Tarraleah Redevelopment Project

Assessment of the transmission options (Level 1 activity) against the Tasmanian Planning Scheme Natural Assets Code

23 March 2026

Prepared by Hydro-Electric Corporation ABN48 072 377 158

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1. Introduction

The Tasmanian Environment Protection Authority (EPA) has determined that the following components of the Tarraleah Redevelopment Project (the Project), which are construction-related works that occur west and upstream of the proposed new power station on the Nive River, constitute a Level 2C activity pursuant to the Tasmanian *Environmental Management and Pollution Control Act 1994* (EMPC Act):

- Headrace pipeline, approximately 4.2 km long up to 4 m diameter, connected to the intake on Lake King William and tunnel completed during upgrade works.
- Headrace tunnel, approximately 12 km long, up to 6.5 m high and 5.5 m wide.
- Access tunnels and portals to headrace and power tunnels and associated permanent spoil storage stockpiles.
- Surge tower, up to 75 m high (above ground level) and 14 m diameter and associated underground surge shaft to control water pressure in the headrace and power tunnels.
- Pumping station and approximately 1.1 km pipeline to transfer water from the existing No. 2 Pond to the surge tower.
- A partially underground power station with an installed capacity of approximately 180 MW and a rated flow of 60 m^3/s, located adjacent to the existing Tarraleah Power Station.

The proposed construction of a new transmission line does not form part of the EPA's scope of assessment. There are currently two transmission options being considered, only one of which will be constructed:

- a 14 km double circuit line from the existing Tungatinah Switchyard to a new tee at Dee Lagoon (northern option), for which a 115.1 ha disturbance footprint is nominated, or
- a 15 km double circuit line from the proposed Tarraleah Switchyard to the existing Liapootah substation (southern option), for which a 146.0 ha disturbance footprint is nominated.

The *Tasmanian Planning Scheme – State Planning Provisions* includes the Natural Assets Code. The Natural Assets Code aims to minimise impacts to ecological values of waterways, wetlands and lakes, coastal areas and foreshore assets, identified priority vegetation and threatened fauna species.

Pursuant to C7.4.1 of the Natural Assts Code, development that is assessed by the EPA as a Level 2 activity is exempt from assessment against the code.

As such, whilst construction activities associated with the Project's headrace pipeline, tunnels, surge tower pumping station and pipeline and power station are exempt from assessment against the Natural Assets Code, the construction of the proposed transmission line is not.

This report describes how the Natural Assets Code applies to the Project's transmission lines, provides a summary of ecological values potentially impacted by the Project's transmission lines and assess the Project's transmission lines against *C7.6 Development Standards for Buildings and Works* of the code.

2. Application of the Natural Assets Code to the Project

The Natural Assets Code applies to waterway and coastal protection areas, future coastal refugia areas and priority vegetation areas when within zones identified in C7.2.1(c) of the code. Waterway and coastal protection areas, future coastal refugia areas and priority vegetation areas are shown on overlay maps in the Central Highlands Local Provisions Schedule.

Attachments A to D show where the waterway and coastal protection area overlay and the priority vegetation area overlay are intersected by each of the two options for the Project's transmission line reference design and disturbance footprint. There are no future coastal refugia areas intersected by either transmission option. The disturbance footprint of the northern transmission option intersects 7.6 ha of the waterway and coastal protection area overlay and 40.6 ha of the priority vegetation area overlay, whilst the southern transmission option intersects 5.8 ha of the waterway and coastal protection area overlay and 27.1 ha of the priority vegetation area overlay.

The disturbance footprint captures the maximum extent of all land that may be physically disturbed during construction and operation of the transmission line and includes easement widening, tower/pole pads, conductor stringing pads, potential hazard tree removal zones, new access tracks, access track widening/upgrades, and temporary laydown areas for construction of the new line.

The entire length of both transmission options is located parallel to existing permanent easement that houses existing transmission lines. The existing easement must be widened by up to 30 m to accommodate the new transmission line, in order to achieve electrical clearance safety distances between the transmission infrastructure and the adjacent vegetation. The reference design for the northern transmission option proposes that easement widening be located on the southern side of the existing permanent easement. The reference design for the southern transmission option proposes that easement widening be located on the northeastern side of the existing permanent easement between Tarraleah and the Black Bobs four-way easement junction; for the section of the option south of that junction, the reference design proposes that the easement widening be located on the northern side of the existing permanent easement (refer Attachments A to D).

Whilst tower locations (in the case of the northern transmission option) or pole locations (in the case of the southern transmission option) are nominated within the reference designs, these locations will be subject to micro-siting within the nominated disturbance footprint during the Project's detailed design phase. The disturbance footprint nominated around all existing access roads is up to 30 m on either side; however, it is unlikely that access roads will be widened to the full extent of the disturbance footprint. The extent of access road widening (if any) will also be determined during detailed design.

2.1 Waterway crossings and wetlands

2.1.1 Northern transmission option

The northern transmission option intersects the following five waterways and two wetlands (see Attachment A):

- Tungatinah Creek and unnamed wetland
  - Overflown by conductors spanning transmission towers T8 and T9
  - Crossed by upgraded access track between transmission towers T8 and T9

  - The waterway protection area associated with Tungatinah Creek is intersected by the disturbance footprint associated with the construction of transmission tower T6 and between transmission towers T7 and T8.
- Black Bobs Rivulet
  - Overflown by conductors spanning transmission towers T15 and T16
  - Crossed by upgraded access track between transmission towers T15 and T16.
- Unnamed waterway flowing from the canal at Spillway Bay in Dee Lagoon and unnamed wetland
  - Overflown by conductors spanning transmission towers T24 and T25
  - Crossed by upgraded access track between transmission towers T24 and T25
  - The waterway protection area associated with the unnamed creek and wetland is intersected by the disturbance footprint for the tower pad associated with transmission tower T29.
- Dee Lagoon
  - Overflown by conductors spanning transmission towers T28 and T29
  - The waterway protection area associated with Dee Lagoon is intersected by the tower pad associated with transmission tower T24.
- Unnamed waterway draining into Dee Lagoon
  - An unnamed waterway and its waterway protection area is intersected by the tee and tower pad associated with transmission towers T30 and T34.

2.1.2 Southern transmission option

The southern transmission option intersects the following five waterways and one wetland (refer Attachment B):

- Nive River
  - Overflown by conductors spanning transmission poles TTA2/TTA1 and TP1, as well as the conductors spanning TP44 and TP45
  - The waterway protection area associated with the Nive River is intersected by the disturbance footprint for the pole pad associated with TP1 (note that the disturbance footprint for TP1 is incorporated in the disturbance footprint for the new power station) and the pole pad associated with TP45 as well as the disturbance footprint for the upgrade to the access track to TP45 from the Lyell Highway.
- Unnamed tributary of Nive River and unnamed wetland
  - Overflown by conductors spanning transmission poles TP21 and TP22
  - Crossed by new section of access track to TP22
  - The waterway protection area associated with the unnamed waterway and unnamed wetland are intersected by the pole pads associated with TP21 and TP22.
- Unnamed tributary of Ringing Creek
  - Overflown by conductors spanning transmission poles TP38 and TP39
  - Crossed by upgraded access track between transmission poles TP38 and TP39.

- Ringing Creek
    - Crossed by upgraded section of access track from the Lyell Highway to TP44.
- Tungatinah Creek
    - Crossed by upgraded access track from the existing northern easement (in the location where tower T9 is proposed for the northern alignment option) to southern alignment option's pole TP10, which would be required to construct TP10.

3. Works within waterway and coastal protection areas and priority vegetation areas

The northern transmission option is located parallel to the existing Waddamana to Tungatinah Transmission Line and will require 30 m of the existing easement for the Waddamana to Tungatinah Transmission Line as well as an additional easement widening of 30 m. The northern transmission option will also largely utilise the existing access track, including waterway crossing, established for the Waddamana to Tungatinah Transmission Line with only minor upgrades required.

The southern transmission option is located parallel to the existing Tarraleah to New Norfolk Transmission Line. The southern transmission option will use 30 m of the existing easement for the Tarraleah to New Norfolk Transmission Line as well as an additional easement widening of 30 m. The southern transmission option will also largely utilise the existing access track, including waterway crossing, established for the Tarraleah to New Norfolk Transmission Line with only minor upgrades required.

Works within the waterway and coastal protection areas and priority vegetation areas intersected by the disturbance footprint of the transmission alignment options and that have the potential to impact values protected by the Natural Assets Code are the construction of new and upgraded access tracks, construction of tower/pole pads and hardstands, erection of towers/poles and stringing of conductors. Works will include:

- The final disturbance footprint will be clearly marked on plans, communicated to all construction personnel, and physically marked on site to avoid unnecessary vegetation removal.
- Traffic management measures will be installed to enable safe access to construction sites.
- Erosion and sediment controls, such as retention basins and catch drains will be installed at all construction sites as soon as practicable prior to, or during, clearing and grubbing.
- Fauna surveys: a suitably qualified ecologist will be engaged to survey for Tasmanian devil and spotted-tailed quoll denning habitat within the mature eucalypt forest within works sites.
- Access tracks upgrades as required, including widening, resurfacing, drainage improvements etc. Access track upgrades within waterways (refer Section 2.1) are expected to be minor may include minor removal of riparian and littoral vegetation to facilitate widening, placement of road base and surface materials and establishment of drainage including the potential upgrade of existing culverts.
- Clearing and grubbing of tower/pole pads which will be completed to progressively remove unwanted surface materials (clearing) and underground materials such as stumps, roots and buried logs (grubbing), with progressive rehabilitation of areas no longer required for construction activities.

- Completion of civil works (e.g. benching, levelling, etc.) as required.
- Establishment of concrete footings for towers/poles.
- Erection of towers/poles using a crane.
- Clearing of vegetation with easements to achieve the required electrical safety clearance from transmission infrastructure. Groundcover including grasses and low shrubs will be retained.
- Stringing of conductors and optical fibre ground wires using helicopters and winches in accordance with industry practices. Other than at winch locations the conductors and optical fibre ground wires will not contact the ground during the stringing operation.

New and upgraded access roads will be designed and built in accordance with the *Tasmanian Municipal Standards* (Local Government Association Tasmania, December 2020) for unsealed rural roads, with a nominal unsealed pavement width of 5.5 m.

4. Ecological values, potential impacts and mitigation measures

This section provides a summary of the ecological values subject to the Natural Assets Code and potentially impacted by the Project's transmission options. A detailed description of ecological survey methods, the biodiversity and natural values recorded within the Project's disturbance footprint, potential Project impacts and proposed mitigation measures is contained in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026).

4.1 Vegetation

Dominant and co-dominant flora species and their cover abundance were recorded in all vegetation communities that were encountered during field surveys of the two transmission options' survey areas such that the vegetation communities therein could be attributed to the appropriate TASVEG Mapping Units (Kitchener & Harris, 2013) as well as recording the presence of any vegetation communities listed under the Tasmanian *Nature Conservation Act 2002* (NC Act) or ecological communities listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The boundaries and extent of the TASVEG communities were mapped on GIS.

- All waterway crossings for new or upgraded access tracks will be designed, constructed and maintained in accordance with the *Forest Practices Authority – Forest Practices Code 2020* (FPA, 2020) and the *Waterways and Wetlands Manual* (DPIPWE, 2003) to minimise potential impacts to riparian or littoral vegetation and flow and drainage.

Table 4.1 shows the extent of each vegetation community recorded within each transmission option's disturbance footprint, as well as the extent of each vegetation community that falls within the priority vegetation overlay and within the waterway protection overlay.

4.1.1 Northern transmission option

Of the 63.2 ha of native vegetation within the disturbance footprint for the northern transmission option, 31.0 ha are mature eucalypt forest, 38.6 ha are within the priority vegetation overlay, and 3.8 ha are within the waterway protection overlay. Of the 38.6 ha within the priority vegetation overlay, 16.8 ha are mature forest within the overlay. Of the 3.8 ha within the waterway protection overlay, 3.3 ha are mature eucalypt forest. Most of the priority vegetation to be impacted for the northern transmission option is forest dominated by *Eucalyptus tasmaniensis* (gum-topped stringybark, previously known as *Eucalyptus delegatensis* subsp. *tasmaniensis*) trees.

There are no threatened vegetation communities listed under the Tasmanian NC Act within northern transmission disturbance footprint. There are no threatened ecological communities listed under the Commonwealth EPBC Act within northern transmission disturbance footprint. There is no "other locally important native vegetation" known to occur within the northern transmission disturbance footprint.

4.1.2 Southern transmission option

Of the 48.8 ha of native vegetation within the disturbance footprint for the southern transmission option, 8.3 ha are mature eucalypt forest, 15.8 ha are within the priority vegetation overlay, and 2.6 ha are within the waterway protection overlay. Of the 15.8 ha within the priority vegetation overlay, 4.7 ha are mature eucalypt forest. Of the 2.6 ha within the waterway protection overlay, 0.4 ha are mature eucalypt forest. Most of the priority vegetation to be impacted for the construction of the southern transmission option is forest dominated by *Eucalyptus tasmaniensis* (gum-topped stringybark) trees.

There are no threatened vegetation communities listed under the NC Act within southern transmission options disturbance footprint. There are no threatened ecological communities listed under the EPBC Act within southern transmission option disturbance footprint. There is no "other locally important native vegetation" known to occur within the southern transmission option disturbance footprint.

4.1.3 Mitigation measures to protect native vegetation

Potential impacts to native vegetation will be mitigated through the application of Mitigation Measures described in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026). These include the following measures:

- A final Project disturbance footprint (within the Project disturbance footprint presented within this report) will be established based on the Project's final design and construction method. The disturbance footprint and vegetation clearing exclusion zones will be clearly shown on Project plans, communicated to all construction personnel and physically marked on site. Vegetation clearing will be limited to the minimum necessary to construct and operate the transmission line.
- A Site Establishment Management Plan (SEMP) will be prepared prior to the commencement of site establishment activities and implemented during their execution. The SEMP will outline the environmental management practices and procedures to be implemented for site establishment activities.

- Hazard trees associated with the 220 kV transmission line and 22 kV distribution lines will be identified and assessed by a suitably qualified arborist prior to construction. Trees marked for removal or trimming will be checked for fauna use of tree hollows by a suitably qualified person before removal. If native fauna are found using hollows of trees that must be cleared, a permit to 'Take' under the Tasmanian *Threatened Species Protection Act 1995* (TSP Act) and/or NC Act will be required.
- All waterway crossings for new or upgraded access tracks will be designed, constructed and maintained in accordance with the *Forest Practices Authority – Forest Practices Code 2020* (FPA, 2020) and the *Waterways and Wetlands Manual* (DPIPWE, 2003) to minimise potential impacts to riparian or littoral vegetation and flow and drainage.

Table 4.1: Extents of forest types within relevant overlays within each transmission option

Vegetation community	TASVEG VegCode	Northern transmission option			Southern transmission option		
		Total within disturbance footprint	Extent within priority vegetation overlay	Extent within waterway protection overlay	Total within disturbance footprint	Extent within priority vegetation overlay	Extent within waterway protection overlay
Acacia dealbata forest (non-eucalypt forest) **See Figure 4.1**	NAD	0.6	9.6	0	0	0	0
Eucalyptus amygdalina forest and woodland on dolerite (dry eucalypt forest) **See Figure 4.2**	DAD	4.2 (all mature)	2.5 (all mature)	0	1.4 (regrowth)	1.2 (regrowth)	0.3 (regrowth)
Eucalyptus dalrympleana – E. pauciflora forest and woodland (dry eucalypt forest) **See Figure 4.3**	DDP	0.2 (all mature)	0.2 (mature)	0	0	0	0
Eucalyptus tasmaniensis dry forest and woodland (dry eucalypt forest) **See Figure 4.4**	DDE	13.0 (3.6 mature)	7.4 (1.8 mature)	0.6 (0.2 mature)	0.3 (all regrowth)	0	0
Eucalyptus rodwayi forest and woodland (dry eucalypt forest) **See Figure 4.5**	DRO	5.1 (all mature)	1.7 (all mature)	3.1 (all mature)	0.5 (all mature)	0	0.1 (all mature)
Eucalyptus tasmaniensis forest with broad-leaf shrubs (wet eucalypt forest) **See Figure 4.6**	WDB	40.1 (17.9 mature)	17.2 (10.6 mature)	0.1 (all regrowth)	37.3 (6.8 mature)	8.1 (2.9 mature)	1.5 (all regrowth)
Eucalyptus obliqua forest with broad-leaf shrubs (wet eucalypt forest) **See Figure 4.7**	WOB	0	0	0	9.3 (1.0 mature)	6.5 (0.6 mature)	0.7 (0.3 mature)
Total		**63.2 (31.0 ha of which mature eucalypt forest)**	**38.6 (16.8 ha of which are mature eucalypt forest)**	**3.8 (3.3 ha of which are mature eucalypt forest)**	**48.8 (8.3 ha of which is mature eucalypt forest)**	**15.8 (4.7 ha of which are mature eucalypt forest)**	**2.6 (0.4 ha of which are mature eucalypt forest)**

Figure 4.1: *Acacia dealbata* forest on the northern transmission option

Figure 4.2: *Eucalyptus amygdalina* forest and woodland on dolerite on the northern transmission option

Figure 4.3: *Eucalyptus dalrympleana - Eucalyptus pauciflora* forest and woodland in the northern transmission option

Figure 4.4: *Eucalyptus tasmaniensis* dry forest and woodland along the northern transmission option

Figure 4.5: *Eucalyptus rodwayi* forest and woodland within the northern transmission option

Figure 4.6: Regrowth *Eucalyptus tasmaniensis* forest over broad-leaf shrubs in the northern transmission option

Figure 4.7: *Eucalyptus obliqua forest* with broad-leaf shrubs within southern transmission option

4.2 Flora

A systematic ground survey method was used to undertake the flora surveys of each of the transmission option survey areas. This involved systematically walking over the survey area and recording all flora species encountered. The flora surveys focused on vegetation communities and habitats that could potentially support threatened species. All flora species encountered during the survey were recorded on a computer tablet with GPS capability using Entura's EFOS (Environmental Field Observation System) which records data using fields that are consistent with the NVA. Nomenclature for flora follows the current *Census of Tasmanian Vascular Plants* (de Salas & Baker, 2024).

