Clearing Permit Application

Cross Country Pipeline Maintenance

April 2020

Range to Reef ENVIRONMENTAL

Prepared for Indian Ocean Oil Company

Name	Task	Version	Date
IOOC-CPS Application_Pipeline ver 0.1	Client Draft	0.1	14/4/20
IOOC-CPS Application_Pipeline ver 0.2	Revised Client draft	0.2	16/4/20

[redacted]

Executive Summary

Indian Ocean Oil Company (IOOC) provide fuel services to Christmas Island under contract with the Commonwealth Government. IOOC receive, store, supply and generally manage fuel supplies and infrastructure on Christmas Island. This comprises Smith Point facilities, Rocky Point facilities, Settlement service station, Murray Road facilities and associated pipelines which connect these facilities. IOOC are responsible for care, control and maintenance of these facilities in accordance with their contractual requirements to the Commonwealth Government.

The “cross country” pipeline corridor runs from Smith Point to Murray Rd and contains two fuel lines and one WaterCorp line. The corridor requires regular maintenance to ensure it is clear of vegetation to allow access for maintenance and inspection, and to remove hazards that pose a risk to the integrity of the pipeline. This permit application covers the maintenance tasks for the pipeline corridor that are required to allow the maintenance of the line and minimise risks of rupture due to trees falling on the pipelines.

Whilst this permit application covers the entire corridor land parcel, clearing activities will be minimised to that essential to maintain the safety and integrity of the pipeline.

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1 Introduction

1.1 Background and Purpose

Christmas Island is an Indian Ocean territory of Australia, located approximately 2,600 km north-west of Perth. The Island is predominantly National Park (63%) in recognition of its unique and sensitive environment with major seabird colonies, special land crab populations, marine habitats and many endemic species.

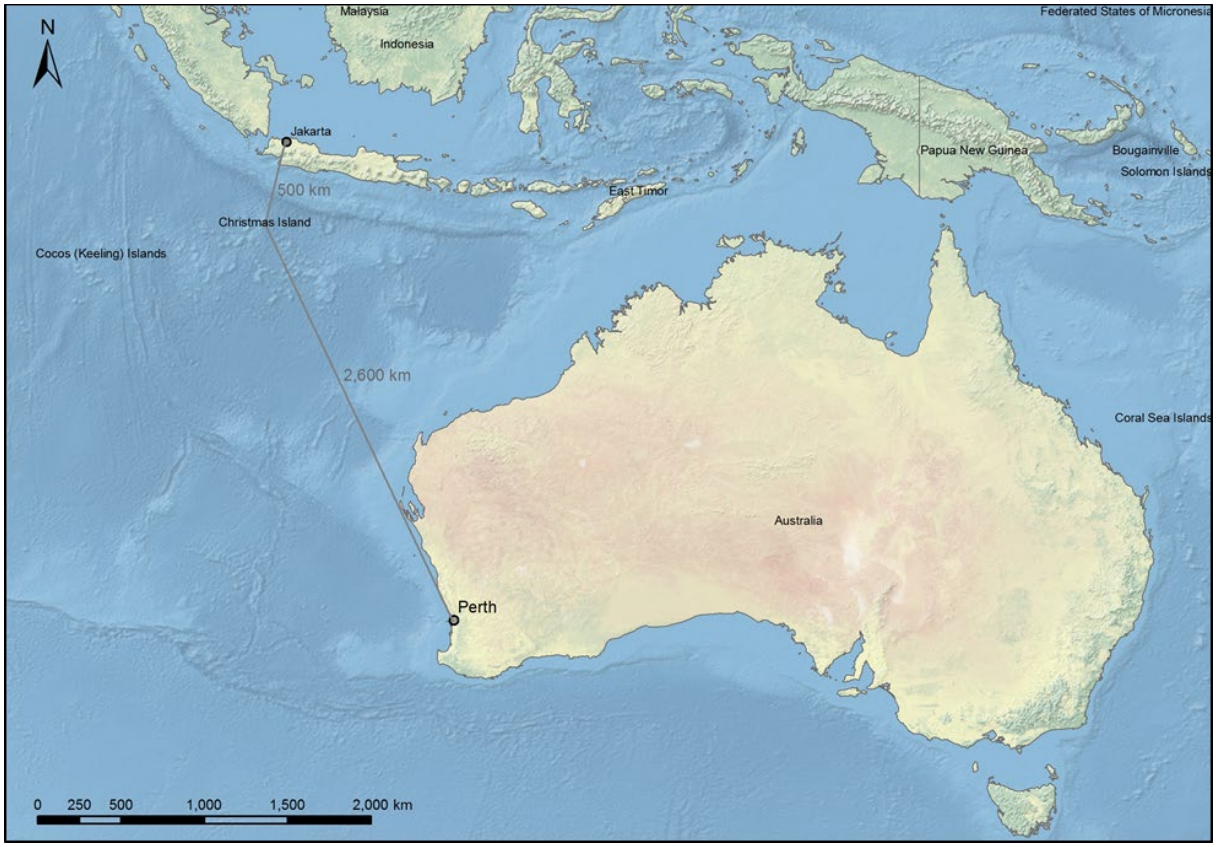

Figure 1. Location of Christmas Island

This application covers vegetation maintenance activities undertaken by IOOC to maintain the pipeline in a safe condition, and specifically to mitigate risks of damage to the pipeline by falling trees.

1.2 Socio-economic Factors

IOOC is the sole supplier of fuel on Christmas Island, supplying fuel to the Island's Power Station, the mining operation, residents and shipping l. This is an essential service that is critical to the ongoing maintenance of the Settlement and the Island's economy.

