proposal has been assessed by the Northern Territory Environment Protection Authority (NT EPA) at the level of an Environmental Impact Statement (EIS) under the *Environmental Assessment Act* (EA Act). The NT EPA has prepared this Assessment Report (this Report) in accordance with section 7(2)(g) of the EA Act and clause 14(3) of the Environmental Assessment Administrative Procedures (EAAP).

The purpose of this Report is to ensure that matters with the potential to affect the environment to a significant extent are fully examined and reported. This Report is provided to the Northern Territory Minister for Environment and Natural Resources (the Minister), who must provide it to the Minister for Infrastructure, Planning and Logistics who is primarily responsible for authorising the Proposal under the *Planning Act* (the Responsible Minister).

This Report it is not intended to provide an environmental approval although it will guide the decisions and conditions of approvals, authorisations and other matters.

1.2 Scope of the assessment

The NT EPA assessed the potentially significant environmental impacts and risks associated with the Proposal in accordance with the NT EPA's factors and objectives and requirements under the EA Act. The matters relating to the environment that the NT EPA considered necessary to be dealt with in the EIS for the Proposal were identified in the Terms of Reference (NT EPA, 2016), which were developed in accordance with clauses 8(3) to 8(6) of the EAAP.

Based on the Notice of Intent, the NT EPA identified the following potential environmental impacts and risks that contributed to the decision to assess the Proposal at the level of an EIS:

- potential impact to listed threatened species and migratory shorebirds
- potential impact to the Casuarina Coastal Reserve due to weeds, fire and pest species
- potential impact to cultural heritage items
- potential for ongoing impact associated with erosion and sedimentation
- land-use conflict and health risks associated with the development being in close proximity to biting insect breeding sites.

1.3 Information before the NT EPA

In making this Report, the NT EPA had regard to:

- the Notice of Intent (NOI)

- the Terms of Reference (ToR)
- the Draft EIS
- the Supplement to the Draft EIS
- comments from NT Government agencies on the Draft ToR, Draft EIS and Supplement to the EIS
- comments from the public on the draft ToR and the Draft EIS
- a site visit conducted by NT EPA members with the Proponent
- updated maps of the masterplan provided 16 October 2018
- technical and other reports which are noted in the References (Chapter 7).

1.4 Approval and regulatory framework

The Proposal will require approval and regulation by the NT Government and the Australian Government. The framework for approval and regulation of the Proposal is provided at Chapter 8 of the EIS and is summarised below, with an emphasis on the obligations and requirements of the NT Government.

The NT EPA provides this Report to the Minister. The Minister is required to provide a copy of this Report to the Responsible Minister, together with any written comments made by the Minister in relation to this Report. If the Minister makes a comment in relation to this Report, the Minister must comply with reporting obligations to the NT EPA, under section 8B of the EA Act.

1.4.1 Primary approval

The Responsible Minister, taking into consideration this Report, will decide whether to approve the Proposal under the *Planning Act* and if so, the conditions that may be applied. The *Planning Act* is the primary legislation for approving urban development proposals in the Northern Territory.

Section 8A(2) of the EA Act requires the Responsible Minister to give the NT EPA notice of the decision as soon as practicable, but within seven days, after making the decision. Alternatively, if the decision by the Responsible Minister is contrary to this Report, the Responsible Minister must comply with reporting obligations to the NT EPA and the Legislative Assembly in accordance with section 8A(3) of the EA Act.

The making of this Report and providing it to the Minister marks the completion of the examination of the EIS by the NT EPA. The EIS and supporting documents can be viewed on the NT EPA website at: https://ntepa.nt.gov.au/environmental-assessments/register/lee-point-master-planned-urban-development.

1.4.2 Environment Protection and Biodiversity Conservation Act 1999

The Proposal (EPBC 2015/7591 – Lee Point Master-planned Urban Development) is a controlled action and requires assessment and approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) before it can proceed. The delegate for the then Australian Minister for the Environment decided that the Proposal would be assessed at the level of Public Environment Report (PER). The bilateral agreement does not apply as the Proponent is a Commonwealth entity. The Proposal is being assessed separately by the NT EPA and Australian Government, however the assessment processes under the EA Act and EPBC Act have been aligned to reduce duplication. The Australian Minister for

the Environment and Energy will consider the PER and decide whether to approve the Proposal under the EPBC Act.

2 The Proposal

2.1 Proponent

The Proponent is Defence Housing Australia (ABN: 72 968 504 934), a Commonwealth Government business that provides housing for Department of Defence members and their families. Defence Housing Australia (the Proponent) stated that it has previously developed properties in the Australian Capital Territory, Queensland and the Northern Territory.

The Proponent stated that it has not been subject to any proceedings under Commonwealth, State or Territory law with respect to the protection of the environment or the conservation and sustainable use of natural resources.

2.2 Proposal description

2.2.1 Location

The Proposal is located adjacent to the northern suburbs of Darwin, approximately 14 km north-north-east of the Darwin central business district (Figure **1**). The surrounding land uses include undeveloped land and Lee Point to the north, Commonwealth land and Buffalo Creek to the east, residential suburbs and Royal Darwin Hospital to the south, and Casuarina Coastal Reserve (including Casuarina Beach) to the west.

The Proposal area includes two properties (2 Control and Reporting Unit (2CRU) and Muirhead North). 2CRU (Lot 4873) is approximately 81 ha and is currently vacant Commonwealth land to the west of Lee Point Road. Muirhead North (Lot 9370) is approximately 51 ha and comprises vacant Crown Land to the east of Lee Point Road (Figure 1).

2.2.2 Proposal components

The Proposal is a master-planned urban development (Figure 2) to provide:

- residential housing options for an estimated 3000 residents comprising a mix of ground-level dwellings, rural residential lots and apartments
- tourist, recreation and commercial components including approximately 200 to 300 room tourist accommodation and commercial and retail businesses
- services, community purpose and open space:
  - one primary school and community centre
  - internal road network, connecting to Lee Point Road
  - pedestrian and bicycle paths
  - essential infrastructure, expanding existing electrical, reticulated water, reticulated sewerage (no septic proposed)
  - stormwater management and detention basins

- esplanade parkland developed along the western boundary of the site adjoining the Casuarina Coastal Reserve, including pedestrian/cycle trails
- active recreation reserve (2.46 ha) developed adjacent to the school site/community centre on the eastern side of Lee Point Road. The reserve would incorporate the Konfrontasi military heritage site and include sports facilities (such as an AFL/cricket oval)
- conservation area (11.24 ha) incorporating a 0.88 ha rainforest patch in Muirhead North
- park and open space area (2.57 ha) incorporating the 'Bunkers' in 2CRU.

2.2.3 Construction

Construction of the Proposal will be undertaken in seven stages (refer Figure 2 for staging sequence). Clearing and civil works would be the first aspect of the Proposal to commence for each stage, with buildings and other facilities for that stage constructed subsequently. The total clearing footprint of the Proposal is 110 ha. Clearing would be staged in line with construction staging.

The Proposal would proceed with the aim of releasing one stage each year, with a total estimated construction timeframe of seven years. The staging and timing of each part of the Proposal would be subject to planning approvals and commercial assessment of the property demand.

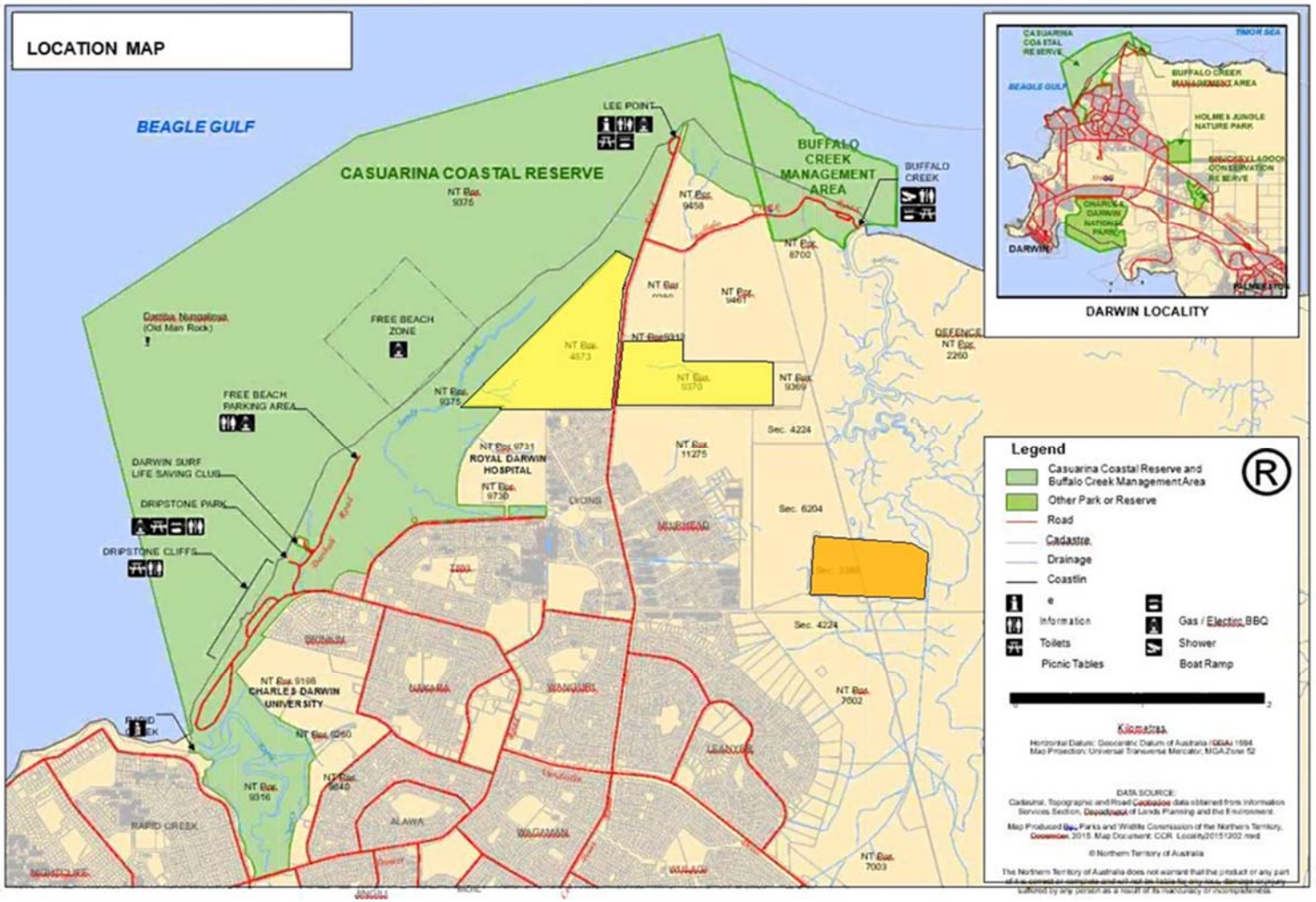


Figure 1. Map of the location of the Proposal (yellow) in relation to the Casuarina Coastal Reserve (green) and the Leanyer Sanderson Wastewater Treatment Plant (orange). Note: the suburb of Muirhead is currently being developed to the southern boundary of the Proposal.

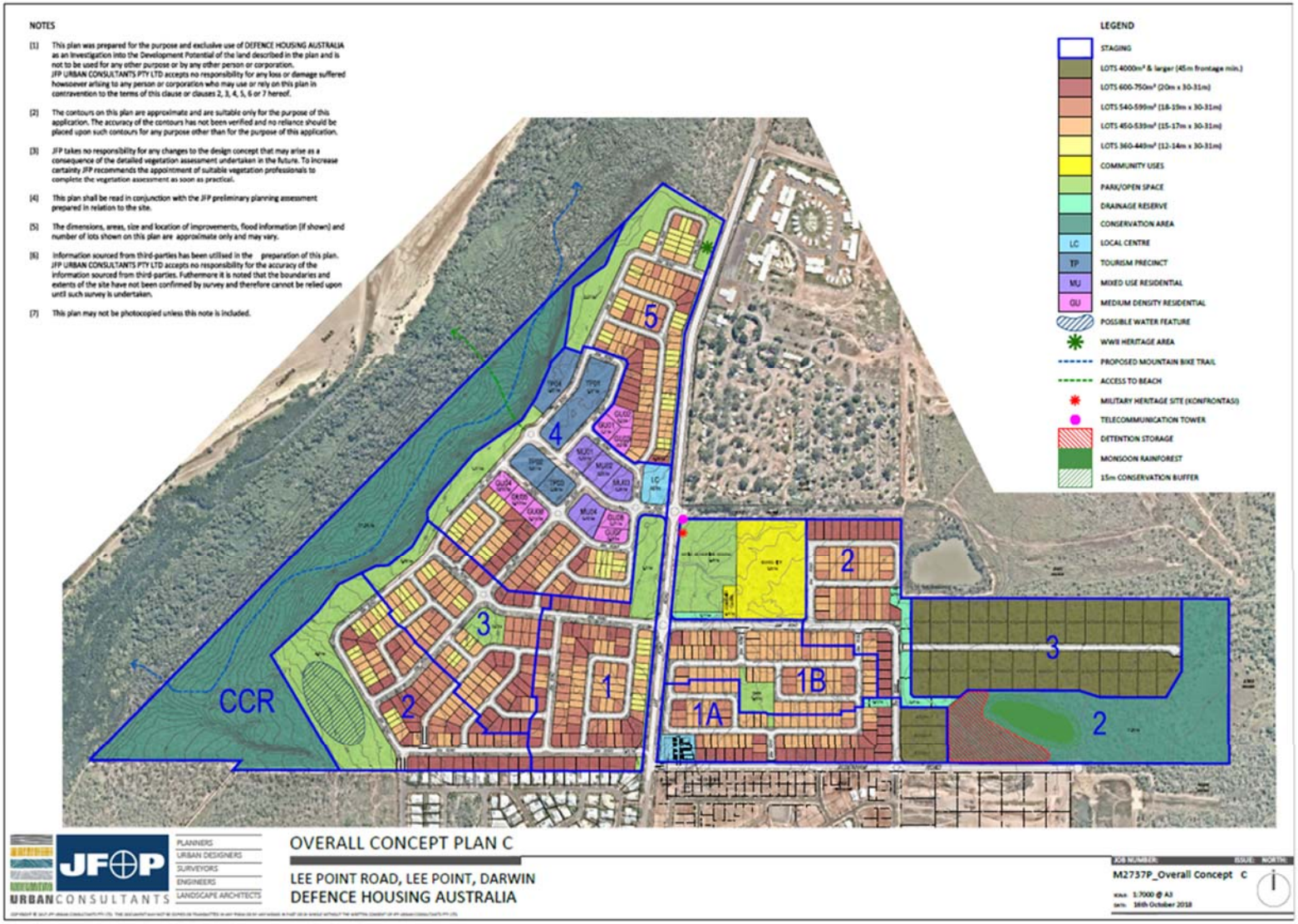


Figure 2. Overall Lee Point Master-planned Urban Development Concept Plan (provided by the Proponent - 16 October 2018)

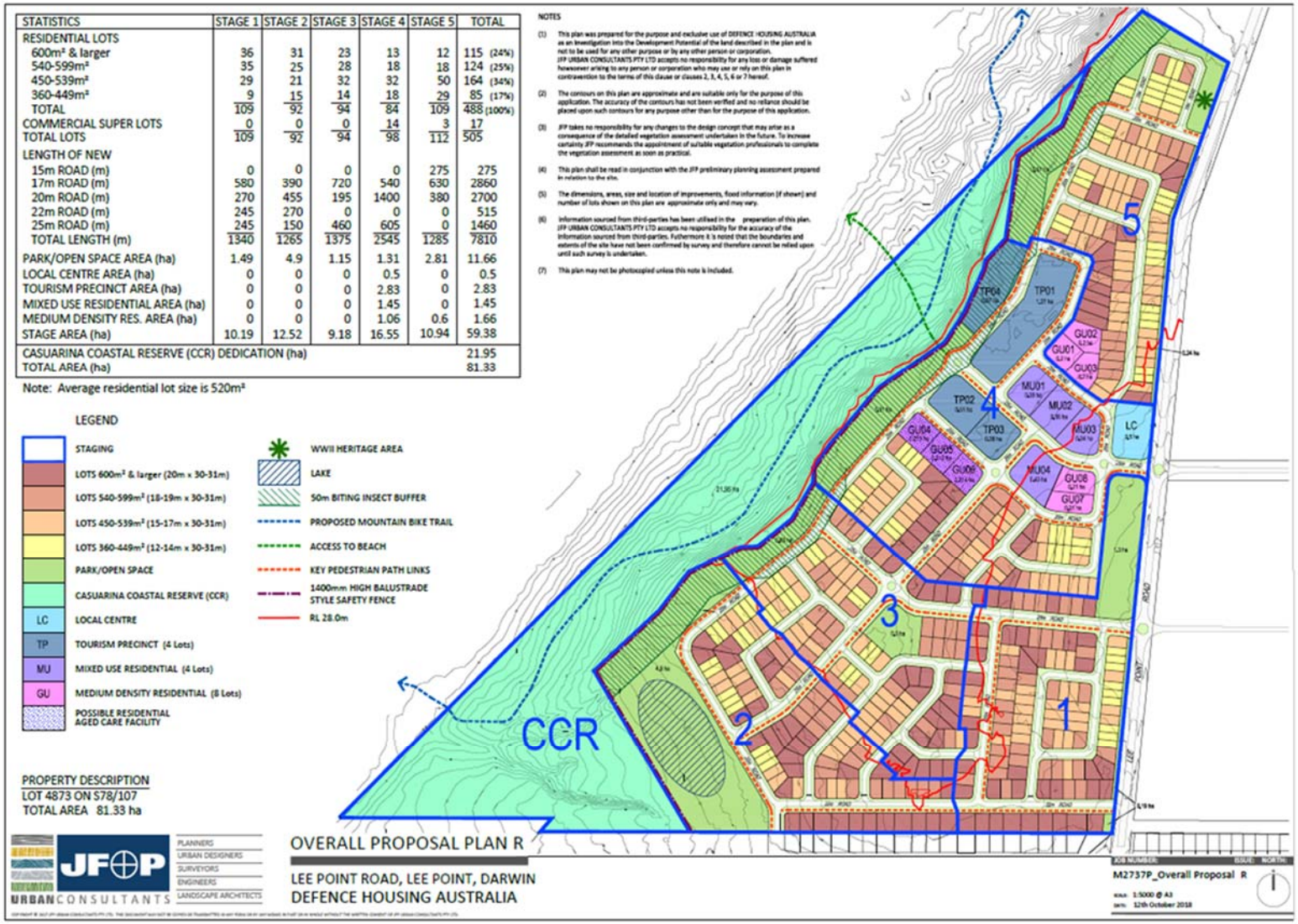


Figure 3. Overall 2CRU Plan (provided by the Proponent - 16 October 2018)

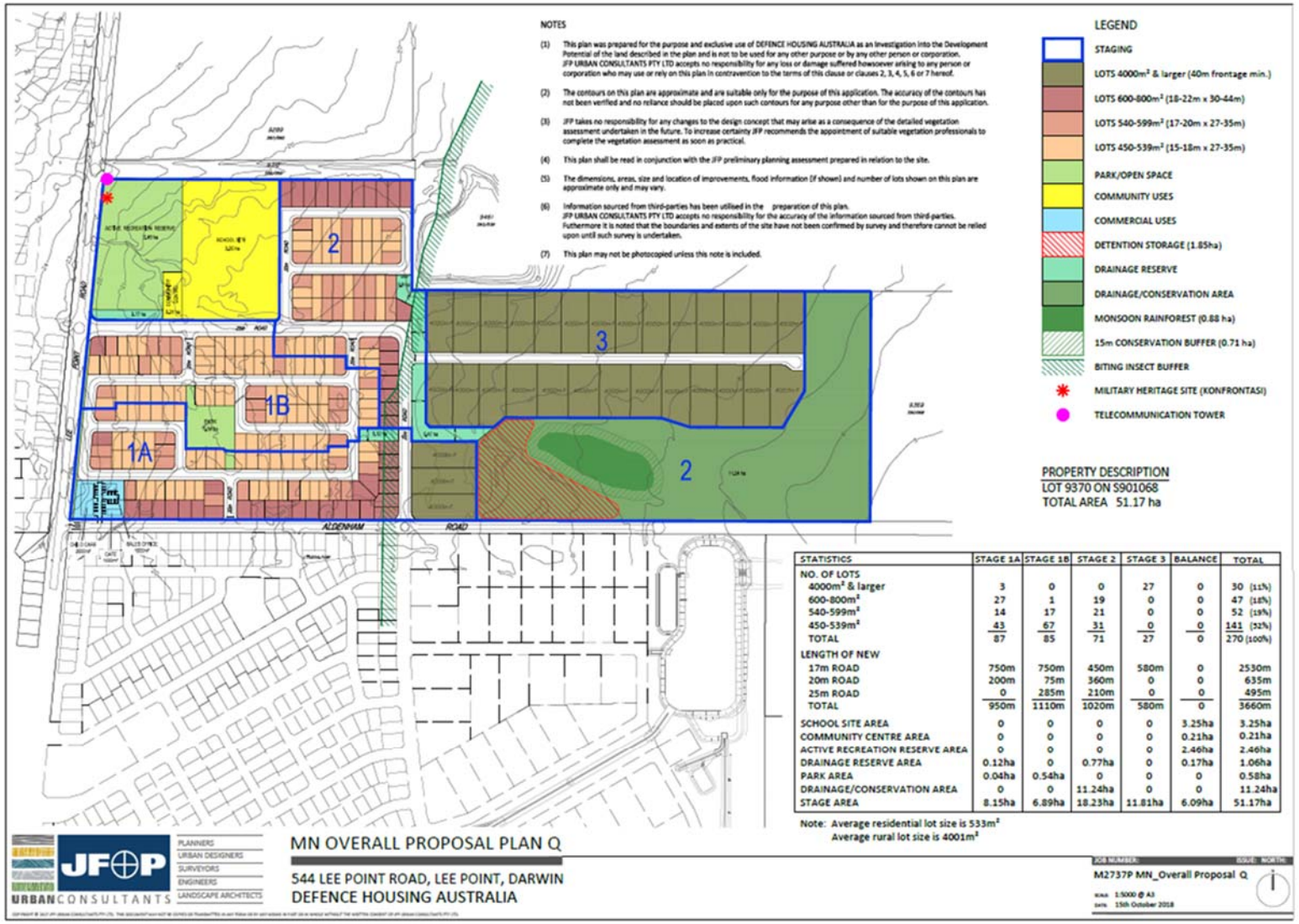


Figure 4. Overall Muirhead North Plan (provided by the Proponent - 16 October 2018)

3 Consultation

The Draft EIS was made available for public comment for 12 weeks, from 18 November 2017 to 1 February 2018. A total of 25 submissions were received. These included 10 from NT Government agencies and 15 from members of the public.

All submissions were forwarded to the Proponent. The issues raised in the submissions and the Proponent's responses were detailed in the Supplement (Ecology and Heritage Partners Pty Ltd, 2018).

The Proponent reported a range of additional consultation activities with stakeholders including:

- two workshops with relevant government agencies and service authorities to inform and seek feedback on the masterplan
- one community infrastructure workshop with identified stakeholders, to identify community and social infrastructure requirements
- one community workshop to seek feedback from the local community
- consultation with representatives of the Larrakia people
- consultation with the Department of Tourism and Culture (Parks, Wildlife and Heritage Division).