Dominant and co-dominant flora species and their cover abundance were recorded in all vegetation communities that were encountered so that the community could be attributed to the appropriate TASVEG Mapping Units (Kitchener & Harris, 2013). The boundaries and extent of the TASVEG communities were mapped on GIS.

4.2.1 Northern transmission option

Tree species recorded within the northern transmission option survey area included *Eucalyptus tasmaniensis* (gum-topped stringybark), *Eucalyptus rodwayi* (swamp peppermint), *Eucalyptus dalrympleana* subsp. *lutruwita* (mountain white gum), *Eucalyptus pauciflora* (cabbage gum), *Eucalyptus amygdalina* (black peppermint), *Acacia dealbata* (silver wattle), and *Pomaderris apetala* (common dogwood). The tall shrub *Bedfordia salicina* (blanket leaf) dominated the areas of *Eucalyptus tasmaniensis* forest with broad-leaf shrubs. Other shrub species recorded in the northern transmission option included *Pultenaea juniperina* (prickly beauty) and *Leptecophylla parvifolia* (common pinkberry), and the graminoid *Lomandra longifolia* (sagg) was also recorded in the understoreys in this area. The ground fern *Pteridium esculentum* subsp. *esculentum* (bracken) was commonly present. Native herbs recorded within the northern transmission option included *Galium australe* (tangled bedstraw), *Hydrocotyle hirta* (hairy pennywort), and *Viola hederacea* (ivyleaf violet).

The only threatened flora species recorded within the northern transmission option survey area was *Westringia angusifolia* (narrowleaf westringia). *Westringia angustifolia* is listed as rare under the TSP Act; it is not listed under the EPBC Act. A population of this threatened flora species was recorded within

the northern transmission option's disturbance footprint at two locations: near the proposed site of tower T3 and near the proposed site of tower T14 (Figure 4.8). The former population extended over an area of 150 m by 80 m across the currently maintained permanent easement into the adjacent *Eucalyptus amygdalina* forest on dolerite community. At the second location, the population extended over an area of 40 m by 20 m, which included the current transmission option and the adjacent *Eucalyptus tasmaniensis* dry forest.

Xerochrysum palustre (swamp paperdaisy), which is listed as vulnerable under the TSP Act and EPBC Act, has been recorded from Father of Marshes approximately 1.6 km downstream of the northern transmission option (NVA data). Black Bobs Rivulet, which is crossed by the northern transmission option, is one of the streams that runs through Father of Marshes. *Xerochrysum palustre* is a perennial paper daisy that grows in swampy habitats, including sedge- and rush-rich wetlands, grassy to sedgy wet heathlands and heathy open eucalypt woodlands usually in sites inundated for part of the year (Threatened Species Section, 2016). This species is unlikely to be affected by the upgrades to the access tracks for the construction and maintenance of the northern transmission option, given the distance from the disturbance footprint and the implementation of erosion and sediment control measures.

Potential impacts to *Westringia angustifolia* flora will be mitigated through the application of Mitigation Measures described in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026). These include the following measure:

- The final disturbance footprint for the northern transmission option (if selected) will be designed to minimise impacts to *Westringia angustifolia* (narrowleaf westringia) plants at proposed sites for Towers 3 and 14. Where *W. angustifolia* plants can be avoided, exclusion zones will be shown on Project plans, communicated to construction personnel and physically marked on site. Where avoidance is not possible a permit to 'Take' in accordance with the TSP Act and/or NC Act will be required.

Figure 4.8: Population of *Westringia angustifolia* (narrowleaf westringia) in the northern transmission option

4.2.2 Southern transmission option

The riparian, flow-dependent plant species *Barbarea australis* (native wintercress), which is listed as endangered under the TSP Act and EPBC Act, is known to occur in the Nive River. Up to 10 plants of this species have been recorded adjacent to the disturbance footprint where the southern transmission option would span the Nive River near the Liapootah substation.

There are no other terrestrial or aquatic threatened flora species within the disturbance footprint for the southern transmission option.

Tree species recorded within the southern transmission option survey area included *Eucalyptus obliqua, Eucalyptus tasmaniensis, Eucalyptus rodwayi,* and *Eucalyptus amygdalina.* The ground fern *Pteridium esculentum* subsp. *esculentum* (bracken) was commonly present. The tall shrub *Bedfordia salicina* (blanket leaf) dominated the areas of *Eucalyptus tasmaniensis* forest with broad-leaf shrubs. The *Eucalyptus obliqua* forest with broad-leaf shrubs within the southern transmission option disturbance footprint would be passed through by the easement for approximately 2.3 km. The *Eucalyptus obliqua* forest with broad-leaf shrubs community was characterised by a tall *E. obliqua* canopy layer, where *Eucalyptus viminalis* was present as a minor component of the community. *Acacia dealbata, Pittosporum bicolor* and *Leptospermum lanigerum* were present as small trees. Ferns were the predominant component of the understorey including the tree fern *Dicksonia antarctica* and the ground ferns *Blechnum nudum, B. wattsii*, and *Polystichum proliferum*.

Potential impacts to the endangered riverine plant *Barbarea australis* will be mitigated through the application of Mitigation Measures described in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026). These include the following measure:

- The *Barbarea australis* populations adjacent to the disturbance footprint where the southern transmission option crosses the Nive River will be protected by exclusion zones during construction and will not be impacted.

4.3 Fauna

4.3.1 Fauna habitat

The northern and southern transmission option disturbance footprints encompass two main native fauna habitat types: dry eucalypt forest and wet eucalypt forest (Table 4.2). The two native forest habitat types are likely to provide habitat for a range of native fauna species. The mature (i.e. not cleared or harvested for timber in recent decades) forests are more likely to provide key habitat features for native fauna such as tree hollows and hollow log shelters than regrowth forests. Arboreal marsupials, bats and bird species use tree hollows in Tasmania, and all hollow-dependent fauna species are listed as having priority status under the Tasmanian Regional Forest Agreement.

Native fauna species are also likely to forage within hardwood plantation and existing easement within the transmission option disturbance footprints.

Table 4.2: Extent of fauna habitat types within the disturbance footprints and relevant overlays.

Habitat type	Northern transmission option (ha)			Southern transmission option (ha)		
	Total	Priority vegetation overlay	Waterway protection overlay	Total	Priority vegetation overlay	Waterway protection overlay
Native vegetation	63.2	29.3	3.9	48.8	16.1	2.6
Modified (non-native) vegetation	58.5	10.7 (hardwood plantation, existing easement)	3.6	96.8	10.9 (hardwood plantation, existing easement)	3.0
Non-eucalypt forest & scrub	0.6	0.6	0	0	0	0
Dry eucalypt forest	22.5	12.0	3.7	2.2	1.5	0.4
Wet eucalypt forest	40.1	17.2	0.1	46.6	14.6	2.1
Mature dry eucalypt forest	13.1	6.5	3.3	0.5	0.4	0.1
Mature wet eucalypt forest	17.9	10.6	0	7.8	3.5	0.3
Water	0.3 (Dee Lagoon)	0	0	0.5	0.1	0.1 (Nive River)

There are no known aquatic fauna records in any of the streams crossed by the northern transmission option.

The only known aquatic fauna records (NVA data) of the streams crossed by the southern transmission option are of the introduced fish species brown trout (*Salmo trutta*) and redfin (*Perca fluviatilis*). Therefore, there are no potential impacts to threatened aquatic fauna from either transmission option.

Potential impacts to fauna and fauna habitat (including threatened fauna) will be mitigated through the application of Mitigation Measures described in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026). These include the measures for threatened fauna described in Section 4.3.2 and the following measures:

- All waterway crossings for new or upgraded access tracks will be designed, constructed and maintained in accordance with the *Forest Practices Authority – Forest Practices Code 2020* (FPA, 2020) and the *Waterways and Wetlands Manual* (DPIPWE, 2003) to minimise potential impacts to instream habitat, flow and drainage.
- To mitigate potential impacts to water quality that may affect aquatic fauna and habitat (e.g. erosion and sedimentation, introduction of hydrocarbons and other hazardous materials, and changes to pH) the following plans will be prepared prior to the commencement of construction and implemented during construction:
    - Water Management Plan (including stormwater)
    - Hydrocarbon Management Plan
    - Erosion and Sediment Control Plan (prepared by a suitably qualified professional as defined the International Erosions Control Association (IECA) *Australasia Position Statement* –

Definition of a Suitably Qualified Professional (Nov 2023) in accordance with the principles and guidance provided in IECA Australasia's *BPESC document* (2008).

4.3.2 Threatened fauna

Mature eucalypt forest located within the disturbance footprint of both transmission options is likely to provide the most optimal foraging habitat for Tasmanian devils (*Sarcophilus harrisii*) and spotted-tailed quolls (*Dasyurus maculatus maculatus*).

Although no known raptor nests are located within the disturbance footprint of either transmission option, the construction of the transmission line also has the potential to impact Tasmanian wedge-tailed eagles and white-bellied sea-eagles nesting in the nearby areas.

4.3.2.1 Tasmanian devils

The Tasmanian devil (*Sarcophilus harrisii*) is listed as endangered under both the EPBC Act and the TSP Act. At the home-range scale, Tasmanian devils require shelter (e.g. dense vegetation, hollow logs, burrows or caves) and hunting habitat with an open understorey mixed with patches of dense vegetation. Suitable maternal denning habitat components for Tasmanian devils include well-drained soil that is easily dug, sheltered overhangs such as cliffs, rocky outcrops, knolls, caves and earth banks, and log piles with at least one entrance through which a devil could pass. Adults are thought to use the same den sites long-term, so den disturbance can have significant implications to devil populations. No potential denning features for the Tasmanian devil were found within either transmission option disturbance footprint. However, Tasmanian devils may forage over all areas of either transmission option's disturbance footprint.

Tasmanian devils were detected by motion-triggered camera traps deployed in *Eucalyptus tasmaniensis* dry forest and woodland (DDE) within the northern transmission option disturbance footprint.

Tasmanian devils were detected by a camera trap deployed within *Eucalyptus amygdalina* forest and woodland on dolerite (DAD) within the southern transmission option disturbance footprint.

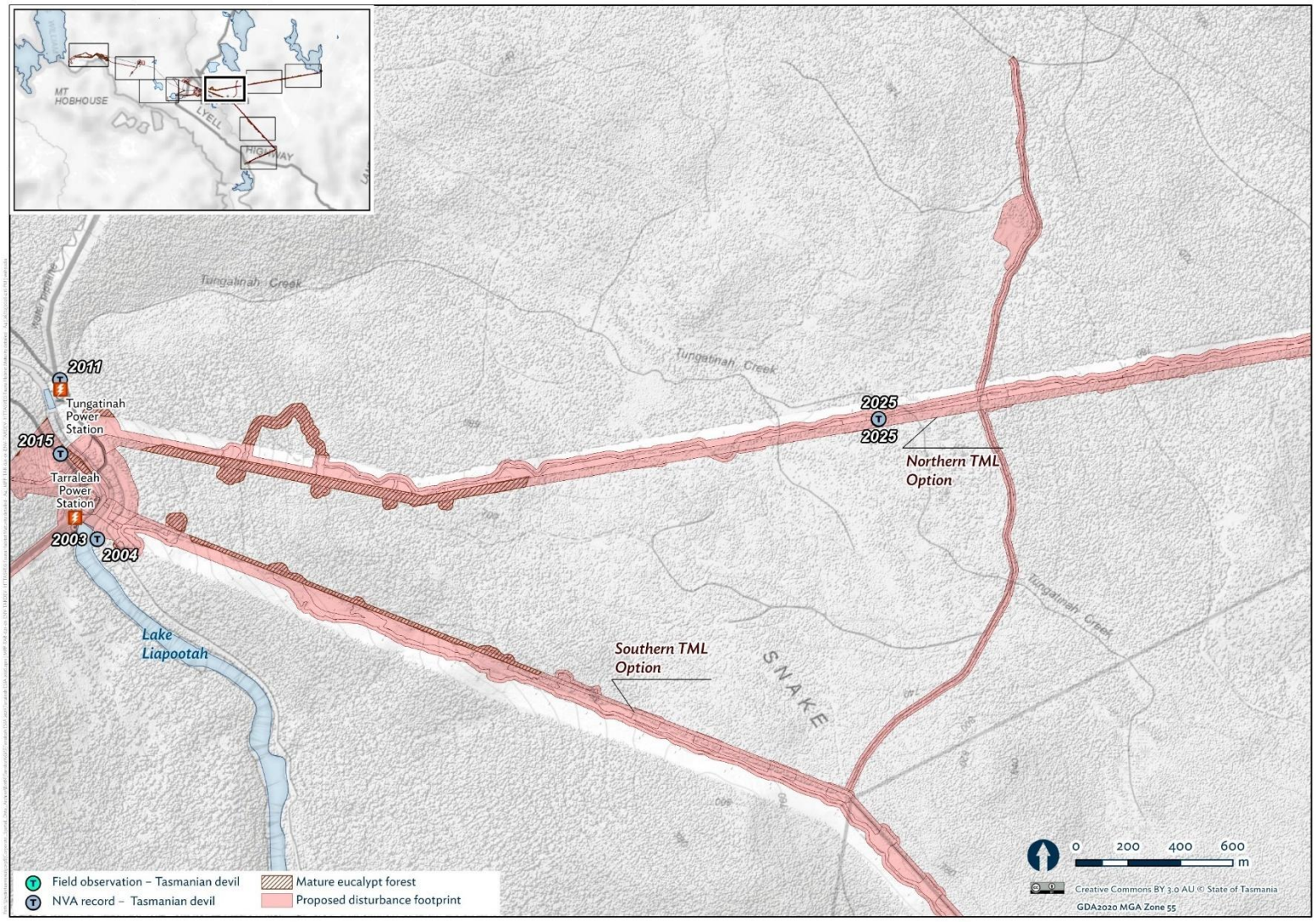

Figure 4.9: Mature forest habitat suitable for Tasmanian devils within the western component of the transmission option's disturbance footprint.

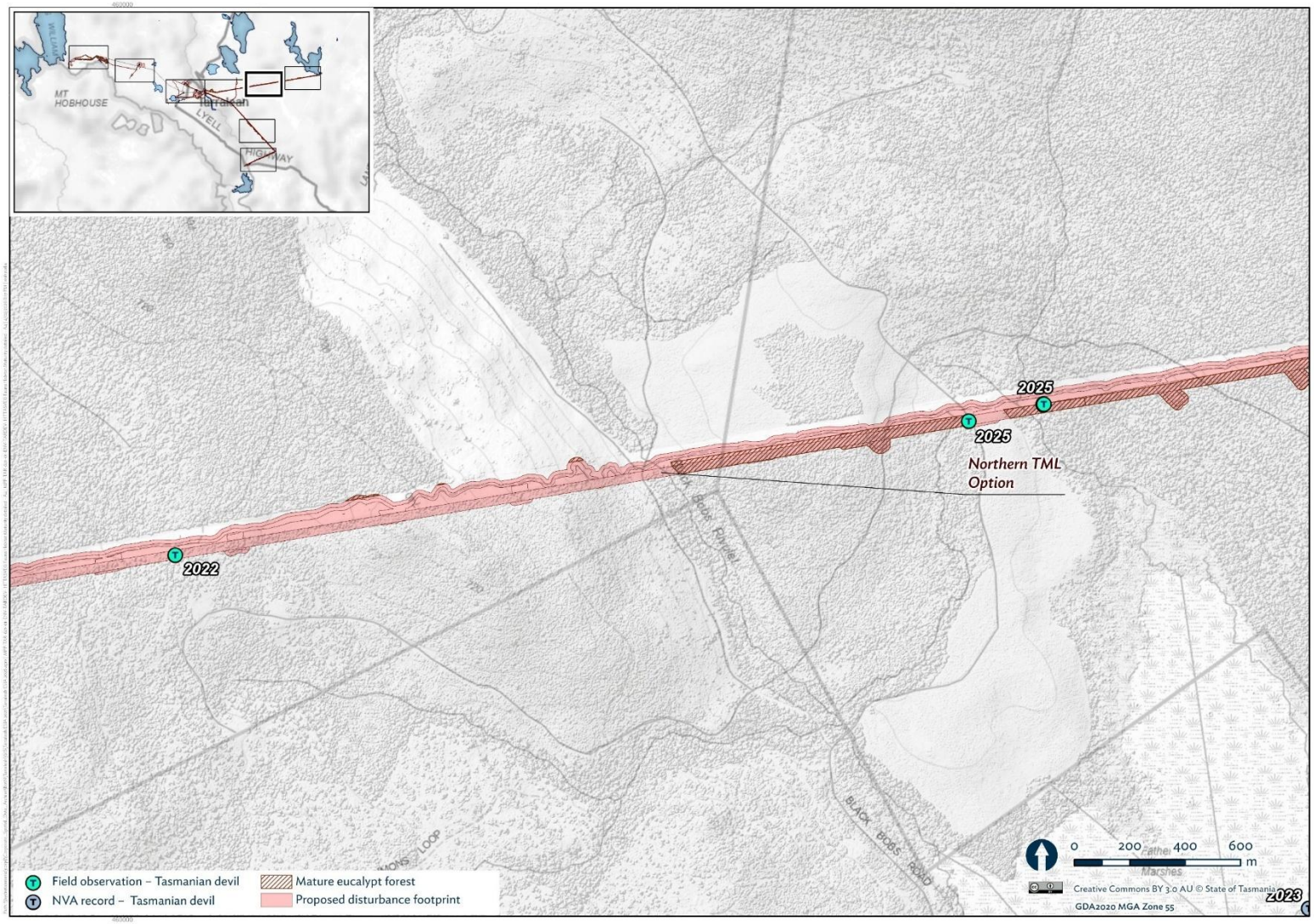

Figure 4.10: Mature forest habitat suitable for Tasmanian devils within the central component of the northern transmission option disturbance footprint.