1.3 Legislative Framework

The legislative framework for Christmas Island is complex. The *Christmas Island Act 1958* outlines the governance arrangements for the island. Sections 8E and 8E of the Act make provision for the laws of Western Australia and the Commonwealth to apply in Christmas Island. The Minister lists selected Western Australian laws to be applied in the *Applied Laws (Implementation) Ordinance 1992*. The island is governed under Commonwealth legislation and administered by the Department of Infrastructure, Regional Development and Cities (DIRDC). Applied Western Australian laws are administered by the

relevant Commonwealth Minister, by Commonwealth officers acting under ministerial delegations, or by State officers exercising delegated power and acting pursuant to inter-government service agreements under Section 8h of the Act. The community is represented in the Federal Parliament by the Member for Lingiari in the House of Representatives and the two Senators for the Northern Territory in the Senate with local Government (i.e. Shire of Christmas Island) utilising Western Australia legislation.

An overview of IOOC's governance arrangements is provided in Table 1.

Table 1. Overview of Environmental Governance

Activity	Responsibility	Program Elements
Regulation	DWER	• Licence for Prescribed Premises under the *Environmental Protection Act 1986 (WA) (CI)* • Review of annual environmental reports • Random inspections • Responses to public complaints • Advice to the proponent
Regulation	DWER	• *Environmental Protection (Controlled Waste) Regulations 2004 (WA) (CI)* • Controlled waste transport • Licenced carrier
Regulation	DWER	• *Environmental Protection (Uncontrolled Discharge) Regulations 2004 (WA) (CI)* • Water discharge monitoring requirements • Stormwater discharge
Regulation	DWER	• Petroleum Pipelines (Environment) Regulations 2012 • Approved environment plan required for pipeline activity • Pipeline activity must comply with approved environment plan • Pipeline activity must not continue if new or increased environmental impact or environmental risk identified
Regulation	DMP	• *Dangerous Goods Safety Act 2004* • Handling ,storage and transport of dangerous goods
Monitoring	Indian Ocean Oil Company	• In accordance with requirements of the Licence for Prescribed Premises under the EP Act (WA) (CI) and regulations, including waste water/storm water discharge monitoring and tracking of controlled waste • Other monitoring as set out in the EMP
Reporting	Indian Ocean Oil Company	• NPI Reporting, *Environmental Protection (NEPM-NPI) Regulations 1998* • Contribute data for PRL's *National Greenhouse and Energy Reporting Act 2007* reporting • Internal reporting will be carried out as described in the EMP
Day to day Operational Management	Indian Ocean Oil Company	• Hydrocarbon storage and management • Transportation of waste oil and diesel • Waste generation and disposal • Dangerous goods storage • Occupational health and safety • Emergency response readiness

1.3.1 Regulation of Operations under the Environmental Protection Act 1986 (WA) (CI) - Licence

IOOC's operation is currently registered as per Schedule 1 Part 2 of the *Environmental Protection Regulations 1987 (WA) (CI)* under category 73 (Bulk Chemical Storage).

IOOC is a subsidiary of PRL. PRL holds a Licence for Prescribed Premises issued under the *Environmental Protection Act 1986 (WA) (CI)* (EP Act). The licence specifies monitoring and reporting requirements which covers some of IOOC operations.

Clearing of native vegetation is regulated under provisions in the EP Act (Section 51) and under current governance arrangements any clearing must be assessed and approved under this legislation.

2 Proposal

IOOC wish to apply for a purpose permit to provide for essential vegetation maintenance along the pipeline. Essential maintenance includes;

1. Maintaining the access track along the pipeline clear of vegetation and obstructions
2. Manual brush cutting vegetation establishing and growing around the pipeline
3. Removal of overhanging branches
4. Removing individual mature trees that represent a risk of falling or dropping large branches onto the pipeline due to the position of the trees, and/or being dead or dying, significant erosion of roots or soil instability around the tree base.

Figure 2 Damage to the pipeline due to recent tree fall over the pipeline

The Commonwealth Right of Way allows for the provision of water and fuel services. The pipeline corridor is 20 metres wide and approximately 1.25 km long and contains two fuel pipelines-diesel and fuel oil lines.

The pipeline traverses steep country and is close to sensitive receptors including the closed evergreen forests, adjacent to the marine environment and in close proximity to the Daniel Roux Freshwater Caves. Neighbouring trees are within 10 m of the pipeline, with a canopy up to 25 m high. The tropical environment causes rapid rot and the monsoon can reduce soil stability.

A internal risk assessment of the pipeline was undertaken by Range to Reef Environmental in 2018 as part of IOOC's broader environmental risk management process. This assessment identified the potential risks to the pipeline and environmental consequences of fuel spill. The pipeline runs from 30 metres above sea level to Murray Rd which is 200 metres above sea level. Therefore, there is significant head pressure on the lines and any rupture would cause a significant and immediate discharge to the environment of either fuel oil or diesel, or potentially both. The fuel lines have five non-return values to limit the loss of product in the case of a rupture. In a worst-case scenario, a rupture could lead to the spillage of over 17,000 litres of Fuel Oil and 7,500 litres of diesel. Given the terrain, a pollution response would be difficult and unlikely to be effective, potentially resulting in long-term impacts to the environment. A key strategy is therefore to minimise the chances of an incident that leads to fuel escape from the line.

Minimising the risk of pipeline rupture is a key management focus of IOOC and actions developed as part of the company's Environmental Management Plan. (Indian Ocean Oil Company Pty Ltd 2015) IOOC have put in place mitigation strategies to minimise the risk and severity of a pollution event. One residual risk is pipe rupture due to a tree falling on the pipeline. This vegetation maintenance activities will assist in protecting the broader environment values by removing several hazardous trees now, and any trees which become hazardous in the future. The proposed tree removal activities are essential to protect the environment and there are no alternatives.