3.1 Consultation by the NT EPA

The NT EPA consulted with NT Government agencies during the development of this Report. In making this Report, the NT EPA had particular regard to whether the Proponent adequately addressed the potentially significant environmental impacts and risks raised in comments by the public and NT Government agencies.

The NT EPA has considered all environmental issues raised by the community and stakeholders in making this Report.

3.2 Public submissions

Fifteen submissions from members of the public were received. Frequent comments (raised in in at least 40% of submissions) related to:

- impacts to threatened fauna (yellow-spotted or floodplain monitor and black-footed tree rat) and migratory birds
- impacts to biodiversity from cats and dogs
- impacts from pollutants entering Buffalo Creek and Sandy Creek
- the need for additional housing in the Darwin suburbs.

Other comments (raised by up to 40% of public respondents) are listed below, in descending order of frequency:

- visual impact and amenity (particularly related to Casuarina Coastal Reserve)
- traffic congestion, vehicle speeds and pedestrian and cycle paths
- impacts to existing schools and the need for new facilities

- energy efficiency and climate change
- impacts to biodiversity from removal of vegetation in general, including impacts to monsoon rainforest from altered hydrology, removal of cycads and spread of weeds
- impacts from sea level rise and subsequent inundation of low lying land and coastal areas
- impacts to sawfish (threatened fauna)
- impacts from odour
- changes to flows in Sandy Creek
- impacts to human health from mosquitoes
- the adequacy of consultation
- erosion and sedimentation.

The Proponent provided responses to the issues raised in the public submissions in the Supplement.

The NT EPA considers that consultation by the Proponent has been appropriate for the purposes of EIA, which occurs early in the development of proposals. The NT EPA notes that the Proposal will require further public consultation under the *Planning Act*, with the requirement for a Development Permit for each stage of the Proposal. The NT EPA has made recommendations to ensure future development applications address a range of issues raised in this Report.

4 Key environmental factors

Having regard to the NOI, the EIS, and comments from the public and NT Government agencies during the EIS review, the NT EPA assessed the Proposal for potential impacts on the NT EPA's factors (NT EPA, 2018). The NT EPA identified three key environmental factors that may be significantly impacted by the Proposal (Table 1).

Table 1. Key environmental factors

Theme	Key Environmental Factor
People and communities	1. Social, economic and cultural surroundings
	2. Human health
Land	3. Terrestrial flora and fauna

The NT EPA has considered the importance of other environmental factors during the course of its assessment. Those factors that were not identified as key environmental factors, or that were adequately addressed through consideration of the above factors, are summarised at Appendix 2 of this Report.

The key environmental factors are discussed in Section 5 of this Report. The description of each factor shows why it is relevant and how it would be affected by the Proposal. The assessment of each environmental factor concludes with a judgement by the NT EPA whether or not the Proposal can meet the NT EPA's environmental objective for each factor, with implementation of recommended management measures where required.

5 Assessment of environmental factors

This section evaluates the Proposal and presents the views of the NT EPA on the environmental acceptability of the Proposal. The environmental acceptability of this Proposal was considered with regard to the principles of Ecologically Sustainably Development (ESD), through analysis of:

- the Proposal (particularly components or activities that are likely to significantly impact the environment)
- the existing environment (particularly environmental values and sensitivities)
- the potential environmental impacts and risks of the Proposal and the evaluation of the significance of those impacts and risks
- the proposed avoidance or minimisation/mitigation measures to reduce potential impacts and risks to acceptable levels and to meet NT EPA objectives.

The NT EPA also had regard to the principles of ESD articulated in the Intergovernmental Agreement on the Environment (Australian Government, 1992):

- the precautionary principle
- the principle of intergenerational equity
- conservation of biological diversity and ecological integrity
- improved valuation, pricing and incentive mechanisms such as the "polluter pays" principle.

The NT EPA has summarised its consideration of ESD in Appendix 3.

Conclusions and recommendations made in this Report are derived from consultation on the EIS with advisory bodies, the NT EPA's examination of the EIS (comprising the Draft EIS and the Supplement), and responses from the Proponent to comments received during the EIS exhibition period. Recommendations are made in this Report to add, emphasise or clarify any commitments made by the Proponent, where the proposed avoidance or minimisation/mitigation measures are considered insufficient, or where a safeguard or intervention is deemed particularly important.

In this Report, the recommendations (in **bold**) are preceded by text that identifies issues and undertakings associated with the Proposal. For this reason, the recommendations should not be considered or read in isolation.

The NT EPA acknowledges that detailed design, construction and operational plans for the Proposal have not been finalised. Minor changes are expected in the design and specifications of the Proposal following the conclusion of the EIA process. It will be necessary for approval mechanisms to accommodate subsequent changes to the environmental safeguards described in the EIS and recommendations in this Report.

If the Proponent is able to demonstrate that any changes are unlikely to significantly increase potential impacts on the environment, an adequate level of environmental protection could be achieved by modifying the conditions of relevant statutory approvals governing the Proposal. Otherwise, further environmental assessment may be required.

Recommendation 1

The Proponent shall ensure that the Lee Point Master-planned Urban Development is implemented in accordance with all environmental commitments and safeguards:

- **identified in the EIS for the Lee Point Master-planned Urban Development (Draft Environmental Impact Statement and Supplement)**
- **recommended in this Assessment Report 88**
- **to the satisfaction of the relevant regulator.**

The Northern Territory Environment Protection Authority considers that all safeguards and mitigation measures outlined in the Environmental Impact Statement are binding commitments made by the Proponent. In addition all the NT EPA recommendations should be implemented and where there is conflict between the EIS commitments and the NT EPA recommendations the latter will take precedence.

Recommendation 2

The Proponent should provide written notice to the Northern Territory Environment Protection Authority and the Responsible Minister if it alters the Lee Point Master-planned Urban Development and/or commitments, safeguards or mitigation measures described in the Environmental Impact Statement in such a manner that the environmental significance of the action may change, in accordance with clause 14A of the Environmental Assessment Administrative Procedures.

The remainder of this section identifies and discusses environmental factors and potential impacts and risks to values underlying those factors. The assessment is based on likely significance of impacts and risks, and the Proponent's investigations, studies and commitments to identify, avoid, mitigate, monitor and manage the potentially significant impacts and risks.

For each key environmental factor, the NT EPA assessed whether or not the Proposal is likely to meet the NT EPA's defined environmental objective.

5.1 Social, economic and cultural surroundings

5.1.1 NT EPA objective

To protect the rich social, economic, cultural and heritage values of the Northern Territory.

5.1.2 Environmental values

The NT EPA has identified the following social, economic and cultural values that are relevant to the Proposal:

- the ‘iconic’ status of Casuarina Coastal Reserve relating to recreational and educational experiences, particularly interactions with shorebirds and nesting turtles
- environmental surrounds facilitating the tropical lifestyle and amenity of residents and visitors
- historic and cultural heritage places and items within the Proposal site.

Recreation, education and iconic experiences associated with natural values of Casuarina Coastal Reserve

Users of the Casuarina Coastal Reserve expect to be able to experience, and continue experiencing into the future, the reserve’s natural values for recreation, education and cultural reasons.

The Proposal is immediately adjacent to Casuarina Coastal Reserve (the reserve) which is used by the public for exercise, walking dogs, bushwalking, mountain biking, beach and water activities, picnics, educational programs (such as turtle hatchling releases) and recreational birdwatching. The reserve receives over 935 000 visits annually, with the majority of visitors being local (Parks and Wildlife Commission of the Northern Territory, 2016). Public submissions confirm that the reserve is important to people.

The reserve is a site of national importance as migratory shorebird habitat and is listed as one of the ‘Best 100 Bird Watching Sites in Australia’ (Taylor, 2013). The reserve’s conservation values for migratory birds are discussed below in Section 5.3.

The reserve provides nesting habitat for three marine turtle species, the olive ridley turtle, the flatback turtle and the green turtle. Monitoring programs indicate Casuarina Beach is a low density nesting site compared to other sites in the NT. However, the significance of turtle nesting at Casuarina Beach is largely derived from the education value and that this is the only beach in Australia to have turtle nesting occurring so close to a major city (Chatto & Baker, 2008). The connection to turtle nesting is strongly valued by the community leading to locals’ views of a unique and ‘iconic’ Darwin experience.

Tropical lifestyle

The tropical climate of Darwin is conducive to an outdoor lifestyle that is valued by residents and visitors to Darwin. This is expressed in the design of tropical homes, featuring open ventilation and natural cooling principles using prevailing breezes and the rapid dispersal of heat. Particular importance is placed on outdoor living areas including verandas, gardens and shaded areas to facilitate a tropical lifestyle.

Residents are likely to have an expectation that the property they occupy allows for outdoor living and enjoyment of the tropical lifestyle, including good air quality.

Heritage and Aboriginal sacred sites

Users of the Casuarina Coastal Reserve expect retention of cultural values for spiritual, educational and tourism purposes. This expectation is supported in public submissions received on the Draft EIS, the Casuarina Coastal Reserve Management Plan and comments from NTG agencies.

Larrakia people are the traditional owners of the Proposal site and currently run cultural tours in the Lee Point area. The Casuarina Coastal Reserve area is

significant for the Larrakia people. Dariba Nunggalinya, or Old Man Rock, is a significant protector ancestor in Larrakia dreamtime. Dariba Nunggalinya is located in the sea approximately 3 km south west of the western extent of the Proposal and can be seen at low tide.

Three species of tree occurring in the project and/or adjacent Casuarina Coastal Reserve - mature Milkwood (*Alstonia actinophylla*), Paperback (*Melaleuca*) and Cycad (*Cycas armstrongii*) - have been identified as having particular cultural significance.

Aboriginal stone scatters are located within the 2CRU portion of the Proposal. No Aboriginal heritage items were identified in Muirhead North.

Items associated with former military conflicts and use of the site by the military are present within the Proposal site. From the 1950s the 2CRU portion of the site was used as a radar and receiving station by the Department of Defence (Defence). By the 1960s, the site had numerous buildings associated with the strengthening of defensive forces during the Konfrontasi conflict.

The site is no longer used as a Defence facility. The northern section of the 2CRU site contains the remains of a missile launching facility and an explosives store referred to as 'the Bunkers'. Remnants of cruciform anti-aircraft battery sites are located in the centre of the 2CRU site.

There is a defensive gun pit surrounded by 44 gallon drums associated with the Konfrontasi period (referred to as the Konfrontasi cruciform), located in Muirhead North adjacent to Lee Point Road (the red asterisk in Figure 2). The remaining structures within the Proposal site are considered to have heritage significance as rare examples of a poorly known conflict period, however they are in poor condition (Crassweller, 2010). The sites are not protected under the *Heritage Act* nor listed on the Commonwealth Heritage List, National Heritage List or inscribed as a World Heritage Place.

5.1.3 Potential impacts

The potential impacts to natural values of the Casuarina Coastal Reserve that may impact on social values, as a result or the Proposal, relate to:

- reduction or loss of recreational activities and enjoyment relating to the presence of rare migratory shorebirds. The potential reduction or cessation of feeding and roosting by shorebirds may occur from increased anthropogenic disturbance or intrusion (including increased presence of dogs and cats)
- reduction or loss of recreational enjoyment and an educational program associated with marine turtle nesting. The potential reduction or cessation of turtles nest at Casuarina Beach may result from increased anthropogenic disturbance, including light pollution from development disrupting turtle nesting.

The potential impacts to values that support a tropical lifestyle include:

- nuisance levels of dust, noise and vibration over a prolonged period during construction, depending on staging, proximity and type of works,.
- exposure to odour emissions due to siting of residences, schools and other land uses within the NT EPA's land use separation distance from existing wastewater treatment facilities.

The potential impacts to cultural heritage include removing the following items within 2CRU:

- remnants of military facilities including Konfrontasi Cruciform anti-aircraft gun position and missile facility which are in poor condition
- scattered Aboriginal stone artefacts.

The proposed new access path (from the main street of 2CRU to Casuarina Beach), and mountain bike trail (within the proposed 2CRU conservation area), have the potential to impact culturally significant trees within the identified area of Aboriginal cultural significance.

The NT EPA acknowledges the potential economic contribution of the Proposal to the Northern Territory, including $350 million to the local economy, provision of temporary full-time employment for up to 964 employees in the construction industry, a further 117 full-time and part time in the hospitality industry and 40 employees in education positions.

5.1.4 NT EPA assessment

Natural Values of the Casuarina Coastal Reserve – migratory shorebirds

The Proposal will increase the number of visitors to the Casuarina Coastal Reserve by an estimated 18 149 each year. This increase is very small (2%) compared to the current, almost one million, visitors each year to the reserve. However, the NT EPA acknowledges the Proposal has the potential to compound anthropogenic influences (including presence of dogs and cats) on the natural values that are important to people, including the natural values that support recreation and educational experiences.

The Proponent, in consultation with the Parks, Wildlife and Heritage Division of the Department of Tourism and Culture (DTC), has recognised potential impacts of uncontrolled intrusion into sensitive locations by designing a new designated beach access point which will avoid disturbance of migratory shorebirds by directing pedestrian traffic away from the known shorebird roosting site. By avoiding or minimising disturbance to birds, it is expected that visitor enjoyment, including birdwatching, can be maintained.

The Proponent has committed to facilitating educational experiences by funding installation of signage at four existing access points to Casuarina Beach as well as the new access point from 2CRU. The signage would include educational material about the significance of the reserve for shorebirds, their migration, key threats and measures for avoiding disturbance (such as keeping dogs on leashes in certain zones to avoid impacts to birds).

The NT EPA considers that the signage will enhance public interest and awareness about the significance of the reserve for birds. Educational signage about shorebirds and the need to minimise disturbance are an effective management tool and have been shown to decrease disturbance rates to shorebirds (Burger 2004 cited in EIS Appendix N). The NT EPA recommends that interpretive signage should also include information to educate the community on the threat to wildlife posed by cats.

The Proponent has committed to providing financial support for a shorebird monitoring program which could be conducted by local bird-watching groups and local residents and visitors. The aim of the program is to quantify potential impacts from the Proposal on the shorebirds. The monitoring program would run for five years

and allow visitors to actively participate in a bird monitoring program and contribute to understanding the significant values of the reserve.

The NT EPA supports the proposed avoidance and mitigation measures to maintain natural values of the reserve for social benefit. The measures proposed by the Proponent are supported by the Parks, Wildlife and Heritage Division and would contribute to the education and ongoing enjoyment of the reserve for birdwatchers and visitors. In addition, the NT EPA makes the following recommendation:

Recommendation 3

That approvals for the proposal should include a condition that requires the Proponent to develop and implement a monitoring program to quantify impacts from the Proposal on local shorebirds. The program is to be designed in consultation with Flora and Fauna Division, Department of Environment Natural Resources, and Wildlife and Heritage Division, Department of Tourism and Culture Parks, and implemented before commencement of construction activities. Results and annual updates from the program should be made publicly available on the internet.

Natural Values of the Casuarina Coastal Reserve – turtle nesting and hatchling release

The NT EPA acknowledges that Casuarina Beach is not a significant turtle nesting site and therefore is unlikely to provide significant conservation value. However, the reserve is iconic as it contains the only turtle nesting beach within a major Australian city. The Casuarina Coastal Reserve has a significant role in educating the public about the conservation of marine turtles and provides visitors with the experience of being involved in the release of hatchling turtles.

In order to protect the iconic status of the reserve and ensure it continues to contribute to people's education about marine turtles, the potential impacts and risks to nesting turtles along Casuarina Beach should be avoided and/or mitigated. The introduction of night time light sources from the development of land adjacent to nesting beaches was identified as a potential impact. The WA EPA guidelines (WA EPA, 2010) refer to instances where light pollution has been demonstrated to disorientate nesting female turtles and hatchlings trying to return to the water.

The Proponent has considered the impacts and risks to nesting turtles and proposes that lighting on buildings above the fourth storey, (taller than vegetation within the Casuarina Coastal Reserve and conservation area), will be designed and installed to avoid light spill on Casuarina Beach, and in accordance with the Western Australian Guideline for Protecting Marine Turtles from Light Impacts (WA EPA, 2010). The NT EPA supports the commitment by the Proponent to adopt measures to avoid lighting impacts on nesting turtles and hatchlings. While Casuarina Beach is protected from urban light sources to some extent by its fringing monsoon rainforest, the proposed development is situated on the top of the escarpment and visibility will be greater offshore, potentially influencing the approach by turtles. Given this, there is potential for lighting from the development to result in some glow on the horizon and for light spill into the reserve. In recognition of the potential for light glow to affect approaching marine turtles, the NT EPA makes the following recommendations:

Recommendation 4

That development applications for development stages adjacent to Casuarina Coastal Reserve (Stages 2, 3, 4 and 5 shown on Figures 2 and 3) should

include details of how the Western Australian Guideline for Protecting Marine Turtles from Light Impacts (WA EPA, 2010) have been incorporated.

Recommendation 5

That development approvals for the Proposal should include conditions that require Western Australian Guideline for Protecting Marine Turtles from Light Impacts (WA EPA, 2010) to be adequately incorporated.

Tropical lifestyle

Residents of Darwin place high importance on outdoor living and recreation in the tropical climate. The design of tropical housing in Darwin typically reflects this type of living with a focus on outdoor areas and natural cooling using sea breezes and prevailing winds. The enjoyment of outdoor living requires high quality air, in particular air that is free from nuisance levels of dust and odour and amenity that is free from nuisance noise and vibration.

Noise, vibration and dust

Proposed construction activities have the potential to generate noise and vibration, predominantly from operation of machinery, and dust from exposed surfaces. This can limit elements of the tropical lifestyle of nearby residents, resulting in occupants avoiding exposure by moving indoor, closing windows and doors and blocking seasonal breezes and natural cooling.

The NT EPA acknowledges that potential generation and exposure of noise and dust correlate to the type of activity, seasonal conditions, and proximity to works. The Proponent has committed to implement and manage a Construction Environmental Management Plan (CEMP) including an erosion and sediment control plan (ESCP) and a noise management sub-plan.

The construction schedule for the Proposal is to complete one of the seven stages per year, over a 7 to 9 month period per stage, predominantly in the Dry season. The Proponent's schedule is dependent on property demand. If construction delays are protracted, occupants may be subject to a prolonged exposure to dust over the medium to long term, which may impact on the enjoyment of the Territory lifestyle.

The NT EPA supports the commitment by the Proponent to avoid and minimise potential impacts to air quality and from noise and vibration emissions. In addition, the NT EPA recommends the following:

Recommendation 6

That approvals for each development stage of the Proposal should include conditions that require the dust, noise and vibration management plans in the Construction Environmental Management Plan to be developed in consultation with community stakeholders and include processes for:

- **communicating anticipated impacts to occupants**
- **reporting of, and responding to, complaints**
- **identifying unexpected and unacceptable impacts to occupants and amending construction practices as appropriate.**

The Construction Environmental Management Plan should be developed and implemented prior to construction commencing, be made publicly available on

the websites of the Proponent, the construction company and relevant authorities, and include scope for regular reviews and updates including the schedule for construction stages.

Recommendation 7

That construction of the Proposal should comply with the *Northern Territory Environment Protection Authority Noise Guidelines for Development Sites*, and the *Northern Territory Environment Protection Authority Noise Management Framework Guideline*.

Odour

There are two existing wastewater treatment facilities within the Lee Point region. A small, privately owned and managed, facultative pond wastewater treatment facility is located within the Lee Point Caravan Park north east of the Proposal. It has a capacity of 1250 equivalent population (EP). Applying the formula in the NT EPA Guideline: Recommended Land Use Separation Distances (NT EPA, 2017), the separation distance for the caravan park facility is 350 m. As this facility is located approximately 980 m from the closest boundary of the Proposal it is not considered to be a potential constraint on the Proposal.

The Leanyer Sanderson Wastewater Treatment Plant (LSWTP), which is owned and managed by the Power and Water Corporation (PWC), is located approximately 1.2 km from the south-eastern corner of the Proposal. The LSWTP was constructed in 1972 and uses facultative lagoons to treat effluent from approximately 50 000 EP in the northern suburbs of Darwin. The LSWTP comprises twelve ponds extending 800 m east-west and 400 m north-south, covering an area of 32 ha. According to PWC, the LSWTP has a maximum capacity of 71 500 EP, which implies that it has significant additional capacity.

The proposed increase in wastewater to the LSWTP from the Proposal was a concern for 40% of submitters, who reported or cited potential instances of unacceptable odour from the LSWTP. Community concern about odour from the LSWTP is reflected in data collected by the NT EPA in its role of regulating pollution and waste, with approximately 80 odour complaints being made to the NT EPA in recent years. Ninety percent of complaints in the NT EPA complaints database are within 1.7 km of the ponds (Figure 5), primarily in the suburbs of Leanyer and Muirhead. A majority of these complaints are from September 2017 and are associated with inlet operations and de-stratification of ponds (de-stratification occurs when there are significant reductions in air temperature leading to turnover of layers within the pond, resulting in odorous material rising to the surface). The complaints to EPA often identified that odours were significantly worse than previous levels experienced by the complainant. It is noted that, due to the large volume of complaints in a short period and, often, a delay between the incident and the report, many of these complaints to NT EPA could not be rigorously verified.

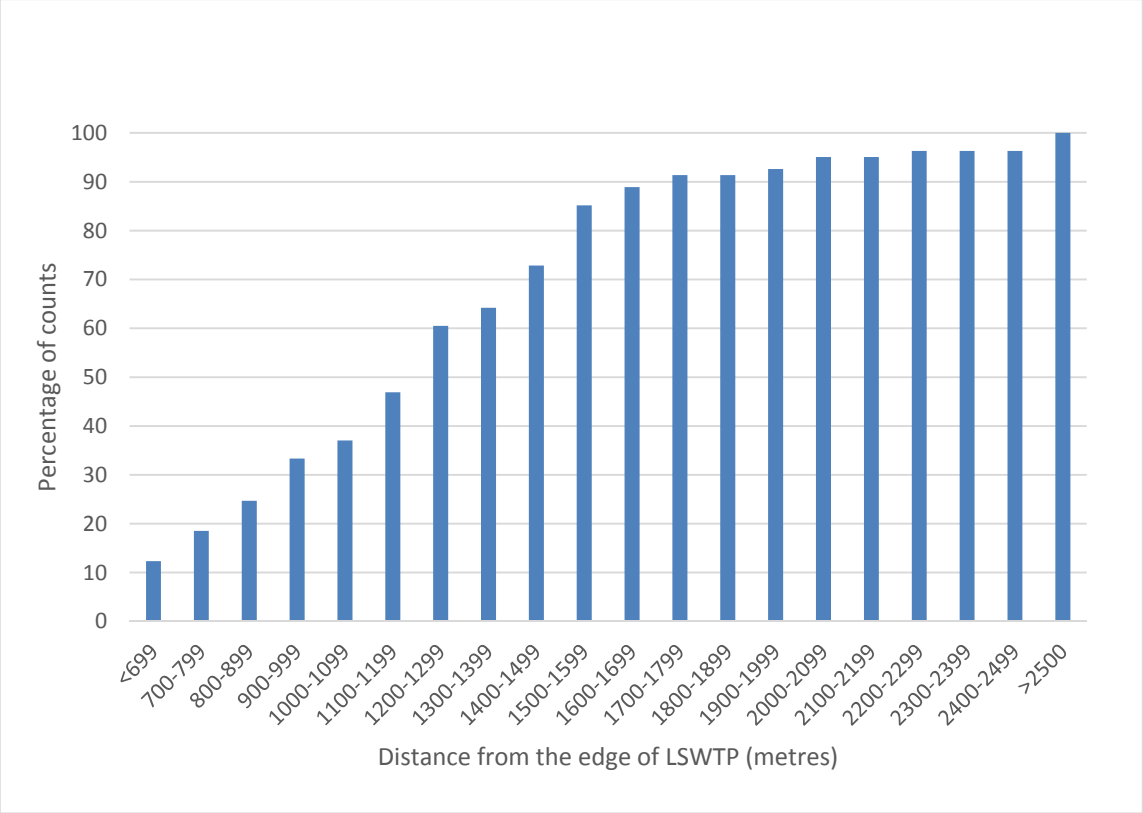


Figure 5 Cumulative counts of odour complaints received under the *Waste Management and Pollution Control Act* versus distance from the edge of LSWTP.