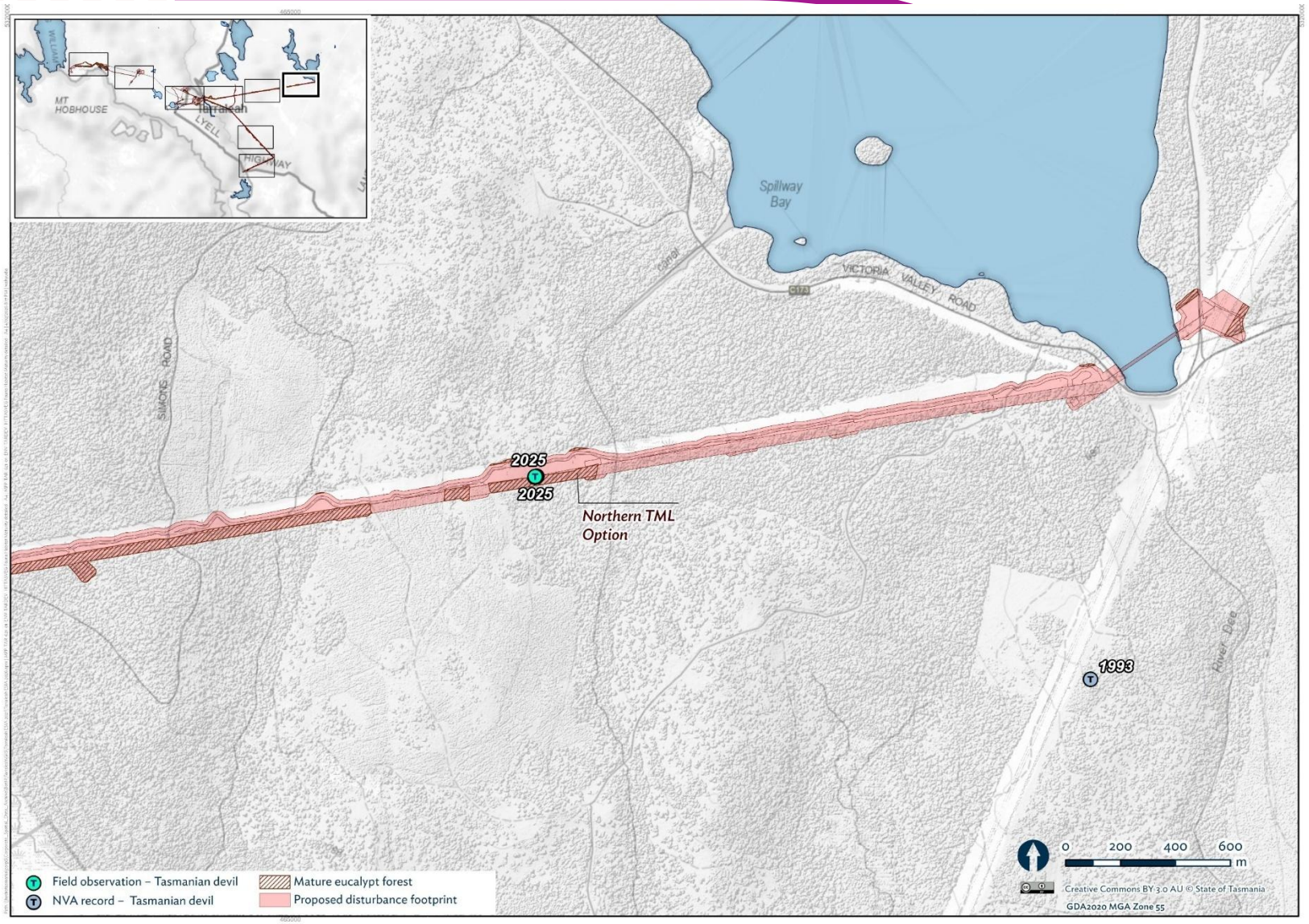

Figure 4.11: Mature forest habitat suitable for Tasmanian devils within the eastern component of the northern transmission option disturbance footprints.

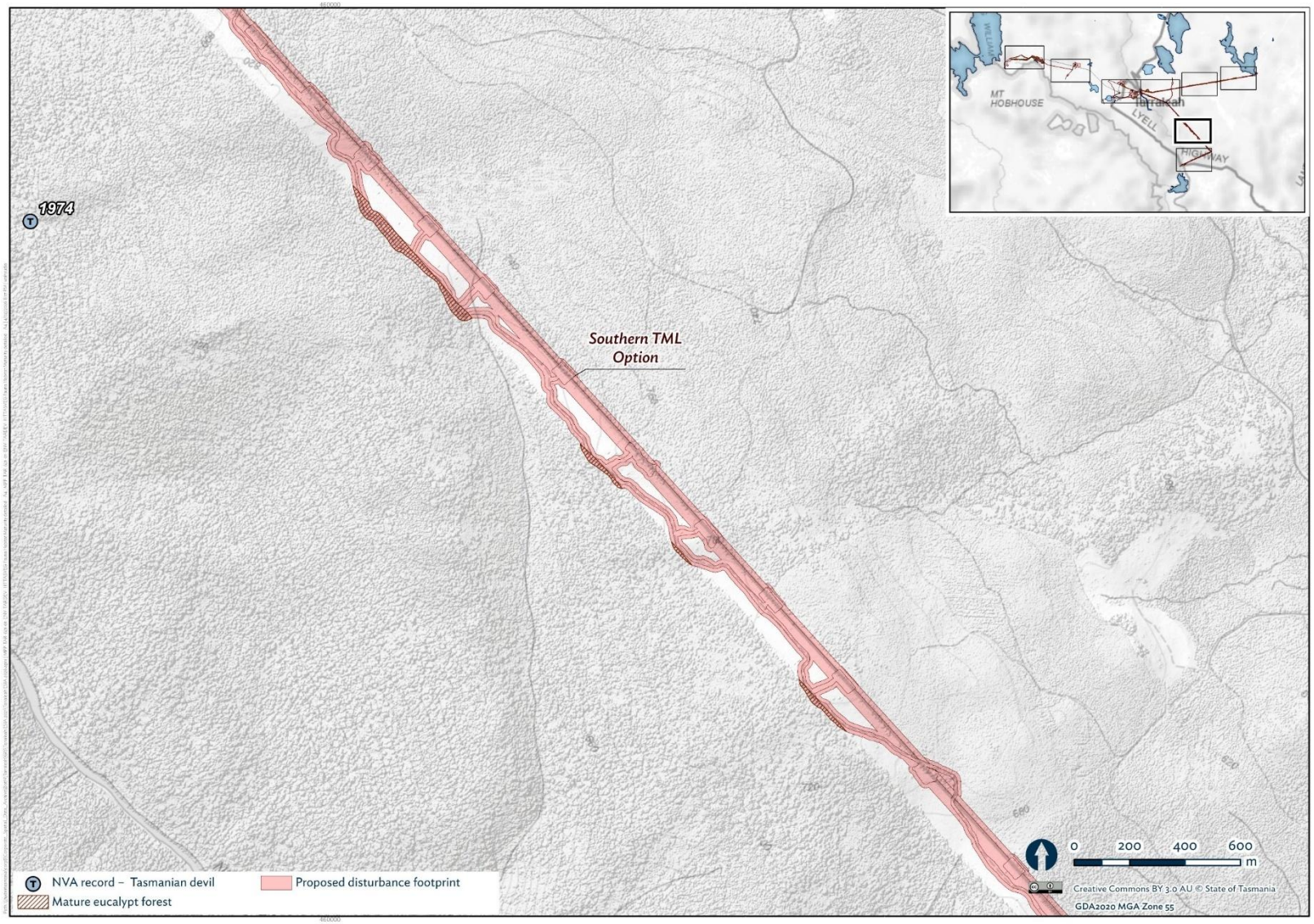

Figure 4.12: Mature forest habitat suitable for Tasmanian devils within the southern transmission option disturbance footprints.

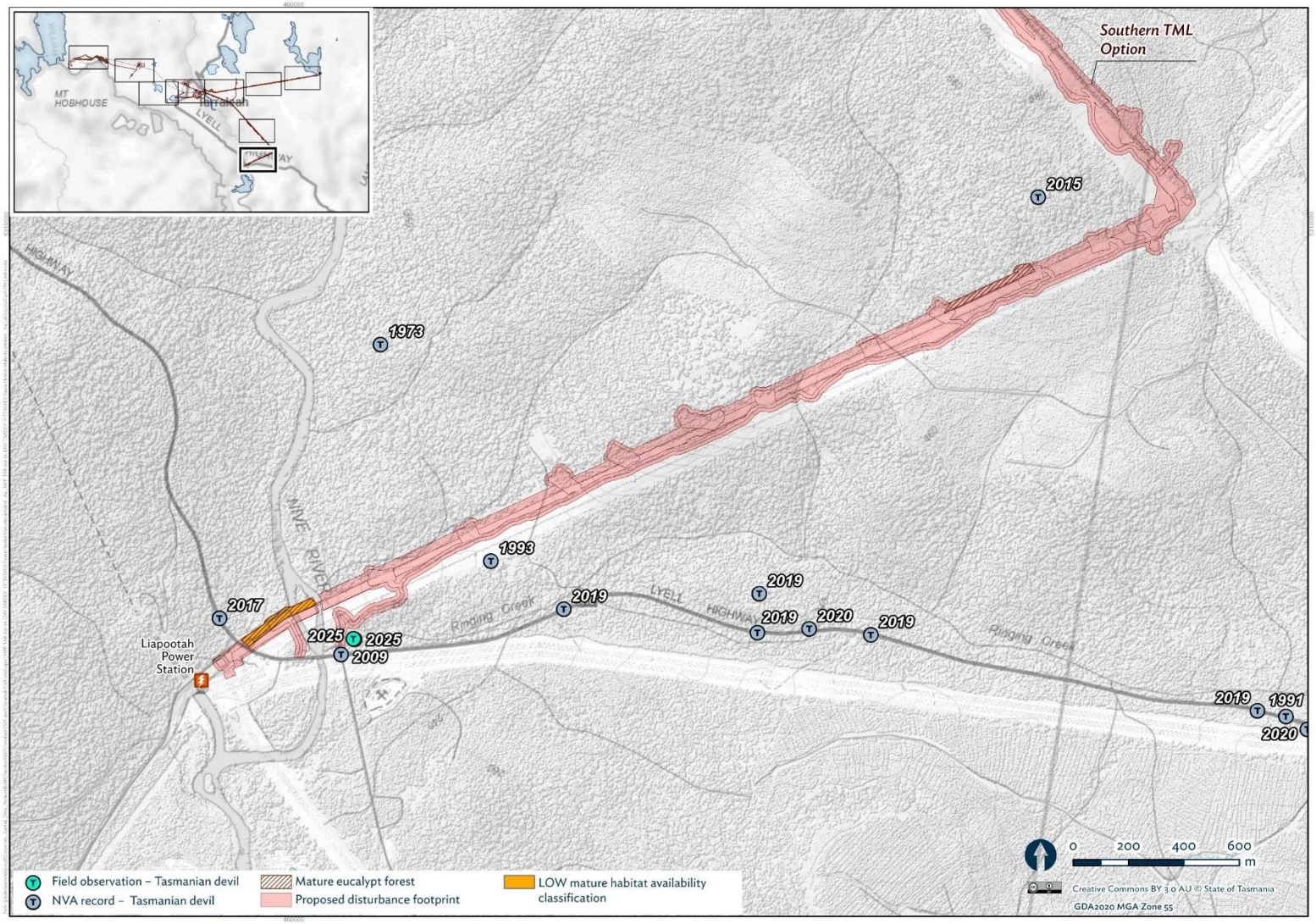

Figure 4.13: Mature forest habitat suitable for Tasmanian devils within the southern component of the southern transmission option disturbance footprints.

Potential impacts of both transmission options relevant to the Tasmanian devil are:

- Modification of foraging habitat due to clearance of native forest and woodland foraging habitat within the transmission option's disturbance footprint, which may change prey availability, noting that of this, **31.0 ha** in the northern transmission option and **48.8 ha** in the southern transmission option are likely to continue to be used for foraging when converted to permanent easement.
- Loss of preferred mature forest habitat due to clearance of up to **31 ha** of mature eucalypt forest in the northern transmission option and up to **8.3 ha** of mature eucalypt forest if the southern transmission option.
- Potential increase in vehicle strike and roadkill risk associated with increased traffic volume related to construction of both transmission options.

In order to reduce roadkill risk for Tasmanian devils and other native fauna during the construction of the transmission line, a Roadkill Management Plan (RkMP) will be prepared. The plan will apply to roads assessed as likely to experience a 10% or greater increase in night-time traffic (defined as one hour before sunset to one hour after sunrise) due to construction. The plan will follow the *Caring for Nature - Reducing Roadkill* guidelines (PWS, 2006) and address elevated risks for threatened species that scavenge on roadkill carcasses (Tasmanian devils, spotted-tailed quolls, eastern quolls, and Tasmanian wedge-tailed eagles). Mitigation measures will include:

- Minimising night-time construction traffic where practicable.
- Reducing Project vehicle night-time speed limits by at least 10 km/hr on all roads that are expected to experience a 10% or greater increase in night-time traffic volume due to Project construction
- Environmental training for site workers covering threatened species awareness, reporting procedures for vehicle strikes and roadkill, and recommended rescue procedures (e.g. reporting to Bonorong Wildlife Rescue on 0447 264 625)
- Reporting Project-related vehicle strikes and threatened species roadkill to Hydro Tasmania within 24 hours
- Investigating Project-related threatened species roadkill incidents within three working days
- Installing advisory signs in high-risk areas
- Continuing verge maintenance along Oldina Drive and Butlers Gorge Road to maintain visibility and reduce browsing
- Prompt removal of roadkill carcasses along Oldina Drive and Butlers Gorge Road, as soon as safe, to reduce scavenger attraction.

4.3.2.2 Spotted-tailed quolls

The Tasmanian population of the spotted-tailed quoll (*Dasyurus maculatus maculatus*) is listed as vulnerable under the EPBC Act and as rare under the TSP Act. This species was detected by motion-triggered camera traps deployed in *Eucalyptus tasmaniensis* dry forest and woodland (DDE) within the northern transmission option disturbance footprint. Spotted-tailed quoll presence and abundance is most likely to be higher in forests and woodlands with mid-storey and understorey cover and old-growth vegetation characteristics. Spotted-tailed quolls are thought to avoid plantations, but they are known to use anthropogenic linear features such as power line easements (Andersen et al., 2017).