Current situation

IOOC staff have identified ten trees that are at risk of falling on the pipelines and need to be removed as soon as possible. The location of these ten trees are shown in Figure 3.

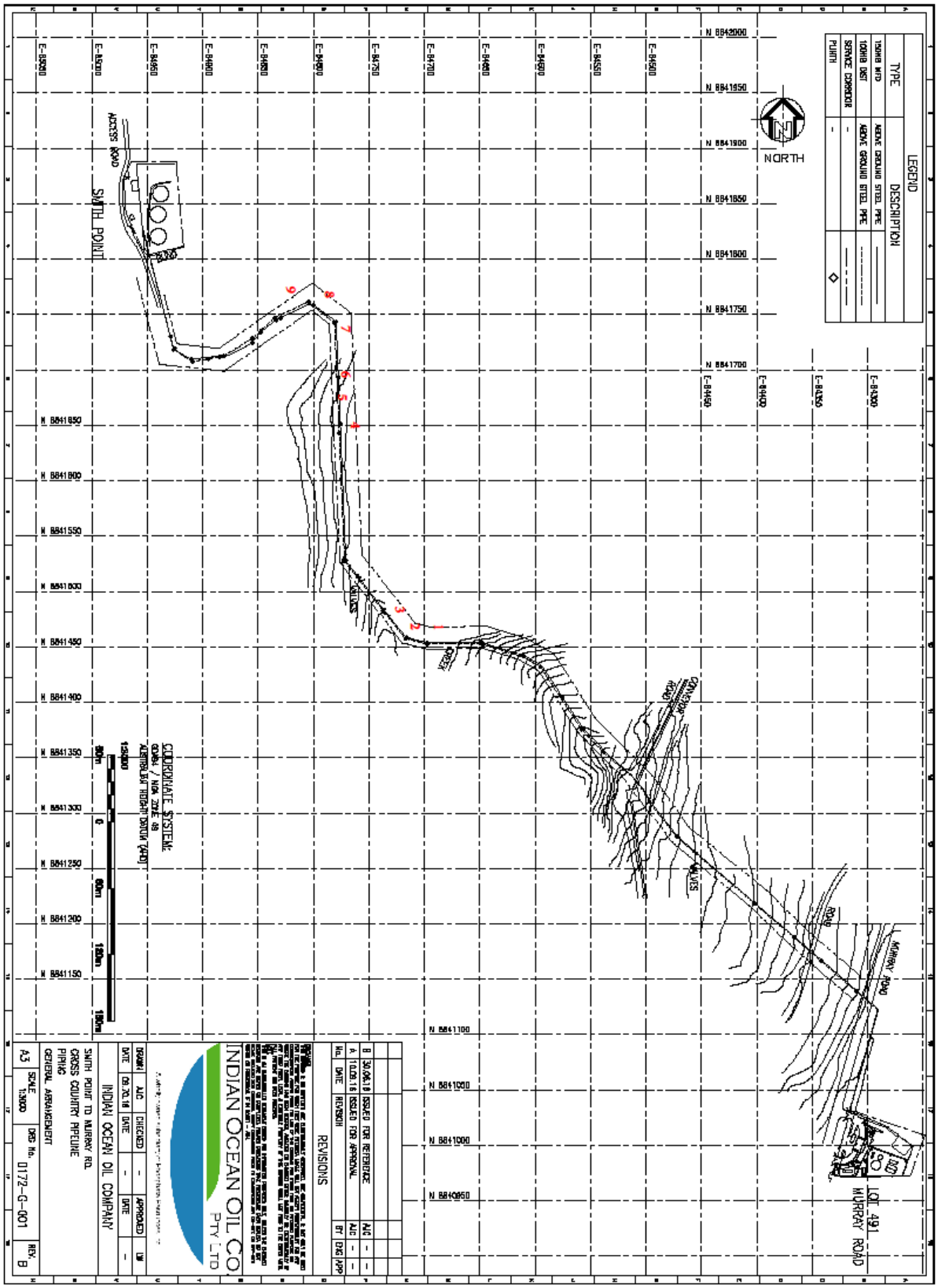

Figure 3 Position of trees that are currently considered dangerous and require immediate removal.

Figure 4 Unstable Tahitian Chestnut (*Inocarpus fagifer*) leaning over pipeline

Figure 5 ‘Tree 5’ showing poor health and deteriorating base of a *Syzygium nervosum*. This large tree will fall at some point.

2.1 Applicant

Indian Ocean Oil Company
Registered Address: 6 Thorogood Street, Burswood, WA 6100

2.2 Clearing Area

The area covered by the purpose permit relates to the pipeline corridor (Figure 6). Table 2 summarises the vegetation types present in the corridor and does not make allowance for the cleared downhill section, which is not identified as cleared by Geoscience Australia's (2014) vegetation mapping. Whilst the permit application covers all of Lot 473, IOOC intend to minimise clearing within the corridor to that which is essential for the proper care, control, and maintenance of the pipeline. This is explained in detail in the application. The clearing will comprise;

- Access track maintenance (weeds and regrowth) that has been traditionally undertaken by mechanical means using a bulldozer or loader
- Removing weeds and regrowth around the pipeline that has been traditionally undertaken by manual brush cutting
- Removal of overhanging branches
- Removal of dangerous trees at risk of falling on the pipeline.