The NT EPA is aware that complaints from the community regarding odour from LSWTP have also been lodged with the City of Darwin, PWC, and local electorate offices and Members of Parliament. Details of these complaints are not available to the NT EPA and are therefore not considered in this assessment.

Based on the complaints received by the NT EPA, it is apparent that the LSWTP in its current operating mode is a constraint on future nearby development. Exposure to odours affects sensitive receptors in residential areas, particularly during events when conditions cause higher than usual odour levels (for example, the presence of an inversion and light winds). Impacts include a loss of amenity and in extreme cases may result in nausea. Another potential impact in Darwin is the inability to enjoy the tropical lifestyle and outdoor living. Some residents living within 1.7 km of the ponds have reported issues (to the Pollution Hotline) with sleeping, particularly when odour emissions are offensive.

The Proponent provided results of a field odour survey (The Odour Unit; EIS Appendix J) carried out on six days from Thursday 23 February to Tuesday 28 February 2018. On three days, the winds blew odour in the opposite direction to the survey points, and on three days there was heavy rain. A downwind odour plume was tracked on one day only, with weak to distinct pond odour being detected on the plant boundary, and light odour detected 500 m away at the edge of Muirhead. This report concluded that odour impacts on Muirhead North and 2CRU would be negligible and in all likelihood nil. The NT EPA considers that this report cannot be considered to reliably predict the annual pattern of odour plumes around the LSWTP, due to the limited field sampling, and therefore the report's conclusion is not supported.

The Odour Unit report also referred to an earlier odour dispersion modelling report by GHD (2015) which found that the risk of odour impacts beyond about 500 m was low. While the NT EPA considers the odour modelling in the GHD report to be informative, the modelled outputs do not accurately reflect the numerous odour complaints reported to the NT EPA, at distances to at least 1.7 km from the LSWTP.

The PWC has a developed a Continuous Improvement Program[1] to improve the performance of the LSWTP and recent works include desludging of the Sanderson Primary Pond and upgrade of inlet works, with a stated intention to trial other odour reduction techniques including surface aeration. The NT EPA acknowledges that these actions may reduce the risk of odour but also notes that it is very unusual for wastewater treatment facility servicing 50 000 EP to be based on a facultative lagoon system. Based on national 'good practice', a transition to less odorous treatment methods such as aerated lagoons is highly desirable, and would significantly reduce the radial distance of significant odour risk.

The NT EPA Guideline: Recommended Land Use Separation Distances (NT EPA, 2017) lists formulae for the nominal separation distance for facultative pond plants and also for treatment plants using other systems. For the stated maximum capacity of 71 500 EP for the LWSTP, the separation distance for facultative ponds is 2.6 km (Figure 6). The NT EPA notes, however, that the formula used in the Guideline was not intended to apply to such a large EP, and is probably an overestimate. Although not included in the NT EPA Guideline, the separation distance for an aerobic pond system, based on the EPA Victoria guidelines (EPA Victoria, 2013), would be 1.3 km. For other types of treatment, the separation distance could be reduced to as little as 440 m.

On the basis of available evidence, which includes taking into account the NT and Victorian Guidelines on separation distances and the available odour complaint data, the NT EPA considers that there is a risk of intermittent odour at nuisance levels at distances up to 1.7 km from the LWSTP as it is currently operating, and this 'odour buffer' should be applied during the assessment of this Proposal. With further improvement to the operation of LWSTP, including increased aeration, it is likely that this odour buffer could be reduced to 1.3 km.

The NT EPA notes that separation distance should not be applied retrospectively (NT EPA, 2017). As stated in the guideline, it '*cannot be applied to existing interfaces between current activities and sensitive land uses where those sensitive land uses are located within land that would be part of the separation distance. In these circumstances the NT EPA manages potential impacts under existing authorisations and general environmental duty provisions within the WMPC Act'.* However, in preparing this assessment, the NT EPA acknowledges two important factors. Firstly that this is a proposed expansion of a new residential development into the odour buffer zone of a sewage treatment plant and, secondly, the current sewage treatment plant cannot be considered as current good practice technology for this level of population. The NT EPA is of the view that it must consider the potential for people occupying this new residential area to be adversely affected by odour from the LSWTP, particularly in light of the potential for an increase in odour issues arising from an increased load at the LSWTP from the development of the Proposal as well as continued growth in the northern suburbs.

[1]https://www.powerwater.com.au/networks_and_infrastructure/water_services/water_and_waste_water_treatment/leanyer_sanderson_waste_stabilisation_ponds

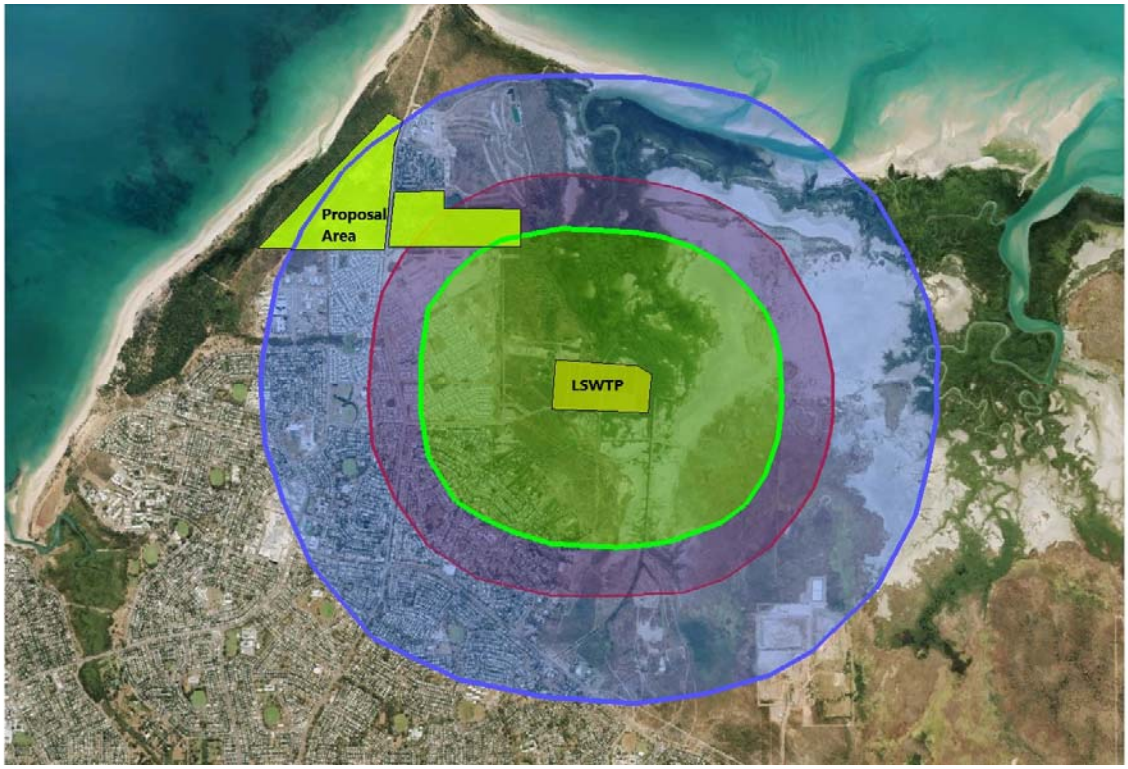


Figure 6. Separation distance calculations and recommended odour buffer around LSWTP. The EPA Victoria aerobic calculation is 1.33 km (green). NT EPA separation distance calculation for facultative ponds is 2.6 km (blue). The NT EPA's recommended odour buffer for the Proposal is 1.7 km (red).

The NT EPA considers all components of the Proposal that are located greater than 1.7 km from the LSWTP can proceed with a low risk of potential future odour nuisance.

There is a potential for land-use conflict within the 1.7 km odour buffer, which includes the proposed rural residential lots and a small proportion of the urban housing lots within Muirhead North. The NT EPA took a number of factors into consideration in determining an appropriate, proportionate response to this issue, including the precautionary principle, the 'agent of change' principle, and the level of uncertainty in determining the odour buffer radius.

As the emissions from the LSWTP are an existing concern and outside the Proponent's control, the NT EPA considers that it would be appropriate for future residents within the 1.7 km odour buffer to be informed that receptors/residents may be impacted by odour from the LSWTP.

Recommendation 8

That prior to issuing of titles, the Proponent should ensure that a Caution Notice (or similar as agreed with the responsible authority under the *Planning Act*) is lodged with the Registrar General under Section 34 of the *Titles Act* for all lots within a 1.7 km buffer from the Leanyer Sanderson Wastewater Treatment Facility.

The Caution Notice (or similar) is to notify potential developers and landholder/s that the lot:

- **occurs within the identified odour buffer for the Leanyer Sanderson Wastewater Treatment Plant**
- **may be subject to occasional odours associated with the operation of the Leanyer Sanderson Wastewater Treatment Plant.**

After completion of upgrade works to the LSWTP, there may be an opportunity to revise the odour buffer and therefore the need for the Caution Notice. This is to be determined following consultation with the Power and Water Corporation, Department of Infrastructure, Planning and Logistics, and Department of Environment and Natural Resources.

Heritage and Aboriginal sacred sites

The Proponent has obtained an AAPA Authority Certificate (C2018/060) under the *Northern Territory Aboriginal Sacred Sites Act.* Provided the Proponent complies with the AAPA Authority Certificate and accompanying letter, with a commitment to avoid clearing and disturbing culturally significant trees within the nominated area of cultural significance, the NT EPA is satisfied that the potential impacts and risks to sacred sites have been adequately addressed.

The Proponent acknowledges the military history of the site and has committed to preserving important heritage items where possible. The 'Bunkers' would be retained and incorporated into the Proposal within park or open space (Figure 2). The Konfrontasi cruciform in the north-west corner of Muirhead North would also be retained. To ensure the retained heritage places continue to be protected, the Proponent proposes a Cultural Heritage Management Plan.

In addition to preserving the heritage items, the Proponent has committed to working with the Parks, Wildlife and Heritage Division of DTC, to develop signage and interpretation material for both sites.

The NT EPA considers that the retention of the two heritage sites will allow development of the Proposal while maintaining people's connection with historic values of the area. The installation of signage and the associated interpretative material will contribute to furthering public awareness and understanding of a poorly known period in Australia's military history.

The stone scatters identified within 2CRU would be removed for each stage of the Proposal, resulting in the associated loss of cultural heritage values. Pre-clearance surveys would be undertaken by the Larrakia Development Corporation to identify the scatters and any new archaeological material. The Proponent has committed to obtaining all relevant approvals under the *Heritage Act* prior to removing Aboriginal heritage items.

The NT EPA supports the Proponent's commitments. Provided the Proponent complies with permit requirements under the *Heritage Act* and the AAPA Authority Certificate and accompany letter under the *Northern Territory Aboriginal Sacred Sites Act*, the NT EPA is satisfied that the potential impacts and risks to cultural heritage have been adequately addressed.

5.1.5 Summary and conclusion

The NT EPA has considered the potential impacts and risks on social and cultural heritage values. The NT EPA considers that, with implementation of the measures proposed by the Proponent and the recommendations described above, the NT EPA objective for social, economic and cultural surroundings is likely to be met.

5.2 Human health

5.2.1 NT EPA objective

Ensure that the risks to human health are identified, understood and adequately avoided and/or mitigated.

5.2.2 Environmental values

Darwin's housing stock, particularly in Darwin's northern suburbs, is seasonally impacted by biting insects. The most common biting insects with potential to spread diseases, and hence impact human health, are mosquitoes and midges.

In a report prepared for the Proponent, the Medical Entomology Unit, Department of Health identified that the northern salt marsh mosquito (*Aedes vigilax*) and the common banded mosquito (*Culex annulirostris*) are present across the Proposal area. Both species are vectors for disease transmission, particularly Ross River virus and Barmah Forest Virus. *Culex annulirostris* is also known to transmit Murray Valley encephalitis virus and Kunjin virus. Other mosquito species that do not transmit disease are also likely to be present (Medical Entomology, 2016).

Two species of pest biting midges (*Culicoides ornatus* and *Culicoides* sp. *subimmaculatus*) were found to be seasonally present at the Proposal area (Medical Entomology, 2016). Biting midges do not transmit disease, however bites may cause local swelling, irritation/discomfort and, potentially, secondary bacterial infection. The Medical Entomology Unit identified the following significant biting insect breeding areas that have the potential to affect the Proposal area:

- the Leanyer swamp, stretching east from the mangrove margin of Buffalo Creek, is a major potential breeding area for *A. vigilax* and *Cx. annulirostris*
- swamps to the east of Leanyer swamp, as far away as the Howard River are a potential minor source of *A. vigilax* due to its very long flight range
- depressions in upper tidal mangrove creeks in Casuarina Coastal Reserve provide breeding habitat for *A. vigilax*
- interdunal and monsoon rainforest depressions from the mouth of Buffalo Creek to Dripstone Cliffs provide very productive breeding habitat for *A. vigilax*
- the mangroves and tidal tributaries of Buffalo Creek are major biting midge breeding areas
- Sandy Creek is likely to be a moderate biting midge breeding area.

Residents and visitors to the proposed future suburb expect to reside and occupy the location with a high level of security for their health and wellbeing. Residents are likely to have an expectation that the property that they occupy allows for outdoor living and enjoyment of the tropical lifestyle.

5.2.3 Potential impacts

The potential impacts to human health, as a result or the Proposal, relate to:

- creation of additional mosquito breeding habitat, particularly inadequately designed stormwater and downstream infrastructure

- exposure of occupants and visitors to pest mosquitoes and biting midges that have the potential to increase the rate of infections of mosquito-borne diseases, or cause irritation and discomfort.

5.2.4 NT EPA assessment

Creation of new biting insect breeding habitat

Poorly designed and constructed stormwater drainage was identified by the Medical Entomology Unit as being a significant contributor to historic mosquito breeding problems in Darwin (Medical Entomology, 2016). Further, the Medical Entomology Unit identifies that the greatest potential for creating new mosquito breeding areas is associated with the selection of inadequate drain discharge points.

The creation of new mosquito breeding habitat would likely increase mosquito problems for future residents of the proposed development as well as existing residents in adjacent suburbs. The Proponent has noted this as a risk and has committed to ensuring all stormwater management infrastructure is designed and constructed consistent with the relevant Northern Territory Guidelines (Medical Entomology, 2017). The Proponent has committed to implementing the measures identified by the Medical Entomology Unit (Medical Entomology, 2016) including a commitment to construct appropriate drainage outfalls and a commitment to remediate historic erosion issues that have been attributed to increased mosquito breeding in Casuarina Coastal Reserve. The NT EPA supports these actions and makes the following recommendations:

Recommendation 9

That development approvals for the Proposal should have conditions that ensure stormwater discharges from the development terminate at a daily flushed tidal area or frontal beachline and are constructed to the satisfaction of the Medical Entomology Unit, NT Department of Health, on behalf of the final drain maintenance authority. All discharge drains, including the end point of the drains, should be excised as separate lots and appropriately zoned to allow the drain owner to carry out expedient maintenance.

Recommendation 10

That development approvals for the Proposal should have conditions that require stormwater treatment structures, including potential detention storage and water features or lakes, to be designed and constructed to be free from potential mosquito breeding sites to the satisfaction of the Medical Entomology Unit, NT Department of Health, on behalf of the final maintenance authority.

Proximity to existing biting insect breeding habitat

The human population occupying the proposed future development area has the potential to be impacted by mosquito-borne diseases, due to the proximity of mosquito breeding habitat. Surveys of the Proposal site found that mosquito numbers were seasonally high across both 2CRU and Muirhead North.

The Department of Health *Guidelines for Preventing Biting Insect Problems for Urban Residential Developments or Subdivisions in the Top End of the NT* (updated Dec 2017), state that there should be no urban residential development within 1.6 km of large uncontrolled areas of mosquito and midge breeding sites, unless specific medical entomology investigations are carried out and these investigations reveal

urban residential development is suitable. The guidelines consider that incorporating a rural residential buffer between major sources of biting insects and the urban component of a subdivision will generally allow the 1.6 km urban residential buffer to be relaxed to 1 km. The guidelines do not prohibit rural blocks closer to mosquito or midge breeding areas, but specify increasingly large block sizes closer to the source boundary.

The risk of mosquito-borne diseases on the human population as a result of the Proposal was assessed by the Medical Entomology Unit in its report prepared for the Proponent (Medical Entomology, 2016). The report made recommendations for a range of controls for the design of the Proposal, including:

- a 1 km separation distance between the landward mangrove margin of Buffalo Creek and urban residential areas (refer to the biting insect buffer demarcated in Figure 4)
- preventing the creation of new breeding areas (particularly when constructing stormwater infrastructure)
- creating barriers or buffers between breeding areas and densely populated residential areas (see specifications below)
- chemical control of larval mosquitoes when significant numbers are anticipated.

Leanyer Swamp, Buffalo Creek and portions of Casuarina Coastal Reserve are currently targeted for aerial mosquito control, particularly when numbers of mosquitoes reach significant numbers and the risk of mosquito-borne disease risk is high (Medical Entomology, 2016). In advice to the NT EPA, Department of Health confirmed that there was a helicopter spray program to control mosquitoes in tidal swamps from the edge of Buffalo Creek to Shoal Bay Receiving Station, and that this control allowed the 1.6 km buffer to be reduced to 1 km for the proposal. This advice also noted that, while the suburb of Leanyer approaches to within approximately 500 m of Leanyer Swamp (where significant mosquito control measures are implemented), a similar 500 m buffer could not be considered for the Proposal due to the additional issue of biting midge problems arising from Buffalo Creek. Unlike for mosquitoes, there are currently no effective controls for biting midge breeding sites.

In advice to the NT EPA, the Department of Health recommended formalising an open-wind buffer between the monsoon forest east of the Casuarina Coastal Reserve and the western development margin. The intent of the buffer is to provide a break in mosquito and biting midge harbourage and breeding habitat between developed areas and the adjacent monsoon forest. The open buffer should have a mature tree canopy of less than 10% crown cover and may include roads, footpaths or mown grass. The NT EPA supports this approach, subject to maintaining the integrity of the coastal monsoon vine forest.

Recommendation 11

That approvals for the Proposal should require a minimum 50 m open wind buffer between the western edge of the 2CRU residential and commercial area and the monsoon forest boundary (or edge of the escarpment if this is closer). The wind buffer should only be planted with tall-growing, long-lived, hardy native trees, with a suggested mature tree crown coverage of approximately 10%.

Portions of the Muirhead North site are less than 1 km from biting insect breeding habitats at Buffalo Creek and Leanyer Swamp, requiring the Proponent to implement a buffer to reduce the dispersal of biting insects through the Proposal. This buffer is in the form of a cleared drainage reserve (approximately 100-150 m wide) and larger rural lots (with reticulated sewerage) along the eastern boundary of Muirhead North. These lots would be of an area of approximately 4000 m^2 and are intended to disrupt the dispersal of biting insects into the Proposal. The NT EPA notes that the Department of Health has confirmed it supports this approach. Larger lots within the 1 km buffer also result in lower population density, reducing the risk of disease at the population level.

The NT EPA supports the adoption of larger rural lots on the eastern margin of the Proposal, to provide a buffer to reduce the dispersal of biting insects into urban and residential areas. The NT EPA recommends the following conditions:

Recommendation 12

That the Responsible Minister should include a condition on future Development Permit(s) requiring that the Proponent ensure any lots in Muirhead North within the biting insect buffer, as shown in Figure 4:

- **have a minimum area of 4000 m^2**
- **cannot ever be subdivided.**

Future occupants of rural lots within the 1 km biting insect buffer are likely to be impacted by biting insects to a greater extent than other residents. The NT Department of Health advised the NT EPA that there are a range of recommended management options to control biting insects, including:

- designing and constructing dwellings that are less accessible to biting insects, for example, elevated houses with insect screens fitted
- use of residual insecticides
- personal protection by individuals.

These would be the responsibility of individual property owners or occupants.

To ensure future occupants of rural lots within the 1 km buffer are aware that they may be exposed to seasonally high numbers of biting insects, the NT EPA recommends that the following condition:

Recommendation 13

That prior to issuing of titles, the Proponent should ensure that a Caution Notice is lodged with the Registrar General under Section 34 of the *Titles Act* (or similar as agreed with the responsible authority under the *Planning Act*) for all lots located within the identified biting insect buffer (in consideration of Recommendation 12 above).

Each Caution Notice (or similar) should indicate the following:

- **that the lot occurs within the biting insect buffer**
- **that the lot is subject to seasonal mosquito and biting midge pest problems arising from the adjacent mangroves of Buffalo Creek and tidal marshes and mangroves in Leanyer Swamp.**

The Medical Entomology Unit reported that the implementation of the recommended controls and buffers would likely result in peak season mosquito numbers experienced in the Proposal area (outside the buffer zone) being similar to other mosquito-affected suburbs such as Muirhead, Leanyer and Karama (Medical Entomology, 2016).

The NT EPA notes that, as the population in the region increases, it will be important that control effort is maintained at a level commensurate with disease risk.

5.2.5 Summary and conclusion

The NT EPA has considered the potential impacts and risks from biting insects on future residents of the Proposal site. The Proponent has followed the key recommendations of the Medical Entomology Unit, and the NT Department of Health has confirmed to the NT EPA the acceptability of these measures in relation to biting insects. While it is acknowledged that the risks to public health from biting insects cannot be fully avoided, the measures proposed would reduce exposure and potential health impacts to occupants and visitors.

The NT EPA considers that, with implementation of the measures proposed by the Proponent and the recommendations described above, the NT EPA objective for human health is likely to be met.

5.3 Terrestrial flora and fauna

5.3.1 NT EPA objective:

Protect the NT's flora and fauna so that biological diversity and ecological integrity are maintained.

5.3.2 Environmental values

Vegetation surveys of the Muirhead North portion of the Proposal site identified seven relatively common vegetation types and one significant and sensitive vegetation type (monsoon rainforest, which includes monsoon vine thicket, or coastal vine thicket). Surveys of the 2CRU site identified four vegetation types including a large patch of monsoon rainforest along the western boundary of the site. The vegetation types and their distribution and extent are summarised in chapter 7 of the EIS.

The area of monsoon rainforest (20.6 ha) along the western boundary of 2CRU is part of a larger stand (52.76 ha) associated with the Lee Point escarpment. The DENR advised that the monsoon rainforest associated with Casuarina Coastal Reserve is of significant conservation value due to its large size. In addition, because of the proximity to Darwin, this patch has value to the community for recreational and educational activities, and supporting natural processes that are highly valued by the community (addressed in section 5.1). The monsoon rainforest in Muirhead North is significantly smaller (0.88 ha) and considered by DENR to be of 'moderate' conservation significance, as one of a network of monsoon rainforest patches in the Darwin area.