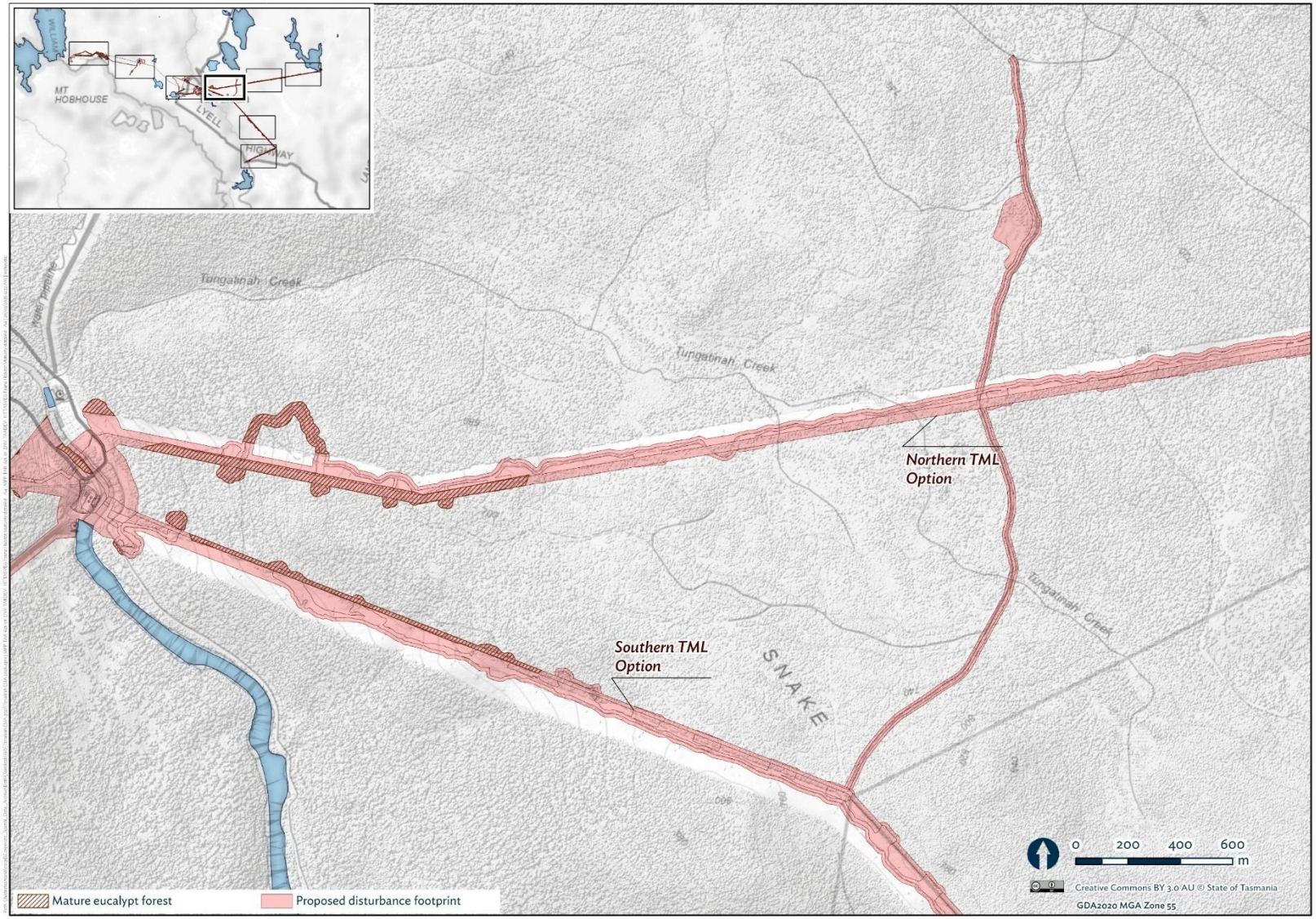

Figure 4.14: Mature forest habitat suitable for spotted-tailed quolls within the western component of the transmission option disturbance footprints.

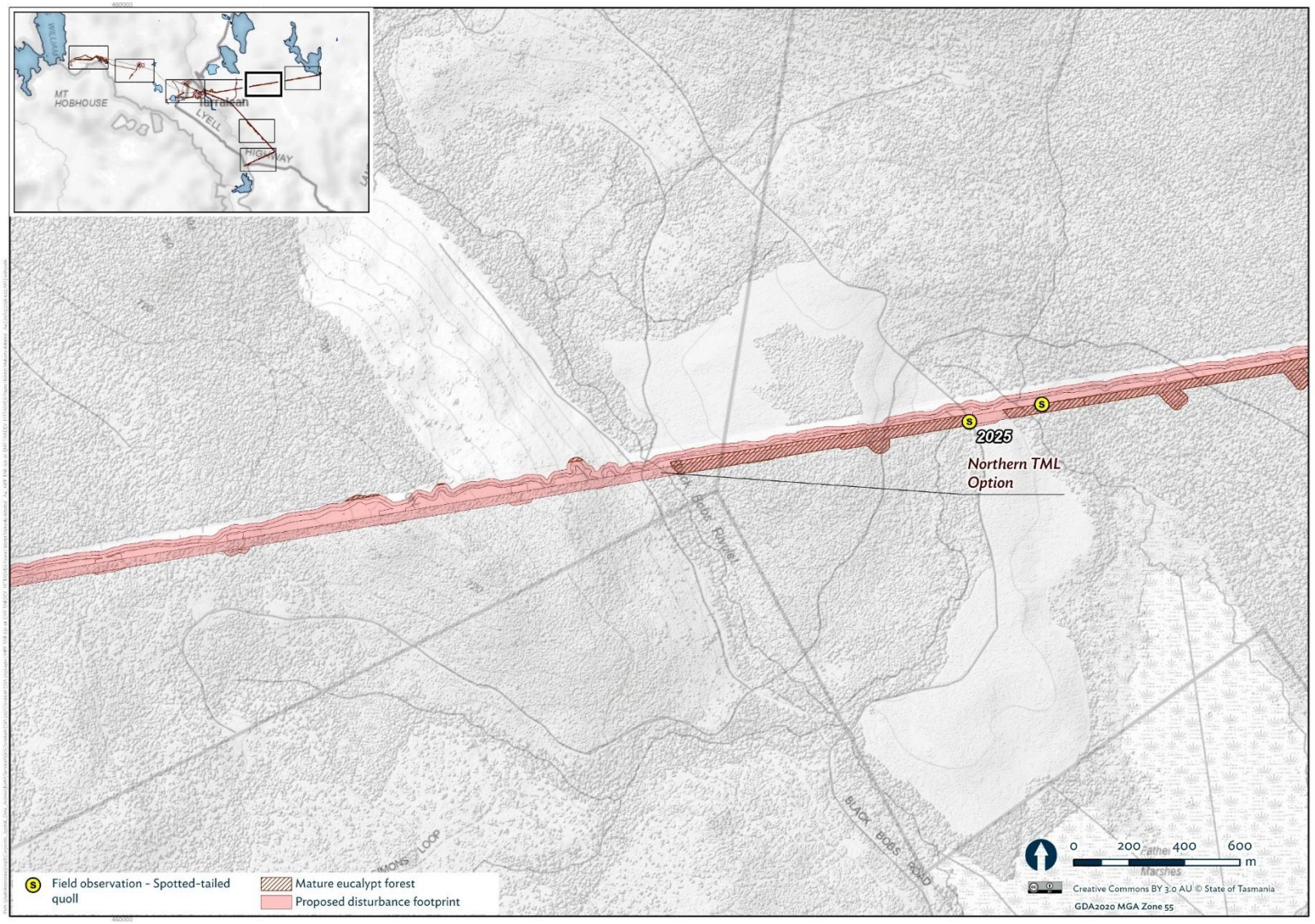

Figure 4.15: Mature forest habitat suitable for spotted-tailed quolls within the northern transmission option disturbance footprint.

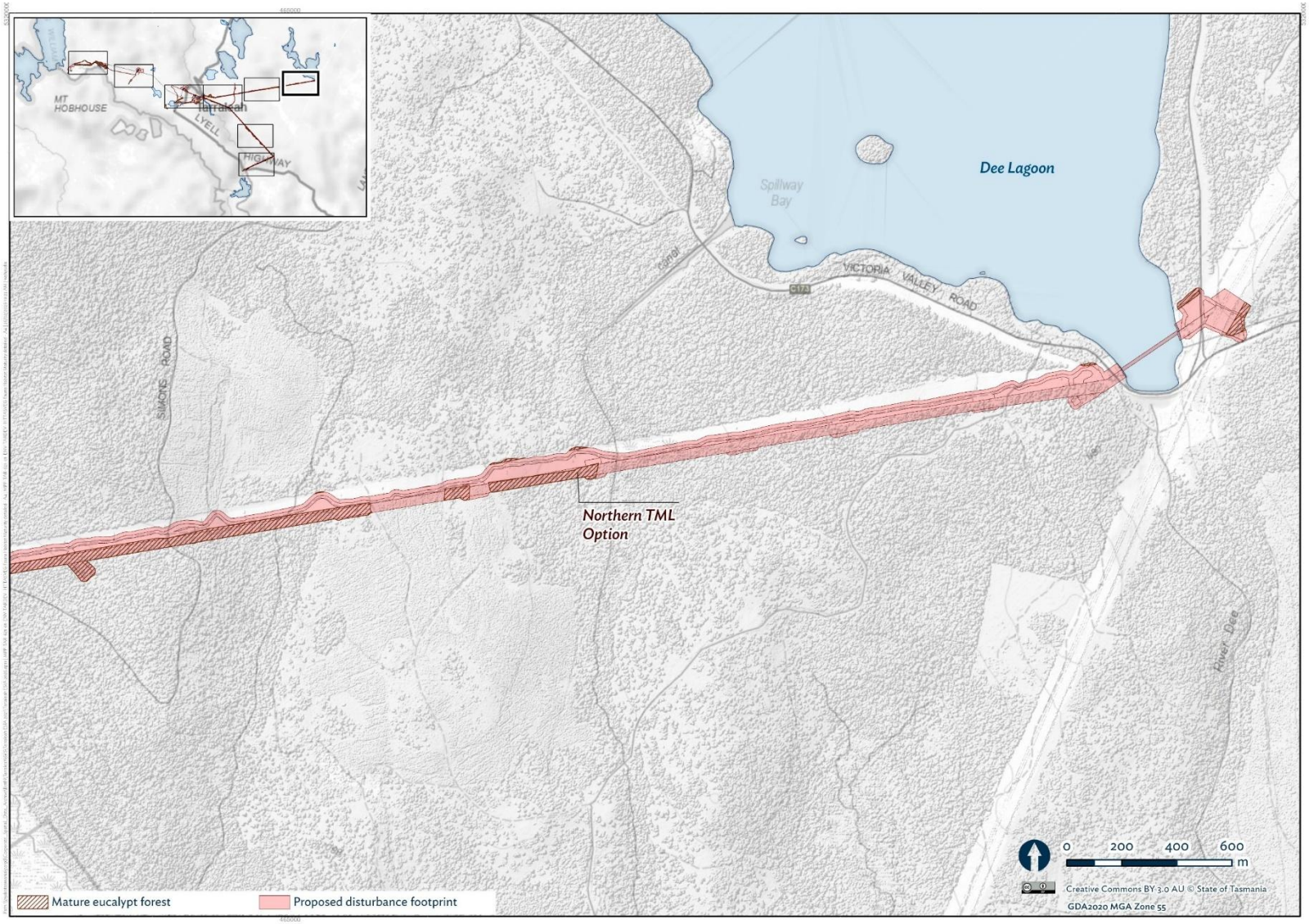
MT HOBHOUSE
Tarraleah
LYELL HIGHWAY
Dee Lagoon
Spillway Bay
VICTORIA VALLEY ROAD
C171
SIMONS ROAD
Northern TML Option
River Dee
0 200 400 600
m
Creative Commons BY 3.0 AU © State of Tasmania
GDA2020 MGA Zone 55
Mature eucalypt forest
Proposed disturbance footprint

Figure 4.16: Mature forest habitat suitable for spotted-tailed quolls within the eastern component of the northern transmission option disturbance footprint.

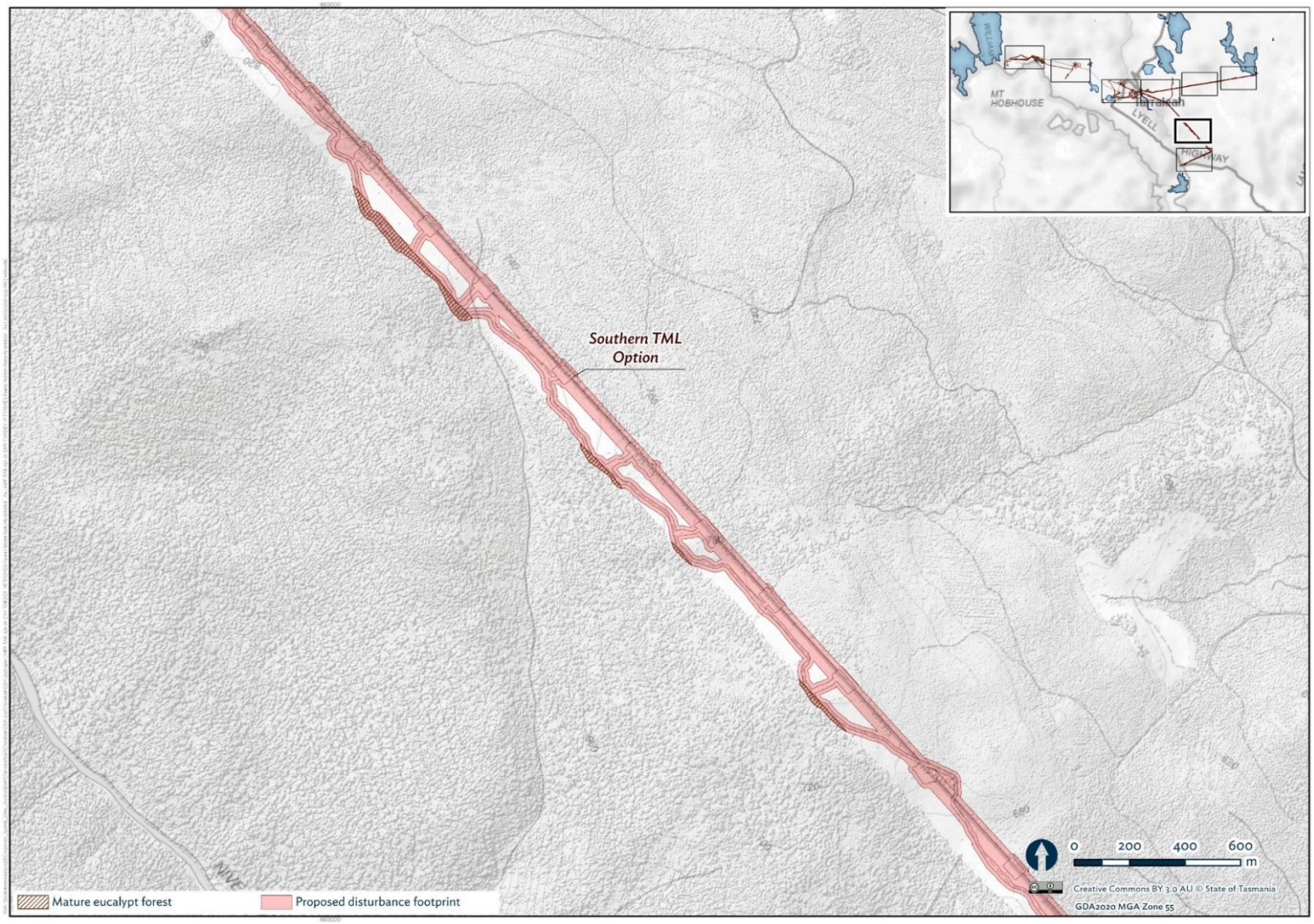

Figure 4.17: Mature forest habitat suitable for spotted-tailed quolls within the southern transmission option disturbance footprint.

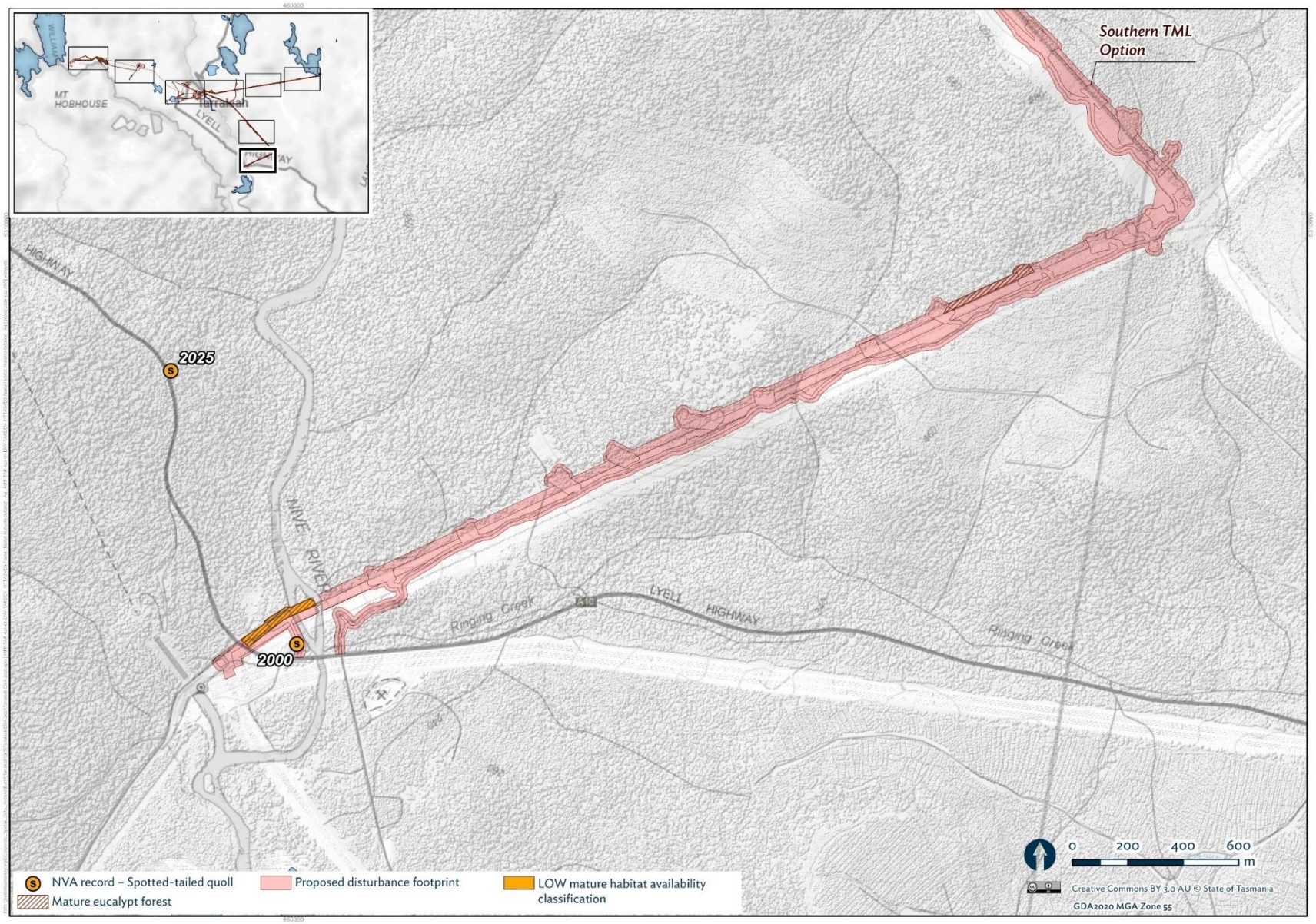

Figure 4.18: Mature forest habitat suitable for spotted-tailed quolls within the southern component of the southern transmission option disturbance footprint near Liapootah substation.