Table 2. The vegetation in proposed clearing areas as mapped by Geoscience Australia (2014)

Vegetation Type	**Area (ha)**
Bare ground	0.16
Closed canopy evergreen forest (moderate)	0.07
Coastal herbland	<0.01
Coastal pinnacles/sand	<0.01
Coastal shrubland	0.01
Infrastructure	0.12
Mixed weed and pioneer species	0.16
Regrowth	0.98
Semi-deciduous forest	0.70
Semi-deciduous scrub	0.32
Total	**2.52**

Figure 6. Proposal Area

2.3 Clearing Method

The clearing method will depend on the specific operational need.

- Access track maintenance will be undertaken by mechanical means using a bulldozer or loader
- Removing weeds and regrowth around the pipeline is undertaken by manual brush cutting
- Removal of overhanging branches with a chainsaw
- Removal of dangerous trees will be facilitated by either machine or arborist depending on their individual circumstances, risks and practicalities in removing the tree.

2.4 Required Permit Duration

The purpose permit is for regular and ongoing maintenance. It is requested to commence as soon as possible and extend for five years.

3 Description of the land

The pipeline corridor runs from Murray Rd at the top of the terrace down to Smith Point which is close to sea level (Figure 6). The corridor varies along its length in terms of previous disturbance, width of existing vegetation and topography. To describe these differences the corridor has been broken into three sections-upper, middle and lower.

Figure 7 shows the local environmental factors for the cross-country pipeline. There are no records for Threatened flora species in the corridor or in the general area.

The vegetation on the corridor is shown on Figure 8. The upper two thirds of the corridor has been cleared, and the lower third is essentially uncleared (the pipelines run under the canopy). The corridor runs through an area of forest that is mapped primarily as semi-deciduous forest. Semi-deciduous forests are distributed around the coastal terraces of the Island. There are some patches of closed canopy evergreen forest within this broader vegetation unit, and some semi-deciduous scrub along the lower end of the pipeline as it runs parallel to the shore.

Christmas Island's semi-deciduous forest is characterised by a combination of evergreen and deciduous trees, typically growing to 20 m height, growing in the shallower soils and slopes of the island's lower terraces. Closer to the shoreline, the semi-deciduous scrub has a low, open, mainly deciduous canopy to around 15 m. Closed-canopy evergreen forest grows primarily on the island's upper terraces in deeper soils. Mature closed-canopy evergreen forest typically ranges from 30-40 m, with emergent trees to 50 m height.

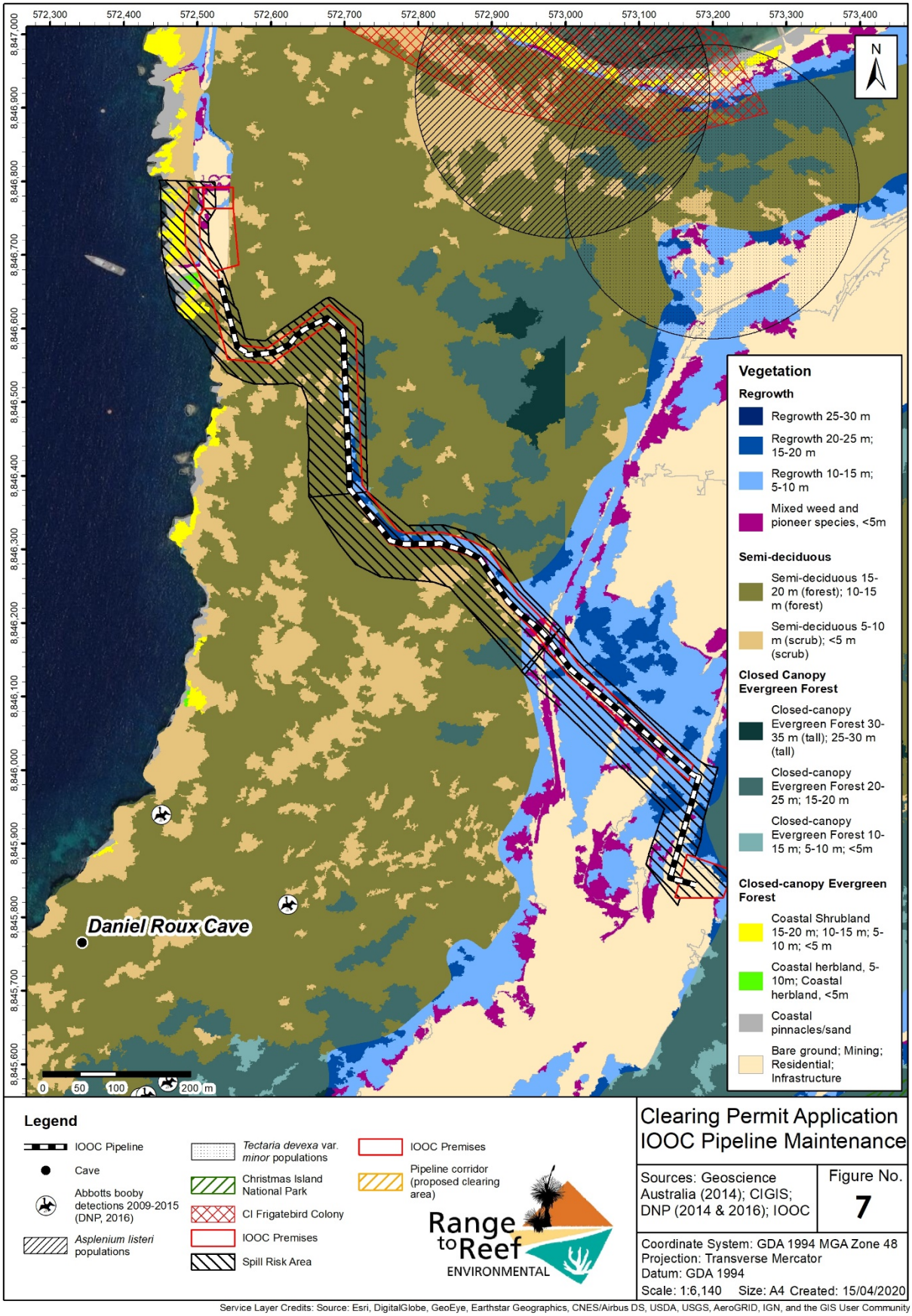

Figure 7 Local Environmental Factors for the cross-country pipeline.