While the Proposal site does not provide habitat for migratory shorebirds, two significant areas for shorebirds are located within the nearby Casuarina Coastal Reserve. Darwin Harbour, including Casuarina Beach, is known to provide foraging and roosting habitat for at least 25 species of migratory shorebirds (Lilleyman, 2016). Migratory shorebirds are protected under the EPBC Act, and several species are also listed as threatened species under the EPBC Act and TWPC Act (Table 2).

Table 2 Threatened migratory shorebird species present in Darwin Harbour

Shorebird	EPBC Act	TWPC Act
lesser sand plover	Endangered	Vulnerable
greater sand plover	Vulnerable	Vulnerable
bar-tailed godwit (northern Siberian)	Critically endangered	Vulnerable
bar-tailed godwit (western Alaskan)	Vulnerable	Vulnerable
eastern curlew	Critically endangered	Vulnerable
Asian dowitcher	-	Vulnerable
great knot	Critically endangered	Vulnerable
red knot	Endangered	Vulnerable
curlew sandpiper	Critically endangered	Vulnerable

Within Casuarina Coastal Reserve, Buffalo Creek at Lee Point (1.4 km northeast of the Proposal site) meets all the criteria (Commonwealth of Australia, 2017) for a nationally important habitat for migratory shorebirds, while Sandy Creek (347 m northwest of the Proposal) meets two of the criteria (Lilleyman, 2016). Both sites support internationally significant numbers[2] of some species.

The coastal area between Rapid Creek and Buffalo Creek is managed under the Casuarina Coastal Reserve Management Plan (Parks and Wildlife Commission of the Northern Territory, 2016). No dogs are allowed between Lee Point and Buffalo Creek (an area approximately 1.7 km long), and dogs must be kept on leads within 100 m on either side of Sandy Creek, to protect migratory shorebirds.

At Sandy Creek, the main area used by roosting shorebirds occurs on the western side of the creek in casuarina trees/mangrove vegetation. Foraging occurs seasonally on the tidal flats along Casuarina Beach (Lilleyman, 2016).

A population of the yellow-spotted monitor (*Varanus panoptes*), which is listed as vulnerable under the TPWC Act, has been recorded as persisting in the Casuarina Coastal Reserve outside of the Proposal site. There are additional records of the species from the nearby suburbs of Brinkin, Rapid Creek and Nightcliff.

Two threatened species are confirmed to occur on the Proposal site. The Darwin cycad (*Cycas armstrongii*), listed as Vulnerable under the TPWC Act, occurs across large areas of the site in low to medium densities. The black-footed tree-rat (*Mesembriomys gouldii gouldii*) is listed as Endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and Vulnerable under the TPWC Act. Surveys of the Proposal site recorded black-footed tree-rat at three sites within Muirhead North, but did not record it in 2CRU (EIS Appendix M). Based on a number of criteria, areas within the Proposal were identified and mapped according to their potential habitat quality for black-footed tree-rat. The majority of higher quality habitat was in Muirhead North, but also included some areas of 2CRU (EIS Appendix M, Figure 3). There are a small number of records of black-footed tree-rat in the Lee Point area (between Charles Darwin University and Buffalo Creek) and, based on the distribution of suitable habitat in this substantially modified region, this could be considered to represent a remnant sub-population of this declining species.

[2]Considered to be greater than 1% of the flyway population of a single species (Hansen, et al., 2016).

5.3.3 Potential impacts

The potential impacts to terrestrial flora and fauna, as a result of the Proposal, include:

- degradation of the health and condition of monsoon rainforest in Casuarina Coastal Reserve, the western margin of 2CRU and one patch in Muirhead North through altered hydrology and introduction of weeds
- removal of habitat for Darwin cycad resulting in a direct loss of individual plants
- reduction of the value of roosting habitat for migratory birds in Casuarina Coastal Reserve due to increased disturbance, causing migratory birds to seek alternative roosting habitat
- removal of habitat for black-footed tree-rat within the proposal area, decreasing and fragmenting the area of available habitat, and with the potential to result in reduction or loss of the Lee Point sub-population.
- Increased risk of vehicle strike, human disturbance, or increased numbers of cane toads affecting the sub-population of yellow-spotted monitor in Casuarina Coastal Reserve.

5.3.4 NT EPA assessment

Monsoon rainforest

The Proponent has committed to avoid clearing monsoon rainforest. The largest patch of monsoon rainforest (21.8 ha) has been rezoned by the Proponent to 'Conservation' (CN zone) under the NT Planning Scheme. The Proponent proposes that this patch of rainforest (on the western boundary of 2CRU) would be transferred to the Parks, Wildlife and Heritage Division, DTC, for inclusion in the Casuarina Coastal Reserve. The NT EPA supports the retention of the 2CRU monsoon rainforest, and its transfer to the Casuarina Coastal Reserve.

The Proposal provides for a 50 m open-wind buffer, to mitigate biting insect impacts, from the edge of the retained Casuarina Coastal monsoon rainforest to the proposed urban development. The NT EPA notes that the proposed buffer is not consistent with the Northern Territory Land Clearing Guidelines 2010 (NRETAS, 2010). The Guidelines specify that a 100 m buffer of native vegetation should be retained around monsoon rainforest to protect the monsoon rainforest from degrading edge effects, particularly colonisation by weeds, impacts from urban runoff and for the maintenance of hydrology.

The NT EPA observed that the existing native vegetation at the edge of the monsoon rainforest is currently highly degraded, and does not provide the benefits expected of a native vegetation buffer. In consultation with DENR, the NT EPA has formed the view that the proposed 50 m biting insect buffer (as per Recommendation 11), providing it is maintained to exclude fire and reduce weed infestation, is likely to provide a preferable level of protection for the monsoon rainforest compared to requiring retention of an additional 50 m buffer of highly degraded native vegetation. In order to protect the values of the monsoon rainforest, it would be essential that weed spread is minimised, and that suitable ground cover is maintained to reduce runoff, erosion and sedimentation.

The revised area plan for Muirhead North includes a drainage reserve and conservation area along the eastern boundary. This drainage reserve and

conservation area includes a smaller monsoon rainforest patch which is proposed to be retained and protected within a 'conservation area' (11.24 ha). The 'conservation area' is proposed to be retained and rezoned as 'open space' (OS zone).

The proposed area plan includes a buffer of 15 m between the monsoon rainforest patch and adjoining rural lots. Advice from the DENR suggests that a 15 m buffer is unlikely to provide adequate protection to the rainforest patch from adjacent land uses and pressures (changes to hydrology, weeds, fire, dumping of rubbish etc.). The NT EPA considers that a minimum buffer of 25 m of retained native vegetation should be considered.

The NT EPA supports the retention and management of the monsoon rainforest in Muirhead North but notes that the proposed zoning as 'open space' would provide limited protection to the patch. To provide adequate protection to the monsoon rainforest patch, the NT EPA makes Recommendation 15 below to require a minimum buffer of 25 m around the monsoon rainforest and that the retained vegetation be incorporated into a larger area zoned as 'conservation' (CN zone) under the NT Planning Scheme.

To maintain sensitive and significant monsoon rainforest, the Proponent has prepared and will implement a Biodiversity Management Sub-plan which identifies appropriate weed hygiene and management measures. The implementation of the plan and commitment to health and condition monitoring is supported.

The ongoing management of the 'conservation area' within 2CRU will be outlined in a management plan which is to be prepared in consultation with relevant stakeholders (City of Darwin; Parks, Wildlife and Heritage; Casuarina Coastal Reserve Landcare Group). The Proponent has committed to managing the 'conservation area' until such time as the 'conservation area' will be handed over to Parks, Wildlife and Heritage. The NT EPA supports this approach.

Darwin cycad (*Cycas armstrongii*)

The Darwin cycad (*Cycas armstrongii*) is a locally common species with a restricted distribution. The species has been recorded from the Proposal site in low to moderate densities. Clearing for the Proposal would require the removal of 63.9 ha of occupied habitat for the species. An area with moderate densities of *C. armstrongii* is proposed to be retained within the 11.24 ha 'conservation area' on the Muirhead North portion of the site. The NT EPA supports the retention of cycads within an area zoned 'conservation' in accordance with Recommendation 15 (below).

During clearing, the Proponent may relocate some *C. armstrongii* for landscaping in the development. The NT EPA notes that the relocation and use of *C. armstrongii* for landscaping is not considered to have any conservation benefit and is not an avoidance or mitigation measure. The use of individual plants for landscaping purposes is, however, consistent with the Management Program for Cycads in the Northern Territory (Liddle, 2009).

The NT EPA acknowledges that the Proposal will contribute to the cumulative loss of *C. armstrongii* in the greater Darwin region. However, due to the small area of habitat lost compared to the total distribution of the species, the NT EPA does not consider that the loss due to the Proposal is likely to affect the conservation status of the species in the Northern Territory.

Migratory shorebirds

Darwin's population growth has contributed to an increase in visitor numbers to the Casuarina Coastal Reserve. This has contributed to increased encroachment on important roosting sites and potential disturbance of shorebirds (Lilleyman, 2016). The disturbance of migratory shorebirds during roosting and foraging activities can add pressure to populations by adversely affecting birds' ability to build energy reserves which are needed for long-distance migration flights (Lilleyman, 2016).

Two areas within Casuarina Coastal Reserve are considered to have significant populations of migratory shorebirds, with Sandy Creek being the closest to the Proposal area. The Proponent has presented a range of mitigation measures to reduce the potential impacts from human intrusion on significant migratory shorebird habitat, including locating access points to avoid roosting habitat, installing interpretative signs and supporting a shorebird monitoring program. The NT EPA considers that the proposed mitigation measures sufficiently address potential impacts to populations of migratory shorebirds from the Proposal (see section 5.1).

Black-footed tree rat (*Mesembriomys gouldii gouldii)*

The Proponent considers that the Proposal would require the clearing of 23 ha, and additional modification of 7.5 ha, of suitable habitat for the black-footed tree-rat (*Mesembriomys gouldii gouldii)*. The NT EPA observes that the Proponent used a qualitative assessment to rank potential habitat, and only higher quality habitats were considered 'suitable' in the area calculation reported above. The NT EPA notes that the inclusion of habitat ranked as 'moderate-quality' would result in the area of 'suitable' habitat being 52.37 ha. The NT EPA considers that a significantly greater spatial and temporal intensity of sampling would be required to definitively determine habitat use by tree-rats within the proposal area and, without this, a more precautionary approach to estimating the total area of habitat potentially used by tree-rats would be appropriate.

The Department of Environment and Natural Resources (DENR) advised that the removal of vegetation across the Proposal site would remove a significant proportion of the remaining woodland habitat for the species in the Lee Point area. There is a risk that removal and fragmentation of woodland habitat may reduce habitat availability to a point that the longer-term viability of the Lee-Point sub-population is compromised, and consequently the residual impact to black-footed tree-rats may extend beyond the immediate proposal footprint.

The NT EPA considers that the postulated impact from the proposal on the larger Lee Point subpopulation of black-footed tree-rat is feasible, but there is insufficient data to rigorously assess the likelihood of this outcome. On balance, the NT EPA considers that there is likely to be a residual impact on the local occurrence of black-footed tree-rat from the Proposal, but the impact on the species is not likely to sufficiently great to make this impact unacceptable. Nevertheless, the NT EPA considers that the residual impact is sufficiently significant for an offset to be appropriate, noting that this mechanism is available under the EPBC Act, rather than NT legislation.

The Proponent has committed to preparing an Offset Management Plan, which is intended to compensate for the significant residual impact, and has presented a preliminary offset proposal and calculation. While the NT EPA does not have responsibility for administering offsets, it recognises and supports the development of an appropriate offset that is based on a precautionary estimate of the residual impact. The NT EPA does not agree with the proponent that retaining a portion of current habitat on site can be considered an offset, as this is a mitigation measure and the

residual impact is present even with this mitigation in place. Similarly, the NT EPA is concerned that limiting offsets to the immediate vicinity of the Proposal does not necessarily ensure the best outcome for improving the conservation security of the species.

Any offset provided by the Proponent should directly contribute to the conservation of the black-footed tree-rat and meet the minimum requirements in the Australian Government's Offset Policy. To ensure the offset is appropriate, the NT EPA recommends that the Proponent prepare the Offset Management Plan in consultation with the Flora and Fauna Division of the Department of Environment and Natural Resources, and the Department of Environment and Energy.

Recommendation 14

That approvals for the Proposal should require that the Proponent demonstrate consultation with, and support by, Flora and Fauna Division of the Department of Environment and Natural Resources, in relation to any offset or offset management plan required by the Australian Government with respect to the significant residual impact to the black-footed tree-rat (*Mesembriomys gouldii gouldii*).

The NT EPA acknowledges that there is uncertainty about the future of habitat for the black-footed tree-rat in the eastern part of Muirhead North. The NT EPA considers that the vegetation within the area identified as 'drainage/conservation' (with the exception of the 1.85 ha area necessary for construction of stormwater infrastructure) should be retained and protected as CN under the NT Planning Scheme.

Recommendation 15

That approvals for Muirhead North should provide adequate protection for the monsoon rainforest patch and habitat for the black-footed tree-rat. In particular, it is recommended that any approval require:

- **a vegetated buffer of at least 25 m around the monsoon rainforest patch in Muirhead North**
- **the retention of native vegetation in the 'Drainage/Conservation Area' (Figure 4), excluding the 1.85 ha 'Detention Storage'**
- **rezoning the retained area of native vegetation as CN conservation under the NT Planning Scheme.**

Where works are required within the 'detention/conservation area' that have not been considered in this report, the Proponent would need to consult with the NT EPA about whether further consideration under the EA Act is required.

The NT EPA considers that the Proposal is likely to result in a significant residual impact to black-footed tree-rat and that, while this is not sufficiently large or certain to make the project unacceptable, it is appropriate that an offset be developed that directly contributes to the conservation security of the species and that meets the minimum requirements of the Australian Government's Offset Policy.

Yellow-spotted monitor (Varanus panoptes)

The main risk from the Proposal to yellow-spotted monitor would be the inadvertent creation of toad breeding habitat, which may increase toad densities in Casuarina Coastal Reserve, and therefore potentially increase lethal ingestion of the toads by

monitors. The Proponent has designed the stormwater treatment infrastructure to avoid creating areas of pooled water and biting insect habitat, and detention basins have been designed to drain within 24 hours of a rainfall event. The design of drainage infrastructure is likely to be unsuitable for toads to successfully breed and disperse into the reserve.

The NT EPA acknowledges that toads are common on the Proposal site and occur in existing urban areas adjoining the reserve.

Varanus panoptes are at risk from road-strike particularly in urban areas. The existing traffic control measures within Casuarina Coastal Reserve are considered to be adequate to limit vehicle speeds and manage additional traffic generated by the Proposal within Casuarina Coastal Reserve.

The NT EPA has assessed the potential impacts and risks to the population of *V. panoptes* within the Casuarina Coastal Reserve and considers that the design of stormwater treatment infrastructure, and existing traffic control measures, would be sufficient to minimise any additional impacts and risks to this species.

5.3.5 Summary and conclusion

The Proponent has satisfactorily addressed potential impacts to cycads, migratory shorebirds and yellow-spotted monitors. The NT EPA has assessed the potential impacts and risks to the black-footed tree-rat and considers that there is likely to be a significant residual impact to the species which can be offset. The NT EPA is therefore satisfied that the impacts of the Proposal on this species are acceptable.

The NT EPA considers that, with implementation of the measures proposed by the Proponent and the recommendations described above, the NT EPA objective for terrestrial flora and fauna is likely to be met.

6 Conclusion

In making this Report, the NT EPA had regard to the information provided by the Proponent, public submissions on the Draft EIS, advice from experts in NT Government agencies, and relevant guidelines and standards. The NT EPA assessed the Proposal against the NT EPA's objectives for the key environmental factors of Social, economic and cultural surroundings; Human health; and Terrestrial flora and fauna.

The NT EPA's assessment of the proposed Lee Point Urban-masterplan Development Project identified potentially significant environmental, social and cultural impacts and risks associated with amenity; recreational and educational activities within the Casuarina Coastal Reserve; tropical lifestyle, land use conflict and biting insects; heritage and culturally significant sites; and reduction in threatened species habitat.

The NT EPA considers that this assessment provides a sound basis for the Proposal to proceed in a manner in which environmental impacts are maintained within acceptable limits. It stresses that the environmental commitments, safeguards and recommendations detailed in the EIS, this Assessment Report and in the final management plans, must be implemented. Further, the Proponent will be required to monitor the performance of safeguards against objectives and ensure that this information informs design and management of future stages.

The NT EPA makes 15 recommendations as an outcome of the EIA of the Proposal. These recommendations are for the Proponent and decision-makers to consider in future approval processes and during the execution of the proposed action.

7 References

Australian Government, 1992. *Intergovernmental Agreement on the Environment,* Canberra: Australian Government.

Burger, J., Jeitner, C., Clark, K. & Nile, L. J., 2004. The effect of human activities on migrant shorebirds: successful adaptive management. *Environmental Conservation ,* 31(4), pp. 283-288.

Chatto, R. & Baker, B., 2008. *The distribution and status of marine turtle nesting in the Northern Territory.* Darwin: Parks and WIldlife Commission of the Northern Territory.

Commonwealth of Australia, 2017. *EPBC Act Policy Statement 3.21 - Industry guidelines for avoiding, assessing and mitigating impacts on EPBC Act listed migratory shorebird species,* Canberra: Commonwealth of Australia.

Crassweller, 2010. *Heritage and Archaeological Investigations over Block 4873 Lee Point Road, Darwin,* Darwin: Unpublished report prepared by Begnaze.

Ecology and Heritage Partners Pty Ltd, 2018. *Final Report - Environmental Impact Statement: Lee Point Master-planned Urban Development,* Melbourne: Ecology and Heritage Partners Pty Ltd.

EPA Victoria, 2013. *Recommended separation distances for industrial residual air emissions,* Carlton: EPA Victoria.

GHD, 2015. *Subdivision of Lots 6959 - 6961, Leanyer Odour Impact Assessment,* Sydney, NSW: s.n.

Hansen, B. D. et al., 2016. *Revisions of the East Asian-Australasian Flyway Population Estiamtes for 37 listed Migratory Shorebird Species,* Melbourne: Birdlife.

IECA, 2008. *Best Practice in Erosion and Sediment Control Manual,* s.l.: International Erosion Control Association.

Liddle, D., 2009. *Management Program for Cycads in the Northern Territory of Australia 2009-2014,* Darwin.: Northern Territory Department of Natural Resources, Environment, the Arts and Sport.

Lilleyman, A., 2016. *Report on potential impacts from disturbance to migratory shorebirds in Darwin: Defence Housing Authority - Lee Point Master-planned Urban Development,* Darwin: EcOz Environmental Consultants.

Medical Entomology, 2016. *Muirhead North and 2CRU Biting Insect Report,* Darwin: NT Department of Health.

Medical Entomology, 2017. *Guidelines for Preventing Biting Insect Problems for Urban Residential Developments or Subdivisions in the Top End of the NT,* Darwin, NT: Department of Health, Northern Territory Government.

NRETAS, 2010. *Land Clearing Guidelines - Northern Territory Planning Scheme,* Palmerston, NT: Department of Natural Resources, Environment, The Arts and Sport.

NT EPA, 2016. *Lee Point Master-Planned Urban Development, Defence Housing Australia.* [Online] Available at: https://ntepa.nt.gov.au/__data/assets/pdf_file/0008/287603/terms_reference_lee_point_urban_dev.pdf [Accessed September 2018].

NT EPA, 2017. *Guideline: Recommended Land Use Speration Distances.* [Online] Available at: https://ntepa.nt.gov.au/__data/assets/pdf_file/0006/453192/guideline_recommended_land_separation_distances_oct.pdf [Accessed October 2018].

NT EPA, 2018. [Online] Available at: https://ntepa.nt.gov.au/environmental-assessments/register/lee-point-master-planned-urban-development [Accessed October 2018].

NT EPA, 2018. *NT EPA Environmental Factors and Objectives,* Darwin, NT: Northern Territory Environment Protection Authority.

Parks and Wildlife Commission of the Northern Territory, 2016. *Casuarina Coastal Reserve Management Plan,* Darwin: Parks and Wildlife Commission of the Northern Territory.

Taylor, S., 2013. *Best 100 Bird Watching Sites in Australia.* 1st ed. s.l.:University of New South Wales Publishing.

WA EPA, 2010. *Environmental Assessment Guideline for Protecting Marine Turtles from Light Impacts,* Western Australia: Environmental Protection Authority.

Appendix 1 – Geographic coordinates

Table 3. Geographic coordinates for the Proposal

Point	Latitude	Longitude
1	-12° 20' 23	130° 53' 27”
2	-12° 20' 26	130° 53' 33”
3	-12° 20' 33	130° 53' 30”
4	-12° 20' 45	130° 53' 29”
5	-12° 20' 45	130° 53' 45”
6	-12° 20' 51	130° 53' 45”
7	-12° 20' 51	130° 54' 08”
8	-12° 21' 04	130° 54' 08”
9	-12° 21' 04	130° 52' 57”
10	-12° 21' 03	130° 52' 58”
11	-12° 21' 03	130° 52' 47”

Appendix 2 – Evaluation of other environmental factors

The NT EPA assessed the environmental impact of the Proposal in line with its environmental factors and objectives (NT EPA, 2018). The following table presents environmental factors for the Proposal which, based on current knowledge, were assessed as not significant. The NT EPA considers it unlikely that implementation of the Proposal would have a significant impact on these factors and they can be managed to meet the NT EPA's environmental objective.