The *National Recovery Plan for the Spotted-tailed Quoll* (DELWP, 2016) does not identify the Central Plateau or Central Highlands as containing an important population of this species. The available data suggest that the spotted-tailed quoll is relatively rare in this part of the Central Highlands bioregion. However, the impact assessment has considered the spotted-tailed quolls possible presence and has identified that without avoidance and mitigation measures, the Project may impact the local resident population.

Clearance of native vegetation for easement widening for either transmission option is unlikely to result in a loss of foraging habitat due to this species' known use of anthropogenic linear features such as power line easements (Andersen et al., 2017).

The conversion of preferred mature eucalypt forest – either **31.0 ha** in the northern transmission option or **8.3** ha in the southern transmission option – may negatively impact the species if a potential denning feature is destroyed. However, the conversion of native forest foraging habitat to easement foraging habitat is unlikely to significantly impact the spotted-tailed quoll, given the large extent of native eucalypt forests and woodlands and plantations within the Central Highlands bioregion. For example, there are 302,003 ha of *Eucalyptus tasmaniensis* wet and dry forest within the Central Highlands bioregion. The transmission option will be built adjacent an existing transmission line within in a production forestry landscape that is continually being disturbed, e.g. whereby forest coupes of 40 ha or more being harvested on a regular rotation.

There is potential for increased risk of spotted-tailed quoll vehicle strike and roadkill due to increased traffic volume related to construction of the transmission line. In order to reduce roadkill risk during the construction of the transmission line, a Roadkill Management Plan (RkMP) will be prepared. The plan will apply to roads assessed as likely to experience a 10% or greater increase in night-time traffic (defined as one hour before sunset to one hour after sunrise) due to construction. The plan will follow the *Caring for Nature - Reducing Roadkill* guidelines (PWS, 2006) and address elevated risks for threatened species that scavenge on roadkill carcasses (Tasmanian devils, spotted-tailed quolls, and Tasmanian wedge-tailed eagles). Mitigation measures will include:

- Minimising night-time construction traffic where practicable.
- Reducing Project vehicle night-time speed limits by at least 10 km/hr on all roads that are expected to experience a 10% or greater increase in night-time traffic volume due to Project construction
- Environmental training for site workers covering threatened species awareness, reporting procedures for vehicle strikes and roadkill, and recommended rescue procedures (e.g. reporting to Bonorong Wildlife Rescue on 0447 264 625)
- Reporting Project-related vehicle strikes and threatened species roadkill to Hydro Tasmania within 24 hours
- Investigating Project-related threatened species roadkill incidents within three working days
- Installing advisory signs in high-risk areas
- Continuing verge maintenance along Oldina Drive and Butlers Gorge Road to maintain visibility and reduce browsing
- Prompt removal of roadkill carcasses along Oldina Drive and Butlers Gorge Road, as soon as safe, to reduce scavenger attraction.

4.3.2.3 Tasmanian wedge-tailed eagles and white-bellied sea-eagles

The Tasmanian wedge-tailed eagle (*Aquila audax fleayi*) is listed as endangered under both the TSP and EPBC Act, and the white-bellied sea-eagle (*Haliaeetus leucogaster*) is listed as vulnerable under the TSP Act. Tasmanian wedge-tailed eagles have been sighted flying overhead during field surveys of transmission options. Wedge-tailed

eagle nesting habitat is generally concentrated in forests of predominantly mature eucalypts on sheltered aspects or locations.

The Tasmanian wedge-tailed eagle and the white-bellied sea-eagle species are sensitive to disturbance during the breeding season, which typically starts in early July and extends to the end of January—and in late-breeding years, into February (FPA, 2023). If a nesting eagle perceives a disturbance as a threat, even from hundreds of metres away, it may leave its eggs or chicks exposed to cold, heat, or predation. Eagles may also abandon a nest site for years after the disturbance has ceased (Threatened Species Section, 2022).

Disturbance late in the breeding period can cause young birds to attempt flight before they are fully fledged (Threatened Species Section, 2006). Potential disturbance may arise from the construction of the transmission line for the Tarraleah Redevelopment.

Northern transmission option

Raptor nest searches of the main project footprint and the northern transmission option were conducted by helicopter in April 2023, June 2024 and 21 May 2025; these searches confirmed the presence of four nests (#2298, #3176, #1700, and a new nest #3577 discovered on 21 May 2025 which was assigned FID 3577) within 1 km of the northern transmission option.

Eagle nest #484, which was also first recorded in 1985, at a location approximately 660 m south of the northern transmission option, was also formally deemed absent by the Tasmanian NVA database in 2000 and was not found during Entura's aerial raptor nest searches for the Project.

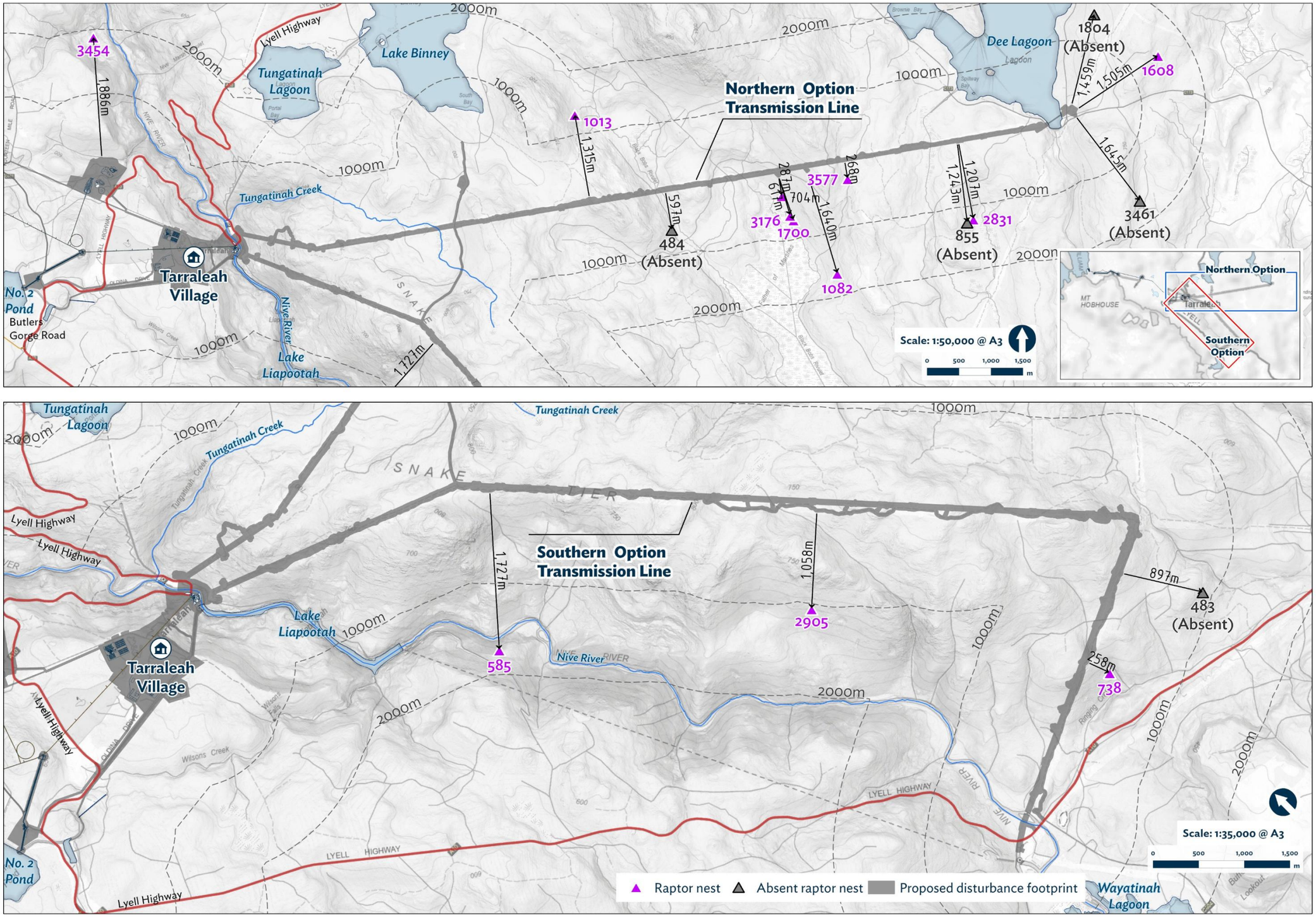

Figure 4.19: Map of locations of eagle nests recorded near the Tarraleah Redevelopment Project area

Eagle nest #2298 is located 280 m south of the northern transmission option. This small nest is located about 25 m up a 35 m tall *E. tasmaniensis* tree and does not appear to be maintained (Figure 4.20). This nest may be impacted by vegetation clearing for easement widening, and/or by construction of the 220 kV transmission infrastructure because it is within 500 m of the proposed option.

Figure 4.20: Eagle nest #2298 as photographed in 2023 (upper) and 2024 (lower)

Nest #3176 is located 688 m south of the existing easement that will be widened to accommodate the 220 kV transmission line, if the northern option is selected. This nest is positioned in a fork at a height of approximately 20 m in a 40 m tall *E. dalrympleana* tree (Figure 4.21). This nest is not within line-of-sight

of the easement due to the extant vegetation screening it from view (Figure 4.22, Figure 4.23) and therefore is unlikely to be disturbed by the transmission line.

Figure 4.21: Eagle nest #3176 as photographed in 2023 (upper) and 2024 (lower)

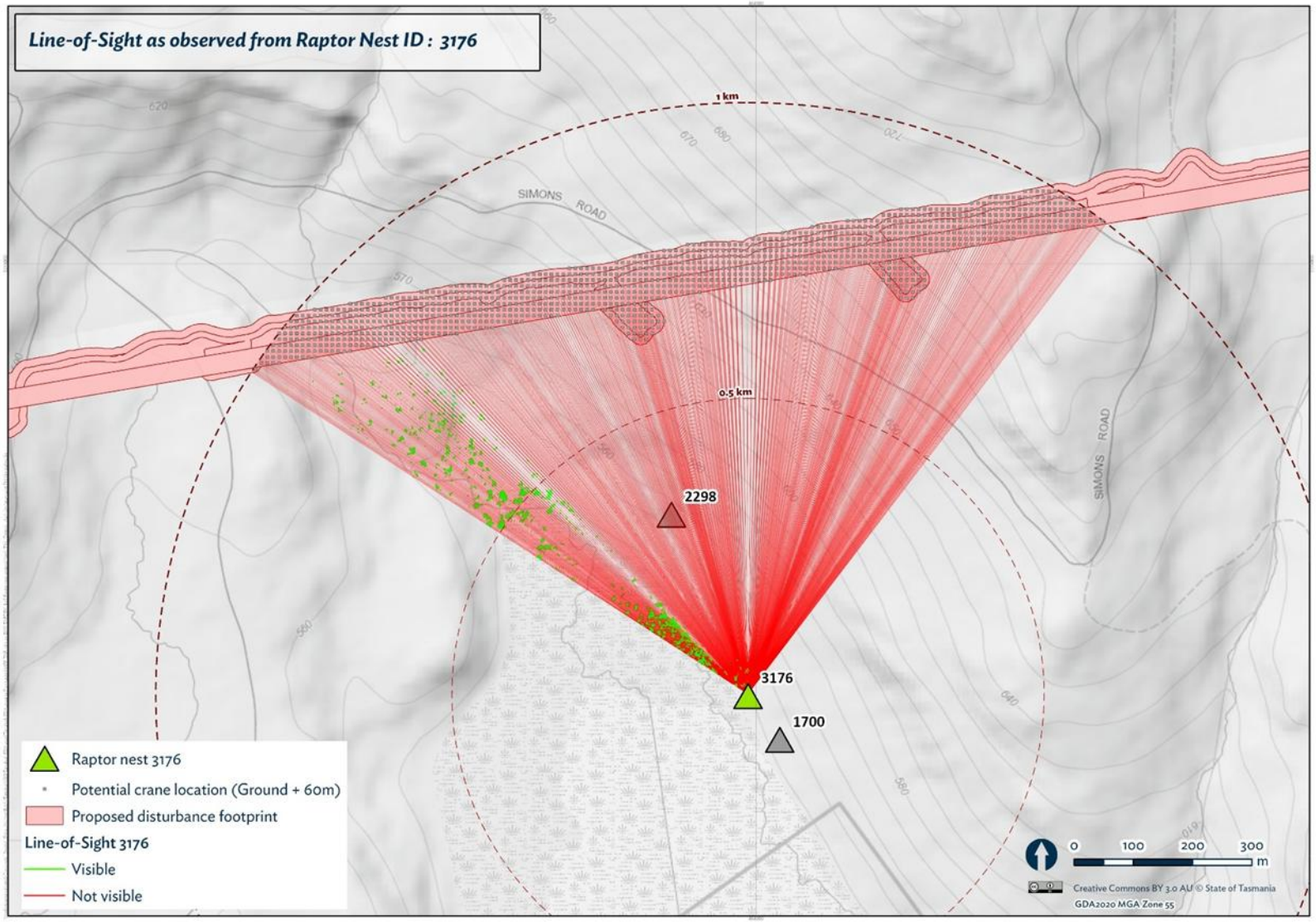

Figure 4.22: Line-of-sight analysis for nest #3176 with extant vegetation

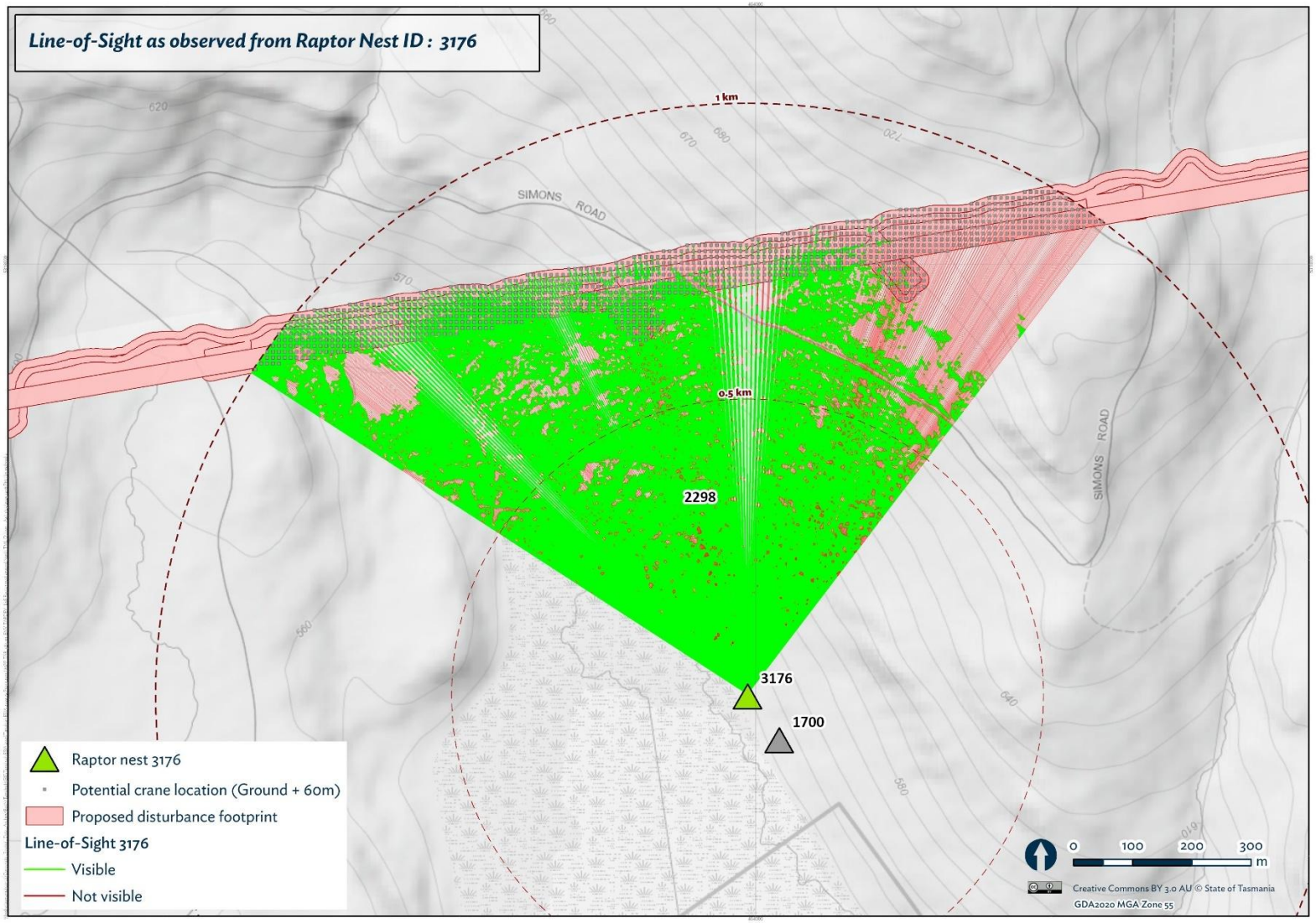

Figure 4.23: Line-of-sight analysis for nest #3176 based on bare-ground topography only (i.e. excluding extant vegetation)

Eagle nest 1700 is located 771 m south of the existing easement on the northern transmission option that will be widened to accommodate the 220 kV transmission line. Then nest is in a large fork approximately 17 m above the ground in a 25 m tall *E. tasmaniensis* tree. It is a round nest with a nest bowl in centre with brown sticks and a few brown leaves. This nest is unlikely to be within line-of-sight of the easement due to the extant vegetation screening it from view. Therefore, nest #1700 is unlikely to be disturbed by the transmission line.