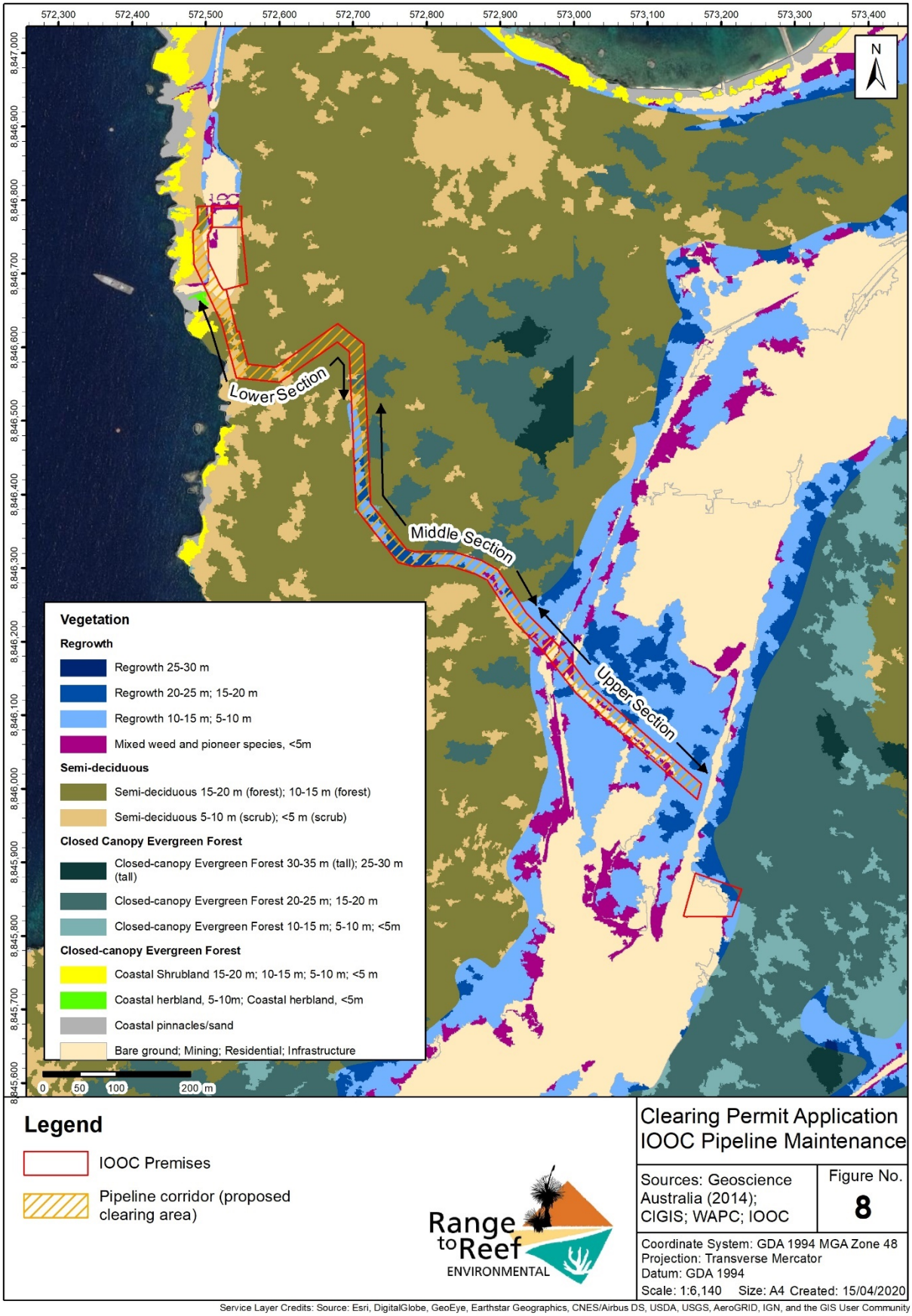

Figure 8. Vegetation types within the proposal area

3.1 Upper Section

The land over which the upper section of the pipeline passes has been historically cleared and contains a combination of infrastructure, regrowth vegetation, mixed weed and pioneer species and grassland. This part of the pipeline corridor has the following characteristics:

- Relatively flat topography
- Pipeline corridor shares an overhead powerline
- Completely cleared and historically maintained as a grassland by mowing to protect the overhead powerline
- Highly disturbed and no environmental value.

This area will continue to be mowed/slashed regularly and access maintained.

Figure 9 View down the pipeline corridor in the upper section. Note this is shared with the overhead powerline.

3.2 Middle Section

The middle section of the pipeline corridor passes through high quality forest. The alignment was originally partly cleared to enable the original installation of the pipeline and provide vehicle access along the pipeline. As can be seen by the photographs, the corridor was not completely cleared to its boundaries and forest has regrown on the corridor, and as such there are some trees growing immediately adjacent to the pipelines. Generally, this doesn't present a serious risk or issue with the maintenance of the pipeline, however, in some cases tree are leaning over the line and if they fall will land on the pipeline with potential to cause serious damage and possibly rupture the line. There have been recent cases of trees falling on the line (See Figure 2) and damaging the pipe and supports.

The proposed clearing activities in this section would be limited to;

- Maintaining the access track in good condition
- Manual brush cutting around the pipeline infrastructure
- Removal of any trees or overhanging branches that are identified to pose a risk to the safety and integrity of the pipeline.