Environmental factor	Potential impacts	Explanation of why the factor is not a key environmental factor
LAND		
Terrestrial Environmental Quality	Erosion and sediment movement	To manage the risks and potential impacts associated with the soil mobilisation and deposition into watercourses, the Proponent has committed to preparing stage-specific erosion and sediment control plans (ESCPs) for each stage of the development. The NT EPA acknowledges this commitment and considers that it would be appropriate for the Responsible Minister to include a condition on any Development Permit(s) requiring that the Proponent develop and implement stage specific ESCPs. The ESCPs need to be prepared by a Certified Practitioner in Erosion and Sediment Control (CPESC). Each ESCP would be prepared in accordance with the International Erosion Control Association (IECA) Best Practice Erosion and Sediment Control Guidelines 2008 (or higher standard) and include the following: • details of both temporary and permanent erosion and sediment control methods and treatments for all stages of the Proposal (pre, during and post construction) • the ESCP should be a stand-alone document which is consistent with other relevant management plans. It should, however contain all the necessary information to implement without requiring the user to refer to other plans

Environmental factor	Potential impacts	Explanation of why the factor is not a key environmental factor
		• include an over-arching strategic document outlining the principles, practices and methods to be implemented • include information on the proposed timing and staging of works, site manager contact details, maintenance and monitoring requirements, and reporting procedures. The Proponent must implement each ESCP until each stage is stable and non-polluting. This should be demonstrated through regular monitoring by a suitably qualified third party auditor, to the satisfaction of the consent authority. The NT EPA is of the opinion that the mitigation measures proposed are appropriate to reduce the potential impacts and risk to an acceptable level.
Landforms	Unlikely	The Proposal area does not contain any significant landforms that would be impacted during the construction and/or occupation of the Proposal.
WATER		
Aquatic ecosystems	Unlikely	There are aquatic ecosystems downstream from the Proposal area within Buffalo Creek and Sandy Creek. The aquatic ecosystem in Buffalo Creek is considered to be heavily impacted due to runoff from existing urban areas and discharges from the Leanyer Sanderson Wastewater Treatment Facility. Sandy Creek receives stormwater from Lyons, Tiwi and the Hospital precinct and is considered to be modified due to changes from an ephemeral system to a more permanent waterway. The proposed inclusion of stormwater treatment infrastructure into the Proposal would ensure the quality of stormwater and the hydrology (peak flows) does not adversely impact on aquatic ecosystems.
Inland water environmental quality	The channelling and accumulation of runoff and changes to the quality of stormwater being discharged from the	The Proponent prepared a Stormwater Management Plan which identifies a range of Water Sensitive Urban Design measures for managing water quality

Environmental factor	Potential impacts	Explanation of why the factor is not a key environmental factor
	Proposal area into Darwin Harbour through Sandy Creek and/or Buffalo Creek were identified as potential impacts on the beneficial use values of Darwin Harbour.	being discharged off the site. The measures are outlined in the CEMP and include gross pollutant traps, grassed swales and stormwater detention basins. Sediment could potentially be mobilised during clearing and construction activities. These would be managed through the development and implementation of stage specific ESCP's prepared by a CPESC and as per the IECA Guidelines. With the implementation of the proposed preventative measures and relevant management plans identified above, the NT EPA considers that the Proposal could be conducted in such a manner that its objective for inland water environmental quality is likely to be met.
Hydrological processes	Changes to the hydrological regime of Sandy Creek and Buffalo Creek.	Water from the development will runoff from the Proposal area into Buffalo Creek, Sandy Creek and the Casuarina Coastal Reserve. The hydrology of both Sandy and Buffalo Creeks are considered to be relatively modified due to existing suburbs and other infrastructure within the catchment. The Proposal would increase in impervious surfaces and as a result surface runoff. Stormwater from the Proposal would be managed as per a Stormwater Management Plan and stormwater infrastructure (detention basins, pollutant traps, swales). The infrastructure is designed to maintain the pre-development hydrology (peak flows). The NT EPA does not consider that Hydrological processes will be significantly impacted by this Proposal.
Marine flora and fauna	Unlikely	The NT EPA notes that there are existing potential impacts and risks to marine flora and fauna (including sawfish) along the Casuarina Beach and Buffalo Creek. The addition of 3100 new residents and a new access point to Casuarina Beach is unlikely to significantly increase interactions with sawfish. The commitment to fund new signage at access points would contribute to educating existing and future users of the reserve.

Environmental factor	Potential impacts	Explanation of why the factor is not a key environmental factor
		The social values in relation to nesting turtles along Casuarina Beach are discussed in section 5.1 of this Report. The NT EPA considers that it is unlikely that the Proposal would have a significant impact on the NT EPA's environmental objective for Marine flora and fauna.
Benthic Habitat and Communities	Unlikely	The Proposal is not located on land immediately adjacent to the coastal margin. Runoff from the site is unlikely to have a significant impact on benthic habitat and communities.
Marine Environmental Quality	Unlikely	The Proposal is unlikely to have a significant impact on the environmental values for Marine Environmental Quality.
Coastal processes	Unlikely	The Proposal is unlikely to have a significant impact on coastal processes.
AIR		
Air quality and Greenhouse Gases	Implementation of the Proposal would result in the unavoidable emission of greenhouse gases from land clearing, construction, vehicle emissions, and energy generation. Potential impacts to this factor may occur through the following: • clearing of 110 ha of vegetation • construction of built infrastructure	Air quality and greenhouse gasses was not identified as a key environmental factor for the Proposal. The NT EPA noted that: • the clearing of 110 ha of vegetation is unlikely to result in significant quantities of GHG emissions • design of the Proposal is likely to take advantage of prevailing breezes for natural cooling to reduce energy consumption • the Proponent has committed to the implementation of a Dust Management Sub-plan during construction including measures to avoid

Environmental factor	Potential impacts	Explanation of why the factor is not a key environmental factor
	• transport of building materials to and around the site • emissions generated from energy usage by households, businesses and industry	the mobilisation of dust and potential impacts on sensitive receptors. This has been assessed in section 5.1 of this Report. The NT EPA considers that it is unlikely that the Proposal would have a significant impact on Air Quality and Greenhouse Gases and can be managed to meet the NT EPA's environmental objective.

Appendix 3 – Principles of Ecologically Sustainable Development

Under the NT EPA Act, ecologically sustainable development (ESD) means *using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quantity of life now and in the future can be increased.*

In December 1992, the Territory Government endorsed the 'National Strategy for Ecologically Sustainable Development' and agreed, along with all other States and Territories, to the 'Intergovernmental Agreement on the Environment' (IGAE).

The NT EPA uses the four principles contained in the IGAE to demonstrate that it has considered ESD in its assessment of the Proposal and in its fulfilment of its objectives under the NT EPA Act.

ESD Guiding principle	NT EPA assessment
1. The precautionary principle *Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation.* *In application of this precautionary principle, decisions should be guided by:* *a) careful evaluation to avoid, where practicable, serious or irreversible damage to the environment; and* *b) an assessment of the risk-weighted consequences of various options.*	In considering this principle, the NT EPA notes that Social, Economic and Cultural, Terrestrial Flora and Fauna and Human Health could be significantly impacted by the Proposal. The assessment of these impacts is provided in Assessment Report 88 (this Report). The Proponent's investigations into the biological and social environment provided sufficient scientific certainty to assess the potential impacts and risks and outline measures to avoid/minimise those impacts and risks. The NT EPA made further recommendations for the Proponent to implement, in line with the precautionary principle, in order to avoid and minimise impacts to social amenity and human health. These recommendations included provisions for informing future residents of potential land use conflicts and minimising the risks. Where there was uncertainty about potential future land conflict (odour), the NT EPA considered the available modelling, complaints data and relevant policy guidance and adopted a precautionary approach using appropriate land use planning tools. From its assessment of the Proposal, the NT EPA identified there is a threat of serious or irreversible damage but concluded that those threats could be

ESD Guiding principle	NT EPA assessment
	managed through the Proponent's commitments and the inclusion of the NT EPA's recommendations as conditions on future Development Permits.
2. The principle of intergenerational equity *The present generation should ensure that the health, diversity and productivity of the environment is maintained and enhanced for the benefit of future generations*.	The NT EPA has considered the principle of intergenerational equity in assessing this Proposal. The design of the Proposal has considered the environmental values of the site and identified suitable avoidance measures in order to retain the identified values within the site and the adjacent Casuarina Coastal Reserve for future generations.
3. The principle of the conservation of biological diversity and ecological integrity *Conservation of biological diversity and ecological integrity should be a fundamental consideration*.	In considering this principle, the NT EPA notes that the Proposal would result in impacts to terrestrial flora and fauna. In assessing this Proposal, the NT EPA has considered these impacts and risks and taken into consideration measures proposed by the proponent to avoid and minimise impacts to the affected environmental factor. From its assessment of this Proposal, the NT EPA has concluded that the measures proposed are adequate to avoid significant impacts to significant and sensitive vegetation types. A residual significant impact is likely for the black-footed tree-rat. Those significant residual impacts could be adequately compensated through a suitable environmental offset.
4. Principles relating to improved valuation, pricing and incentive mechanisms *a) Environmental factors should be included in the valuation of assets and services.* *b) The polluter pays principles – those who generate pollution and waste should bear the cost of containment, avoidance and abatement.* *c) The users of goods and services should pay prices based on the full life-cycle costs of providing goods and services, including the use*	In considering this principle, the NT EPA notes that the Proponent would take responsibility for preventing, managing and mitigating waste and pollution during clearing and construction of the Proposal. Once the site is constructed and occupied, the responsibility for preventing, managing and mitigating waste and pollution would become the responsibility of individual landholders. The NT EPA has had regard to this principle during the assessment of the proposal.

ESD Guiding principle	NT EPA assessment
of natural resources and assets and the ultimate disposal of any waste. *d) Environmental goals, having been established, should be pursued in the most cost effective way, by establishing incentive structure, including market mechanisms, which enable those best placed to maximise benefits and/or minimise costs to develop their own solution and responses to environmental problems.*	

Approval

Lee Point Master-planned Urban Development, Darwin, Northern Territory (EPBC 2015/7591)

This decision is made under sections 130(1) and 133 of the *Environment Protection and Biodiversity Conservation Act 1999*.

Proposed action

person to whom the approval is granted	Defence Housing Australia
proponent's ABN	72 968 504 934
proposed action	To construct a master-planned urban residential development on Lot 4873 and Lot 9370 at Lee Point, approximately 14 km northeast of Darwin, Northern Territory [See EPBC Act referral 2015/7591].

Approval decision

Controlling Provision	Decision
Listed threatened species and communities (sections 18 & 18A)	Approved
Listed migratory species (sections 20 & 20A)	Approved
Commonwealth action (section 28)	Approved

conditions of approval This approval is subject to the conditions specified below.

expiry date of approval

This approval has effect until 31 December 2035.

Decision-maker

name and position	Gregory Manning Assistant Secretary Assessments (WA, SA, NT) and Post Approvals Branch
signature	
date of decision	17/3/19

Conditions attached to the approval

1. For the protection of the **EPBC Act listed species** and **the Environment**, the approval holder must not **clear** more than 110 ha within the **project area**.

2. To mitigate and manage impacts to **EPBC Act listed species** and **the Environment**, the approval holder must comply with and implement the **Construction Environmental Management Plan**, **Stormwater Management Plan – 2CRU**, **Stormwater Management Plan – Muirhead North** and **Water Quality Monitoring Plan**.

3. For the protection of the heritage values of **the Environment** on the **project area** the approval holder must:

   a) retain the existing **Konfrontasi Cruciform** and **Lee Point bunkers** at their current location

   b) engage a **heritage expert** to develop and install signage and interpretation material for the **Konfrontasi Cruciform** and **Lee Point bunkers** which must be maintained until at least the expiry date of approval.

4. In the event of a discovery of a heritage place or item (including an object) within the **project area**, the approval holder must:

   a) cease work within 20 meters of the discovery, fence and cover the area from further disturbance

   b) seek advice from the relevant authority administering the *NT Heritage Act*; and

   c) document, salvage and store the discovery consistent with advice received in accordance with condition 4(b), prior to any recommencement of work within 20 m of the discovery.

5. To minimise light pollution impacts to **turtles**, the approval holder must restrict artificial lighting on buildings above 15 m in height, and any other lighting directly visible from the beach, by:

   a) only permitting lights of a long-wavelength (560 nanometers or longer) to which **turtle** hatchlings are not sensitive

   b) ensuring lighting is directed in a downwards direction and faced away from the **Casuarina Coastal Reserve** and

   c) At least once each year prior to the **turtle** hatching season, conducting an audit of compliance with 5.a) and 5.b) and replace or correct any non-compliant light source.

6. For the protection of **the environment** the approval holder must determine if **PFASs** are known or likely to be present on the **project area** using the procedures outlined in the *National Environment Protection (Assessment of Site Contamination) Measure 1999*, which must include a desktop historical review of past fire suppression practices. If **PFASs** are known to be or likely to be present, prior to the **commencement** of **clearing** or other works which have the potential to disturb areas of known or potential **PFAS** contamination, the approval holder must submit a **PFAS** Management Plan for the written approval of the **Minister**. If **PFASs** are known to be or are likely to be present the approval holder must not **commence** the action until the **PFAS** Management Plan is approved by the **Minister** in writing. The **PFAS** Management Plan must:

a) identify the extent and concentrations of possible contamination within the **project area**

b) identify possible exposure pathways and ecological receptors including from stored material

c) identify possible risks tailored to the identified concentrations, pathways and receptors

d) outline management strategies to be undertaken, as well as any remediation action plans or strategies, to manage any identified or potential risks and provide for ongoing monitoring

e) commit that:

i. any **PFAS** contaminated material (including but not limited to excavated soil or sediment, leachate from soil or sediment, water arising from de-watering of soil or sediment, concrete, tarmac, appliances, pumps, pipes, hoses, fittings) will be handled appropriately and disposed of in an environmentally sound manner such that potential for the **PFAS** content to enter/spread into **the environment** is minimised.

ii. any **PFAS** contaminated material with a **PFOS**, **PFHxS** or **PFOA** content above 50 milligrams per kilogram or litre (mg/kg or L), will be stored or disposed of in an environmentally sound manner that will achieve nil environmental release of its **PFAS** content.

7. To offset the loss of **Black-footed Tree-rat** habitat from **2CRU**, the approval holder must provide the following to the **Department**:

a) a title search demonstrating that the title for the **offset area** has been transferred by the approval holder to the **Northern Territory Government**. The **offset area** must contain at least 21.5 ha of **Black-footed Tree-rat** habitat

b) documentation demonstrating that the **Northern Territory Government** is satisfied with the **management funding** provided by the approval holder for the management and monitoring required by **Northern Territory Government** of the **offset area**

c) the **offset attributes** and a **shapefile** for the **offset area** required by condition 7(a).

Unless otherwise agreed to in writing by the **Department**, the action at **2CRU** cannot continue for more than 36 months from the date of **commencement** of the action unless the approval holder has provided the requirements of condition 7(a-c).

8. To offset the loss of 10 hectares of **Black-footed Tree-rat** habitat from **Muirhead North**, within 12 months of **commencement** of the action at **Muirhead North** the approval holder must submit an Offset Plan to the **Minister**. The action at **Muirhead North** cannot continue for more than 24 months from the date of **commencement** of the action unless the **Minister** has approved the Offsets Plan in writing.

a) The Offset Plan must provide a framework for how the **clearance** of **Black-footed Tree-rat** habitat will be offset, and must:

i. review relevant **approved conservation advices**, **recovery plans and threat abatement plans**;

ii. identify threats to **Black-footed Tree-rat**, and potential recovery actions and research opportunities; and

iii. provide in detail a process for developing Offset Projects, a staged process for submitting Offset Projects and milestones for completion of Offset Projects to the **Department** for written approval by the **Department**.

b) Offset Projects submitted to the **Department** for approval in accordance with Condition 8(a)iii must:

i. specify the location and nature of Offset Project activities;

ii. include project goal/s, budget and a detailed Offset Project description, including timeframes for the elements of the Offset Project, and reporting and publishing of the Offset Project results;

iii. demonstrate how the Offset Project is consistent with the Offset Plan;

iv. describe consultations undertaken to develop the Offset Project;

v. explain how the Offset Project complies with the principles of the **EPBC Act Environmental Offsets Policy** and, if relevant, provide details of how the Offset Project meets the criteria for research and educational programs identified in Appendix A of the **EPBC Act Environmental Offsets Policy**; and

vi. identify and manage risks associated with implementing the Offset Project.

The approval holder must not implement an Offset Project until the Offset Project has been approved in writing by the **Department**. The approved Offset Project must be implemented. The approval holder must expend at least $78,750 (excluding GST) on Offset Projects approved in accordance with Condition 8(a) and 7(b).

9. Within 30 days after **commencement** of the action, the approval holder must advise the **Department** in writing of the actual date of **commencement**.

10. The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans, and make them available upon request to the **Department**. Such records may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the **Department's** website. The results of audits may also be publicised through the general media.

11. Upon the direction of the **Minister**, the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the **Minister**. The independent auditor and audit criteria must be approved by the **Minister** prior to the commencement of the audit. The audit report must address the criteria to the satisfaction of the **Minister**.

12. The approval holder may choose to revise a management plan specified in condition 2 without submitting it for approval under section 143A of the **EPBC Act**, if the taking of the action in accordance with the revised plan would not be likely to have a **new or increased impact**. If the approval holder makes this choice it must notify the **Department** in writing that the management plan has been revised and provide the **Department**, at least four weeks before implementing the revised plan, with:

i. an electronic copy of the revised plan;

ii. an explanation of the differences between the revised plan and the management plan; and

iii. the reasons the approval holder considers that the taking of the action in accordance with the revised plan would not be likely to have a **new or increased impact**.

12A. The approval holder may revoke its choice under condition 12 at any time by notice to the **Department**. If the **approval holder** revokes the choice to implement a revised plan, without approval under section 143A of the **EPBC Act**, the plan approved by the **Minister** must be implemented.

12B. If the **Minister** gives a notice to the approval holder that the **Minister** is satisfied that the taking of the action in accordance with the revised plan would be likely to have a **new or increased impact**, then:

i. Condition 12 does not apply, or ceases to apply, in relation to the revised plan; and

ii. The approval holder must implement the plan approved by the **Minister**.

To avoid any doubt, this condition does not affect any operation of conditions 12 and 12A in the period before the day the notice is given.

At the time of giving the notice the **Minister** may also notify that for a specified period of time, that condition 11 does not apply for one or more specified plans required under the approval.

12C. Conditions 12, 12A and 12B are not intended to limit the operation of section 143A of the **EPBC Act** which allows the approval holder to submit a revised plan to the **Minister** for approval.

13. Unless otherwise agreed to in writing by the **Minister**, the approval holder must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within one (1) month of being approved by the **Minister** or being submitted under condition 12 and must remain published for the life of the approval.

14. If, at any time after five (5) years from the date of this approval, the approval holder has not substantially **commenced** the action, then the approval holder must not substantially **commence** the action without the written agreement of the **Minister**.

Definitions

2CRU is the area shown in Attachment A, where it is depicted as '2CRU Development Site', and marked with a red dashed perimeter line.

Approved conservation advices, recovery plans and threat abatement plans is a threat abatement plan/s, conservation advice/s and/or recovery plan/s made or adopted by the **Minister** under the **EPBC Act**.

Black-footed Tree-rat is the **EPBC Act** listed Black-footed Tree-rat (Kimberley and mainland Northern Territory) (*Mesembriomys gouldii gouldii*)

Casuarina Coastal Reserve is the area shown in Attachment B, where it is depicted as 'Casuarina Coastal Reserve', and marked with a solid green fill titled in the legend as 'CN – Conservation'.

Clearing/clear/cleared means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of native vegetation.

Commencement/commence/commenced means the clearing of any vegetation or construction of any infrastructure, excluding fences and signage, associated with the proposed action.

Construction Environmental Management Plan is the document entitled 'Construction Environmental Management Plan (CEMP): Lee Point Master-planned Urban Development', dated July 2018, authored by Ecology and Heritage Partners Pty Ltd, which was provided to the Department with the final assessment documentation; or as revised under these conditions or under section 143A of the EPBC Act.

Department ('s) is the Australian Government Department or any other agency administering the EPBC Act.

EPBC Act is the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).

EPBC Act Environmental Offsets Policy is the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy* (October, 2012), or subsequent revision, including the Offsets Assessment Guide. Available at: http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy.

EPBC Act listed species means the **EPBC Act** listed Black-footed Tree-rat (Kimberley and mainland NT) (*Mesembriomys gouldii gouldii*), Dwarf Sawfish (*Pristis clavata*), Green Sawfish (*Pristis zijsron*), Largetooth Sawfish (*Pristis pristis*), Eastern Curlew (*Numenius madagascariensis*) and **Turtles**.

Heritage expert is a heritage expert with relevant qualifications and expertise appointed and funded by the approval holder.

Konfrontasi Cruciform is the area described in *Muirhead North (Lot 9370 Town of Nightcliff) – Archaeological Survey Report* (Jung 2015) submitted with the EPBC Act referral 2015/7591. Location labelled as 'Konfrontasi Cruciform site' and marked with a pink cross Attachment B.

Lee Point bunkers is the area described in *Heritage and Archaeologial Investigations over block 4873 Lee Point Road, Darwin Final Report* (Crassweller, 2010) submitted with the EPBC Act referral 2015/7591. Location labelled as 'Concrete Bunker' and marked with a yellow box in Attachment C.

Management funding is a monetary contribution made by the approval holder for the implementation of management measures on the **offset area**.

Minister means the Minister administering the EPBC Act and includes a delegate of the Minister.

Muirhead North is the area shown in Attachment A, where it is depicted as 'Muirhead North Development Site', and marked with a red dashed perimeter line.

New or increased impact means a new or increased impact on any matter protected by the controlling provisions for the action, when compared to the plan that has been approved by the **Minister**.

Northern Territory Government means Northern Territory body responsible for the administration of the *Parks and Wildlife Commission Act 2013* (NT) or the *Territory Parks and Wildlife Conservation Act 2014* (NT).

Offset area is the area shown in Attachment B, where it is depicted as 'Portion of Lot 4873 to be added to Casuarina Coastal Reserve', and marked with a light blue perimeter line with a solid green fill titled in the legend as 'CN – Conservation'.

Offset attributes means electronic files including '.xls' files and ESRI shapefiles containing '.shp', '.shx' and '.dbf' files capturing the relevant attributes of the **offset area**, including the **EPBC Act** reference number, the physical address of the **offset area**, coordinates of the boundary points in decimal degrees, the **EPBC Act** protected matters that the **offset area** compensates for, any additional **EPBC Act** protected matters benefiting from the offset and the size of the **offset area** (in hectares).

PFAS/PFASs means a per-and poly-fluoroalkyl substance or per-and poly-fluoroalkyl substances. **PFAS** substances include **PFOS**, **PFOA**, **PFHxS**, and their precursors. Where the identity of **PFOS**, **PFOA**, and **PFHxS** precursors are unknown, the suite of analytes in Eurofins (method LTM-ORG-2100) or other equivalent laboratory techniques is appropriate for the measurement of **PFAS** substances and may be reported as 'Sum of PFASs (n=28)'.

PFOS means perfluorooctane sulfonate.

PFOA means perfluorooctanoic acid.

PFHxS means perfluorohexane sulfonate.

Project Area is the area shown in Attachment D, where it is depicted as 'Subject Site', and marked with a red perimeter line.

Shapefile is an ESRI shapefile containing '.shp', '.shx' and '.dbf' files and other files capturing attributes of the **offset area**, including the shape, **EPBC Act** reference ID number and **EPBC Act** protected matters present at the relevant site. Attributes should also be captured in '.xls' format.

Stormwater Management Plan – 2CRU is the document entitled '2CRU - Lee Point Road, Lee Point - Stormwater Management Plan - DC1603/R1/V3', dated 11 October 2017, authored by Cardno (Qld) Pty Ltd, which was provided to the Department with the final assessment documentation; or as revised under these conditions or under section 143A of the EPBC Act.

Stormwater Management Plan – Muirhead North is the document entitled 'Muirhead North - Lee Point Road, Lee Point - Stormwater Management Plan - DC1603/R1/V2', dated 11 October 2017, authored by Cardno (Qld) Pty Ltd, which was provided to the Department with the final

assessment documentation; or as revised under these conditions or under section 143A of the EPBC Act.

The Environment means the *environment* as defined under section 528 of the **EPBC Act**.

Turtles are the **EPBC Act** listed Flatback Turtle (*Natator depressus*), Olive Ridley Turtle (*Lepidochelys olivacea*) and Green Turtle (*Chelodina mydas*).

Water Quality Monitoring Plan is the document entitled 'Lee Point Master-planned Urban Development – Water Quality Monitoring Plan', dated October 2017, authored by Ecology and Heritage Partners Pty Ltd, which was provided to the Department with the final assessment documentation; or as revised under these conditions or under section 143A of the EPBC Act.