Figure 4.24: Eagle nest #1700 as photographed in 2023 (upper) and 2024 (lower)

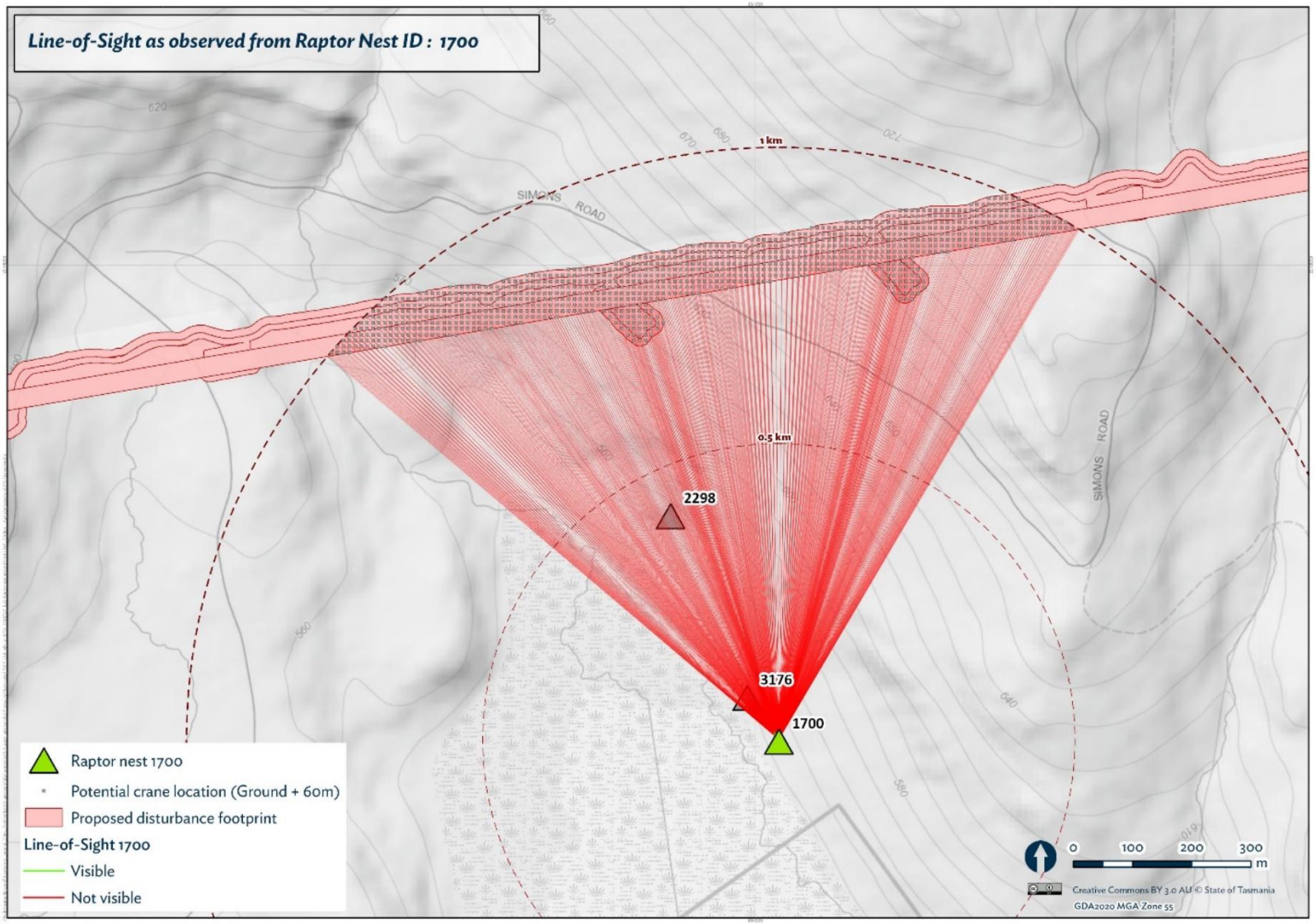

Figure 4.25: Line-of-sight analysis for nest #1700 with extant vegetation

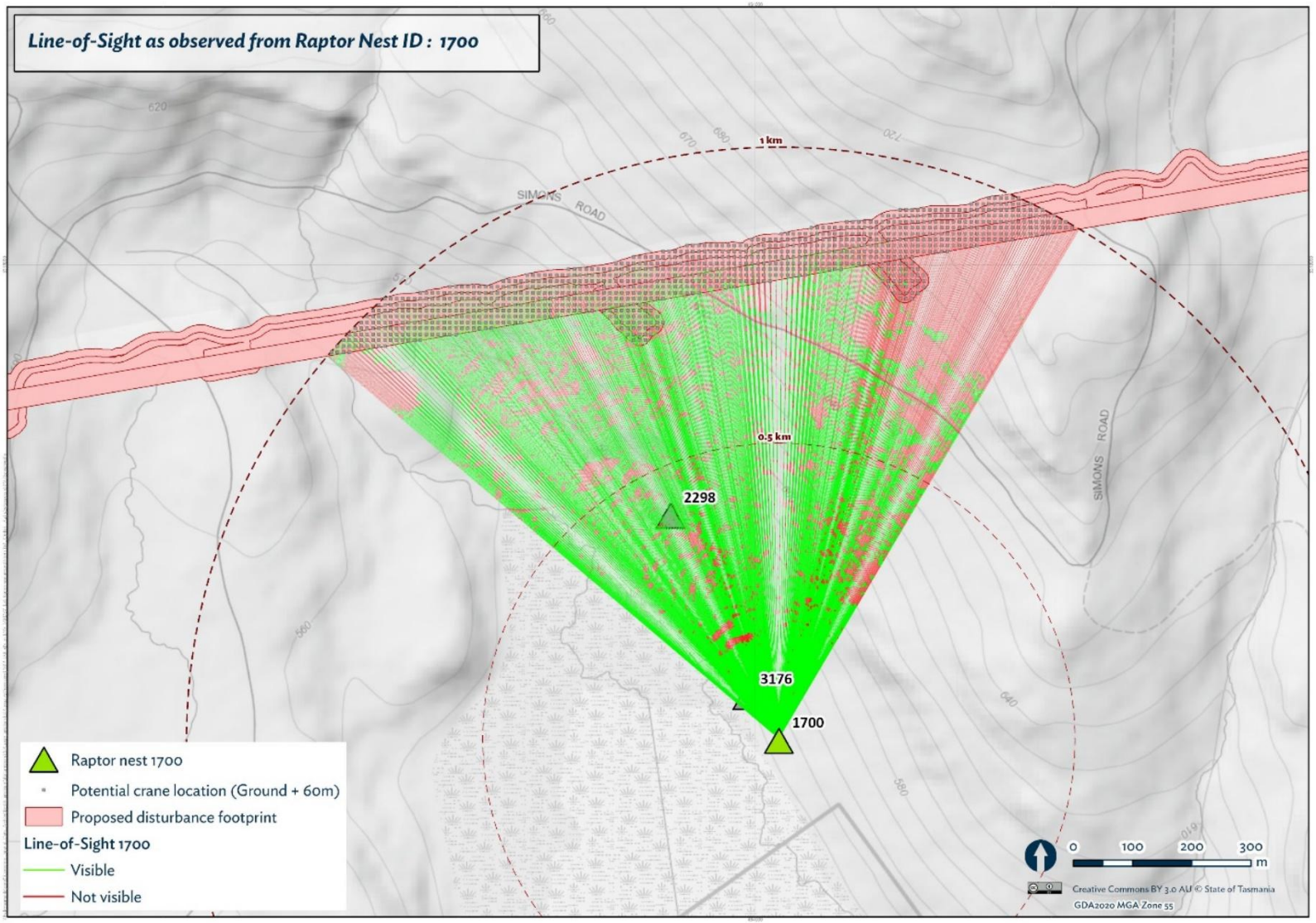

Figure 4.26: Line-of-sight analysis for nest #1700 based on bare-ground topography only (i.e. excluding extant vegetation)

A previously unrecorded eagle nest was identified by Entura ecologists during the aerial eagle nest search on 21 May 2025, and the NVA assigned the foreign ID number 3577 to this nest. Nest 3577 is located approximately 360 m south the disturbance footprint for the span between the proposed site of Tower 20 and 21 of the northern transmission option. It was described as a large nest with a flat top, located approximately 35 m up a 45 m live *Eucalyptus tasmaniensis* tree (Figure 4.27).

Figure 4.27: Nest #3577 as photographed 21 May 2025

A summary of the results of the line-of-sight analyses for each of the eagle nests within 1 km of the transmission line options is provided in Table 4.3**Error! Reference source not found.**

Table 4.3: Factors affecting likelihood of the northern transmission option disturbing eagle nests during the breeding season

NVA nest ID	Likelihood of disturbance by project activities	Distance to current easement		In line-of-sight with extant vegetation	In line-of-sight without extant vegetation
		≤500 m	≤1 km		
2298	High due to proximity	✓		N/A	N/A
3176	Unlikely		✓	No	Yes
1700	Unlikely		✓	No	Yes
3577 (New nest discovered 21 May 2025)	High due to proximity	✓		N/A	N/A

Southern transmission option

The southern transmission option was added to the survey area in November 2024; aerial raptor nest searching of the 2 km surrounding this transmission alignment option was undertaken on 13 May 2025. One known eagle nest (#738) was verified within 500 m of the southern transmission option; it was last confirmed present in 2022 and was located again by Entura during the 13 May 2025 aerial survey (Figure 4.28). It is located approximately 200 m from the current easement that will be widened to accommodate the 220 kV transmission line if the southern transmission option is selected. The nest, which was recorded as having a compressed flat top, is in a fork at approximately 35m above the ground in a 40m *Eucalyptus obliqua* tree. This nest may be impacted by vegetation clearing for easement widening, and/or by construction of the 220 kV transmission infrastructure due to its proximity (i.e. being within 500 m of the works).

Eagle nest #483, first recorded in 1985, at a location approximately 850 m south of the southern transmission option was formally deemed absent by the Tasmanian NVA database in 2000. Nest #585, which was last recorded in 2013 more than 1 km from the southern transmission option, could not be found despite concentrated search effort on 13 May 2025.

Figure 4.28: Eagle nest #738 as photographed in May 2025

Tasmanian eagle mitigation measures

There are two known eagle nests (nests #2298 and #3577) that are within 500 m of the northern transmission option that have the potential to be disturbed by construction works during the breeding season. There is one eagle nest (nests #738) that is within 500 m of the southern transmission option that has the potential to be disturbed by construction works during the breeding season.

Annual eagle nest searches will be undertaken before the start of construction and repeated until construction is complete, to identify new or previously unknown eagle nests and to monitor the condition of known nests. Searches and activity checks will follow the EPA's *Guide to Eagle Nest Searches and Activity Checks (*EPA Tasmania, 2023), the Tasmanian FPA's *Fauna Technical Note No. 1: Eagle nest searching, activity checking and nest management* (Forest Practices Authority, 2023), and the *Survey Guidelines for Australia's Threatened Birds* (Department of the Environment, Water, Heritage and the Arts, now DCCEEW, 2010a). Searches will be guided by the FPA's eagle nesting habitat models (FPA, 2014a).

For all eagle nests either within 500 m or 1 km line-of-sight of proposed surface works, no surface works will occur within these buffers during the breeding season (July to January inclusive, and July to February in late breeding seasons) unless the nest is confirmed inactive for that breeding season. Where required, nest activity checks will be undertaken during the breeding season before relevant works commence, and nest activity checks will be repeated annually until construction of the relevant infrastructure is complete.

An annual report summarising the results of eagle nest search results will be prepared and provided to the EPA upon request. Any previously unrecorded raptor nests, or failures to locate previously recorded nests, will be reported to the Tasmanian Natural Values Atlas (NVA) as soon as practicable. Photographs and descriptions of known nests re-located during surveys will be provided to the NVA as soon as practicable after each search.

Additionally, anti-coagulant rodenticides, especially second-generation anticoagulant rodenticides (SGARs; brodifacoum, bromadiolone, difethialone, difenacoum and flocoumafen), that pose a risk of secondary poisoning of raptors will be avoided during all phases of the Project, including at the new power station on the Nive River.

The new 22 kV power distribution lines will be designed and built in accordance with TasNetworks standards, which seek to minimise electrocution risk and collision risk for avifauna.

4.3.3 Weeds

4.3.3.1 Northern transmission option

The following declared weed species under the Tasmanian *Biosecurity Act 2019* were recorded within the northern transmission option survey area:

- a large infestation of *Cytisus scoparius* (English broom) was recorded in a proposed tower pad associated with the northern transmission option.
- a large infestation of *Genista monspessulana* (Montpellier Broom) at the eastern end of the northern transmission option at Dee Lagoon.

The survey area is located within the Central Highlands municipality, which is a Zone B municipality for English broom and Montpellier broom, according to the respective species' Statutory Weed Management Plans. The objective of weed management in Zone B municipalities is *'Containment within municipal boundaries, protection of specified areas within municipal boundaries, prevention of spread to Zone A municipalities*.' English broom and Montpellier broom are also recognised as Weeds of National Significance.

Potential impacts from declared weeds will be mitigated through the application of the biosecurity management plan:

- A biosecurity management plan will be prepared and implemented in accordance with the *Arrive Clean Leave Clean guidelines* (Commonwealth of Australia, 2015) and the *Weed and Disease Planning and Hygiene Guidelines – Preventing the spread of weeds and diseases in Tasmania* (DPIPWE, 2015). The plan will aim to prevent the spread of weeds and diseases (e.g. *Phytophthora cinnamomi* and the chytrid fungus *Batrachochytrium dendrobatidis*) and to achieve targeted eradication of the known declared weed infestations within the disturbance footprint where practicable, prior to construction commencing. Efforts should target eradication of English broom and Montpellier broom in particular. The plan will include measures for training on weed and disease management to be provided to all staff, contractors, subcontractors and visitors, including responsibilities. Application of herbicides, if required, must be undertaken by a suitably qualified weed contractor in approved areas only. Identification of weeds and application of herbicide must be recorded by the weed contractor and provided to Hydro Tasmania to be entered into the corporate Hydro Tasmania GIS; declared weed observation records will be supplied to the Tasmanian Natural Values Atlas database.

4.3.3.2 Southern transmission option

No declared weed species were recorded within the southern transmission option survey area.

4.3.4 Phytophthora cinnamomi

Commonly known as root rot or dieback, *Phytophthora cinnamomi* is a soil-borne fungal pathogen that invades the roots of plants and starves them of nutrients and water. It is generally spread by the transportation of soil on vehicles, construction machinery and walking boots. Soils that are more favourable for the spread of *Phytophthora* are generally the low nutrient types that support healthy communities. The vegetation types most affected in Tasmania are heathland, moorland, dry eucalypt forest. *Phytophthora cinnamomi* requires warm moist soils if it is to reproduce and spread. This limits its distribution in Tasmania to areas that are generally below about 700 m in altitude.