There are currently three trees identified in this section that require removal.

Figure 10 Middle section of the pipeline-note proximity of trees

3.3 Lower Section

The lower section comprises a steep and rocky limestone terrace. The pipeline passes under the canopy and is attached directly to concrete footings or directly to the limestone rock (Figure 11). There is no vehicle access track along this section, and it is impractical to establish a vehicle access track due to the steepness and rough nature of the terrain. The vegetation in this area is semi-deciduous scrub and forest typical of these rocky terraces. The proposed clearing activities in this section would be limited to;

- manual brush cutting around the pipeline infrastructure; and
- removal of any trees or overhanging branches that are identified as posing a risk to the safety and integrity of the pipeline.

There are currently seven trees identified in this section that require immediate removal.

Figure 11 Pipeline in lower section traversing down limestone terrace.

4 Impacts and Mitigation

4.1 Potential Impacts

The proposal will have minimal impacts given the very limited spatial area of clearing and the fine scale of vegetation removal.

4.2 Likely Direct and Indirect Impacts

Individual tree removal on an as required basis. Currently ten trees have been identified as requiring removal. The trees vary in size however using the standard canopy area of one tree =100 square metres the ten trees would equate to 1000 m^2 or 0.1 hectare. The trees are not conservation significant species or critical habitat. The pipeline is surrounded by intact evergreen and semi-deciduous forests that will be unimpacted by the activities. No wildlife impacts are anticipated.

The Christmas Island tropical environment is characterised by rapid forest growth. Any gaps in the canopy created by tree removal would be expected to regenerate quickly from new seedlings and/or expanding tree canopies of surrounding trees.

4.3 Mitigation Applied

Individual trees will only be removed where they pose an identifiable risk to the pipeline.

When trees are removed it will be done in such a manner to minimise damage to surrounding trees and vegetation. This may involve tree lopping contractors to sensitively remove trees.

5 Assessment Factors

5.1 Application of the Ten Clearing Principles

Ten clearing principles have been developed under Section 5 of the *Environmental Protection Act 1986* for the purposes of determining the impact of clearing. These are considered when a decision to grant or refuse a clearing permit is required. An assessment of the potential impacts of clearing, against the ten clearing principles, is outlined in Table 3 below.

Table 3. Application of the Ten Clearing Principles

Principle No.	Native Vegetation Should Not be Cleared if ...	Is the Proposed Project at Variance?
(a)	...it comprises a high level of biological diversity.	Proposal is **not at variance** to this Principle.
Comments: Christmas Island is home to approximately 420 species of vascular plants, including 177 introduced species and 242 species thought to be indigenous to the island. Eighteen species are known to be endemic to Christmas Island, with the other flora being more widely distributed through the Indo-Malayan and Malesian regions, or throughout the tropical Indo-Pacific. No Priority Flora species are listed for Christmas Island. Areas of the island which are previously uncleared and retain high biodiversity have been reserved as National Park, including the island's two Ramsar wetlands. Given that there are no special habitats or species that are found solely in these areas, only low numbers of individual trees are proposed to be removed, and the pipeline corridor has generally been cleared/disturbed, the proposal is not at variance to this principle.		
(b)	...it comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia.	Proposal is **not at variance** to this Principle.
Comments: Christmas Island provides habitat for several species of fauna indigenous to the island including fourteen native bird species and nine species of seabird which use the island for breeding. Four seabird taxa and nine land bird taxa are endemic to the island. A further 108 migratory or vagrant bird species have been recorded on the island. Six of the island's endemic birds are listed as Threatened under the EPBC Act 1999. Five endemic native mammals have been recorded on Christmas Island with only one, the Christmas Island flying-fox, now known to remain. Christmas Island has six species of native terrestrial reptiles, five of them endemic. Mammal and reptile species indigenous to the island have undergone a significant decline since human settlement, largely as a consequence of the introduction of the Yellow Crazy Ant, cats and rodents. Christmas Island supports 20 terrestrial and intertidal crab species of which three have been identified as conservation significant; the red crab, blue crab and robber crab. Blue crabs have a restricted distribution and do not occur within the areas proposed for clearing. Red crabs are numerous (last Island estimate 40-50 million) and common throughout the island and are considered a keystone species in the island's ecology. Robber crabs are numerous and found across the Island. Robber crabs were present in proposed clearing areas but in low numbers. Key considerations in assessing impacts is that; • This proposal involves individual tree removal only • The habitat is not uncommon or unique and the pipeline is surrounded by uncleared native forest that will remain undisturbed and therefore fauna of the Island is supported by the extensive surrounding intact vegetation • There are several species (e.g. the Christmas Island thrush) which, although listed as Threatened species under the EPBC Act due to their endemic status, are found across the whole Island, are common and habitat generalists who recolonise disturbed areas. Whilst there is potential for these species to be in the proposed clearing areas, individual tree removal will not have impacts for these species and the risk of species impacts is very low. • The Island fauna species that are of particular conservation concern due to low population numbers or special risks (Abbott's booby, Lister's gecko, forest skink, Pipistrelle bat, Christmas Island shrew and the Christmas Island blind snake) have not been found in the proposed clearing areas. • There are no fauna species that rely solely upon habitat in areas proposed to be cleared. • Red crabs are ubiquitous and common, estimated to be between 40-50 million and individual tree removal will have no impact on the population. • Whilst Abbott's booby is found to the south (closets point is 500 m away from the pipeline), there are no Abbott's nest trees found within the proposed clearing areas so tree removal will not impact on current or future nesting of this species. In conclusion, the proposal is not at variance to this principle.		