CLOUSTON associates

DHA
Defence Housing Australia

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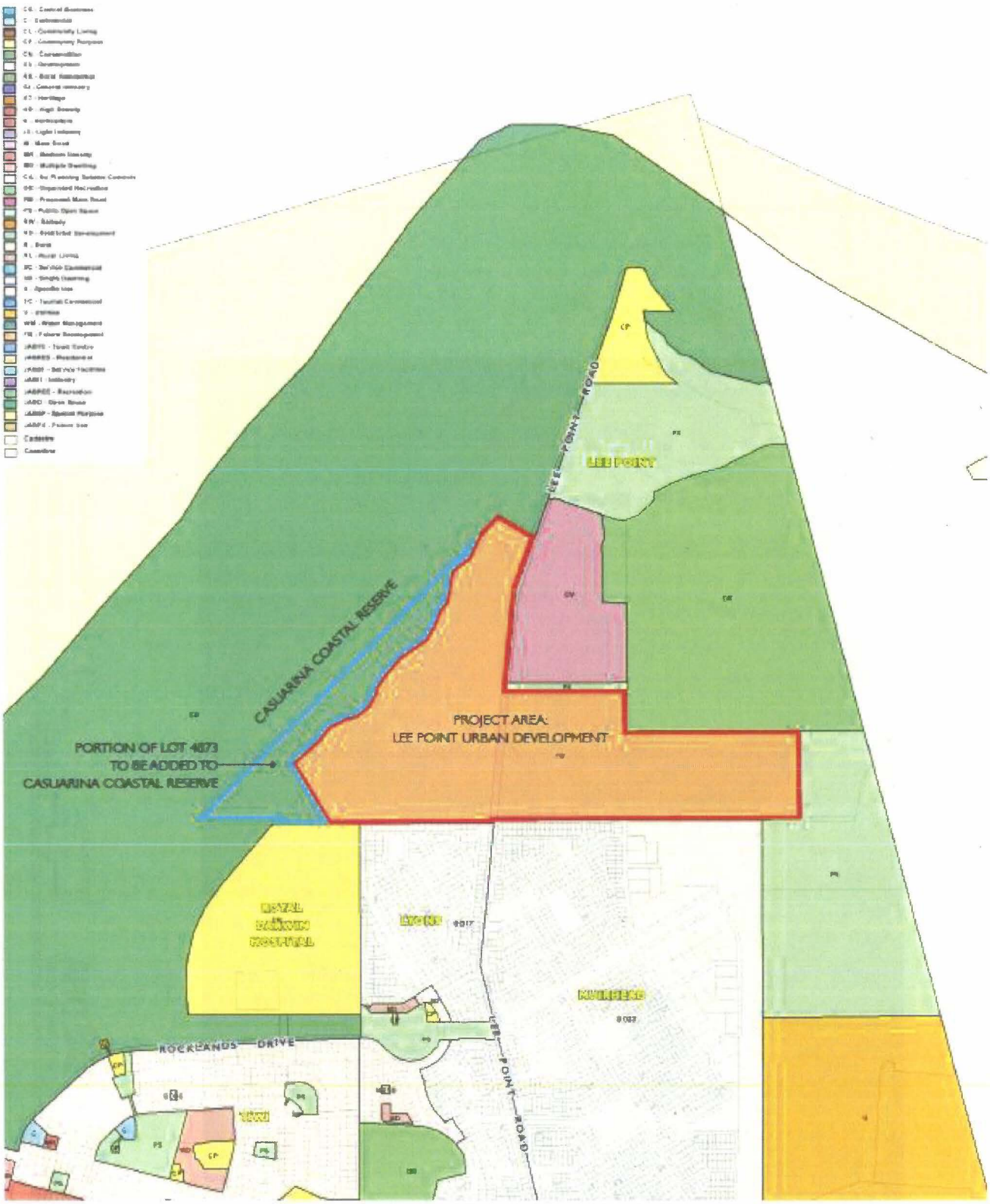
2CRU Development • Darwin NT

LEE POINT AND SURROUNDS AREA PLAN

D17-0020

29/08/2018 Issue A

Attachment B



Context Plans

LEE POINT URBAN DEVELOPMENT &
CASUARINA COASTAL RESERVE
-LAND ADDED TO RESERVE - TOWN PLANNING ZONES-

Lee Point Road
LEE POINT

(Created 30 August 2018)

Northern Planning Consultants
Darwin Corporate Park, Unit 6, T212
631 Stuart Highway
BERRIMAH

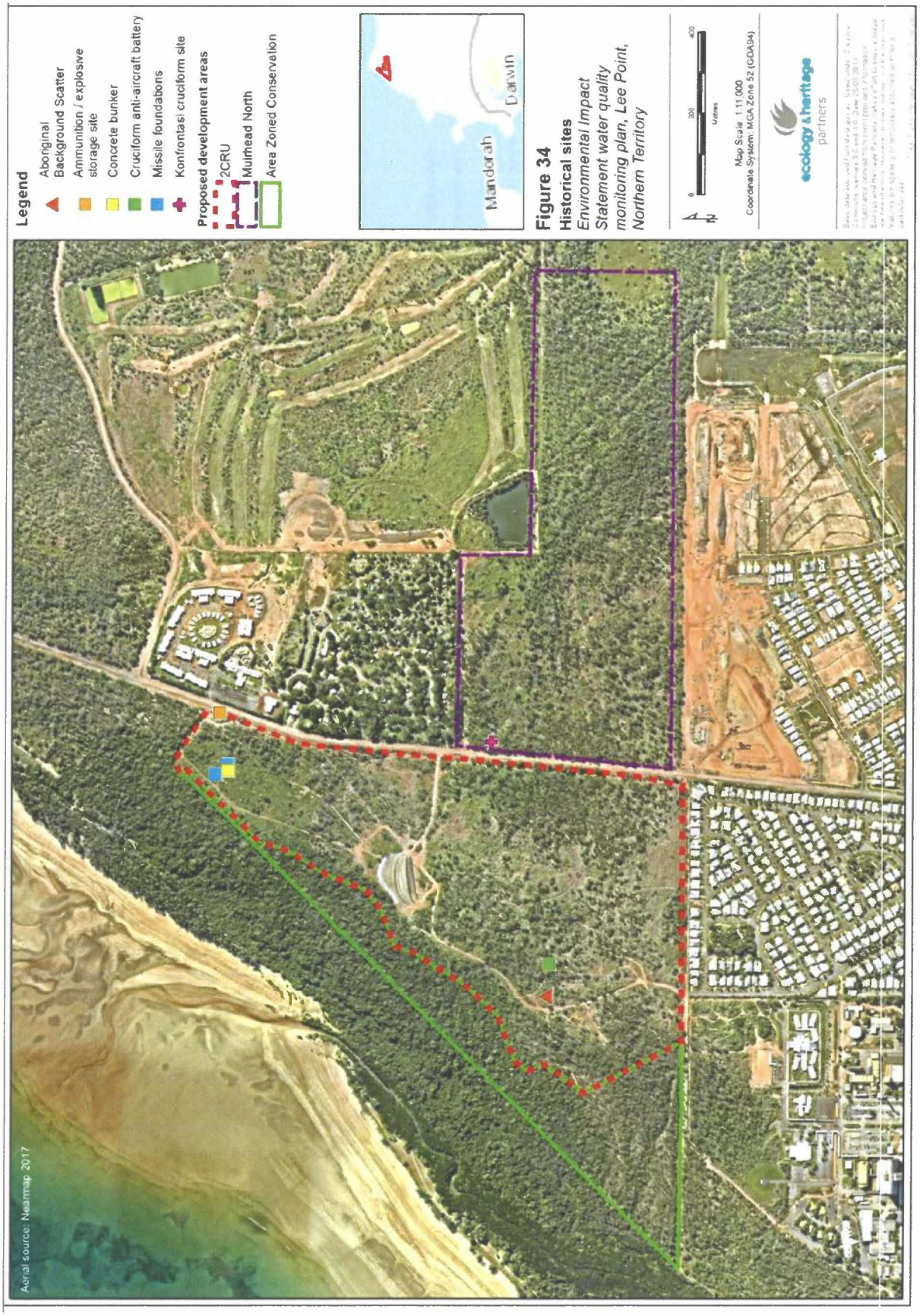
Mobile: 0427 796 140
Email: brad.cunningson@northernplanning.net
www.facebook.com/northernplanning

N

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Attachment C



NOTES

(1) This plan was prepared for the purpose and exclusive use of DEFENCE HOUSING AUSTRALIA as an investigation into the Development Potential of the land described in the plan and is not to be used for any other purpose or by any other person or corporation. JFP URBAN CONSULTANTS PTY LTD accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this plan in contravention to the terms of this clause or clauses 2, 3, 4, 5, 6 or 7 hereof.

(2) The contours on this plan are approximate and are suitable only for the purpose of this application. The accuracy of the contours has not been verified and no reliance should be placed upon such contours for any purpose other than for the purpose of this application.

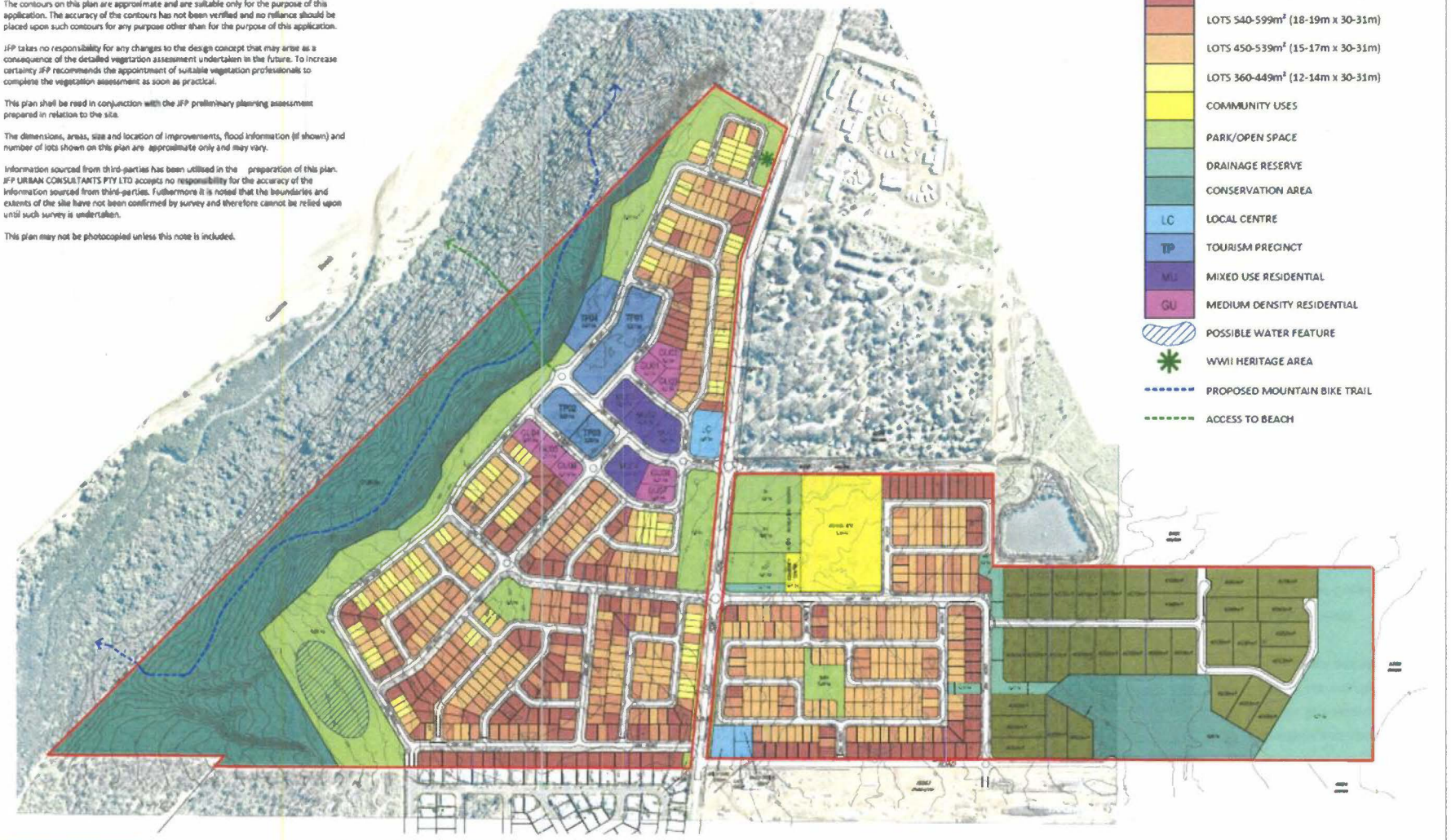
(3) JFP takes no responsibility for any changes to the design concept that may arise as a consequence of the detailed vegetation assessment undertaken in the future. To increase certainty JFP recommends the appointment of suitable vegetation professionals to complete the vegetation assessment as soon as practical.

(4) This plan shall be read in conjunction with the JFP preliminary planning assessment prepared in relation to the site.

(5) The dimensions, areas, size and location of improvements, flood information (if shown) and number of lots shown on this plan are approximate only and may vary.

(6) Information sourced from third-parties has been utilised in the preparation of this plan. JFP URBAN CONSULTANTS PTY LTD accepts no responsibility for the accuracy of the information sourced from third-parties. Furthermore it is noted that the boundaries and extents of the site have not been confirmed by survey and therefore cannot be relied upon until such survey is undertaken.

(7) This plan may not be photocopied unless this note is included.



JFP URBAN CONSULTANTS
PLANNERS
URBAN DESIGNERS
SURVEYORS
ENGINEERS
LANDSCAPE ARCHITECTS

OVERALL CONCEPT PLAN B

LEE POINT ROAD, LEE POINT, DARWIN
DEFENCE HOUSING AUSTRALIA

JOB NUMBER: M2737P_Overall Concept B
ISSUE: B
SCALE: 1:7000 @ A3
DATE: 23rd August 2018

Australian Government

Department of Climate Change, Energy, the Environment and Water

Correction Notification

Variation Notice; 15 June 2023, Lee Point Master-planned Urban Development, Darwin, Northern Territory [EPBC 2015/7591]

The Variation Notice signed on 15 June 2023 contained the following errors.

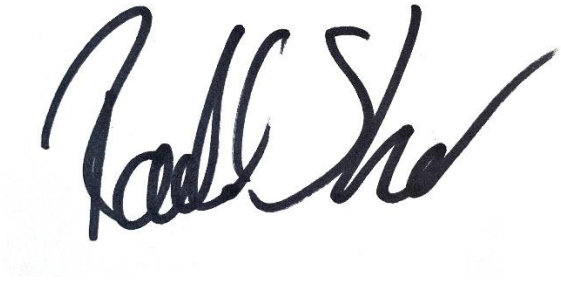
The notice incorrectly stated in the definition of **Konfrontasi Cruciform** that its location was marked with a pink cross in **Attachment B**. The correct text should read "**Konfrontasi Cruciform** is the area described in Muirhead North (Lot 9370 Town of Nightcliff) – Archaeological Survey Report (Jung 2015) submitted with the EPBC Act referral 2015/7591. Location labelled as 'Konfrontasi Cruciform site' and marked with a pink cross at **Attachment C**."

The notice incorrectly stated in reference to Attachment D that it contained Overall Concept Plan U. The correct text should read "Attachment D – Overall Concept Plan AD".

The notice inadvertently did not include Attachments A, B, C, D, E, F and G. The correct notice should include Attachments A, B, C, D, E, F and G.

A corrected version of the notice is at Annexure 1.

Person making the correction

name and position	Rachel Short Branch Head Environment Approvals (Vic/Tas) and Post Approvals
signature	
date of correction	**21** June 2023

Australian Government
Department of Climate Change, Energy, the Environment and Water

Annexure 1

VARIATION OF CONDITIONS ATTACHED TO APPROVAL
Lee Point Master-planned Urban Development, Darwin, Northern Territory (EPBC 2015/7591)

This decision to vary conditions of approval is made under section 143 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Approved action

Person to whom the approval is granted	Defence Housing Australia ABN: 72 968 504 934
Approved action	To construct a master-planned urban residential development on Lot 4873 and Lot 9370 at Lee Point, approximately 14 km northeast of Darwin, Northern Territory [See EPBC Act referral 2015/7591]
Expiry date of approval	31 December 2035

Variation

Variation of conditions attached to approval	The variation is: Delete condition 2, 6, 7, and 8 attached to the approval and replace it with that specified in the table below. Add conditions 2A, 8A, 8B, 8C, 8D, 8E, 10A, 10B and 10C specified in the table below. Delete the definitions for **Department**, **EPBC Act listed species, New or increased impact, Project area** and **Shapefile(s)** attached to the approval and replace them with those specified in the table below. Revoke the definition for **Offset Area.** Add definitions for **Black-footed Tree-rat Offset area**, **Business day**, **Compliance report**, **Detail(s)**, **Environmental Management Plan Guidelines**, **Fauna Spotter Catcher, Functional loss / functionally lost**, **Gouldian Finch**, **Gouldian Finch breeding habitat**, **Gouldian Finch foraging habitat**, **Migratory Shorebirds**, **Plans**, **Sandy and Buffalo Creek Roosts**, **Stage 1**, **Stage 2**, **Stage 3**, **Suitably qualified independent expert(s)**, **Survey Guidelines for Australia's Threatened Birds**, and **Website** as specified in the table below.

	Delete **Attachment D** and replace it with the **Attachment D** as specified in the table below. Add **Attachments E, F and G** as specified in the table below.
Date of effect	This variation has effect on the date the instrument is signed

Person authorised to make decision

Name and position	The Hon Tanya Plibersek MP Minister for the Environment and Water
Signature	
Date of decision	15 June 2023

Date of decision	Conditions attached to approval
Original dated 17/03/2019	1. For the protection of **EPBC Act listed species** and **the Environment**, the approval holder must not **clear** more than 110 ha within the **project area**.
As varied on the date this instrument was signed	2. To mitigate and manage impacts to **EPBC Act listed species** and **the Environment**, the approval holder must comply with and implement the **Stormwater Management Plan - 2CRU**, **Stormwater Management Plan - Muirhead North** and **Water Quality Monitoring Plan**.
As varied on the date this instrument was signed	2A. To mitigate and manage impacts to **Gouldian Finch** in the **project area** and **Migratory Shorebirds** at the **Sandy and Buffalo Creek roosts**, the approval holder must submit to the **department,** for the **Minister's** approval, a revised version of the **Construction Environmental Management Plan**. The revised **Construction Environmental Management Plan** must include **details** of: a) measures to mitigate the impacts of **clearing** to **Gouldian Finch**, including but not limited to: i. pre-clearance surveys; ii. tree felling protocols; and iii. the oversight of all **clearing** by **fauna spotter catcher(s)**. b) additional measures to those in the **Construction Environmental Management Plan** that avoid, mitigate and manage impacts of the action to **Migratory Shorebirds**; c) measures to plant native grass species where gamba grass is removed in conservation areas; and d) activities to monitor and ensure the efficacy and integrity of these measures, including trigger values and corrective actions that will be implemented if trigger values are realised. The approval holder must not undertake any **clearing** in the **project area**, other than **stage 1A, stage 2** and **stage 3** and clearing up to 20 meters from the perimeters of these stages (as required to facilitate construction), unless the **Minister** has approved the revised **Construction Environmental Management Plan** in writing. The approval holder may undertake **clearing** where required for the removal of contamination, noxious weeds (including gamba grass), and/or the creation and maintenance of fire breaks. The approval holder must implement the revised **Construction Environmental Management Plan** approved by the **Minister**.
Original dated 17/03/2019	3. For the protection of the heritage values of **the Environment** on the **project area** the approval holder must:

Date of decision	Conditions attached to approval
	a) retain the existing **Konfrontasi Cruciform** and **Lee Point bunkers** at their current location b) engage a **heritage expert** to develop and install signage and interpretation material for the **Konfrontasi Cruciform** and **Lee Point bunkers** which must be maintained until at least the expiry date of approval.
Original dated 17/03/2019	4. In the event of a discovery of a heritage place item (including an object) within the **project area**, the approval holder must: a) cease work within 20 meters of the discovery, fence and cover the area from further disturbance b) seek advice from the relevant authority administering the *NT Heritage Act*; and c) document, salvage and store the discovery consistent with advice received in accordance with condition 4(b), prior to any recommencement of work within 20 meters of the discovery.
Original dated 17/03/2019	5. To minimise light pollution impacts to **turtles**, the approval holder must restrict artificial lighting on buildings above 15 meters in height, and any other lighting directly visible from the beach, by: a) only permitting lights of a long-wavelength (560 nanometers or longer) to which **turtle** hatchlings are not sensitive b) ensuring lighting is directed in a downwards direction and faced away from the **Casuarina Coastal Reserve** and c) At least once each year prior to **turtle** hatching season, conducting an audit of compliance with 5.a) and 5.b) and replace or correct any non-compliant light source.
As varied on the date this instrument was signed	6. For the protection of **the environment** the approval holder must determine if **PFASs** are known or likely to be present on the **project area** using the procedures outlined in the *National Environment Protection (Assessment of Site Contamination) Measure 1999*, which must include a desktop historical review of past fire suppression practices. If **PFASs** are known to be or likely to be present, prior to **commencement** of **clearing** or other works which have the potential to disturb areas of known or potential **PFAS** contamination, the approval holder must submit a **PFAS** Management Plan for the written approval of the **Minister**. If **PFASs** are known to be or are likely to be present the approval holder must not **commence** the action until the **PFAS** Management Plan is approved by the **Minister** in writing. The **PFAS** Management Plan must:

Date of decision	Conditions attached to approval
	a) identify the extent and concentrations of possible contamination within the **project area** b) identify possible exposure pathways and ecological receptors including from stored material c) identify possible risks tailored to the identified concentrations, pathways and receptors d) outline management strategies to be undertaken, as well as any remediation action plans or strategies, to manage any identified or potential risks and provide for ongoing monitoring e) commit to: i. any **PFAS** contaminated material (including but not limited to excavated soil or sediment, leachate from soil or sediment, water arising from de-watering of soil or sediment, concrete, tarmac, appliances, pumps, pipes, hoses, fittings) will be handled in accordance with current best practice and disposed of in an approved receiving facility such that the **PFAS** content is unlikely to enter/spread into **the environment** ii. ii. any **PFAS** contaminated material with a **PFOS, PFHxS or PFOA** content above 50 milligrams per kilogram or litre (mg/kg or L) will be stored or disposed of in an approved receiving facility such that there will be no release of its **PFAS** content into **the environment**.
As varied on the date this instrument was signed	7. To offset the loss of **Black-footed Tree-rat** habitat from **2CRU**, the approval holder must provide the following to the **Department**: a) a title search demonstrating that the title for the **Black-footed Tree Rat offset area** has been transferred by the approval holder to the **Northern Territory Government**. The **Black-footed Tree Rat offset area** must contain at least 21.5 ha of **Black-footed Tree-rat** habitat; b) documentation demonstrating that the **Northern Territory Government** is satisfied with the **management funding** provided by the approval holder for the management and monitoring required by **Northern Territory Government** of the **Black-footed Tree Rat offset area;** c) the **offset attributes** and **shapefile** for the **Black-footed Tree Rat offset area** required by condition 7(a). Unless otherwise agreed to in writing by the **Minister**, the approval holder must not continue the action at **2CRU** for more than 36 months from the date of

Date of decision	Conditions attached to approval
	commencement of the action unless the approval holder has provided the requirements of condition 7(a-c) to the **department**.
As varied on the date this instrument was signed	8. To offset the loss of 10 ha of **Black-footed Tree-rat** habitat from **Muirhead North**, within 12 months of **commencement** of the action at **Muirhead North** the approval holder must submit a Black-footed Tree Rat Offset Plan to the **department** for the **Minister**'s approval. The approval holder must not undertake the action at **Muirhead North** for more than 24 months from the date of **commencement** of the action unless the **Minister** has approved the Black-footed Tree Rat Offset Plan in writing, and the provisions of condition 2A and 8B have been met. a) The Black-footed Tree Rat Offset Plan must provide a framework for how the **clearance** of **Black-footed Tree-rat** habitat will be offset, and must: i. Include a review of relevant **approved conservation advices, recovery plans and threat abatement plans**; ii. identify threats to **Black-footed Tree-rat**, and potential recovery actions and research opportunities; and iii. specify a process for developing Black-footed Tree Rat Offset Projects, and a staged process for submitting proposed Black-footed Tree Rat Offset Projects and milestones for completion of Black-footed Tree Rat Offset Projects to the **Department** for approval by the **Minister**. b) Offset Projects submitted to the **Department** for approval in accordance with Condition 8.a)iii. must: i. specify the location and nature of Offset Project activities; ii. include project goal/s, budget and a detailed Black-footed Tree Rat Offset Project description, including timeframes for the elements of the Black-footed Tree Rat Offset Project, and reporting and publishing of the Black-footed Tree Rat Offset Project results; iii. demonstrate how the Black-footed Tree Rat Offset Project is consistent with the Black-footed Tree Rat Offset Plan; iv. describe advice obtained to develop the Black-footed Tree Rat Offset Project; v. explain how the Black-footed Tree Rat Offset Project complies with the principles of the **EPBC Act Environmental Offsets Policy** and, if relevant, provide details of how the Black-footed Tree Rat Offset Project meets the criteria for research and educational programs identified in Appendix A of the **EPBC Act Environmental Offsets Policy**; and vi. identify and manage risks associated with implementing the Black-footed Tree Rat Offsets Project.