4.3.4.1 Northern transmission option

There are no *Phytophthora cinnamomi* records on the NVA within 5 km of the northern transmission option's disturbance footprint, and there were no symptoms of infection (e.g. dieback in susceptible species) recorded during field surveys.

The only potentially susceptible vegetation community within the northern transmission option's survey area is the *Eucalyptus amygdalina* forest on dolerite dry eucalypt forest. However, most of the disturbance footprint for the northern transmission option is at the upper limit of the altitudinal range of *Phytophthora cinnamomi,* and therefore it is unlikely to occur.

4.3.4.2 Southern transmission option

There are no *Phytophthora cinnamomi* records on the NVA within 5 km of the southern transmission option disturbance footprint, and there were no symptoms of infection (i.e. dieback in susceptible species) recorded during field surveys.

The only potentially susceptible vegetation community within the southern transmission option's survey area is the *Eucalyptus amygdalina* forest on dolerite dry eucalypt forest. However, most of the disturbance footprint for the southern transmission option is at the upper limit of the altitudinal range of *Phytophthora cinnamomi*; the exception is the southern end of the southern transmission option which is at 240 m AHD. The nearest record of *Phytophthora cinnamomi* on the NVA is over 6 km south of the southern end of the southern transmission option.

Potential impacts from diseases like *Phytophthora cinnamomi* will be mitigated through the application of the biosecurity management plan.

5. Assessment against C7.6 Development Standards for Buildings of the Natural Assets Code

5.1 C7.6.1 Buildings and works within a waterway and coastal protection area or a future coastal refugia area

C7.6.1 BUILDINGS AND WORKS WITHIN A WATERWAY AND COASTAL PROTECTION AREA OR A FUTURE COASTAL REFUGIA AREA	
Acceptable Solutions	Performance criteria
Objective: That buildings and works within a waterway and coastal protection area or future coastal refugia area will not have an unnecessary or unacceptable impact on natural assets.	
A1 Buildings and works within a waterway and coastal protection area must: (a) be within a building area on a sealed plan approved under this planning scheme; (b) in relation to a Class 4 watercourse, be for a crossing or bridge not more than 5m in width; or (c) if within the spatial extent of tidal waters, be an extension to an existing boat ramp, car park, jetty, marina, marine farming shore facility or slipway that is not more than 20% of the area of the facility existing at the effective date	**P1.1** Buildings and works within a waterway and coastal protection area must avoid or minimise adverse impacts on natural assets, having regard to: (a) impacts caused by erosion, siltation, sedimentation and runoff; (b) impacts on riparian or littoral vegetation; (c) maintaining natural streambank and streambed condition, where it exists; (d) impacts on in-stream natural habitat, such as fallen logs, bank overhangs, rocks and trailing vegetation; (e) the need to avoid significantly impeding natural flow and drainage; (f) the need to maintain fish passage, where known to exist; (g) the need to avoid land filling of wetlands; (h) the need to group new facilities with existing facilities, where reasonably practical; (i) minimising cut and fill; (j) building design that responds to the particular size, shape, contours or slope of the land; (k) minimising impacts on coastal processes, including sand movement and wave action;

C7.6.1 BUILDINGS AND WORKS WITHIN A WATERWAY AND COASTAL PROTECTION AREA OR A FUTURE COASTAL REFUGIA AREA

	(l) minimising the need for future works for the protection of natural assets, infrastructure and property; (m) the environmental best practice guidelines in the Wetlands and Waterways Works Manual; and (n) the guidelines in the Tasmanian Coastal Works Manual. **P1.2** Buildings and **works** within the spatial extent of tidal waters must be for a **use** that relies upon a coastal location to fulfil its purpose, having regard to: (a) the need to access a specific resource in a coastal location; (b) the need to operate a marine farming shore facility; (c) the need to access infrastructure available in a coastal location; (d) the need to service a marine or coastal related activity; (e) provision of essential utility or marine infrastructure; or (f) provisions of open space or for marine-related educational, research, or recreational facilities.

Assessment

Construction of either transmission option will include works within a waterway protection area that are not within a building area on a sealed plan approved under the TPS and as such do not meet A1. An assessment against P1.1 and P1.2 is provided below.

P1.1

(a) **Northern transmission option:** Construction has the potential to cause minor erosion, sedimentation and runoff in waterway protection areas predominately through ground disturbing activities associated with establishment of tower pads and upgrading access tracks. Four tower pads (T8, T24, T29 and T30-34) partially intersect the waterway protection area whilst three sections of access track (T8 to T9, T15 to T16 and T24 to 25) that will be upgraded are partly located within the waterway protection area.
Southern transmission option: construction has the potential to cause minor erosion, sedimentation and runoff in waterway protection areas also predominately through ground disturbing activities associated with establishment of pole pads and new and upgraded access tracks. Four pole pads (TP1, TP21, TP22 and TP45) will wholly or partially intersect the waterway protection area whilst five sections of access track (TP21 to TP22, TP21 to TP22, TP38 to TP39 and upgraded access to TP44 and TP45) are partly located within the waterway protection area.
Potential erosion, sedimentation and runoff impacts associated with the new transmission line will be mitigated through application of Mitigation Measures described in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026) including the following measures:
- *Prior to commencing construction an Erosion and Sediment Control Plan (ESCP) will be prepared by a suitably qualified professional, as defined in the IECA Australasia Position Statement – Definition of a Suitably Qualified Professional (Nov 2023). The ESCP will be developed in accordance with the principles and guidance in IECA Australasia's Best Practice Erosion and Sediment Control (BPESC) document (2008).*
- *All waterway crossings for new or upgraded access tracks will be designed, constructed and maintained in accordance with the Forest Practices Authority – Forest Practices Code 2020 (FPA, 2020) and the Waterways and Wetlands Manual (DPIPWE, 2003) to minimise potential impacts to riparian or littoral vegetation and flow and drainage.*

(b) **Northern transmission option:** There is no threatened riparian or littoral vegetation listed under the NC Act potentially impacted by the northern transmission line. Minor impacts to non-threatened riparian and littoral vegetation may result from the construction of watercourse crossings to upgrade access tracks over Tungatinah Creek, Black Bob's Rivulet and an unnamed waterway. Impacts to riparian or littoral vegetation are expected to be minimal as watercourse crossings are for the minor upgrade of existing access tracks where a crossing already exists and are over small watercourses, the largest being Black Bob's Rivulet which is a Conservation of Freshwater Ecosystems Values (CFEV) stream order 3 with an accumulated catchment area at the location of the access track crossing of 1,035 ha.

C7.6.1 BUILDINGS AND WORKS WITHIN A WATERWAY AND COASTAL PROTECTION AREA OR A FUTURE COASTAL REFUGIA AREA

Southern transmission option: There is no threatened riparian or littoral vegetation listed under the NC Act potentially impacted by the southern transmission line. Minor impacts to non-threatened riparian and littoral vegetation may result from the construction of watercourse crossings to upgrade access tracks over Tungatinah Creek, Ringing Creek and two unnamed waterways. Impacts to riparian or littoral vegetation are expected to be minimal as watercourse crossings are for the minor upgrade of existing access tracks where a crossing already exists and are over small watercourses, with the largest being Ringing Creek which is a CFEV stream order 3 with an accumulated catchment area at the location of the access track crossing of 1,292 ha.

Potential impacts to riparian and littoral vegetation for both transmission options will be mitigated through application of Mitigation Measures described in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026) including the following measures:

- *A final Project disturbance footprint (within the Project disturbance footprint presented within this report) will be established based on the Project's final design and construction method. The disturbance footprint and vegetation clearing exclusion zones will be clearly shown on Project plans, communicated to all construction personnel and physically marked on site. Vegetation clearing will be limited to the minimum necessary to construct and operate the Project*
- *A Site Establishment Management Plan (SEMP) will be prepared prior to the commencement of site establishment activities and implemented during their execution. The SEMP will outline the environmental management practices and procedures to be implemented for site establishment activities*
- *All waterway crossings for new or upgraded access tracks will be designed, constructed and maintained in accordance with the Forest Practices Authority – Forest Practices Code 2020 (FPA, 2020) and the Waterways and Wetlands Manual (DPIPWE, 2003) to minimise potential impacts to riparian or littoral vegetation and flow and drainage*

(c) **Northern transmission option:** Natural streambank and streambed condition has the potential to be impacted by the construction of watercourse crossings to upgrade access tracks over Tungatinah Creek, Black Bob's Rivulet and an unnamed waterway. Potential impacts to natural streambank and stream bed conditions are expected to be minimal as all potential watercourse crossings are for the upgrade of existing access tracks where a crossing already exists and are over minor watercourses, the largest being Black Bob's Rivulet which is a CFEV stream order 3 with an accumulated catchment area at the location of the access track crossing of 1,035 ha.

Southern transmission option: Natural streambank and streambed condition has the potential to be impacted by the construction of watercourse crossings to upgrade access tracks over Tungatinah Creek, Ringing Creek and two unnamed waterways. Potential impacts to natural streambank and stream bed conditions are expected to be minimal as all potential watercourse crossings are for the upgrade of existing access tracks where a crossing already exists and are over minor watercourses, the largest Ringing Creek which is a CFEV stream order 3 with an accumulated catchment area at the location of the access track crossing of 1,292 ha.

Natural streambank and streambed condition will be maintained for both transmission options through application of Mitigation Measures described in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026) including the following measure:

- *All waterway crossings for new or upgraded access tracks will be designed, constructed and maintained in accordance with the Forest Practices Authority – Forest Practices Code 2020 (FPA, 2020) and the Waterways and Wetlands Manual (DPIPWE, 2003) to minimise potential impacts to riparian or littoral vegetation and flow and drainage*

(d) **Northern transmission option:** Instream natural habitat has the potential to be impacted by the construction of watercourse crossings to upgrade access tracks over Tungatinah Creek, Black Bob's Rivulet and an unnamed waterway. Potential impacts to natural streambank and stream bed conditions are expected to be minimal as all potential watercourse crossings are for the upgrade of existing access tracks where a crossing already exists and are over minor watercourses, the largest being Black Bob's Rivulet which is a CFEV stream order 3 with an accumulated catchment area at the location of the access track crossing of 1,035 ha.

Southern transmission option: Instream natural habitat has the potential to be impacted by the construction of watercourse crossings to upgrade access tracks over Tungatinah Creek, Ringing Creek and two unnamed waterways. Potential impacts to natural streambank and stream bed conditions are expected to be minimal as all potential watercourse crossings are for the upgrade of existing access tracks where a crossing already exists and are over minor watercourses, the largest being Ringing Creek which is a CFEV stream order 3 with an accumulated catchment area at the location of the access track crossing of 1,292 ha.

Impacts to instream natural habitat will be minimised through application of Mitigation Measures described in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026) including the following measure:

- *All waterway crossings for new or upgraded access tracks will be designed, constructed and maintained in accordance with the Forest Practices Authority – Forest Practices Code 2020 (FPA, 2020) and the Waterways*

C7.6.1 BUILDINGS AND WORKS WITHIN A WATERWAY AND COASTAL PROTECTION AREA OR A FUTURE COASTAL REFUGIA AREA

and Wetlands Manual (DPIPWE, 2003) to minimise potential impacts to riparian or littoral vegetation and flow and drainage

(e) **Northern transmission option:** Construction will not significantly impede natural flow and drainage in the waterway protection area within the areas of the northern transmission option. Crossings of Tungatinah Creek, Black Bob's Rivulet and the unnamed waterway will be designed to maintain flow and drainage in accordance with the Forest Practices Authority – *Forest Practices Code 2020* (FPA, 2020) and the *Waterways and Wetlands Manual* (DPIPWE, 2003) whilst other works including access tracks and tower pads will be designed to maintain natural drainage in accordance with the FPA code and DPIPWE manual above as well as the Project's ESCP prepared in accordance with IECA requirements.
Southern transmission option: Construction will not significantly impede the natural flow and drainage in the waterway protection area within areas of the southern transmission line. Crossings of Tungatinah Creek, Ringing Creek and two unnamed waterways will be designed to maintain flow and drainage in accordance with the Forest Practices Authority – *Forest Practices Code 2020* (FPA, 2020) and the *Waterways and Wetlands Manual* (DPIPWE, 2003) whilst other works including access tracks and tower pads will be designed to maintain natural drainage in accordance with the FPA code and DPIPWE manual above as well as the Project's ESCP prepared in accordance with IECA requirements.

(f) **Northern transmission option:** Fish passage will be maintained on crossings of Tungatinah Creek, Black Bob's Rivulet and the unnamed waterway through the implementation of the Forest Practices Authority – *Forest Practices Code 2020* (FPA, 2020) and the *Waterways and Wetlands Manual* (DPIPWE, 2003) in particular, section B3.3 and Guideline 5 respectively, which describe culvert design requirements to maintain fish passage.
Southern transmission option: Fish passage will be maintained on crossings of Tungatinah Creek, Ringing Creek and two unnamed waterways through the implementation of the Forest Practices Authority – *Forest Practices Code 2020* (FPA, 2020) and the *Waterways and Wetlands Manual* (DPIPWE, 2003) in particular, section B3.3 and Guideline 5 respectively, which describe culvert design requirements to maintain fish passage.

(g) **Northern transmission option:** there are two wetlands associated with the northern option, being an unnamed wetland associated with Tungatinah Creek and another unnamed wetland associated with the unnamed waterway flowing from the canal at Spillway Bay in Dee Lagoon. Minor land filling within the mapped boundary of the two wetlands may occur from the construction of tower pads T8 and T24 which partly overlap the wetlands and the upgrade of access tracks between transmission towers T8 and T9 and T24 and T25 which traverse the wetlands. Potential impacts are expected to be minor as both tower pads only partly intersect the mapped wetlands and it is anticipated that tower pads will be micro-sited to avoid wet areas and upgrades of access tracks will not significantly increase the width of the existing track and as such do not require significant land filling.
Southern transmission option: There is one wetland associated with the southern option, being an unnamed wetland associated with the unnamed tributary of the Nive River. Minor landfilling of the wetland may occur from the construction of the pole pad for TP21, which is wholly within the mapped boundary of the wetland. Potential impacts are expected to be minor as the area of pole pad for TP21 is only approximately 2.5% of the mapped area of the wetland and it is anticipated that pole pads will be micro-sited to avoid wet areas.

(h) **Northern transmission option:** This option is located parallel to the existing overhead 110kV Waddamana to Tungatinah transmission line. Its location adjacent to existing transmission infrastructure minimises impacts to natural values by reducing clearing required for new easement and access tracks. The northern transmission option will use 30 m of the existing easement for the Waddamana to Tungatinah transmission line, therefore reducing the width required for new easement to 30 m. The northern transmission option will also largely utilise the existing access track, including waterway crossing, established for the Waddamana to Tungatinah transmission line with only minor upgrades required.
Southern transmission option: This option is located parallel to the existing overhead 110kV Tarraleah to New Norfolk transmission line. Its location adjacent to existing transmission infrastructure minimises impacts to natural values by reducing clearing required for new easement and access tracks. The southern transmission option will use 30 m of the existing easement for the Tarraleah to New Norfolk Transmission Line reducing the width required for new easement to 30 m. The southern transmission option will also largely utilise the existing access track, including waterway crossing, established for the Tarraleah to New Norfolk transmission line with only minor upgrades required.

(i) **Northern transmission option:** Cut and fill will be required for the establishment of tower pads and upgrade of access tracks. The reference design for the northern transmission option has minimised cut and fill as far as is practicable, including for sections of the design that fall within the waterway protection area.
Southern transmission option: Cut and fill will be required for the establishment of pole pads and upgrade of access tracks. The reference design for the southern transmission option has minimised cut and fill as far as is practicable, including for sections of the design that fall within the waterway protection area.

C7.6.1 BUILDINGS AND WORKS WITHIN A WATERWAY AND COASTAL PROTECTION AREA OR A FUTURE COASTAL REFUGIA AREA

(j) **Northern transmission option:** The reference design for the northern transmission option responds to the size, shape, contour and slope of the land by sizing towers in accordance with topography (shorter towers on higher locations) within the constraints imposed be relevant design standards.
Southern transmission option: The reference design for the southern transmission option responds to the size, shape, contour and slope of the land by sizing towers in accordance with topography (shorter towers on higher locations) within the constraints imposed be relevant design standards.

(k) There are no potential impacts on coastal process resulting from either the northern or southern transmission option.

(l) Either transmission options will be designed and constructed in accordance with relevant design standards and the Forest Practices Authority – *Forest Practices Code 2020* (FPA, 2020) and the *Waterways and Wetlands Manual* (DPIPWE, 2003). Other than standard maintenance of vegetation on easements and access tracks no future works for the protection of natural assets, infrastructure and property are anticipated.

(m) Either transmission options will be designed and constructed in accordance with the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026) including the following measure:

- *All waterway crossings for new or upgraded access tracks will be designed, constructed and maintained in accordance with the Forest Practices Authority – Forest Practices Code 2020 (FPA, 2020) and the Waterways and Wetlands Manual (DPIPWE, 2003) to minimise potential impacts to riparian or littoral vegetation and flow and drainage*

(n) There are no coastal works associated with the either transmission option and as such guidelines in the Tasmanian Coastal Works Manual are not applicable.