(c)	...it includes, or is necessary for the continued existence, or rare flora.	Proposal is **not at variance** to this Principle.
Comments: There are three species listed as Threatened under the EPBC Act 1999. These are *Asplenium §listeri* (Christmas Island Spleenwort), which is listed as Critically Endangered, *Tectaria devexa* var. *§minor*, which is listed as Endangered and *Pneumatopteris truncata* which is listed as Critically Endangered. There are no records of these species with the vicinity of the pipeline corridor, and it is unlikely these species would be found on the corridor given that they have not been identified during routine maintenance and inspection. In the unlikely case they were found, the activity of tree removal is unlikely to pose a serious risk to these species given that they are low ground-based plants and ground disturbance of tree removal is likely to be minimal.		
(d)	...it comprises the whole or a part of, or is necessary for the maintenance of, a Threatened Ecological Community.	Proposal is **not at variance** to this Principle.
Comments: There are no listed Threatened Ecological Communities on Christmas Island. Therefore, the clearing as proposed is not at variance to this principle.		
(e)	...it is significant as a remnant of native vegetation in an area that has been extensively cleared.	Proposal is **not at variance** to this Principle
Comments: Approximately 75% of Christmas Island has never been cleared and 84% of this (63% of total island area) is protected within National Park. The proposed clearing is very fine scale (<0.1 hectare). The vegetation within the application area is not a significant remnant (surrounded by intact forest) and therefore is not at variance to this principle.		
(f)	...it is growing in, or in association with, an environment associated with a watercourse or wetland.	Proposal is **not at variance** to this Principle.
Comments: None of the proposed clearing is associated with or adjacent to a watercourse or wetland. Perennial surface water features on Christmas Island are limited to spring fed streams on coastal or sloping areas of the island. The removal of trees is fine scale and will not impact on hydrology. This proposal is not at variance to this principle.		
(g)	...the clearing of the vegetation is likely to cause appreciable land degradation.	Proposal is **not at variance** to this Principle.
Comments:. The removal of trees is fine scale and will not impact hydrology, or lead to wind erosion, water erosion, salinity, eutrophication or waterlogging. Any gaps created are likely to be recolonised quickly in this high rainfall tropical environment. This proposal is not at variance to this principle.		
(h)	...the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.	Proposal is **not at variance** to this Principle.
Comments: The pipeline corridor passes through Unallocated Crown Lands. It does not border on conservation lands and is therefore not at variance to this principle.		
(i)	...the clearing of the vegetation is likely to cause deterioration on the quality of surface or underground water.	Proposal is **not at variance** to this Principle.
Comments: None of the proposed clearing is associated with or adjacent to a watercourse or wetland. The Daniel Rous Cave system is located approximately 700 m to the south which is a known underground karst cave system. The removal of trees is fine scale and will not impact hydrology, with rapid recolonization and growth following tree removal. Given the fine scale of tree removal and distance to the cave system this proposal is not at variance to this principle.		
(j)	...the clearing of the vegetation is likely to cause, or exacerbate, incidence or intensity of flooding.	Proposal is **not at variance** to this Principle.
Comments: Christmas Island's soils and karstic limestone rocks are generally highly permeable so clearing on the island does not cause or exacerbate flooding. The proposed tree removal will not cause or exacerbate waterlogging or flooding and as the water features on Christmas Island are not close to the applied area. The removal of trees is fine scale and will not impact hydrology, with rapid recolonization and growth following tree removal. Given the fine scale of tree removal l is not at variance to this principle.		

5.2 Planning Instruments

5.2.1 Indian Ocean Territories Regional Plan

The Indian Ocean Territories (IOT) Regional Plan Summary (Regional Development Australia 2012) was published in October 2012. Building the capacity of the community and business to transition from a mining-based economy to a diverse and broad-based economy is a focus of the Regional Plan. The sectors identified for growth are tourism, food production and education and research. The care and management of the natural environment is also critical because if the natural environment is not well managed and protected, it also puts a risk the possibility of establishing a new tourism-based economy.

5.2.2 Christmas Island Strategic Plan

The Christmas Island Strategic Plan was finalised in 2018 and proposes strategies which will enable the Island to move towards key goals through to 2030 (IOTRDOA 2018). IOOC as a subsidiary of Phosphate Resources is acknowledged by the plan as a firm supporter of local businesses and organisations. The Strategic Plan proposes a transition to renewable and green energy sources but maintenance of existing fuel and oil facilities will be crucial for the island community and businesses in the interim.

5.2.3 Town Planning Scheme

The Shire of Christmas Island *Local Planning Strategy* was endorsed in May 2015 and Local Planning Scheme No. 2 received approval in accordance with the requirements of the *Planning and Development Act 2005* (WA) (CI) in February 2016. The new scheme includes a stated objective "*to enhance and diversify the island's economic base through the provision of land for a range of economic activities,*" (Shire of Christmas Island 2016). Under Local Planning Scheme No. 2 (LPS 2), the pipeline corridor is zoned for "public purposes" (Figure 12). The clearing proposed will not alter the current land use.