Date of decision	Conditions attached to approval
	The approval holder must not implement any Black-footed Tree Rat Offset Project until it has been approved in writing by the **Minister**. Each approved Black-footed Tree Rat Offset Project must be implemented. The approval holder must expend an amount equivalent to at least $78,750 (excluding GST) on implementation of the Black-footed Tree Rat Offset Projects approved in accordance with Condition 8(a) and 7(b).
As varied on the date this instrument was signed	8A. The approval holder must not **clear** more than 94.64 ha of **Gouldian Finch breeding habitat** and 62.05 ha of **Gouldian Finch foraging habitat** within the **project area**. All **clearing** of **Gouldian Finch breeding habitat** and **Gouldian Finch foraging habitat** within the **project area** must be offset in accordance with the requirements of conditions 8B and 8C.
As varied on the date this instrument was signed	8B. To compensate for the loss of **Gouldian Finch breeding habitat** and **Gouldian Finch foraging habitat** within the **project area**, the approval holder must submit to the **department** a Gouldian Finch Strategy and Offset Plan (GFSOP) for the **Minister's** approval. The approval holder must implement the GFSOP approved by the **Minister**. The approval holder must not undertake any **clearing** in the **project area**, other than **stage 1A**, **stage 2** and **stage 3**, and **clearing** extending no more than 20 meters from the perimeters of these stages (as required to facilitate construction), unless the **Minister** has approved the GFSOP. The approval holder may undertake minor **clearing** where required for the removal of contamination, noxious weeds (including gamba grass), and/or the creation or maintenance of fire breaks
As varied on the date this instrument was signed	8C. The GFSOP must be prepared by a **suitably qualified independent expert**, and must: a. be consistent with the **department's** published **Environmental Management Plan Guidelines**; b. include an ecological survey of **Gouldian Finch breeding habitat** and **Gouldian Finch foraging habitat** within the **project area**, conducted by a **suitably qualified independent expert**; c. specify the actual area of **Gouldian Finch breeding habitat** and **Gouldian Finch foraging habitat** that will be **cleared**; d. for any areas of **Gouldian Finch breeding habitat** and / or **Gouldian Finch foraging habitat** to be retained within the **project area**: i. identify and assess the likelihood and consequence of potential project-related impacts that may lead to the **functional loss** of retained areas of **Gouldian Finch breeding habitat** and **Gouldian Finch foraging habitat**;

Date of decision	Conditions attached to approval
	ii. include **details** of measures that will be implemented to avoid, mitigate, monitor and manage risks for the period of effect of approval to prevent the **functional loss** of retained areas of **Gouldian Finch breeding habitat** and **Gouldian Finch foraging habitat**. Where applicable, activities must be consistent with **the Survey Guidelines for Australia's Threatened Birds**; and iii. include **details** of contingency responses, including triggers, corrective actions and reporting requirements that will be implemented in the event retained areas of **Gouldian Finch breeding habitat** and / or **Gouldian Finch foraging habitat** are **functionally lost**; e. identify suitable environmental offsets to provide compensation for the actual area of **Gouldian Finch breeding habitat** and **Gouldian Finch foraging habitat** that has been or will be **cleared**, that are consistent with the **EPBC Act Offsets Policy**; f. specify outcomes for **Gouldian Finch** habitat quality that will be attained for each offset; g. specify timebound and measurable completion criteria that will be achieved and maintained and demonstrate the attainment of outcomes; h. specify timebound and measurable performance targets that will be achieved and maintained and demonstrate the likely achievement of completion criteria; i. include **details** of measures that will be implemented to achieve and maintain performance targets and completion criteria; j. include **details** of activities to monitor the achievement and maintenance of performance targets and completion criteria, and the attainment of outcomes; k. specify timebound actions that will be implemented in the event performance targets and/or completion criteria are not achieved or maintained, with the capacity to correct this failure; and l. include **details** of reporting requirements, including triggers for different reporting types.

Date of decision	Conditions attached to approval
As varied on the date this instrument was signed	8D. The approval holder must legally secure the environmental offset(s) for **Gouldian Finch** identified in the GFSOP approved by the **Minister**, within 48 months of the **Minister** approving the GFSOP.
As varied on the date this instrument was signed	8E. The approval holder must not transfer the ownership or long-term management responsibility of the area marked as conservation area in **Muirhead North** as shown in **Attachment D** to another entity unless the proposed transfer has been approved by the **Minister** in writing. Note: The proposed arrangement must serve to protect that part of the **project area** in perpetuity from any impact on **EPBC Act listed species** or **the Environment.**
Original dated 17/03/2019	9. Within 30 days of **commencement** of the action, the approval holder must advise the **Department** of the actual date of **commencement**.
Original dated 17/03/2019	10. The approval holder must maintain accurate records substantiating all activities associated with or relevant to the conditions of approval, including measures taken to implement the management plans, and make them available upon request to the **Department**. Such records may be subject to audit by the **Department** or an independent auditor in accordance with section 458 of the **EPBC Act**, or used to verify compliance with the conditions of approval. Summaries of audits will be posted on the **Department's** website. The results of audits may also be publicised through the general media.
As varied on the date this instrument was signed	10A. The approval holder must prepare a **compliance report** for each 12-month period following the date of **commencement**. Each **compliance report** must include: a. accurate and complete details of compliance and any non-compliance with the conditions and the **plans**, and any **incidents**; b. one or more **shapefile** showing all **clearing** of any **protected matters**, and/or their habitat, undertaken within the 12-month period at the end of which that **compliance report** is prepared; and c. a schedule of all **plans** in existence in relation to these conditions and accurate and complete details of how each plan is being implemented.
As varied on the date this instrument was signed	10B. Each **compliance report** must be consistent with the department's *Annual Compliance Report Guidelines (2014),* or any subsequent official version, and include: a. accurate and complete details of compliance and any non-compliance with the conditions and the **plans**, and any **incidents**; b. one or more **shapefile** showing all **clearing** of any **protected matters**, and/or their habitat, undertaken within the 12-month period at the end of which that **compliance report** is prepared; and

Date of decision	Conditions attached to approval
	c. a schedule of all **plans** in existence in relation to these conditions and accurate and complete details of how each plan is being implemented.
As varied on the date this instrument was signed	10C. The approval holder must: a. publish each **compliance report** on the **website** within 60 **business days** following the end of the 12-month period for which that **compliance report** is required; b. notify the **department** electronically, within 5 **business days** of the date of publication that a **compliance report** has been published on the **website**; c. provide the weblink for the **compliance report** in the notification to the department; d. keep all published **compliance reports** required by these conditions on the **website** until the expiry date of this approval; e. exclude or redact **sensitive ecological data** from **compliance reports** published on the **website** or otherwise provided to a member of the public; and f. if **sensitive ecological data** is excluded or redacted from the published version, submit the full **compliance report** to the **department** within 5 **business days** of its publication on the **website** and notify the **department** in writing of what exclusions and redactions have been made in the version published on the website. **Note**: **Compliance reports** may be published on the **department's** website.
Original dated 17/03/2019	11. Upon the direction of the **Minister**, the approval holder must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the **Minister**. The independent auditor and audit criteria must be approved by the **Minister** prior to the commencement of the audit. The audit report must address the criteria to the satisfaction of the **Minister.**
Original dated 17/03/2019	12. The approval holder may choose to revise a management plan specified in condition 2 without submitting it for approval under section 143A of the **EPBC Act**, if the taking of the action in accordance with the revised plan would not be likely to have a **new or increased impact**. If the approval holder makes this choice it must notify the **Department** in writing that the management plan has been revised and provide the **Department**, at least four weeks before implementing the revised plan, with: i. an electronic copy of the revised plan; ii. an explanation of the differences between the revised plan and the management plan; and iii. the reasons the approval holder considers that the taking of the action in accordance with the revised plan would not be likely to have a **new or increased impact**.

Date of decision	Conditions attached to approval
Original dated 17/03/2019	12A. The approval holder may revoke its choice under condition 12 at any time by notice to the **Department.** If the approval holder revokes the choice to implement a revised plan, without approval under section 143A of the **EPBC Act**, the plan approved by the **Minister** must be implemented.
Original dated 17/03/2019	12B. If the **Minister** gives a notice to the approval holder that the **Minister** is satisfied that the taking of the action in accordance with the revised plan would be likely to have a **new or increased impact**, then: i. Condition 12 does not apply, or ceases to apply, in relation to the revised plan; and ii. The approval holder must implement the plan approved by the **Minister**. To avoid any doubt, this condition does not affect any operation of conditions 12 and 12A in the period before the day the notice is given. At the time of giving the notice the **Minister** may also notify that for a specified period of time, that condition 11 does not apply for one or more specified plans required under the approval.
Original dated 17/03/2019	12C. Conditions 12, 12A and 12B are not intended to limit the operation of section 143A of the **EPBC Act** which allows the approval holder to submit a revised plan to the **Minister** for approval.
Original dated 17/03/2019	13. Unless otherwise agreed to in writing by the **Minister**, the approval holder must publish all management plans referred to in these conditions of approval on their website. Each management plan must be published on the website within one (1) month of being approved by the **Minister** or being submitted under condition 12 and must remain published for the life of the approval.
Original dated 17/03/2019	14. If, at any time after five (5) years from the date of this approval, the approval holder has not substantially **commenced** the action, then the approval holder must not substantially **commence** the action without the written agreement of the **Minister**.

Date of decision	Definitions attached to approval
Original dated 17/03/2019	**2CRU** is the area shown in **Attachment A,** where it is depicted as '2CRU Development Site', and marked with a red dashed perimeter line.
Original dated 17/03/2019	**Approved conservation advices, recovery plans and threat abatement plans** is a threat abatement plan/s, conservation advice/s and/or recovery plan/s made or adopted by the Minister under the EPBC Act.
Original dated 17/03/2019	**Black-footed Tree-rat** is the **EPBC Act** listed Black-footed Tree-rat (Kimberley and mainland Northern Territory) (*Mesembriomys gouldii gouldii*)
As varied on the date this instrument was signed	**Black-footed Tree-rat Offset area** means the area represented in **Attachment B**, as 'Portion of Lot 4873 to be added to Casuarina Coastal Reserve', and marked with a light blue perimeter line with a solid green fill titled in the legend as 'CN – Conservation'.
As varied on the date this instrument was signed	**Business day** means a day that is not a Saturday, a Sunday or a public holiday in the Northern Territory.
Original dated 17/03/2019	**Casuarina Coastal Reserve** is the area shown in **Attachment B**, where it is depicted as 'Casuarina Coastal Reserve', and marked with a solid green fill titled in the legend as 'CN – Conservation'.
Original dated 17/03/2019	**Clearing/clear/cleared** means the cutting down, felling, thinning, logging, removing, killing, destroying, poisoning, ringbarking, uprooting or burning of native vegetation.
Original dated 17/03/2019	**Commencement/commence/commenced** means the clearing of any vegetation or construction of any infrastructure, excluding fences and signage, associated with the proposed action.
As varied on the date this instrument was signed	**Compliance report** means a written report of compliance with, and fulfilment of, the conditions attached to the approval.
Original dated 17/03/2019	**Construction Environmental Management Plan** is the document entitled 'Construction Environmental Management Plan (CEMP): Lee Point Master-planned Urban Development', dated July 2018, authored by Ecology and Heritage Partners Pty Ltd, which was provided to the **Department** with the final assessment documentation; or as revised under these conditions or under section 143A of the **EPBC Act**.
As varied on the date this instrument was signed	**Department** means the Australian Government agency administering the **EPBC Act**.
As varied on the date this instrument was signed	**Detail(s)** means specific information that clearly identifies, as relevant to each activity or measure: i. its purpose; ii. where it will be implemented; iii. the duration, frequency and timing, calendar year and/or season, of implementation; iv. the personnel responsible for implementation; and

Date of decision	Definitions attached to approval
	v. the method of implementation.
As varied on the date this instrument was signed	**Environmental Management Plan Guidelines** means the *Environmental Management Plan Guidelines, Commonwealth of Australia 2014*.
Original dated 17/03/2019	**EPBC Act** is the *Environment Protection and Biodiversity Conservation Act 1999* (Cth).
Original dated 17/03/2019	**EPBC Act Environmental Offsets Policy** is the *Environment Protection and Biodiversity Conservation Act 1999 Environmental Offsets Policy* (October, 2012), or subsequent revision, including the Offsets Assessment Guide. Available at: http://www.environment.gov.au/epbc/publications/epbc-act-environmental-offsets-policy.
As varied on the date this instrument was signed	**EPBC Act listed species** means the **Black-footed Tree-rat**, **Gouldian Finch**, Dwarf Sawfish (*Pristis clavata*), Green Sawfish (*Pristis zijsron*), Largetooth Sawfish (*Pristis pristis*), Eastern Curlew (*Numenius madagascariensis*), Gouldian Finch (*Erythrura gouldiae*) and **Turtles**.
As varied on the date this instrument was signed	**Fauna spotter catcher(s)** means a person who has demonstrable identification and handling skills, and behaviour knowledge (including nesting requirements) for **EPBC Act listed species** that have the potential to occur, are likely to occur, or are known to occur, in the area being impacted by the relevant **clearing**.
As varied on the date this instrument was signed	**Functional loss / functionally lost** means, as relevant to **Gouldian Finch breeding habitat**, habitat that is no longer utilised by **Gouldian Finch** for breeding, as evidenced by: i. 3 consecutive years without an observation of **Gouldian Finch**, and ii. The absence of obvious factors other than the action that can be attributed for the lack of observation.
As varied on the date this instrument was signed	**Gouldian Finch** means the **EPBC Act** listed Gouldian Finch (*Erythrura gouldiae*)
As varied on the date this instrument was signed	**Gouldian Finch breeding habitat** means all land comprising the following vegetation types as shown at **Attachment E**: iii. B. *Eucalyptus tetrodonta* Woodland, in the dark-yellow shaded polygon; iv. C. Low *Eucalyptus tetrodonta* Woodland with Monsoon Vine Thicket elements, in the light-yellow shaded polygon; v. D. Disturbed *Eucalyptus tetrodonta* Woodland with *Calytrix exstipulata* shrubland, in the brown shaded polygon; vi. 2. Darwin Stringybark (*Eucalyptus tetrodonta*) and Woollybutt (*E.miniata*) Open Forest over *Sarga intrans* Grassland, in the pinkish-orange shaded polygon; vii. 3. Darwin Stringybark (*Eucalyptus tetrodonta*) Open Woodland over *Sarga intrans* grassland understorey, in the light-green shaded polygon;

Date of decision	Definitions attached to approval
	viii. 4. Eucalyptus and Corymbia Open Woodland (mixed species) over introduced grasses, in the light-blue shaded polygon; and ix. 6. *Lophostemon lactifluus* and *Pandanus spiralis* open woodland to low open woodland, in the lavender shaded polygon.
As varied on the date this instrument was signed	**Gouldian Finch foraging habitat** means all land identified at **Attachment F** as: i. Very High, in polygons with a dark-green hash; ii. High, in polygons with a dark-blue hash; iii. Medium, in polygons with an orange hash; and iv. Low, in polygons with a light yellow hash.
Original dated 17/03/2019	**Heritage expert** is a heritage expert with relevant qualifications and expertise appointed and funded by the approval holder.
Original dated 17/03/2019	**Konfrontasi Cruciform** is the area described in *Muirhead North (Lot 9370 Town of Nightcliff) – Archaeological Survey Report* (Jung 2015) submitted with the **EPBC Act** referral 2015/7591. Location labelled as 'Konfrontasi Cruciform site' and marked with a pink cross at **Attachment C**.
Original dated 17/03/2019	**Lee Point bunkers** is the area described in *Heritage and Archaeologial Investigations over block 4873 Lee Point Road, Darwin Final Report* (Crassweller, 2010) submitted with the **EPBC Act** referral 2015/7591. Location labelled as 'Concrete Bunker' and marked with a yellow box in **Attachment C**.
Original dated 17/03/2019	**Management funding** is a monetary contribution made by the approval holder for the implementation of management measures on the **offset area**.
As varied on the date this instrument was signed	**Migratory Shorebirds** means species of **EPBC Act listed** migratory shorebirds found at Lee Point.
Original dated 17/03/2019	**Minister** means the Minister administering the **EPBC Act** and includes a delegate of the Minister.
Original dated 17/03/2019	**Muirhead North** is the area shown in **Attachment A**, where it is depicted as 'Muirhead North Development Site', and marked with a red dashed perimeter line.
As varied on the date this instrument was signed	**New or increased impact** means any direct or indirect increase in the impacts of an action, an increase to the likelihood of an impact occurring, a reduction to the monitoring or mitigation measures for a protected matter, and/or a change to the nature or management of an environmental offset as outlined in the *Guidance on 'new or increased impact' relating to changes to approved management plans under EPBC Act environmental approvals* (2017).
Original dated 17/03/2019	**Northern Territory Government** means Northern Territory body responsible for the administration of the *Parks and Wildlife Commission Act 2013* (NT) or the *Territory Parks and Wildlife Conservation Act 2014* (NT).

Date of decision	Definitions attached to approval
Original dated 17/03/2019	**Offset attributes** means electronic files including '.xls' files and ESRI shapefiles containing '.shp', '.shx' and '.dbf' files capturing the relevant attributes of the **offset area**, including the **EPBC Act** reference number, the physical address of the **offset area**, coordinates of the boundary points in decimal degrees, the **EPBC Act** protected matters that the **offset area** compensates for, any additional **EPBC Act** protected matters benefiting from the offset and the size of the **offset area** (in hectares).
Original dated 17/03/2019	**PFAS/PFASs** means a per-and poly-fluoroalkyl substance or per-and poly-fluoroalkyl substances. **PFAS** substances include **PFOS**, **PFOA**, **PFHxS**, and their precursors. Where the identity of **PFOS**, **PFOA**, and PFHxS precursors are unknown, the suite of analytes in Eurofins (method LTM-ORG-2100) or other equivalent laboratory techniques is appropriate for the measurement of **PFAS** substances and may be reported as 'Sum of PFASs (n=28)'.
Original dated 17/03/2019	**PFOS** means perfluorooctane sulfonate.
Original dated 17/03/2019	**PFOA** means perfluorooctanoic acid.
Original dated 17/03/2019	**PFHxS** means perfluorohexane sulfonate.
As varied on the date this instrument was signed	**Plan(s)** means any action management plan or strategy that the approval holder is required by these conditions to implement.
As varied on the date this instrument was signed	**Project Area** means the area represented in **Attachment D** by all zones enclosed by a solid blue perimeter line.
As varied on the date this instrument was signed	**Sandy and Buffalo Creek roosts** means the areas shown at **Attachment G**, within the pink polygons identified as roosting location.
As varied on the date this instrument was signed	**Shapefile(s)** means location and attribute information about the Action provided in an Esri shapefile format. Shapefiles must contain '.shp', '.shx', '.dbf' files and a '.prj' file that specifies the projection/geographic coordinate system used. Shapefiles must also include an '.xml' metadata file that describes the shapefile for discovery and identification purposes**.**
As varied on the date this instrument was signed	**Stage 1A** means undertaking the Action within the area represented at **Attachment D** by the zone labelled '1A' and enclosed by a solid blue line.
As varied on the date this instrument was signed	**Stage 2** means undertaking the Action within the area represented at **Attachment D** by the zone labelled '2' and enclosed by a solid blue line.
As varied on the date this instrument was signed	**Stage 3** means undertaking the action within the area represented at **Attachment D** by the zone labelled '3' and enclosed by a solid blue line.

Date of decision	Definitions attached to approval
Original dated 17/03/2019	**Stormwater Management Plan – 2CRU** is the document entitled '2CRU - Lee Point Road, Lee Point - Stormwater Management Plan - DC1603/R1/V3', dated 11 October 2017, authored by Cardno (Qld) Pty Ltd, which was provided to the **Department** with the final assessment documentation; or as revised under these conditions or under section 143A of the **EPBC Act.**
Original dated 17/03/2019	**Stormwater Management Plan – Muirhead North** is the document entitled 'Muirhead North - Lee Point Road, Lee Point - Stormwater Management Plan - DC1603/R1/V2', dated 11 October 2017, authored by Cardno (Qld) Pty Ltd, which was provided to the **Department** with the final assessment documentation; or as revised under these conditions or under section 143A of the **EPBC Act.**
As varied on the date this instrument was signed	**Suitably qualified independent expert(s)*** means a person(s) or firm that: i does not have any individual, financial**, employment** or family affiliation or any conflicting interests with the project, the approval holder or the approval holder's staff, representatives, or associated persons; and ii has relevant professional qualifications and at least 3 years of work experience designing and implementing surveys for threatened birds and can give an authoritative assessment and advice on the presence of **Gouldian Finch** and their habitat using relevant protocols, standards, methods and/or literature. *the approval holder may use the services of a team to fully meet the requirements. **other than for the purpose of undertaking the role for which an independent person is required
As varied on the date this instrument was signed	**Survey Guidelines for Australia's Threatened Birds** means the *Survey guidelines for Australia's threatened birds; Guidelines for detecting birds listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999, 2010,* or a published successor document.
Original dated 17/03/2019	**The Environment** means the *environment* as defined under section 528 of the **EPBC Act**.
Original dated 17/03/2019	**Turtles** are the **EPBC Act listed** Flatback Turtle (*Natator depressus*), Olive Ridley Turtle (*Lepidochelys olivacea*) and Green Turtle (*Chelodina mydas*).
Original dated 17/03/2019	**Water Quality Monitoring Plan** is the document entitled 'Lee Point Master-planned Urban Development – Water Quality Monitoring Plan', dated October 2017, authored by Ecology and Heritage Partners Pty Ltd, which was provided to the **Department** with the final assessment documentation; or as revised under these conditions or under section 143A of the **EPBC Act**.
As varied on the date this instrument was signed	**Website** means a set of related web pages located under a single domain name attributed to the approval holder and available to the public.