The Project is considered consistent with the performance criteria P1.1.

P1.2

Performance criteria P1.2 does not apply to the Project as no building works for either the northern or southern transmission option are within the spatial extent of tidal waters.

A2 Buildings and works within a future coastal refugia area must be located within a building area on a sealed plan approved under this planning scheme.	**P2.1** Buildings and works within a future coastal refugia area must allow for natural coastal processes to continue to occur and avoid or minimise adverse impacts on natural assets, having regard to: (a) allowing for the landward transgression of sand dunes and the landward colonisation of wetlands, saltmarshes and other coastal habitats from adjacent areas; (b) avoiding the creation of barriers or drainage networks that would prevent future tidal inundation; (c) allowing the coastal processes of sand deposition or erosion to continue to occur; (d) the need to group new facilities with existing facilities, where reasonably practical; (e) the impacts on native vegetation; (f) minimising cut and fill; (g) building design that responds to the particular size, shape, contours or slope of the land; (h) the impacts of sea-level rise on natural coastal processes and coastal habitat; (i) the environmental best practice guidelines in the Wetlands and Waterways Works Manual; and (j) the guidelines in the Tasmanian Coastal Works Manual. **P2.2** Buildings and works within a future coastal refugia area must be for a use that relies upon a coastal location to fulfil its purpose, having regard to:

C7.6.1 BUILDINGS AND WORKS WITHIN A WATERWAY AND COASTAL PROTECTION AREA OR A FUTURE COASTAL REFUGIA AREA

	(a) the need to access a specific resource in a coastal location; (b) the need to operate a marine farming shore facility; (c) the need to access infrastructure available in a coastal location; (d) the need to service a marine or coastal related activity; (e) provision of essential utility or marine infrastructure; and (f) provision of open space or for marine-related educational, research, or recreational facilities.

Assessment

The Project (northern or southern transmission options) is not mapped within a future coastal refugia area, therefore A2 does not apply.

A3	P3
Development within a waterway and coastal protection area or a future coastal refugia area must not involve a new stormwater point discharge into a watercourse, wetland or lake.	Development within a waterway and coastal protection area or a future coastal refugia area involving a new stormwater point discharge into a watercourse, wetland or lake must avoid or minimise adverse impacts on natural assets, having regard to: (a) the need to minimise impacts on water quality; and (b) the need to mitigate and manage any impacts likely to arise from erosion, sedimentation or runoff.

Assessment

Stormwater will be managed at locations of potential ground disturbing activities within the waterway protection area for both transmission options. Stormwater management at these locations is likely to include new stormwater discharge points that discharge directly or indirectly into a watercourse or wetland. As such, A3 is not met, and an assessment against P3 is provided below.

P3

Northern transmission option

Infrastructure that partially intersect the waterway protection area are:

- establishment of four tower pads (T8, T24, T29 and T30-34), and
- upgrade of three sections of access track (T8 to T9, T15 to T16 and T24 to 25).

Stormwater at these sites will be managed during construction by either diversion around the site to existing flow paths or be collected, treated and disposed or of in accordance with an Erosion and Sediment Control Plan as outlined in the mitigation measures outlined below. Stormwater discharge from sites will likely enter the following waterways either directly, or via managed overland flow; Tungatinah Creek, the unnamed waterway flowing from the canal at Spillway Bay in Dee Lagoon, the unnamed waterway draining into Dee Lagoon or Dee Lagoon itself. If not adequately managed stormwater runoff as the potential to adversely impact water quality and ecological values in these waterways. Stormwater management is not anticipated to be required during operation following rehabilitation of sites immediately following construction.

To avoid potential impacts to water quality, including those from potential erosion and sedimentation, and associated ecological values stormwater at these locations will be managed through the application of Mitigation Measures described in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026) including the following measures:

- *An Erosion and Sediment Control Plan will be prepared prior to the commencement of construction and implemented during construction. The ESCP will be prepared by a suitably qualified professional as defined the IECA Australasia Position Statement – Definition of a Suitably Qualified Professional (Nov 2023) in accordance with the principles and guidance provided in IECA Australasia's BPESC document (2008)).*

The disturbance footprint for the northern transmission option has been designed in consideration of stormwater management requirements.

C7.6.1 BUILDINGS AND WORKS WITHIN A WATERWAY AND COASTAL PROTECTION AREA OR A FUTURE COASTAL REFUGIA AREA

The northern transmission option is considered consistent with the performance criteria in P3.

Southern transmission option

Infrastructure that partially intersect the waterway protection area are:

- establishment of four pole pads (TP1, TP 21, TP22 and TP45), and
- upgrade of five sections of access track (TP21 to TP22, TP21 to TP22, TP38 to TP39 and upgraded access to TP44 and TP45).

Stormwater at these sites will be managed during construction by either diversion around the site to existing flow paths or be collected, treated and disposed or of in accordance with an Erosion and Sediment Control Plan as outlined in the mitigation measures outlined below. Stormwater discharge from sites will likely enter the following waterways either directly, or via managed overland flow; Nive River, the unnamed tributary of Ringing Creek or Ringing Creek. If not adequately managed stormwater runoff as the potential to adversely impact water quality and ecological values in these waterways. Stormwater management is not anticipated to be required during operation following rehabilitation of sites immediately following construction.

To avoid potential impacts to water quality, including those from potential erosion and sedimentation, and associated ecological values stormwater at these locations will be managed through the application of Mitigation Measures described in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026) including the following measures:

- *An Erosion and Sediment Control Plan will be prepared prior to the commencement of construction and implemented during construction. The ESCP will be prepared by a suitably qualified professional as defined the IECA Australasia Position Statement – Definition of a Suitably Qualified Professional (Nov 2023) in accordance with the principles and guidance provided in IECA Australasia's BPESC document (2008)).*

The disturbance footprint for the southern transmission option has been designed in consideration of stormwater management requirements.

The southern transmission option is considered consistent with the performance criteria in P3.

A4	**P4.1**
Dredging or reclamation must not occur within a waterway and coastal protection area or a future coastal refugia area.	Dredging or reclamation within a waterway and coastal protection area or a future coastal refugia area must minimise adverse impacts on natural coastal processes and natural assets, having regard to: (a) impacts caused by erosion, siltation, sedimentation and runoff; (b) impacts on riparian or littoral vegetation; (c) the need to avoid land filling of wetlands; (d) impacts on sand movement and wave action; and (e) the potential for increased risk to inundation of adjacent land. **P4.2** Dredging or reclamation within a waterway and coastal protection area or a future coastal refugia area must be necessary: (a) to continue an existing use or development on adjacent land; or (b) for a use which relies upon a coastal location to fulfil its purpose, having regard to: (i) the need to access a specific resource in a coastal location; (ii) the need to operate a marine farming shore facility; (iii) the need to access infrastructure available in a coastal location; (iv) the need to service a marine or coastal related activity;

C7.6.1 BUILDINGS AND WORKS WITHIN A WATERWAY AND COASTAL PROTECTION AREA OR A FUTURE COASTAL REFUGIA AREA	
	(v) provision of essential utility or marine infrastructure; and (vi) provision of open space or for marine-related educational, research, or recreational facilities.
Assessment No dredging or reclamation is proposed for either the northern or southern transmission line options. A4 does not apply to this Project.	
A5 Coastal protection works or watercourse erosion or inundation protection works must not occur within a waterway and coastal protection area or a future coastal refugia area.	**P5** Coastal protection works or watercourse erosion or inundation protection works within a waterway and coastal protection area or a future coastal refugia area must be designed by a suitably qualified person and minimise adverse impacts on natural coastal processes, having regard to: (a) impacts on sand movement and wave action; and (b) the potential for increased risk of inundation to adjacent land.
Assessment No coastal protection works or watercourse erosion or inundation protection works are proposed for either the northern or southern transmission options. A5 does not apply to this Project.	

5.2 C7.6.2 Clearance within a priority vegetation area

ACCEPTABLE SOLUTIONS	PERFORMANCE CRITERIA
Objective: That clearance of native vegetation within a priority vegetation area: (a) does not result in unreasonable loss of priority vegetation; (b) is appropriately managed to adequately protect identified priority vegetation; and (c) minimises and appropriately manages impacts from construction and development activities.	
A1 Clearance of native vegetation within a priority vegetation area must be within a building area on a sealed plan approved under this planning scheme.	**P1.1** Clearance of native vegetation within a priority vegetation area must be for: (a) an existing use on the site, provided any clearance is contained within the minimum area necessary to be cleared to provide adequate bushfire protection, as recommended by the Tasmania Fire Service or an accredited person; (b) buildings and works associated with the construction of a single dwelling or an associated outbuilding; (c) subdivision in the General Residential Zone or Low Density Residential Zone; (d) use or development that will result in significant long term social and economic benefits and there is no feasible alternative location or design; (e) clearance of native vegetation where it is demonstrated that on-going pre-existing management cannot ensure the survival of the priority vegetation and there is little potential for long-term persistence; or (f) the clearance of native vegetation that is of limited scale relative to the extent of priority vegetation on the site. **P1.2** Clearance of **native vegetation** within a **priority vegetation area** must minimise adverse impacts on **priority vegetation**, having regard to: (a) the design and location of buildings and works and any constraints such as topography or land hazards; (b) any particular requirements for the buildings and works;

ACCEPTABLE SOLUTIONS	PERFORMANCE CRITERIA
	(c) minimising impacts resulting from bushfire hazard management measures through siting and fire-resistant design of habitable buildings; (d) any mitigation measures implemented to minimise the residual impacts on priority vegetation; (e) any on-site biodiversity offsets; and (f) any existing cleared areas on the site.

Assessment

Clearance of vegetation required for the Project within the priority vegetation area is not within a building area on a sealed plan approved under the planning scheme. The Project must therefore be assessed against the performance criteria:

P1.1

d) **Northern transmission option:** The clearance of native vegetation, including areas within the priority vegetation overlay, will be necessary for the construction of the northern transmission option, which, as part of the Project, will provide benefit to Tasmania's energy network and support a range of social and economic benefits – see *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026). Alternative transmission options were considered, and the southern transmission option is still being considered, however, co-location of the new transmission line with an existing transmission line, as both the northern and southern transmission options provide, is considered the most feasible option, in part, because of the reduced impact to priority vegetation.

Southern transmission option: The clearance of native vegetation, including areas within the priority vegetation overlay, will be necessary for the construction of the southern transmission option, which, as part of the Project, will provide benefit to Tasmania's energy network and support a range of social and economic benefits – see the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026). Alternative transmission options were considered, and the northern transmission option is still being considered, however, co-location of the new transmission line with an existing transmission line, as both the northern and southern transmission options provide, is considered the most feasible option, in part, because of the reduced impact to priority vegetation.

The Project is considered consistent with P1.1.

P1.2

a) **Northern transmission option:** The design of the northern transmission option has sought to minimise adverse impacts on priority vegetation by locating the option parallel to the existing Waddamana to Tungatinah transmission line. Locating the northern transmission option adjacent to existing transmission infrastructure minimises impacts to priority vegetation by reducing clearing required for new easement and access tracks. The northern transmission option will use 30 m of the existing easement for the Waddamana to Tungatinah transmission line reducing the width required for new easement to 30 m. The northern transmission option will also largely utilise the existing access track, including established for the Waddamana to Tungatinah transmission line further reducing impacts to priority vegetation.

Southern transmission option: The design of the southern transmission option is located parallel to the existing Tarraleah to New Norfolk transmission line. Locating the southern transmission option adjacent to existing transmission infrastructure minimising impacts to priority vegetation by reducing clearing required for new easement and access tracks. The southern transmission option will use 30 m of the existing easement for the Tarraleah to New Norfolk transmission line e reducing the width required for new easement to 30 m. The southern transmission option will also largely utilise the existing access track established for the Tarraleah to New Norfolk transmission line with further reducing impacts to priority vegetation.

b) **Northern transmission option:** Particular requirements for the northern transmission option that potentially impact priority vegetation are the easement width and asset protection zones. As described in a) above, priority vegetation clearance for easement establishment has been minimised by designing the option of the northern transmission option parallel to the existing Waddamana to Tungatinah Transmission Line. A preliminary bushfire hazard analysis has been prepared by Bushfire Risk Consultants, who are accredited by the Tasmanian Fire Service, and allowance for asset protection zones included in the disturbance footprint. Although vegetation management will be required in asset protection zones, impacts to priority vegetation are reduced as managed easements still provide habitat for threatened fauna.

ACCEPTABLE SOLUTIONS	PERFORMANCE CRITERIA

Southern transmission option: Particular requirements for the southern transmission option that potentially impact priority vegetation are the easement width and asset protection zones. As described in a) above priority vegetation clearance for easement establishment has been minimised by designing the option of the southern transmission option parallel to the existing Tarraleah to New Norfolk Transmission Line. A preliminary bushfire hazard analysis has been prepared by Bushfire Risk Consultants, who are accredited by the Tasmanian Fire Service, and allowance for asset protection zones included in the disturbance footprint. Although vegetation management will be required in asset protection zones impacts to priority vegetation are reduced as managed easements still provide habitat for threatened fauna.

c) **Northern transmission option:** There are no habitable buildings proposed as part of the northern transmission option, and this criterion is not considered applicable.

However, as described in b) above a preliminary bushfire hazard analysis has been prepared and allowance for asset management zones included in the disturbance footprint of the northern transmission option. The impacts of bushfire hazard management on priority vegetation have been minimised by designing the option of the northern transmission option parallel to the existing Waddamana to Tungatinah Transmission Line reducing the width of new easement and the corresponding area of new asset protection zone.

Southern transmission option: There are no habitable buildings proposed as part of the southern transmission option and this criterion is not considered applicable. However, as described in b) above a preliminary bushfire hazard analysis has been prepared and allowance for asset management zones included in the disturbance footprint of the southern transmission option. The impacts of bushfire hazard management on priority vegetation have been minimised by designing the option of the southern transmission option parallel to the existing Tarraleah to New Norfolk Transmission Line reducing the width of new easement and the corresponding area of new asset protection zone.

d) **Northern transmission option:** Mitigation measures to minimise residual impacts to priority vegetation for the Project, including those resulting from the northern transmission option are detailed in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026). Mitigation measures specifically relating to impacts to priority vegetation associated with the northern transmission option are described in Section 4 and include:

- Minimising disturbance as far as practicable, especially on significant species, by establishing a finalised disturbance footprint and exclusion zones for vegetation clearance prior to construction.
- Implementing a site establishment plan
- Having important features or species – i.e. hazard trees, habitat trees and denning habitat assessed by a suitably qualified specialist prior to any required disturbance.
- Minimising impacts to the threatened flora species *Westringia angustifolia* at transmission towers T3 and T14 and establishing exclusion zones to protect *Westringia angustifolia* that can be avoided.
- Implementing a roadkill management plan to protect the threatened fauna species the Tasmanian devil and spotted-tailed quoll.
- Conducting annual eagle nest searches, in accordance with relevant EPA guidance, and for worksites with within 500 m or 1 km line-of-sight of an eagle nest not conducting work at those sites until the nest has been confirmed inactive during each annual breeding season.

Southern transmission option: Mitigation measures to minimise residual impacts to priority vegetation for the Project, including those resulting from the southern transmission line are detailed in the *Tarraleah Redevelopment Project - Environmental Impact Statement* (Hydro Tasmania, 2026). Mitigation measures specifically relating to impacts to priority vegetation associated with the southern transmission line are described in Section 4 and include:

- Minimising disturbance as far as practicable, especially on significant species, by establishing a finalised disturbance footprint and exclusion zones for vegetation clearance prior to construction.
- Implementing a site establishment plan
- Having important features or species – i.e. hazard trees, habitat trees and denning habitat assessed by a suitably qualified specialist prior to any required disturbance.
- Avoiding impacts to the threatened flora species *Barbarea australis* located adjacent to the disturbance footprint on the Nive River near TP1 by establishing exclusion zones during construction.
- Implementing a roadkill management plan to protect the threatened fauna species the Tasmanian devil and spotted-tailed quoll.
- Conducting annual eagle nest searches, in accordance with relevant EPA guidance, and for worksites with within 500 m or 1 km line-of-sight of an eagle nest not conducting work at those sites until the nest has been confirmed inactive during each annual breeding season.

e) There are no on-site biodiversity offsets proposed for either the northern or southern transmission line options.

ACCEPTABLE SOLUTIONS	PERFORMANCE CRITERIA
f) **Northern transmission option:** The design of this option has sought to utilised existing cleared areas by locating the option parallel to the existing Waddamana to Tungatinah Transmission Line. This design allows part of the new transmission line easement to be located in the existing, already cleared, easement. The northern transmission option will also upgrade the existing access track again utilising already cleared areas. **Southern transmission option:** The design of this option has sought to utilised existing cleared areas by locating the option parallel to the existing Tarraleah to New Norfolk Transmission Line. This design allows part of the new transmission line easement to be located in the existing, already cleared, easement. The southern transmission option will also upgrade the existing access track again utilising already cleared areas.	
The Project is considered consistent with P1.2	

6. References

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Attachments

A Waterway and coastal protection area overlay – northern transmission option

B Waterway and coastal protection area overlay – southern transmission option

C Priority vegetation area overlay – northern transmission option

D Priority vegetation area overlay – southern transmission option

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