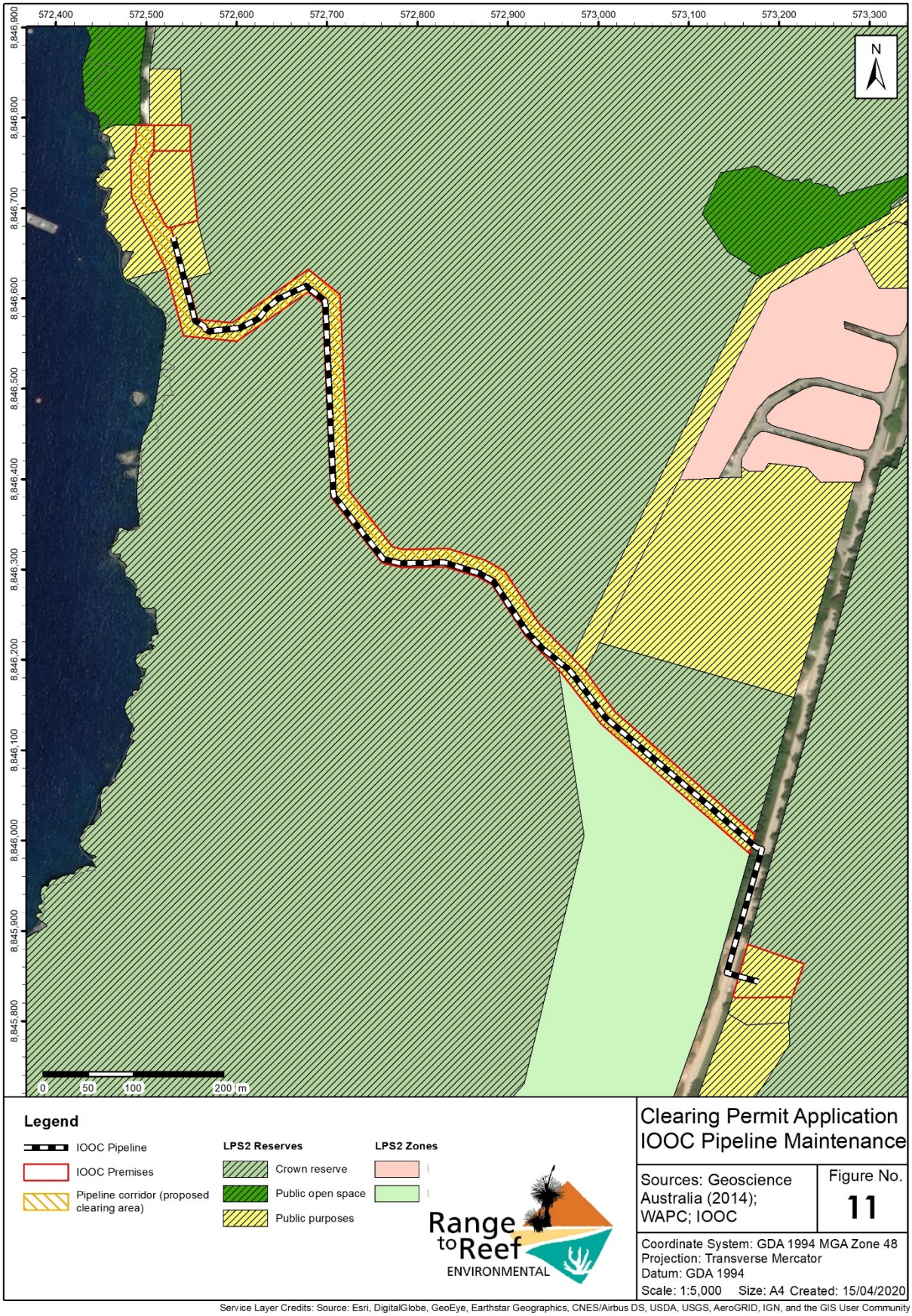

Figure 12. Local Planning Scheme 2 Zones and Reserves

5.3 Other Relevant Matters

5.3.1 Land Use Impacts

The clearing application will not impact negatively on other land uses. The proposal will provide positive impacts by protecting the water services that share the corridor.

5.3.2 Previous Decisions

No previous clearing applications have been made in relation to the pipeline corridor.

5.3.3 Legislative Requirements

There are no Aboriginal Sites of significance or Native Title Claims on the Island.

The EPBC Act applies on Christmas Island. The Western Australian Environmental Protection Authority does not make decisions on Christmas Island.

The *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* apply to Christmas Island under the *Applied Laws (Implementation) Ordinance 1992* and are administered by the Department of Water and Environmental Regulation.

5.3.4 Necessity

The proposed tree removal activities are essential to protect the environment from the existing pipeline and there are no alternatives. The pipeline traverses steep country and in respect to potential pollution events, is close to sensitive receptors including uncleared closed evergreen and semi-deciduous forests, the adjacent marine environment and the Daniel Roux freshwater caves. Minimising the risk of pipeline rupture is a key management focus of IOOC and actions developed as part of the company's Environmental Management Plan.

5.4 Environmental Protection Policies

There are no Environmental Protection Policies developed under Part III of the EP Act that apply to Christmas Island.

5.5 Agreements to reserve, conservation covenants and soil conservation notices

There are no agreements to reserve, conservation covenants or soil conservation notices under the *Soil and Land Conservation Act 1945* applicable to the proposal.

6 Conclusions and Recommendations

This purpose permit requests approval for IOOC to undertake essential vegetation maintenance along the pipeline corridor which contains fuel and water services. The application covers;

- Maintaining the access track in good condition
- Manual brush cutting around the pipeline infrastructure
- Removal of overhanging branches
- Removal of ten trees that are known to present a risk to the pipeline, ongoing tree removal of any trees that are identified in the future as posing a risk to the safety and integrity of the pipeline.

Tree have fallen on the pipelines in the past and are considered a key threat to the integrity of the pipelines. Currently ten individual trees have been identified as being dangerous and in need of immediate removal. There is a high likelihood of pipeline rupture if a large tree falls on the pipeline and therefore the tree removal is an important environment protection and risk mitigation strategy.

An assessment of any proposed native vegetation clearing against each of the ten principles outlined in Schedule 5 of the *Environmental Protection Act 1986*, has identified that the proposal is **not at variance** to the ten clearing principles.

7 References

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