Date of decision	Attachments
Original dated 17/03/2019	Attachment A – Lee Point and Surrounds Area Plan
Original dated 17/03/2019	Attachment B – Lee Point Urban Development and Casuarina Coastal Reserve
Original dated 17/03/2019	Attachment C – Historical Sites
As varied on the date this instrument was signed	Attachment D – Overall Concept Plan AD
As varied on the date this instrument was signed	Attachment E – Vegetation Types (strata) sampled
As varied on the date this instrument was signed	Attachment F – Understorey mapping
As varied on the date this instrument was signed	Attachment G – Lee Point showing migratory shorebird habitat



CLOUSTON associates

DHA
Defence Housing Australia

1:20,000 @A3
0 200 400 600 1000m

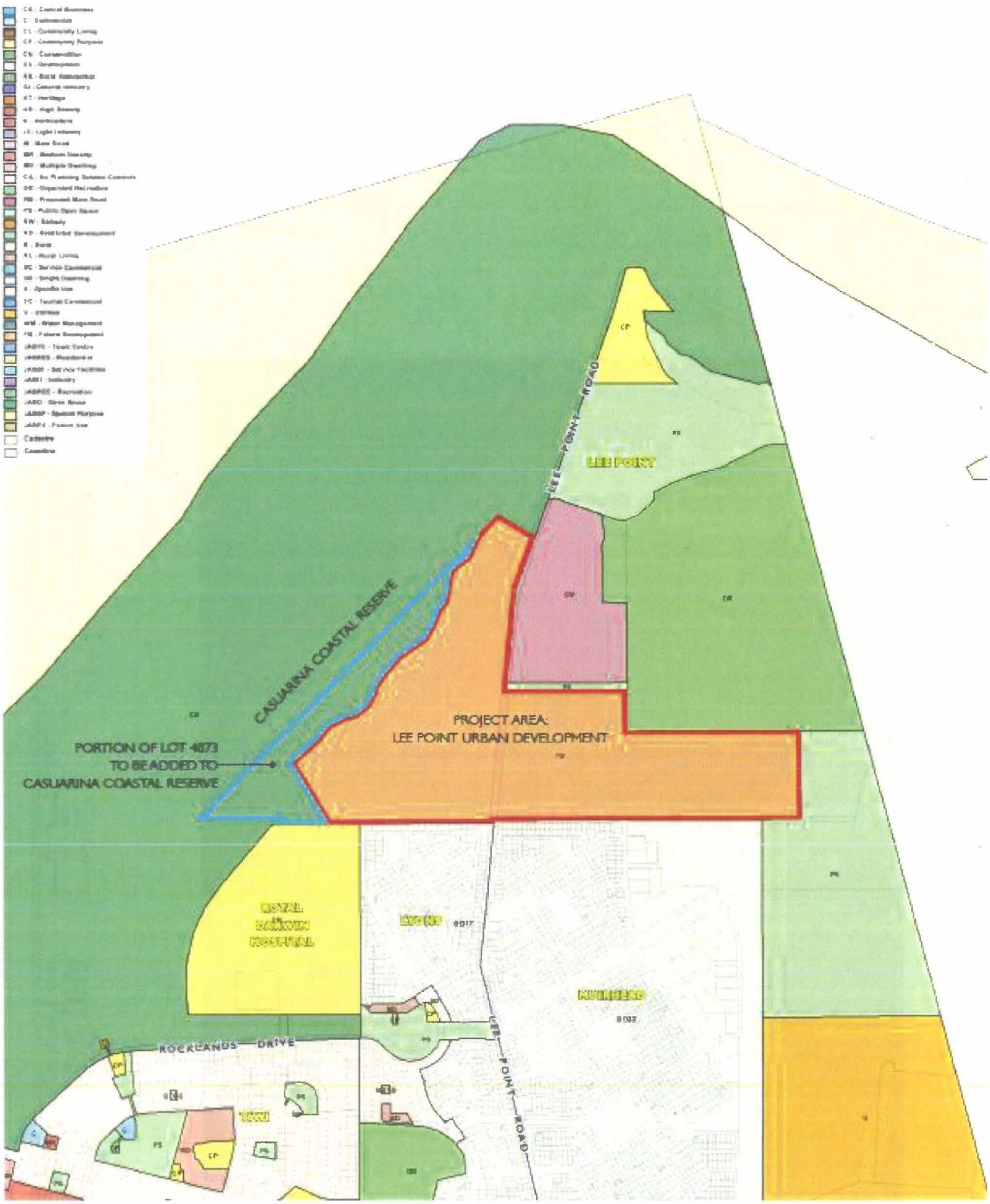
2CRU Development • Darwin NT

LEE POINT AND SURROUNDS AREA PLAN

D17-0020

29/08/2018 Issue A

Attachment B



Context Plans

LEE POINT URBAN DEVELOPMENT &
CASUARINA COASTAL RESERVE
-LAND ADDED TO RESERVE - TOWN PLANNING ZONES-

Lee Point Road
LEE POINT

(Created 30 August 2018)

Northern Planning Consultants
Darwin Corporate Park, Unit 6, T212
631 Stuart Highway
BERRIMAH

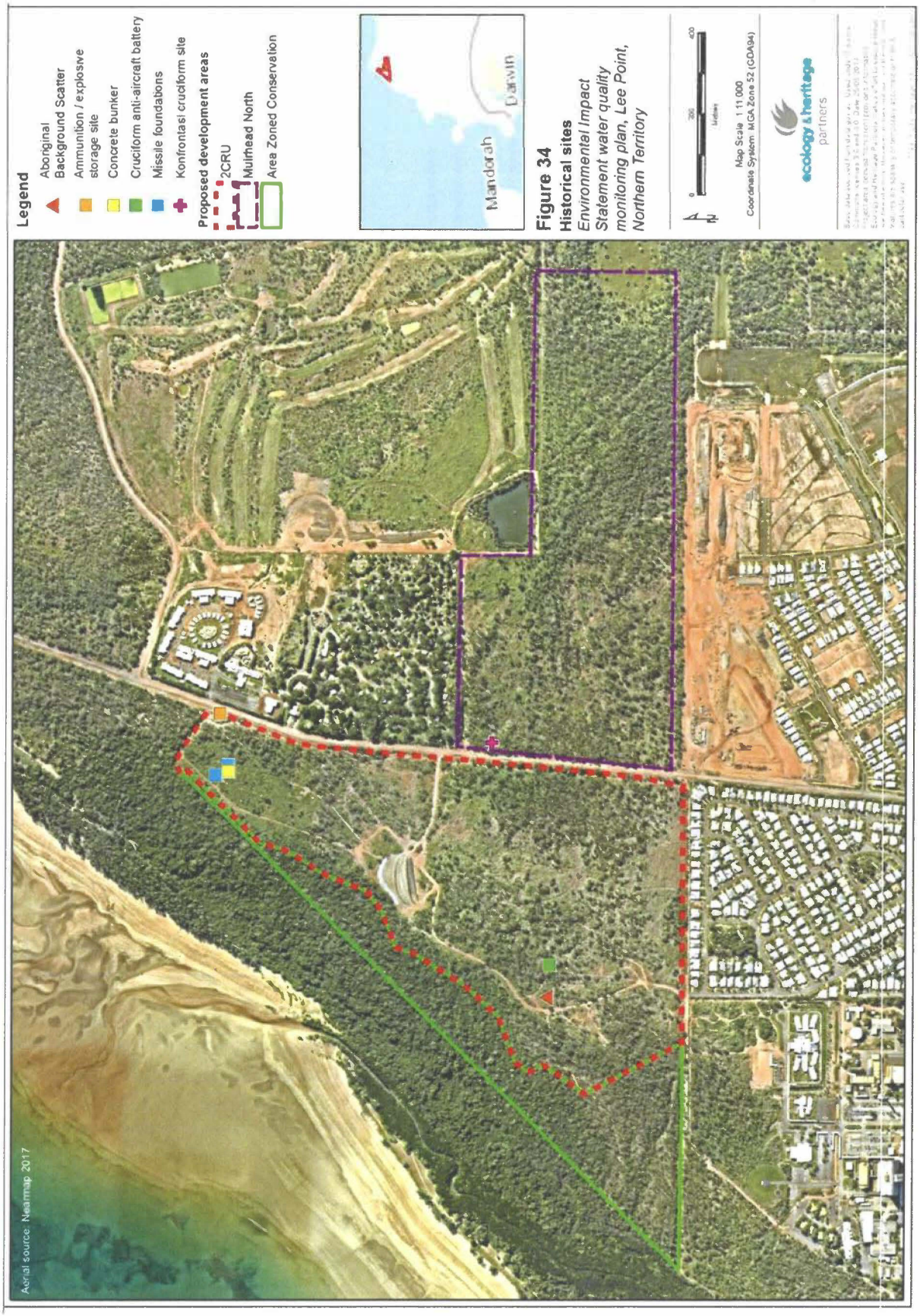
Mobile: 0427 796 140
Email: brad.cunningson@northernplanning.net
www.facebook.com/northernplanning

N

1:20,000@A4

0 500m

Attachment C



Attachment D

LEGEND

- STAGING
- LOTS 4000m² & larger (40m frontage min.)
- LOTS 600-750m² (20m x 30-31m)
- LOTS 540-599m² (18-19m x 30-31m)
- LOTS 450-539m² (15-17m x 30-31m)
- LOTS 360-449m² (12-14m x 30-31m)
- COMMUNITY USES
- PARK/OPEN SPACE
- DRAINAGE RESERVE
- CONSERVATION AREA
- LC — LOCAL CENTRE
- TP — TOURISM PRECINCT
- MU — MIXED USE RESIDENTIAL
- GU — MEDIUM DENSITY RESIDENTIAL
- POSSIBLE WATER FEATURE
- WWII HERITAGE AREA
- PROPOSED MOUNTAIN BIKE TRAIL
- ACCESS TO BEACH
- MILITARY HERITAGE SITE (KONFRONTASI)
- TELECOMMUNICATION TOWER
- DETENTION STORAGE
- MONSOON RAINFOREST
- SEWER

PROPERTY DESCRIPTION

LOT 4873 ON S78/107 &
LOT 9370 ON S901068
TOTAL AREA 132.5 ha

NOTES

(1) This plan was prepared for the purpose and exclusive use of DEFENCE HOUSING AUSTRALIA as an Investigation into the Development Potential of the land described in the plan and is not to be used for any other purpose or by any other person or corporation.
JFP URBAN CONSULTANTS PTY LTD accepts no responsibility for any loss or damage suffered howsoever arising to any person or corporation who may use or rely on this plan in contravention to the terms of this clause or clauses 2, 3, 4, 5, 6 or 7 hereof.

(2) The contours on this plan are approximate and are suitable only for the purpose of this application. The accuracy of the contours has not been verified and no reliance should be placed upon such contours for any purpose other than for the purpose of this application.

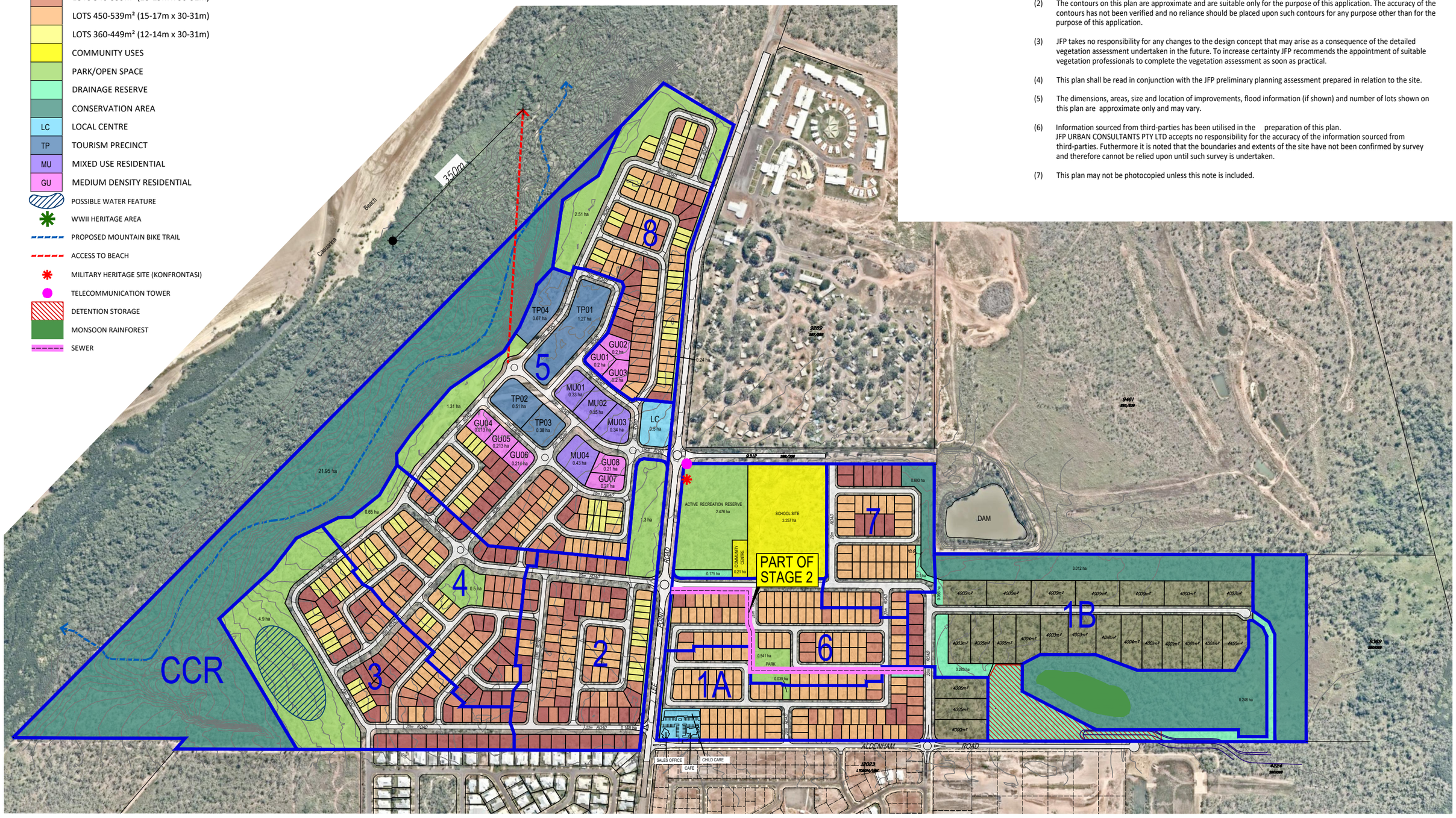
(3) JFP takes no responsibility for any changes to the design concept that may arise as a consequence of the detailed vegetation assessment undertaken in the future. To increase certainty JFP recommends the appointment of suitable vegetation professionals to complete the vegetation assessment as soon as practical.

(4) This plan shall be read in conjunction with the JFP preliminary planning assessment prepared in relation to the site.

(5) The dimensions, areas, size and location of improvements, flood information (if shown) and number of lots shown on this plan are approximate only and may vary.

(6) Information sourced from third-parties has been utilised in the preparation of this plan.
JFP URBAN CONSULTANTS PTY LTD accepts no responsibility for the accuracy of the information sourced from third-parties. Futhermore it is noted that the boundaries and extents of the site have not been confirmed by survey and therefore cannot be relied upon until such survey is undertaken.

(7) This plan may not be photocopied unless this note is included.



PLANNERS
URBAN DESIGNERS
SURVEYORS
ENGINEERS
LANDSCAPE ARCHITECTS

JFP URBAN CONSULTANTS

OVERALL CONCEPT PLAN AD

LEE POINT ROAD, LEE POINT, DARWIN
DEFENCE HOUSING AUSTRALIA

JOB NUMBER: M2737P_Overall Concept AD
ISSUE:
NORTH:
SCALE: 1:7000 @ A3
DATE: 25th May 2023

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Attachment E

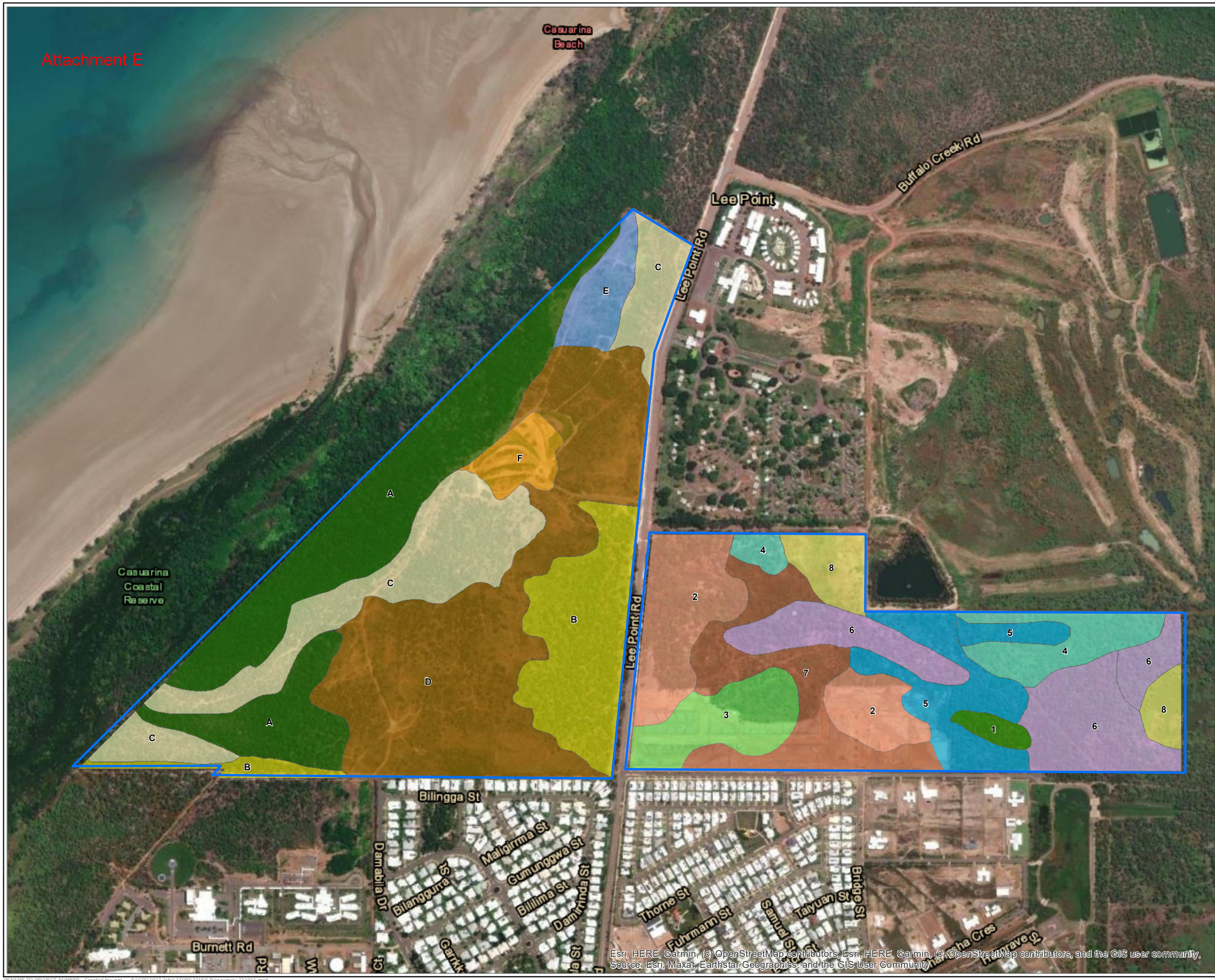


Figure 15: Vegetation types (strata) sampled

Project: Defence Housing Lee Point Development
Client: Defence Housing Australia
Date: 14/10/2022

Development area

Muirhead North Vegetation

- 1, Mixed species monsoon rainforest
- 2, Darwin Stringybark (Eucalyptus tetrodonta) and Woollybutt (E. miniata) Open Forest over Sarga intrans Grassland
- 3, Darwin Stringybark (Eucalyptus tetrodonta) Open Woodland with Sarga intrans grassland understorey
- 4, Eucalyptus and Corymbia Open Woodland (mixed species) over introduced grasses
- 5, Melaleuca viridiflora low woodland over introduced grasses
- 6, Lophostemon lactifluus and Pandanus spiralis open woodland to low open woodland
- 7, Acacia shrubland with scattered Stringybark (Eucalyptus tetrodonta) over introduced grasses.
- 8, Grassland of Gamba Grass (Andropogon gayanus) and Mission Grass (Pennisetum polystachion). Introduced species

Lee Point Rd Vegetation

- A, Monsoon Vine Forest
- B, Eucalyptus tetrodonta Woodland
- C, Low Eucalyptus tetrodonta Woodland with Monsoon Vine Thicket elements
- D, Disturbed Eucalyptus tetrodonta Woodland with Calytrix exstipulata shrubland
- E, Disturbed Acacia auriculiformis Woodlandwith dense introduced Grassland
- F, Disturbed area

N

Metres
0 130

Nature Advisory
PO Box 337, Camberwell, VIC 3124, Australia
www.natureadvisory.com.au
03 9815 2111 - info@natureadvisory.com.au

Attachment F

Figure 10: Understorey mapping

Project: Defence Housing Lee Point Development
Client: Peter Briggs (Partner)
Date: 18/08/2022

- Study area
- Calytrix shrubland
- Closed woodland with Gamba/Sarga understorey
- Dense forest thicket (dry/wet)
- Eucalyptus open forest over Sarga grassland
- Eucalyptus woodland with shruby understorey
- Eucalyptus/Melaleuca over low density Gamba grassland
- Eucalytus open woodland over diverse native grassland
- Lophostemon/Eucalytus woodland
- Low density Gamba grassland
- Melaleuca woodland with Gamba understorey
- Disturbed - high weed cover

GF Habitat Suitability

- Very High
- High
- Medium
- Low
- Unsuitable

N

Metres
0 125

Nature Advisory
PO Box 337, Camberwell, VIC 3124, Australia
www.natureadvisory.com.au
03 9815 2111 - info@natureadvisory.com.au

Esri, HERE, Garmin, (c) OpenStreetMap contributors, Esri, HERE, Garmin, (c) OpenStreetMap contributors, and the GIS user community, Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Attachment G





Shorebirds

Feeding location

Roosting location

Project data

Proposed development boundary

The remainder of Lee Point is considered suitable for occasional roosting and feeding

0 145 290 580
Metres

Projection: GDA 1994 MGA Zone 52
Date Saved: 23/08/2016
Client: Defence Housing Australia
Author: K Munson (reviewed Kylie Welch)
DATA SOURCE
Shorebirds: EcOz Boundary: DHA
Imagery: Google Earth Pro
Earthfast, ESRI basemap

EcOz

EcOz makes every effort to ensure this map is free of errors but does not warrant the map or its features are either spatially or temporally accurate or fit for a particular use. EcOz provides this map without any warranty of any kind whatsoever, either express or implied.